Government of Ontario

Information Standard for Address Specification using Government of Ontario CDE Schema Version 2.0 (GOCDES)

GO-ITS Document # 27.1
Version 2.0
Status: Approved

OCCIO/OCCTO
MANAGEMENT BOARD SECRETARIAT

CORPORATE ARCHITECTURE BRANCH
TECHNICAL STANDARDS SECTION

Last Review Date: March 17, 2004

Foreword

Government of Ontario Information & Technology Standards are the official publications on the standards, guidelines, technical reports and preferred practices adopted by the Information & Technology Standards Council under delegated authority of the Management Board of Cabinet. These publications support the Management Board Secretariat's responsibilities for coordinating standardization of Information and Technology in the Government of Ontario. Publications that set new or revised standards provide policy guidance and administrative information for their implementation. In particular, they describe where the application of a standard is mandatory and specify any qualifications governing its implementation.

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Introduction

1 Introduction to GOCDES 2.0

GOCDES is the name of the authoritative corporate (Government of Ontario) version of the Common Data Elements XML Schemas. It is developed, owned and maintained by the Corporate Architecture Branch (CAB) within the Office of Corporate Chief Technology Officer (OCCTO) in the Management Board Secretariat (MBS) of the Government of Ontario.

The current version, Version 2.0, is a revised version of GOCDES version 1.7d, which was developed based on Common Data Elements Model (CDEM) version 1.7d, and released on June 14, 2003. Since the release of GOCDES version 1.7d, CDEM Addressing subject area business model has gone through a few iterations of changes. Its latest major update, version 2.0, was released and approved by Corporate Architecture Review Board in November 2003. It becomes deem necessary to have an update release of GOCDES that reflects all CDEM changes in the Addressing subject area.

GOCDES version 1.7d included two subject areas: Party and Location. The Party subject area includes individuals, organizations and their roles. The Location subject area describes Locations of Parties such as Mailing, Physical, Telephone, Email, or Net addresses. CDEM Version 2.0, as well as CDES 2.0, covers only Address subject area (formerly Location). The Party subject area will be specified in one of the next versions of CDEM and CDES.

The design of GOCDES version 2.0 is leveraged on the previous XML schema design and development experience and, in particular, the feedback on the use of GOCDES version 1.7d in the ESDI project (Electronic Service Delivery for Individuals).

The new design of GOCDES uses the model driven approach by starting from a Logical Data Model and then transforming it into a Physical Data Model, and finally into XML Schemas. The CDES 2.0 Logical Data Model (LDM) uses CDEM Addressing model version 2.0 (also referenced as BVLDM 2.0) as a base, and implements a set of XML schema design principles, with a focus on providing solutions to problems and issues emerged during the use of GOCDES version 1.7d.

This document is organized as follows:

Section 2 presents the CDES 2.0 Design Principles, CDES Address sub-areas (Common Address, Canada Address, US Address, International Address and Electronic Address), and their LDMs. The modeling technique used is Entity Relationship Modeling (ERM).

Section 3 elaborates GOCDES 2.0 Physical Design, which is composed of the definition of GOCDES 2.0 namespaces, XML Schema tree diagrams, and fragments of the GOCDES 2.0 XML Schema source code. The XML Schema codes indicate the significant parts of the XML schemas and the data integrity rules. The rules are presented either as XML Schema facets or as specifications in the application information of XML Schema annotations.

Section 4 introduces the CDES 2.0 Usage Rules. These rules indicate mandatory and optional parts of the standard, as well as recommendations on how to use GOCDES 2.0 in GO OPS applications.

Finally, the Appendix A section covers other additional information such as GOCDES Change Record from version 1.7d to version 2.0, and provides a complete list of all related documents and

references. All listed documents are attached in this package and also available for download from the ITSC website.

1.1 Applicability

This publication applies to the Ontario Public Service (OPS) ministries and clusters. It also applies to all agencies reclassified to regulatory/adjudicative, advisory and operational to which standards have been regulated.

Kindly refer to http://intra.pmed.mbs.gov.on.ca/mbc/pdf/Agency_Establishment&Accountability-Dir.pdf for a list of provincial government agencies with their classification under the current classification system, as well as their previous Schedule under the former Schedule system.

1.2 Requirement Levels

This publication contains **mandatory** requirements for all applications, projects, cluster or ministry common XML schemas within OPS that utilize the concepts of Common Data Elements, including the use of GOCDES components.

1.3 Document Types and Filenames

Acronym	Type
GO-ITS	Government of Ontario Information Technology Standard

File name:

GO-ITS 27.1 Information Standard for Address Specification using Government of Ontario CDE Schema Version 2.0.doc

1.4 Purpose of the Standard

The Common Data Elements are standardized definitions of information that is generic to all mandates of the Government of Ontario. They provide information technology staff with a detailed, flexible template, or menu, of reusable names, definitions and formats for data elements. Using Common Data Elements can save time, provide new ideas, ensure consistency, enforce standards and integrate information.

GOCDES is developed based on the concepts of Common Data Elements Model. The design of GOCDES is leveraged on previous XML schema design and development experience and, in particular, the feedbacks on the usage of previous released XML schema within the Ontario Public Service (OPS).

GOCDES covers Parties (individuals, organizations and their roles). It also covers the Addresses of Parties, such as mailing, physical, telephone, e-mail or net addresses.

GOCDES could be used in the following cases:

- Sharing OPS document structure rules within OPS or across jurisdiction as a common format for data exchange.
- Automatic validation of OPS's own XML data or data from external sources.
- Exchanging data between heterogeneous databases.
- XML parses to supply default values or fixed values for attributes that are not explicit in each XML document instance.

1.5 Recommended Versioning and/or Change Management

The previous release of the GO-ITS standard No. 27 has been versioned as 1.4 and consists of GOCDES release version 1.7d, which was developed based on Common Data Elements Model (CDEM) version 1.7d.

This follow-on standard document, GO-ITS 27.1, provides solutions and enhancements to issues listed in the Known Issues Section of GO-ITS standard No. 27, Version 1.4, and incorporates all changes made in the CDEM Addressing subject area data model version 2.0, which was approved by Corporate Architecture Review Board in November 2003. This new release of the GO-ITS standard for Address schema is versioned as 2.0.

Due to the dynamic and changing nature of the current work on the Common Data Elements Model, this standard will require further changes to certain areas. This work is evolving through major project usage feedback and Domain Working Group enhancements to the model. Future changes are being managed through the EAPM-based change control procedure - see appendix for this procedure. As this work evolves and receives approval through the Domain working Group, there will be a new release of this schema brought forward to the Standards Committee as an update to this standard..

If you have questions or comments about the GOCDES content or have the needs to make modification to the current release of GOCDES, please contact the Information Architect or equivalent in your I&IT Cluster. The cluster architect will then consult with MBS Corporate Architecture Branch if it is required. Issues may be resolved by cluster or corporate architecture governance bodies.

1.6 Contact Information

	Contact 1	**Contact 2**
Name	Database Analyst	Technical Coordinator
Organization/ Ministry	Management Board Secretariat	Management Board Secretariat
Division	Office of the Corporate Chief Technology Officer	Office of the Corporate Chief Technology Officer
Branch	Corporate Architecture Branch	Corporate Architecture Branch
Section/ Unit	Information & Business Architecture	Technical Standards Section
Office Phone	(416) 327-2086	(416) 212-0940
E-mail	go-its@gov.on.ca	go-its@gov.on.ca

1.7 Type of Standard

Check One	*Type of Standard*
☐	Implementation Standard – requirements or specifications, which may include advise and guidance, for the implementation of a technology or the performance of an activity related to the use of technology, applicable throughout the provincial government. (e.g. mandatory O/S configuration requirements, security procedures, web page design requirements etc.).
X	Information Standard – specifications for a data format (e.g. XML schema, metadata, and/or related data models)
☐	Technical Standard - networking and communications specifications, protocols, interfaces (API's) (e.g. standards adopted from recognized standards development organizations such as W3C, OASIS or IETF such as TCP/IP, XML, SOAP, etc.)
☐	Architecture Standard – application patterns, architecture and standards principles governing the design and technology decisions for the development of major enterprise applications

Please indicate if this standard should be restricted to publishing on the Internal (Intranet) IT Standards web site or whether it is intended for publishing on the public (Internet) Government of Ontario IT Standards web site.

Check One	*Publish as Internal or External*
☐	Internal Standard
☑	External Standard

1.8 Acknowledgements

1.8.1 Development Team

Name	**Cluster/Ministry**	**Branch**
Thomas Chen	Management Board Secretariat	Corporate Architecture Branch
Adnan Kulenovic	Management Board Secretariat	Consultant to Corporate Architecture Branch
Athar Gill	Management Board Secretariat	Corporate Architecture Branch

1.8.2 Reviewers

Name	**Cluster/Ministry**	**Branch**
Alana Boltwood	Management Board Secretariat	Corporate Architecture Branch
Alexander Yutkin	Community Services Cluster	Apprenticeship Support Application

Anna Nadin	Justice Cluster	Architecture
Anne Trudell	Land Resources Cluster	Land and Resources Data Administration
Asif Khan	Community Services Cluster	Ontario Student Information System
Barb Stead	Central Agencies Cluster, Ministry of Finance	Enterprise Business Solutions Branch
Bernard Sychangco	Ministry of Transportation	Consultant to ESDI
Bill Powell	Management Board Secretariat	Corporate Architecture Branch
Dale Hunter	Management Board Secretariat	Corporate Architecture Branch
Daniel Chang	Human Services Cluster	Information Management and IT Security
Dean Pigeon	Management Board Secretariat	Corporate Architecture Branch
Frank Cheng	Central Agencies Cluster, Ministry of Finance	Enterprise Technology Solutions Branch
Frank Tao	Economics and Business Cluster	Consultant to Electronic Service Delivery to Individuals project
Garry Stoddart	Transportation Cluster	Information Resources Management
Gennaro Giampaolo	Economics and Business Cluster	Planning & Architecture
George Berelidze	Economics and Business Cluster	Planning & Architecture
Ian Koster	Community Services Cluster	Ontario Student Information System
Joanne Venema	Human Services Cluster	Information Management and IT Security
Kamel Toubache	Community Services Cluster	Planning and Architecture
Karin Wood	Transportation Cluster	Consultant to Road User Safety System Renewal
Kathleen Youmans	Human Services Cluster	Information Management and IT Security
Lorie Oblak	Transportation Cluster	Architecture
Moira Watson-Turner	Land Resources Cluster	Consultant to Land and Resources Data Administration
Murray Edmund	Economics and Business Cluster	Planning & Architecture
Murray Harris	Central Agencies Cluster, Ministry of Finance	Enterprise Technology Solutions Branch
Norman Lee	Management Board Secretariat	Corporate Architecture Branch
Paul Daly	Management Board Secretariat	Corporate Architecture Branch
Paul Nita	Ministry of Transportation	Consultant to ESDI
Randy Dixon	Justice Cluster	Architecture
Rob Parry	Land Resources Cluster	Land and Resources Data Administration
Shafeena Ying	Economics and Business Cluster	Consultant to Electronic Service Delivery to Individuals project
Shehaan Ragunathan	Community Services Cluster	Policy and Planning
Simon Lea	Economics and Business Cluster	Consultant to Electronic Service Delivery to Individuals project

Sylvia Smart	Management Board Secretariat	Corporate Architecture Branch
Victor Chan	Management Board Secretariat	Applied Technology Branch
Zheng (Jane) Liang	Management Board Secretariat	e-Government Branch

1.8.3 Group and Committee Reviews

Check	Area	Date: (month/year)
☑	Technical Standards Unit, Corporate Architecture Branch, OCCTO	03/2004
☑	Corporate Architecture Branch (CAB Architects), OCCTO	01/2004
☑	– Information Architecture Domain (IADWG)	02/2004
☑	Clusters XML Schema Development Team	02/2004
☑	IT Standards Council	03/2004

Common Data Elements XML Schemas

2 CDES Logical Design

GOCDES schemas and their associated Logical Data Models and Physical Data Models are owned by the Corporate Architecture Branch (CAB) in the Management Board Secretariat (MBS) of the Government of Ontario. They are semantically identical to the CDE Model. For more information, please contact the Manager, Information And Business Architecture at 416-327-0313.

2.1 Design Principles

This section lists the design principles that guided development of GOCDES 2.0.

1. **Completeness:** CDES LDM must implement all business requirements and rules that have been expressed in the CDEM BVLDM. In other words, CDES LDM must be semantically equivalent to its business data model, but not necessarily map its structures directly.

2. **Consistency:** CDES LDM must maintain the consistency in the use of entity names, attribute names and design patterns of data model. Similarly, GOCDES Schema must also maintain the consistency in the use of schema type names, element names, attribute names and structures of design patterns within the schema.

3. **Stability:** GOCDES should be designed in a way that will minimize the impact of the future changes of business requirements.

4. **Reusability/Extendibility:** GOCDES must be able to support the extension and re-composition of data components to meet specific requirements of OPS applications.

5. **Compatibility:** CDES LDM should align with ministry and cluster logical data models wherever is possible, especially when a ministry or cluster logical data model is shared and supported by several clusters or ministries.

6. **Standardization:** Data element names used in the CDES LDM, GOCDES PDM and schemas should follow OPS corporate naming standards and conventions as specified in OPS IMH.

7. **Simplicity:** CDES LDM and GOCDES PDM should avoid any unnecessary complexity and make GOCDES simple for implementation, maintenance and support.

8. **Robustness and Modularity**: GOCDES should be organized into a few smaller, loosely coupled, and well-defined modules (subject sub-areas), to enable independent change management, versioning and customization on each of these individual modules.

9. **Performance:** The design of GOCDES should aim at minimizing run-time processing costs. XML Schema and XML instances should be simple and short to minimize parsing, processing and/or application binding costs.

10. **Compatibility with Validation Tools:** The design of GOCDES should enable easy integration of GOCDES based applications with application data validation software.

11. **Compatibility with Code Generating Tools:** The usage rules of GOCDES should allow customization of XML Schemas to meet specific requirements of Java to XML binding tools (JAXB).

2.2 CDES Address Sub Areas

CDES Address LDM is divided into the following sub areas:

- Common Address Elements
- Canada Address
- US Address
- International Address
- Electronic Address

The logical subject sub areas are shown in Figure 1.

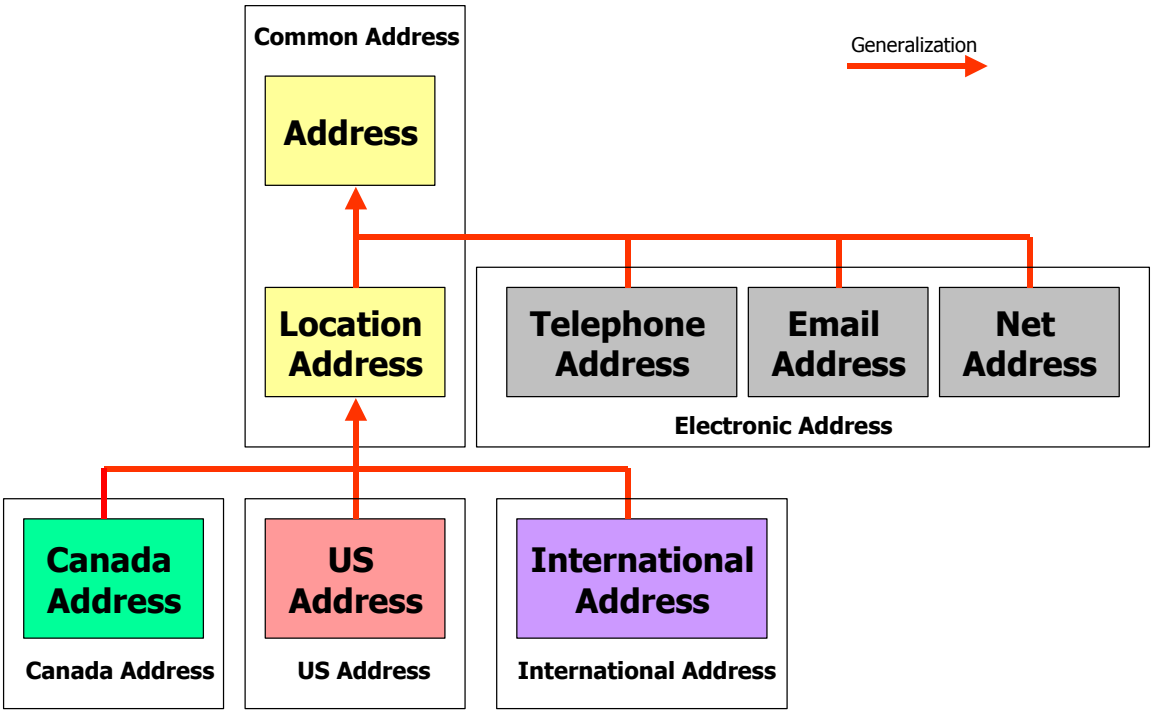


Figure 1. Address Sub Areas

2.3 CDES Address Data Models

The CDES LDM is expressed in the format of entity-relationship Model (ERM). Please see the "Components of a Data Model" section of the *Information Modeling Handbook* for the notation used, and the detailed CDES design documentation, *Common Data Elements XML Schema Addressing Subject Area, Logical Data Model and Schema Design,*for the meaning of entities and attributes.

2.3.1 Common Address Elements

Common Address Elements are data elements (entities, attributes, and relationships) that are commonly shared in the Address subject area. The diagram in Figure 2 shows the common elements of the Address subject area. These entities are abstract (i.e. they can be extended with specific subtypes, but cannot be instantiated):

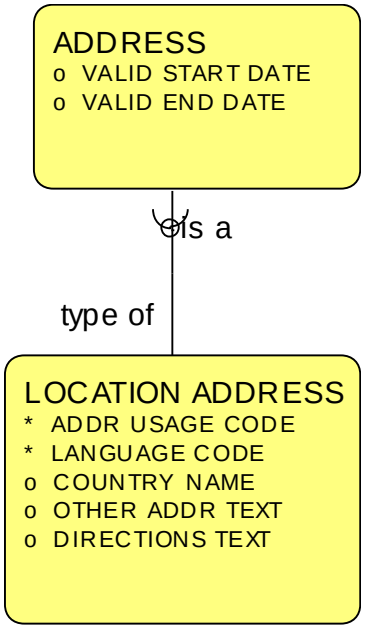


Figure 2. Common Address Elements Logical Data Model

2.3.2 Canada Address

Figure 3 shows the mapping of the mailing and physical address entities of CDEM BVLDM into that of CDES LDM. Canada Address entity has six subtypes, as indicated in the diagram. Address attribute *RecordTypeCode* indicates Canada Post Address Database (CPADB) record type (1-5). Non Civic Physical Address, which is not contained in CPADB, has *RecordTypeCode* of 0. The Attribute *AddrUsageCode* indicates the use of an address subtype, which can be mailing (M), physical (P) or both (B). Non Civic Physical Address can be used only as physical; PO Box, Route Delivery and General Delivery only as mailing, while Civic and Route Addresses may serve for both purposes in the same address instance.

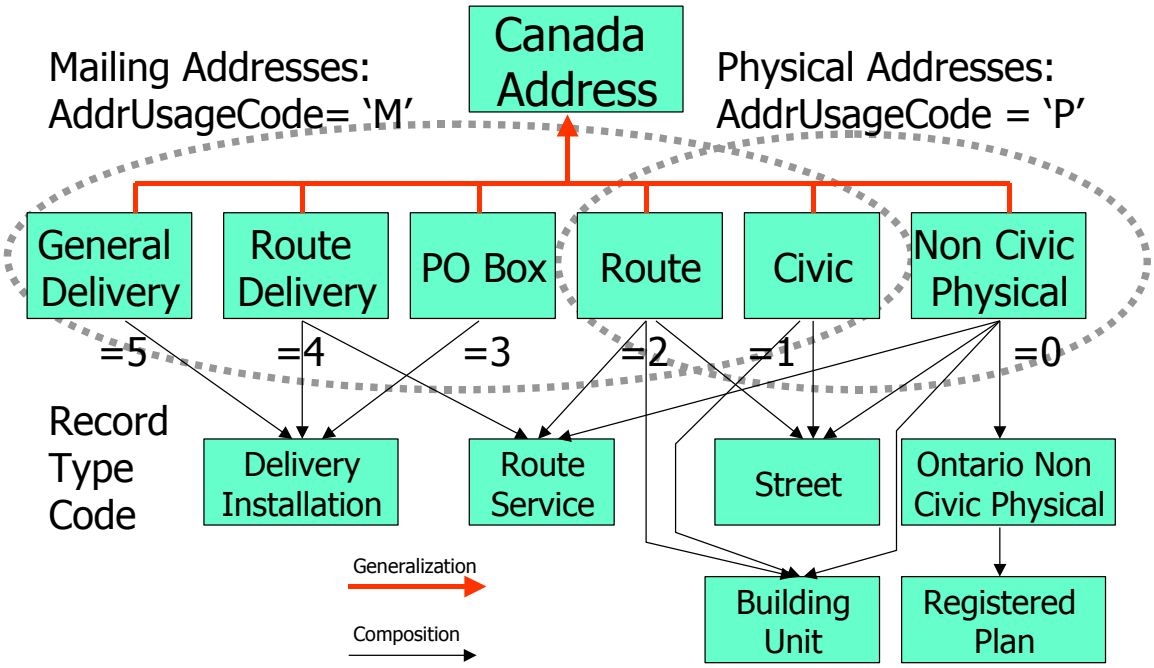


Figure 3. Canada Mailing and Physical Addresses

Figure 4 shows CDES Canada Address LDM. The white boxes at the bottom right corner of the diagram show various views of Ontario Non-Civic Physical Address. Similarly, the white boxes at the middle bottom of the diagram describe views of Route Address. These views will be presented with the choice construct in GOCDES PDM and XML Schemas.

2.3.3 US Address

Figure 5 shows LDM of US mailing or physical addresses: Civic Address, PO Box Address, etc.

2.3.4 International Address

Figure 6 shows LDM of international mailing or physical addresses.

2.3.5 Electronic Address

Figure 7 presents LDM for Electronic Address (i.e. Telephone, Email and Net address).

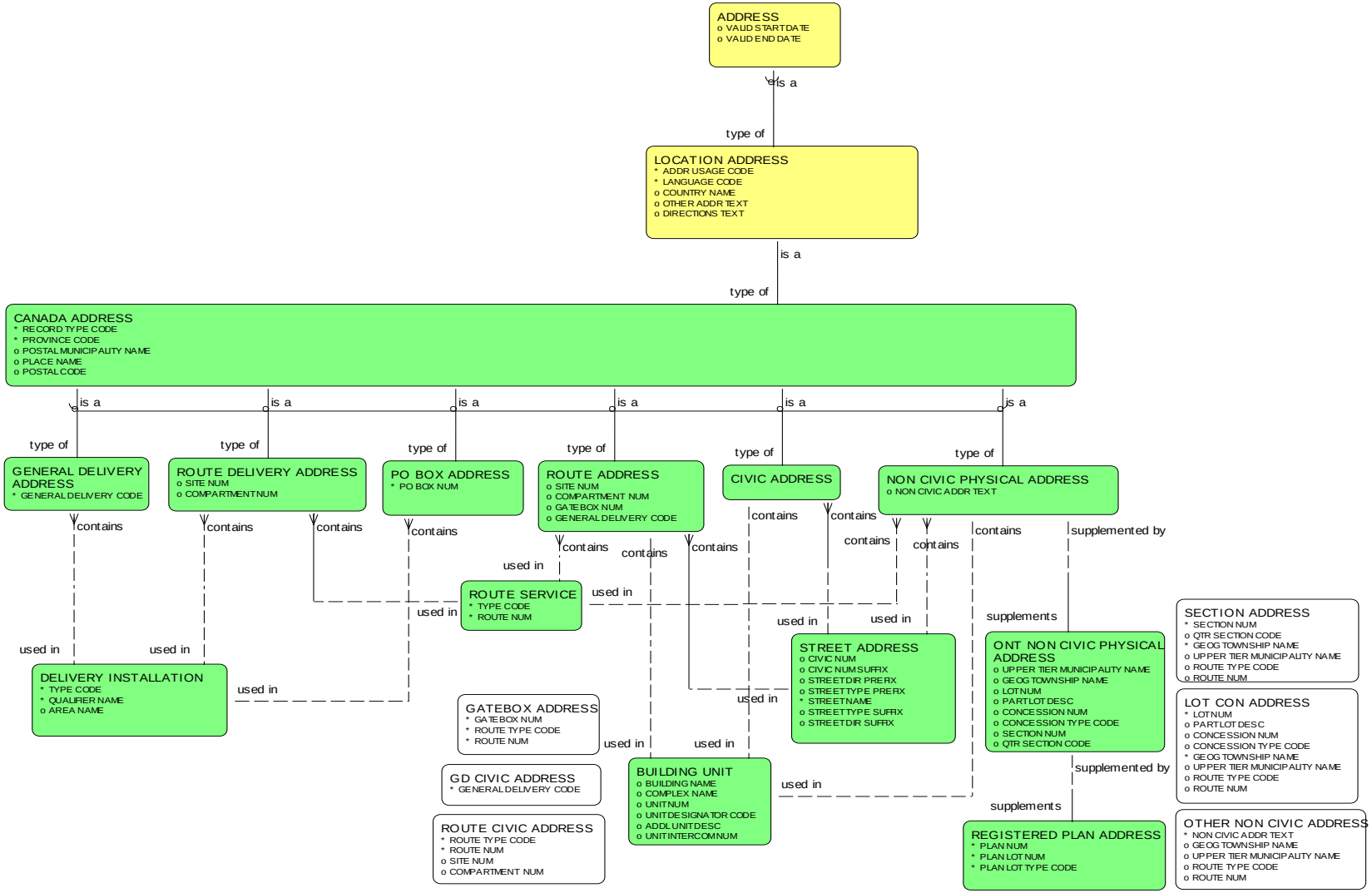


Figure 4. Canada Address Logical Data Model

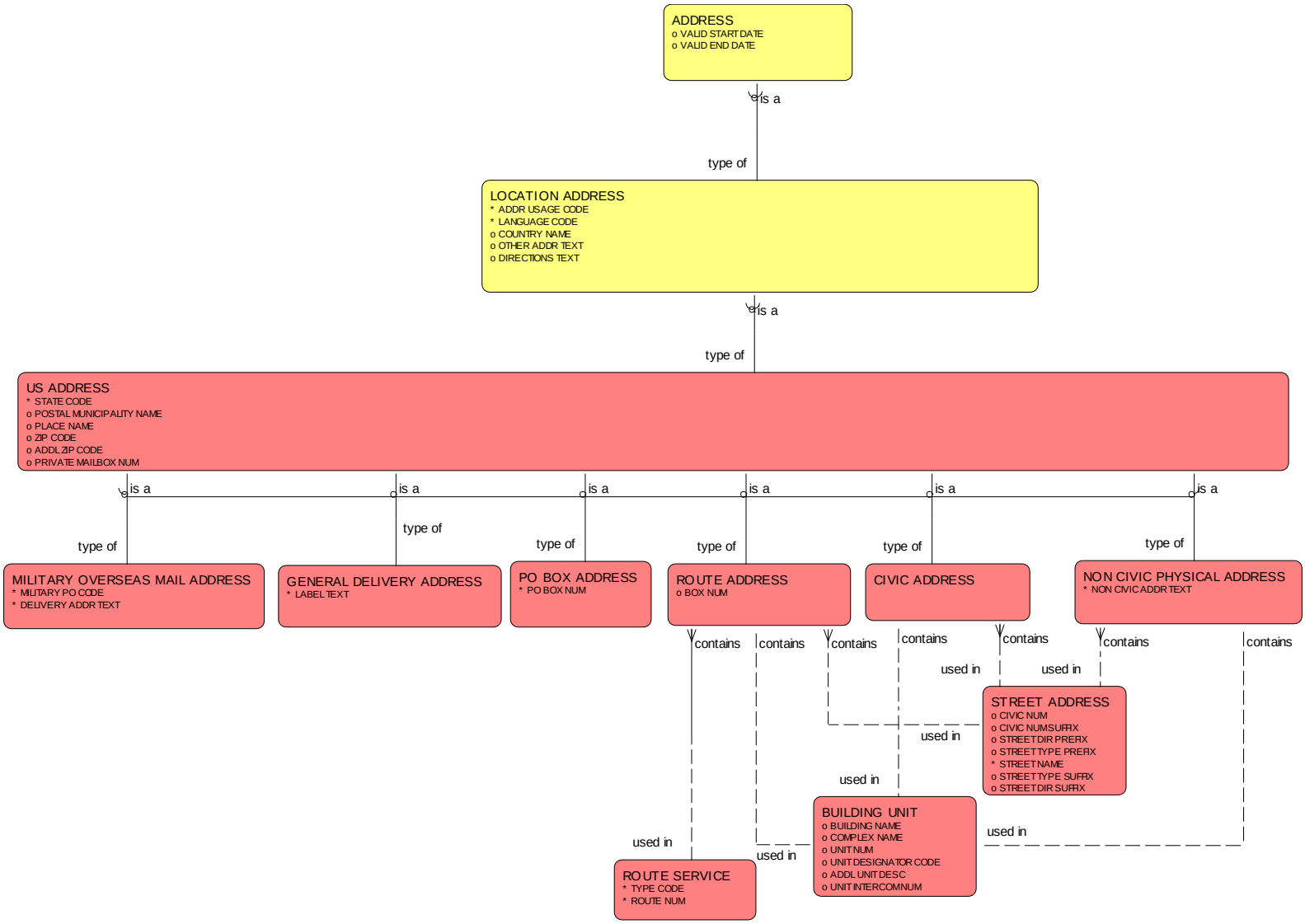


Figure 5. US Address Logical Data Model

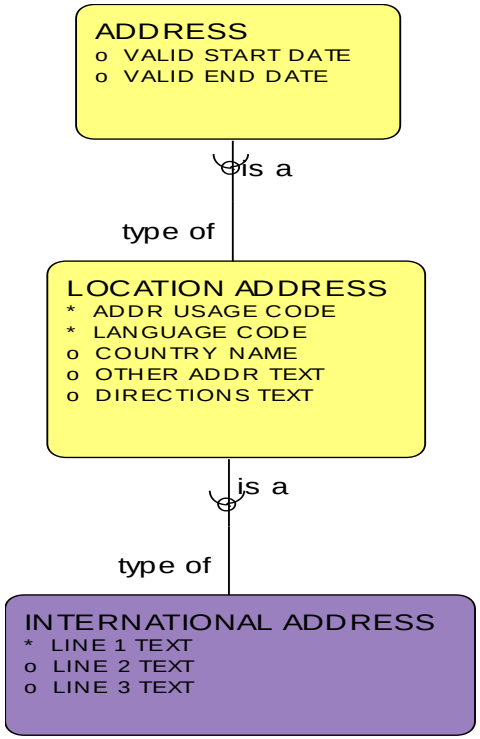


Figure 6. International Address Logical Data Model

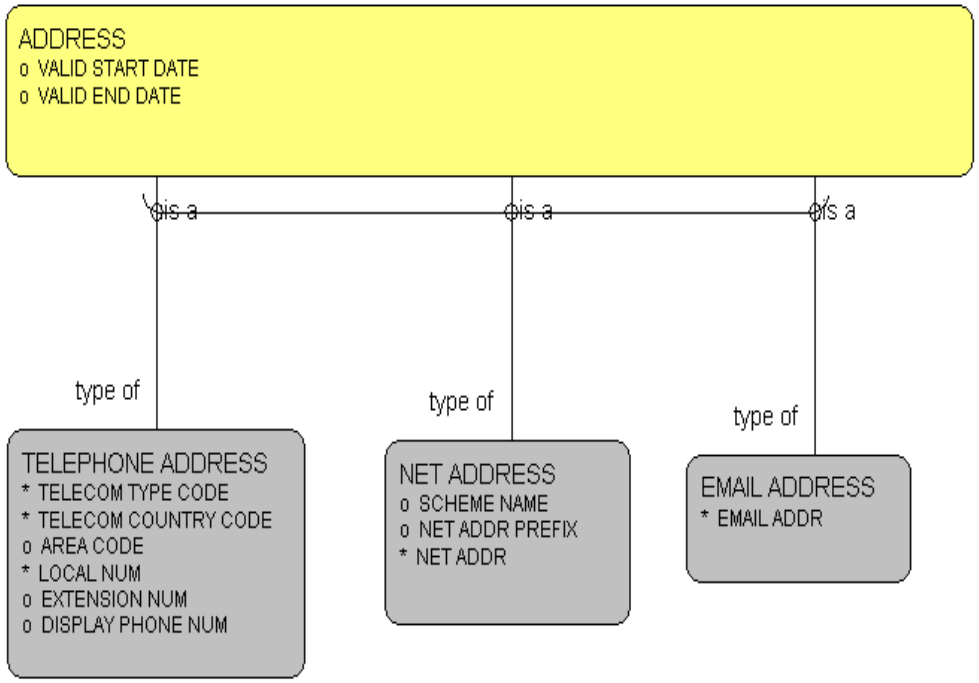


Figure 7. Electronic Address Logical Data Model

3 GOCDES Physical Design

3.1 XML Schema Namespaces

GOCDES Physical Data Model (PDM) has two parts:

a) XML Schema namespaces, and
b) tree diagrams with associated XML code that describes the data integrity rules.

The following namespaces are defined in GOCDES 2.0:

- GOShared
- GOAddressCommon
- GOCanadaAddress
- GOUSAddress
- GOInternationalAddress
- GOElectronicAddress

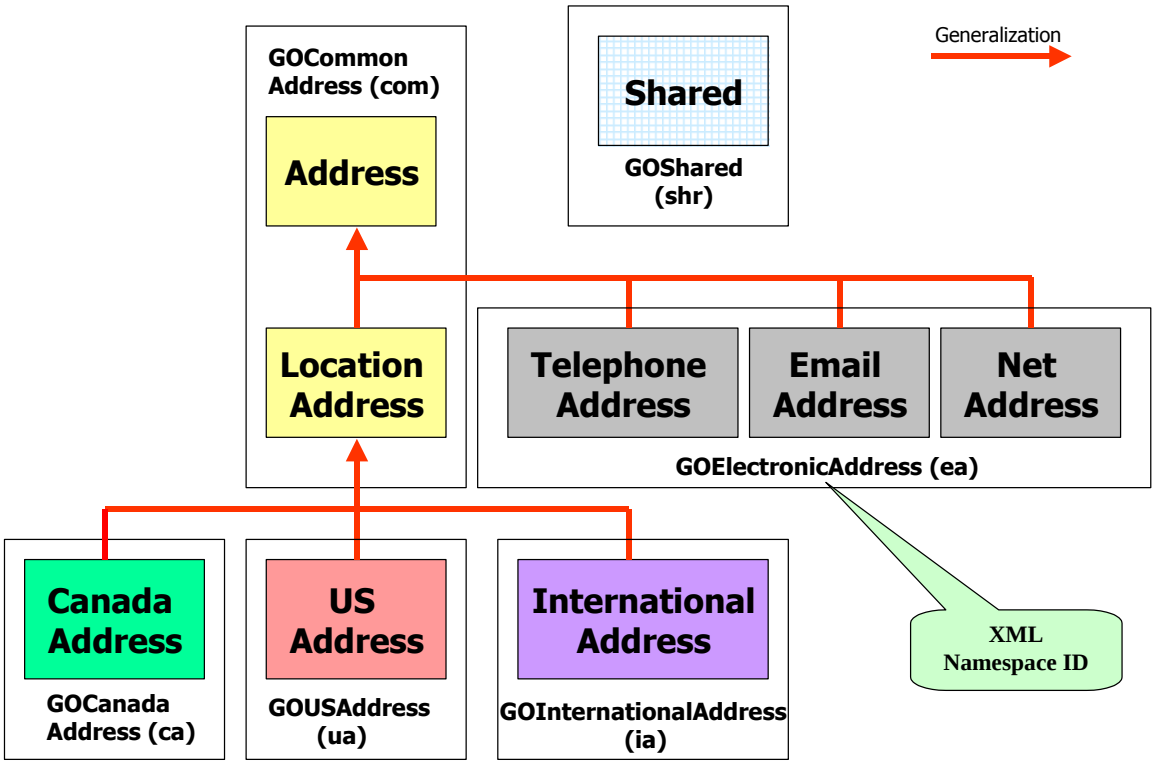


Figure 8. Address Subject Area Namespaces

Figure 8 presents the namespaces and associated logical entities in a diagrammatic form. A namespace corresponds to a logical sub area identified in the CDES LDM, with exception of GOShared. The GOShared namespace contains generic common elements, such as Date, Time, Flags, etc., which are shared among all CDE subject areas.

PDMs and XML Schemas for each of these namespaces are described in the subsequent sections.

3.2 XML Schemas

3.2.1 GOAddressCommon

The GOCommonAddress schema contains components (i.e. types and elements) that are used by two or more GOCDES modules within the Address subject area. These are often intersection entities or super entities in the CDES LDM.

Schema **GOCommonAddress2.0.xsd**

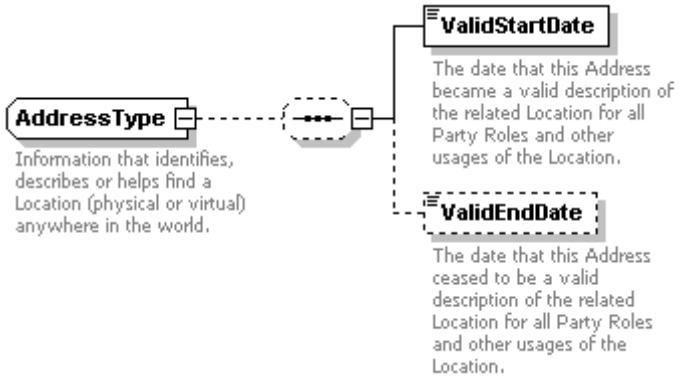
targetNamespace: **GOCommonAddress2.0.xsd**

Complex types	Simple types
AddressType	**AddlUnitDescType**
BuildingUnitType	**AddrLineTextType**
LocationAddressType	**AddrUsageType**
	BuildingNameType
	CivicNumSuffixType
	CivicNumType
	CountryNameType
	DirectionsTextType
	MailBoxNumType
	MunicipalityNameType
	POBoxNumType
	PostalCodeType
	ProvinceStateCodeType
	RouteServiceNumType
	RouteType
	StreetDirType
	StreetNameType
	StreetType
	UnitDesignatorType
	UnitIntercomNumType
	UnitNumType

Imported namespace

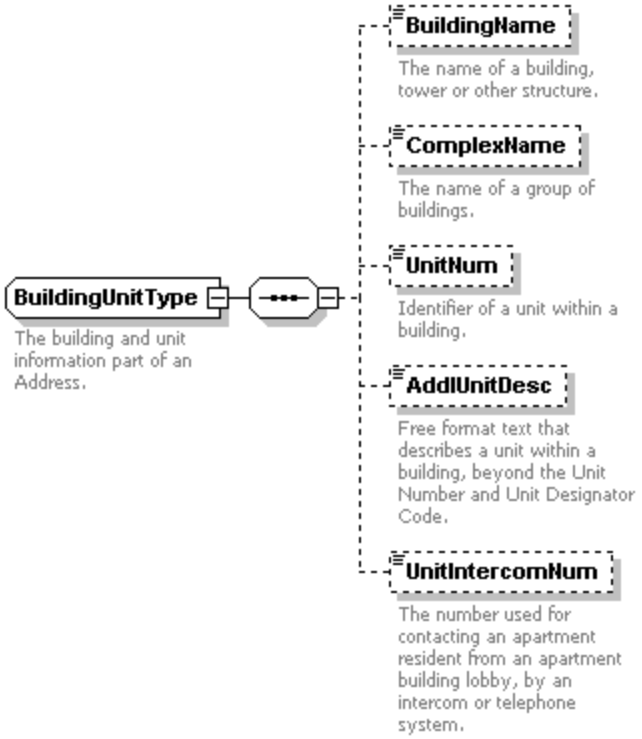
targetNamespace: **GOShared2.0.xsd**

complexType **AddressType**

diagram	
source	<complexType name="AddressType"> <annotation> <documentation xml:lang="EN">Information that identifies, describes or helps find a Location (physical or virtual) anywhere in the world.</documentation> <appinfo>Data Integrity Rules: 1. If ValidEndDate is used then ValidStartDate must be used. 2. If ValidEndDate has a value then ValidEndDate >= ValidStartDate </appinfo> </annotation> <sequence minOccurs="0"> <element name="ValidStartDate" type="shr:Date"> <annotation> <documentation xml:lang="EN">The date that this Address became a valid description of the related Location for all Party Roles and other usages of the Location.</documentation> </annotation> </element> <element name="ValidEndDate" type="shr:Date" minOccurs="0"> <annotation> <documentation xml:lang="EN">The date that this Address ceased to be a valid description of the related Location for all Party Roles and other usages of the Location.</documentation> </annotation> </element> </sequence> </complexType>

complexType **BuildingUnitType**

diagram

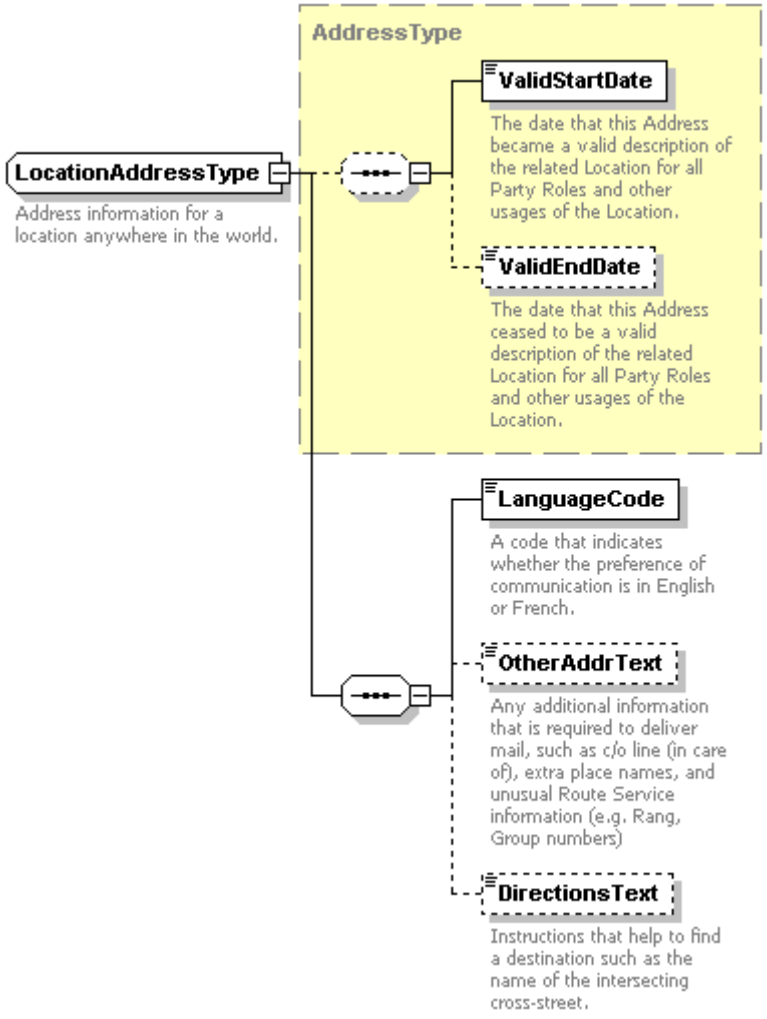


source

```
<complexType name="BuildingUnitType">
  <annotation>
    <documentation xml:lang="EN">The building and unit information part of an Address.</documentation>
  </annotation>
  <sequence>
    <element name="BuildingName" type="com:BuildingNameType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The name of a building, tower or other structure.</documentation>
      </annotation>
    </element>
    <element name="ComplexName" type="com:BuildingNameType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The name of a group of buildings.</documentation>
      </annotation>
    </element>
    <element name="UnitNum" type="com:UnitNumType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">Identifier of a unit within a building.</documentation>
      </annotation>
    </element>
    <element name="AddlUnitDesc" type="com:AddlUnitDescType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">Free format text that describes a unit within a building, beyond the Unit Number
and Unit Designator Code.</documentation>
      </annotation>
    </element>
        <element name="UnitIntercomNum" type="com:UnitIntercomNumType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The number used for contacting an apartment resident from an apartment
building lobby, by an intercom or telephone system.</documentation>
        <appinfo>Data Integrity Rules:
              1.  IF AddrUsageCode = 'P' or 'B' THEN UnitIntercomNum may be used.
              2.  IF AddrUsageCode = 'M' THEN UnitIntercomNum must NOT be used.
        </appinfo>
```

	</annotation> </element> </sequence> </complexType>

complexType **LocationAddressType**

diagram	

source

```
<complexType name="LocationAddressType">
  <annotation>
    <documentation xml:lang="EN">Address information for a location anywhere in the world.</documentation>
    <appinfo>Data Integrity Rules:
            1. If the LocationAddress is a CivicAddress, RouteAddress, or InternationalAddress then AddrUsageCode
               may be = 'M', 'P' or 'B'.
            2. If LocationAddress is a NonCivicPhysicalAddress then AddrUsageCode must be = 'P'.
            3. If LocationAddress is a POBoxAddress, GeneralDeliveryAddress, or RouteDeliveryAddress then
               AddrUsageCode must be = 'M'
   </appinfo>
  </annotation>
  <complexContent>
    <extension base="com:AddressType">
      <sequence>
        <element name="LanguageCode" type="shr:OntOfficialLanguageType" default="EN">
          <annotation>
            <documentation xml:lang="EN">A code that indicates whether the preference of communication is in English or
French.</documentation>
            <appinfo>Valid LanguageCode values are available in the CDER table ONT_OFFICIAL_LANG.</appinfo>
          </annotation>
        </element>
        <element name="OtherAddrText" type="com:AddrLineTextType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">Any additional information that is required to deliver mail, such as c/o line (in
care of), extra place names, and unusual Route Service information (e.g. Rang, Group numbers)</documentation>
          </annotation>
        </element>
        <element name="DirectionsText" type="com:DirectionsTextType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">Instructions that help to find a destination such as the name of the intersecting
cross-street.</documentation>
            <appinfo>Data Integrity Rules
                1. If AddrUsageCode = 'P' or 'B' then DirectionsText may be specified.
                2. If AddrUsageCode = 'M' then DirectionsText must NOT be specified.
            </appinfo>
          </annotation>
        </element>
      </sequence>
    </extension>
  </complexContent>
</complexType>
```

simpleType **AddlUnitDescType**

source

```
<simpleType name="AddlUnitDescType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for Additional Unit Description.</documentation>
  </annotation>
  <restriction base="string">
    <maxLength value="20"/>
  </restriction>
</simpleType>
```

simpleType **AddrLineTextType**

source	<simpleType name="AddrLineTextType"> <annotation> <documentation xml:lang="EN">Domain definition for Free format address line.</documentation> </annotation> <restriction base="string"> <maxLength value="50"/> </restriction> </simpleType>

simpleType **AddrUsageType**

source	<simpleType name="AddrUsageType"> <annotation> <documentation xml:lang="EN">Domain definition for address usage code.</documentation> <appinfo>Valid address usage codes are: M - Mailing Address, P - Physical Address, B - Both Mailing Address and Physical Address, and these values can be found in the CDER table ADDRESS_USAGE_TYPE.</appinfo> </annotation> <restriction base="string"> <enumeration value="M"/> <enumeration value="P"/> <enumeration value="B"/> </restriction> </simpleType>

simpleType **BuildingNameType**

source	<simpleType name="BuildingNameType"> <annotation> <documentation xml:lang="EN">Domain definition for a building name or a building complex name.</documentation> </annotation> <restriction base="string"> <maxLength value="30"/> </restriction> </simpleType>

simpleType **CivicNumSuffixType**

source	<simpleType name="CivicNumSuffixType"> <annotation> <documentation xml:lang="EN">Domain definition for a civic number suffix code.</documentation> </annotation> <restriction base="string"/> </simpleType>

simpleType **CivicNumType**

source	<simpleType name="CivicNumType"> <annotation> <documentation xml:lang="EN">Domain definition for a civic number.</documentation> </annotation> <restriction base="string"> <maxLength value="6"/> </restriction> </simpleType>

simpleType **CountryNameType**

source	<simpleType name="CountryNameType"> <annotation> <documentation xml:lang="EN">Domain definition for a country name.</documentation> </annotation> <restriction base="string"> <maxLength value="50"/> </restriction> </simpleType>

simpleType **DirectionsTextType**

source	<simpleType name="DirectionsTextType"> <annotation> <documentation xml:lang="EN">Domain definition for a free format of address directions or special instructions.</documentation> </annotation> <restriction base="string"> <maxLength value="255"/> </restriction> </simpleType>

simpleType **MailBoxNumType**

source	<simpleType name="MailBoxNumType"> <annotation> <documentation xml:lang="EN">Domain definition for a postal mail box number any postal service in the world.</documentation> </annotation> <restriction base="string"/> </simpleType>

simpleType **MunicipalityNameType**

source	<simpleType name="MunicipalityNameType"> <annotation> <documentation xml:lang="EN">Domain definition for a municipality name, township name, or place name.</documentation> </annotation> <restriction base="string"> <maxLength value="30"/> </restriction> </simpleType>

simpleType **POBoxNumType**

source	<simpleType name="POBoxNumType"> <annotation> <documentation xml:lang="EN">Domain definition for a postal office box number used in Canada and US.</documentation> </annotation> <restriction base="string"> <maxLength value="5"/> </restriction> </simpleType>

simpleType **PostalCodeType**

source	<simpleType name="PostalCodeType"> <annotation> <documentation xml:lang="EN">Domain definition for a postal code of any postal service in the world.</documentation> </annotation> <restriction base="string"/> </simpleType>

simpleType **ProvinceStateCodeType**

source	<simpleType name="ProvinceStateCodeType"> <annotation> <documentation xml:lang="EN">Domain definition for a province, territory, or state code.</documentation> </annotation> <restriction base="string"/> </simpleType>

simpleType **RouteServiceNumType**

source	<simpleType name="RouteServiceNumType"> <annotation> <documentation xml:lang="EN">Domain definition for a postal route service number used in Canada and US.</documentation> </annotation> <restriction base="string"> <pattern value="[0-9]{1,4}"/> </restriction> </simpleType>

simpleType **RouteType**

source	<simpleType name="RouteType"> <annotation> <documentation xml:lang="EN">Domain definition for a postal route code of any postal service in the world.</documentation> </annotation> <restriction base="string"/> </simpleType>

simpleType **StreetDirType**

source	<simpleType name="StreetDirType"> <annotation> <documentation xml:lang="EN">Domain definition a code used to indicate a part of a street.</documentation> </annotation> <restriction base="string"/> </simpleType>

simpleType **StreetNameType**

source	<simpleType name="StreetNameType"> <annotation> <documentation xml:lang="EN">Domain definition for a street name.</documentation> </annotation> <restriction base="string"/> </simpleType>

simpleType **StreetType**

source	<simpleType name="StreetType"> <annotation> <documentation xml:lang="EN">Domain definition for a street type code such as Ave, Rd, Blvd, etc.</documentation> </annotation> <restriction base="string"> <maxLength value="6"/> </restriction> </simpleType>

simpleType **UnitDesignatorType**

source	<simpleType name="UnitDesignatorType"> <annotation> <documentation xml:lang="EN">Domain definition for a building unit designator code like Apt, Fl, etc.</documentation> </annotation> <restriction base="string"/> </simpleType>

simpleType **UnitIntercomNumType**

source	<simpleType name="UnitIntercomNumType"> <annotation> <documentation xml:lang="EN">Domain definition for a building apartment unit intercom number.</documentation> </annotation> <restriction base="string"> <pattern value="[0-9]{1,6}"/> </restriction> </simpleType>

simpleType **UnitNumType**

source	<simpleType name="UnitNumType"> <annotation> <documentation xml:lang="EN">Domain definition for a building unit number.</documentation> </annotation> <restriction base="string"> <maxLength value="6"/> </restriction> </simpleType>

3.2.2 GOCanadaAddress

The GOCanadaAddress schema contains components (i.e. types and elements) that are associated with a Canada Address of physical and any structured mailing address formats that are compliant with specifications from Canada Post Corporation and Canada Post Data Lookup database. GOCanadaAddress is semantically identical to the Canada Address found in the CDES Address LDM.

Schema **GOCanadaAddress2.0.xsd**

targetNamespace: **GOCanadaAddress2.0.xsd**

Complex types	Simple types
BuildingUnitType	**AddrRecordType**
CanadaAddressType	**CivicNumSuffixType**
CivicAddressType	**CivicNumType**
DeliveryInstallationType	**CompartmentNumType**
GeneralDeliveryAddressType	**ConcessionNumType**
LocationAddressType	**ConcessionType**
NonCivicPhysicalAddressType	**DeliveryInstallQualNameType**
OntNonCivicPhysicalAddressType	**DeliveryInstallType**
POBoxAddressType	**GeneralDeliveryType**
RegisteredPlanAddressType	**LotNumType**
RouteAddressType	**PartLotDescType**
RouteDeliveryAddressType	**PlanLotNumType**
RouteServiceType	**PlanLotType**
StreetAddressType	**PlanNumType**
	PostalCodeType
	ProvinceCodeType
	QuarterSectionType
	RouteType
	SectionNumType
	SiteNumType
	StreetDirType
	StreetNameType
	StreetType
	UnitDesignatorType

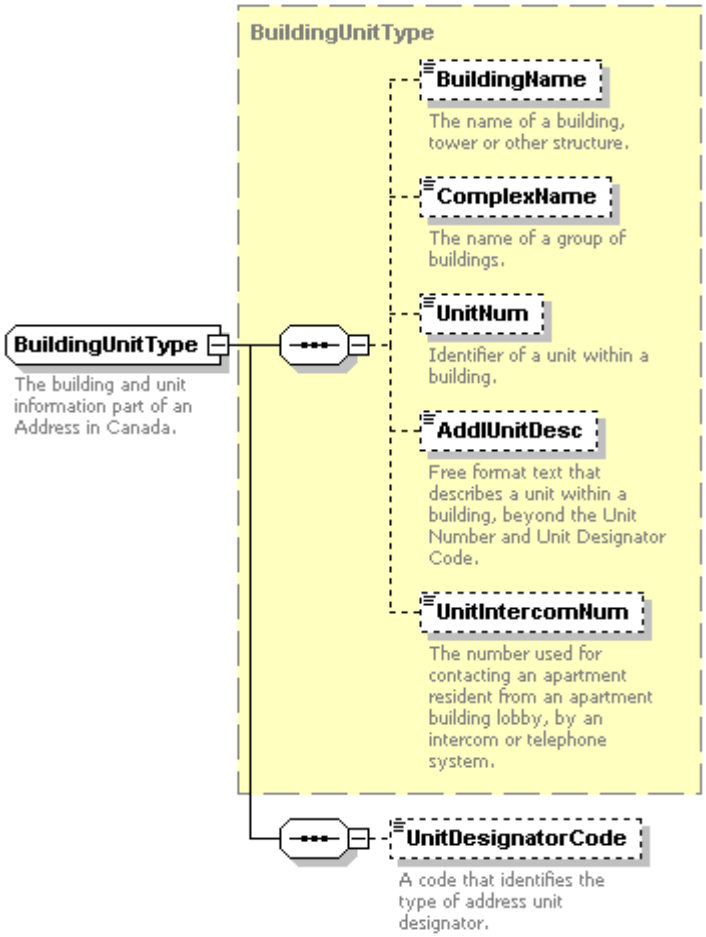
Imported Namespaces

targetNamespace: **GOCommonAddress2.0.xsd**

targetNamespace: **GOShared2.0.xsd**

complexType **BuildingUnitType**

diagram

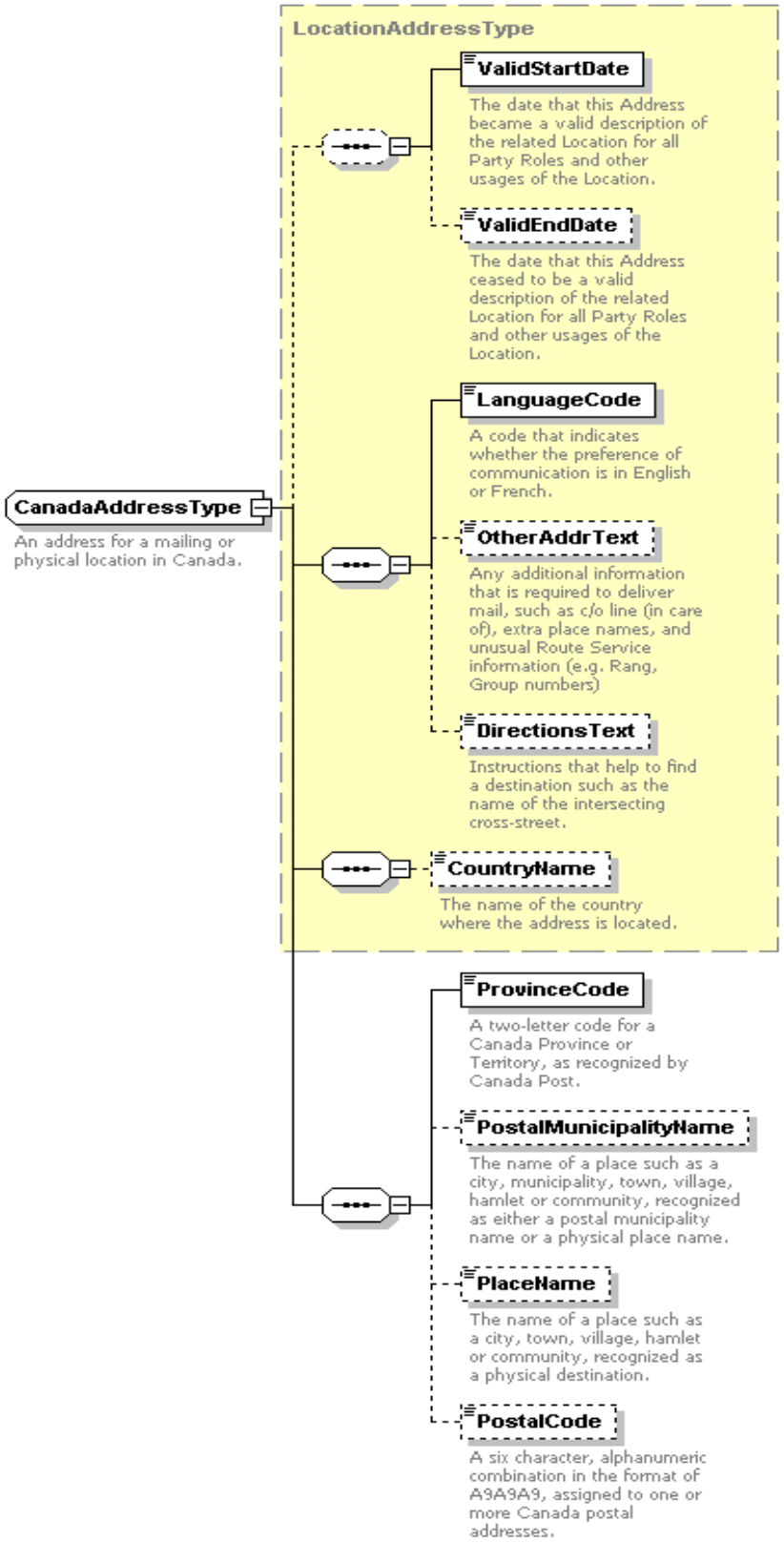


source

```
<complexType name="BuildingUnitType">
  <annotation>
    <documentation xml:lang="EN">The building and unit information part of an Address in Canada.</documentation>
  </annotation>
  <complexContent>
    <extension base="com:BuildingUnitType">
      <sequence>
        <element name="UnitDesignatorCode" type="ca:UnitDesignatorType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">A code that identifies the type of address unit designator.</documentation>
            <appinfo>UnitDesignatorCode is language dependent. Codes common in both English and French are:
HANGAR, HNGR, PHASE.  Codes only valid in English are: APT, BACK, BSMT, CONDO, DEPT, DOOR, FL, FLOOR,
FLR, FRNT, FRONT, LBBY, LOBBY, LOWER, PLANT, PH, REAR, RM, ROOM, SIDE, STN, STE, SUITE, TH,
TWNHSE, TOWER, TWR, UNIT, UPPER, UPPR, WING. Codes only valid in French are: APP, BUREAU, ETAGE,
LOC, LOCAL, LOG, PIECE, PORTE, SALLE, UNITE. Data Integrity Rules:
                1. If LanguageCode of LocationAddressType = 'EN' then use UnitDesignatorCodes that are valid in
                   English or common in both languages.
                2. If LanguageCode of LocationAddressType = 'FR' then use UnitDesignatorCodes that are valid in French
                   or common in both languages.</appinfo>
          </annotation>
        </element>
      </sequence>
    </extension>
  </complexContent>
</complexType>
```

complexType **CanadaAddressType**

diagram

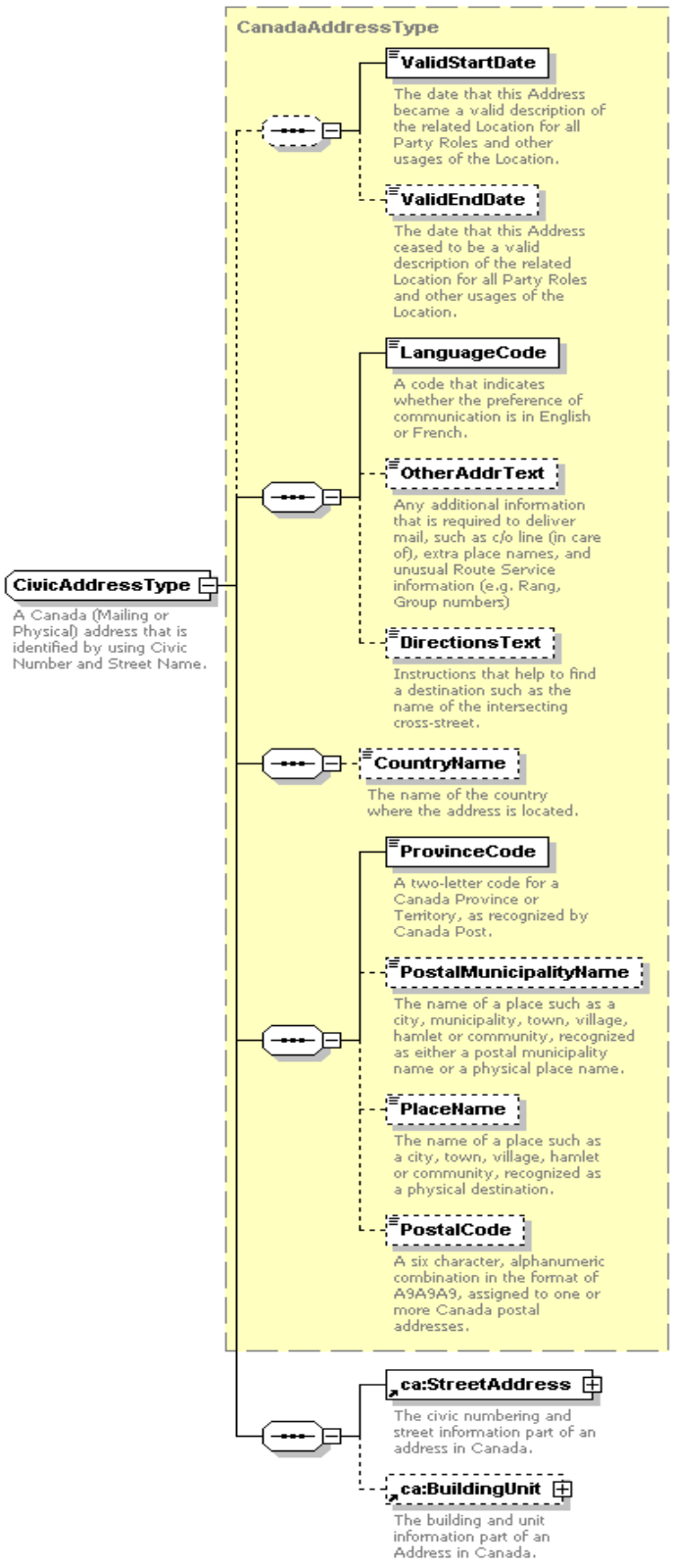


Source

```
<complexType name="CanadaAddressType">
  <annotation>
    <documentation xml:lang="EN">An address for a mailing or physical location in Canada.</documentation>
  </annotation>
  <complexContent>
    <extension base="ca:LocationAddressType">
      <sequence>
        <element name="ProvinceCode" type="ca:ProvinceCodeType">
          <annotation>
            <documentation xml:lang="EN">A two-letter code for a Canada Province or Territory, as recognized by Canada Post.</documentation>
          </annotation>
        </element>
        <element name="PostalMunicipalityName" type="com:MunicipalityNameType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">The name of a place such as a city, municipality, town, village, or community, recognized as a valid mailing destination.</documentation>
            <appinfo>Data Integrity Rules:
                1. If addrUsageCode = ‘M’, or ‘B’ then PostalMunicipalityName must be specified.
                2. If addrUsageCode = ‘P’ then PostalMunicipalityName must NOT be specified.
            </appinfo>
          </annotation>
        </element>
        <element name="PlaceName" type="com:MunicipalityNameType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">The name of a place such as a city, town, village, hamlet or community, recognized as a physical destination.</documentation>
            <appinfo>Data Integrity Rules:
                1. If addrUsageCode = 'P' or 'B' THEN PlaceName must be specified.
                2. If addrUsageCode = ‘M’ THEN PlaceName must NOT be specified.
            </appinfo>
          </annotation>
        </element>
        <element name="PostalCode" type="ca:PostalCodeType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">A six character, alphanumeric combination in the format of A9A9A9, assigned to one or more Canada postal addresses.</documentation>
            <appinfo>Data Integrity Rules: 1. If addrUsageCode = 'M' or 'B' then PostalCode must be specified.</appinfo>
          </annotation>
        </element>
      </sequence>
    </extension>
  </complexContent>
</complexType>
```

complexType **CivicAddressType**

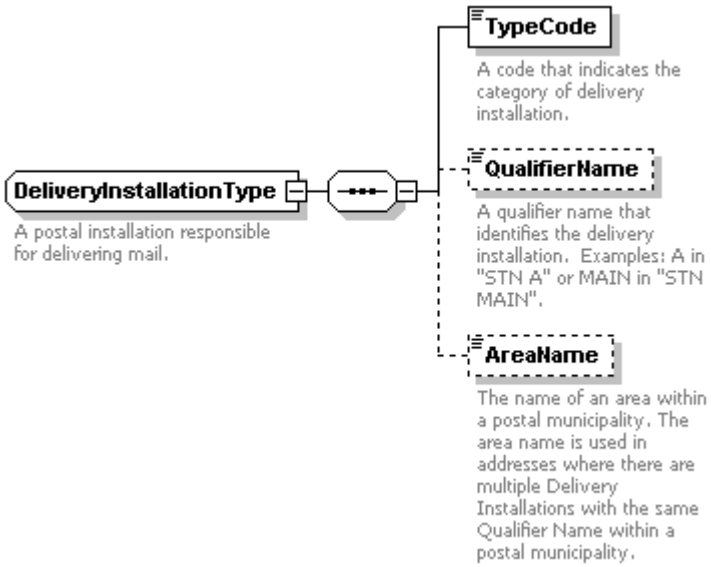
diagram



source	<complexType name="CivicAddressType" final="#all"> <annotation> <documentation xml:lang="EN">A Canada (Mailing or Physical) address that is identified by using Civic Number and Street Name.</documentation> </annotation> <complexContent> <extension base="ca:CanadaAddressType"> <sequence> <element ref="ca:StreetAddress"> <annotation> <documentation xml:lang="EN">The civic numbering and street information part of a Canada (Mailing or Physical) Address.</documentation> </annotation> </element> <element ref="ca:BuildingUnit" minOccurs="0"> <annotation> <documentation xml:lang="EN">The building and unit information part of an Address in Canada.</documentation> </annotation> </element> </sequence> <attribute ref="ca:recordTypeCode" fixed="1"> <annotation> <documentation xml:lang="EN">A code used to indicate the types and formats of addresses.</documentation> <appinfo>The recordTypeCode must = '1' for a CivicAddressType.</appinfo> </annotation> </attribute> <attribute ref="com:addrUsageCode"> <annotation> <documentation xml:lang="EN">A code used to indicate the usage of a location address.</documentation> <appinfo>The addrUsageCode may = 'M', 'P', or 'B' for a CivicAddressType.</appinfo> </annotation> </attribute> </extension> </complexContent> </complexType>

complexType **DeliveryInstallationType**

diagram

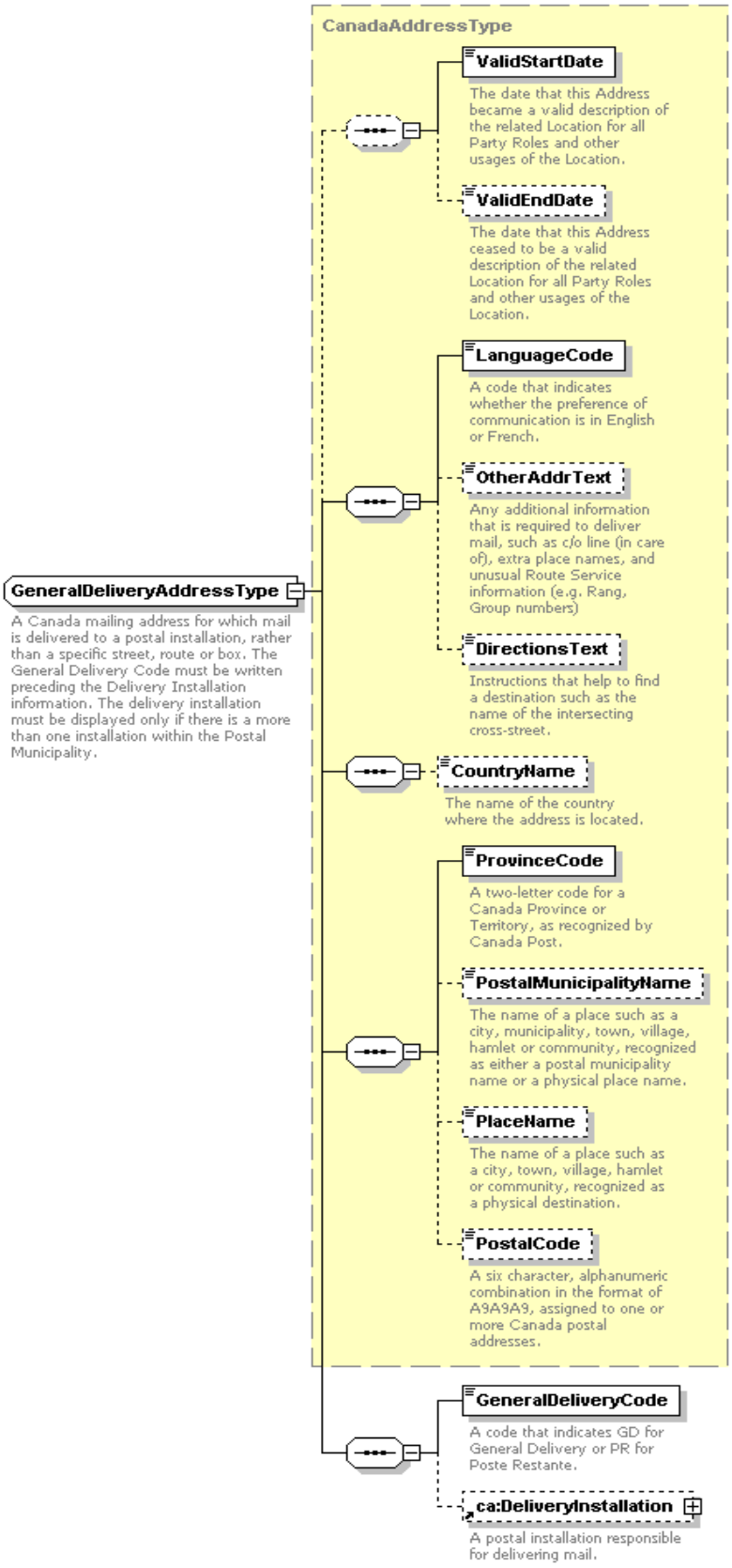


source

```
<complexType name="DeliveryInstallationType" final="#all">
  <annotation>
    <documentation xml:lang="EN">A postal installation responsible for delivering mail.</documentation>
  </annotation>
  <sequence>
    <element name="TypeCode" type="ca:DeliveryInstallType">
      <annotation>
        <documentation xml:lang="EN">A code that indicates the category of delivery installation.</documentation>
        <appinfo>The delivery installation type code is language dependent. The valid English codes are: CDO, CMC,
LCD, PO, RPO, and STN, while the valid French codes are: BDP, CC, COP, CPC, CSP, PDF, and SUCC. Data
Integrity Rules:
            1. If LanguageCode of LocationAddressType = 'EN' then use TypeCodes that are valid in English or
               common in both languages.
            2. If LanguageCode of LocationAddressType = 'FR' then use TypeCodes that are valid in French or
               common in both languages.
      </appinfo>
      </annotation>
    </element>
    <element name="QualifierName" type="ca:DeliveryInstallQualNameType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">A qualifier name that identifies the delivery installation.  Examples: A in "STN A"
or MAIN in "STN MAIN".</documentation>
      </annotation>
    </element>
    <element name="AreaName" type="com:MunicipalityNameType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The name of an area within a postal municipality. The area name is used in
addresses where there are multiple Delivery Installations with the same Qualifier Name within a postal
municipality.</documentation>
      </annotation>
    </element>
  </sequence>
</complexType>
```

complexType **GeneralDeliveryAddressType**

diagram

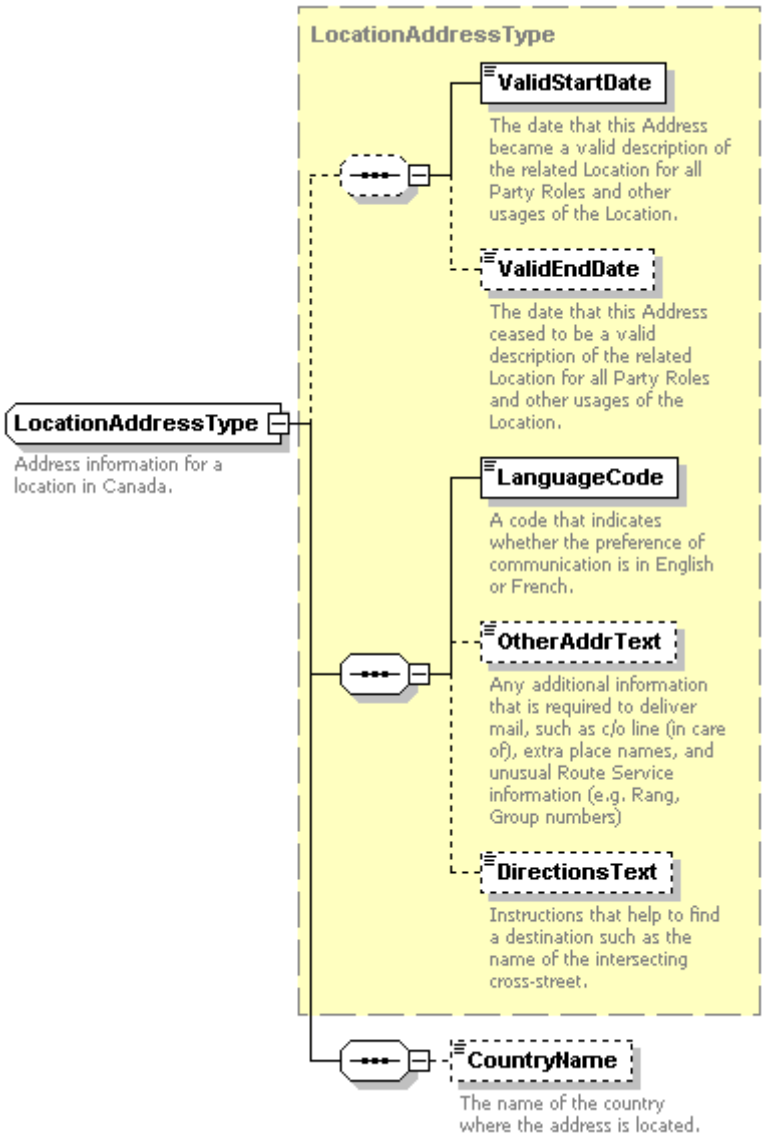


source

```
<complexType name="GeneralDeliveryAddressType" final="#all">
  <annotation>
    <documentation xml:lang="EN">A Canada mailing address for which mail is delivered to a postal installation, rather than a specific street, route or box. The General Delivery Code must be written preceding the Delivery Installation information. The delivery installation must be displayed only if there is a more than one installation within the Postal Municipality.</documentation>
  </annotation>
  <complexContent>
    <extension base="ca:CanadaAddressType">
      <sequence>
        <element name="GeneralDeliveryCode" type="ca:GeneralDeliveryType" default="GD">
          <annotation>
            <documentation xml:lang="EN">A code that indicates GD for General Delivery or PR for Poste Restante.</documentation>
            <appinfo>Allowed values are listed in the CDER table CAN_GENERAL_DELIVERY. Data Integrity Rules:
                    1. If LanguageCode of LocationAddressType = 'EN' then GeneralDeliveryCode must = 'GD'.
                    2. If LanguageCode of LocationAddressType = 'FR then GeneralDeliveryCode must = 'PR'.
            </appinfo>
          </annotation>
        </element>
        <element ref="ca:DeliveryInstallation" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">A postal installation responsible for delivering mail.</documentation>
          </annotation>
        </element>
      </sequence>
      <attribute ref="ca:recordTypeCode" fixed="5">
        <annotation>
          <documentation xml:lang="EN">A code used to indicate the types and formats of addresses.</documentation>
          <appinfo>The recordTypeCode must = '5' for a GeneralDeliveryAddressType.</appinfo>
        </annotation>
      </attribute>
      <attribute ref="com:addrUsageCode" fixed="M">
        <annotation>
          <documentation xml:lang="EN">A code used to indicate the usage of a location address.</documentation>
          <appinfo>The addrUsageCode must = 'M' for a GeneralDeliveryAddressType.</appinfo>
        </annotation>
      </attribute>
    </extension>
  </complexContent>
</complexType>
```

complexType **LocationAddressType**

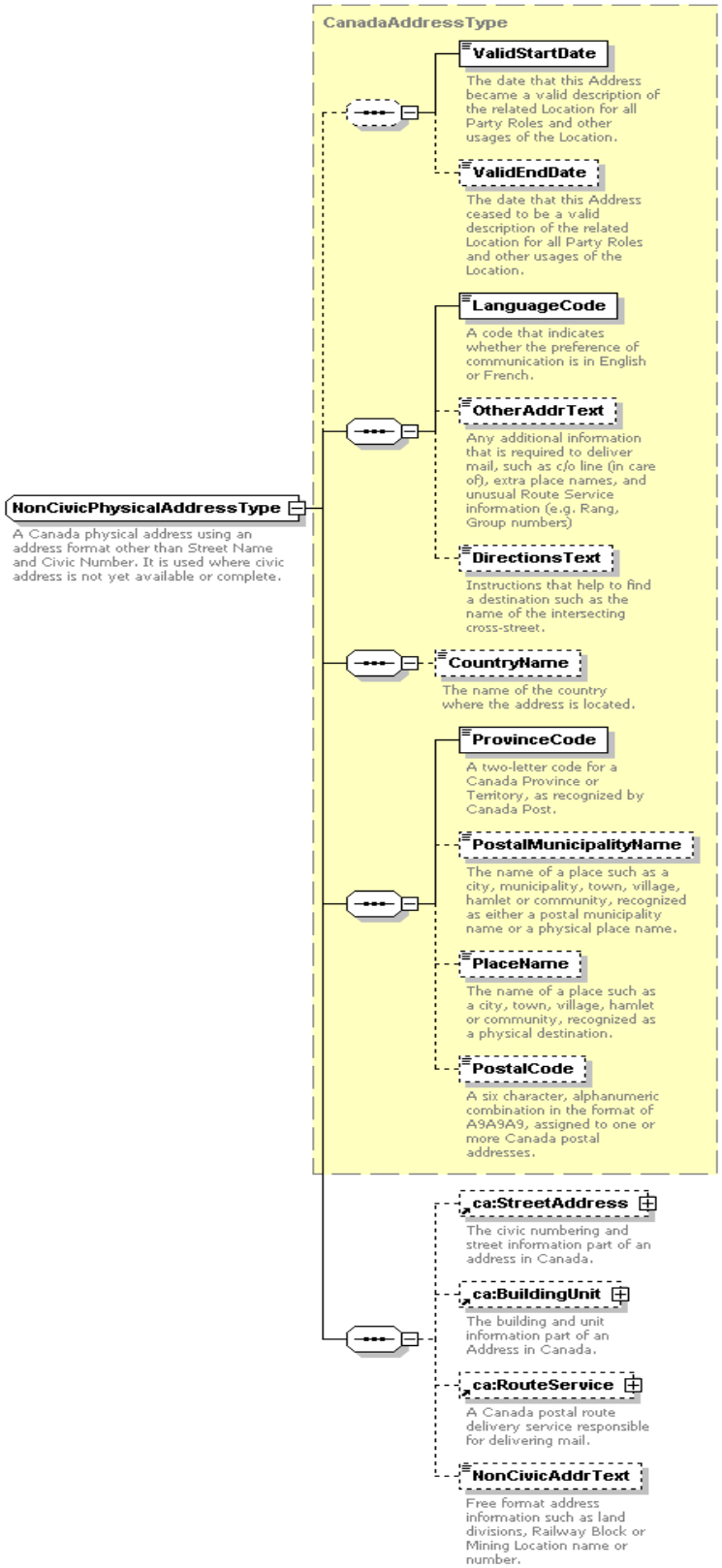
diagram



source	<complexType name="LocationAddressType"> <annotation> <documentation xml:lang="EN">Address information for a location in Canada.</documentation> </annotation> <complexContent> <extension base="com:LocationAddressType"> <sequence> <element name="CountryName" minOccurs="0"> <annotation> <documentation xml:lang="EN">The name of the country where the address is located.</documentation> <appinfo>The name may be in English or French. IF the CountryName contains a value THEN the value must be = 'Canada'.</appinfo> </annotation> <simpleType> <restriction base="com:CountryNameType"> <enumeration value="Canada"/> </restriction> </simpleType> </element> </sequence> </extension> </complexContent> </complexType>

complexType **NonCivicPhysicalAddressType**

diagram

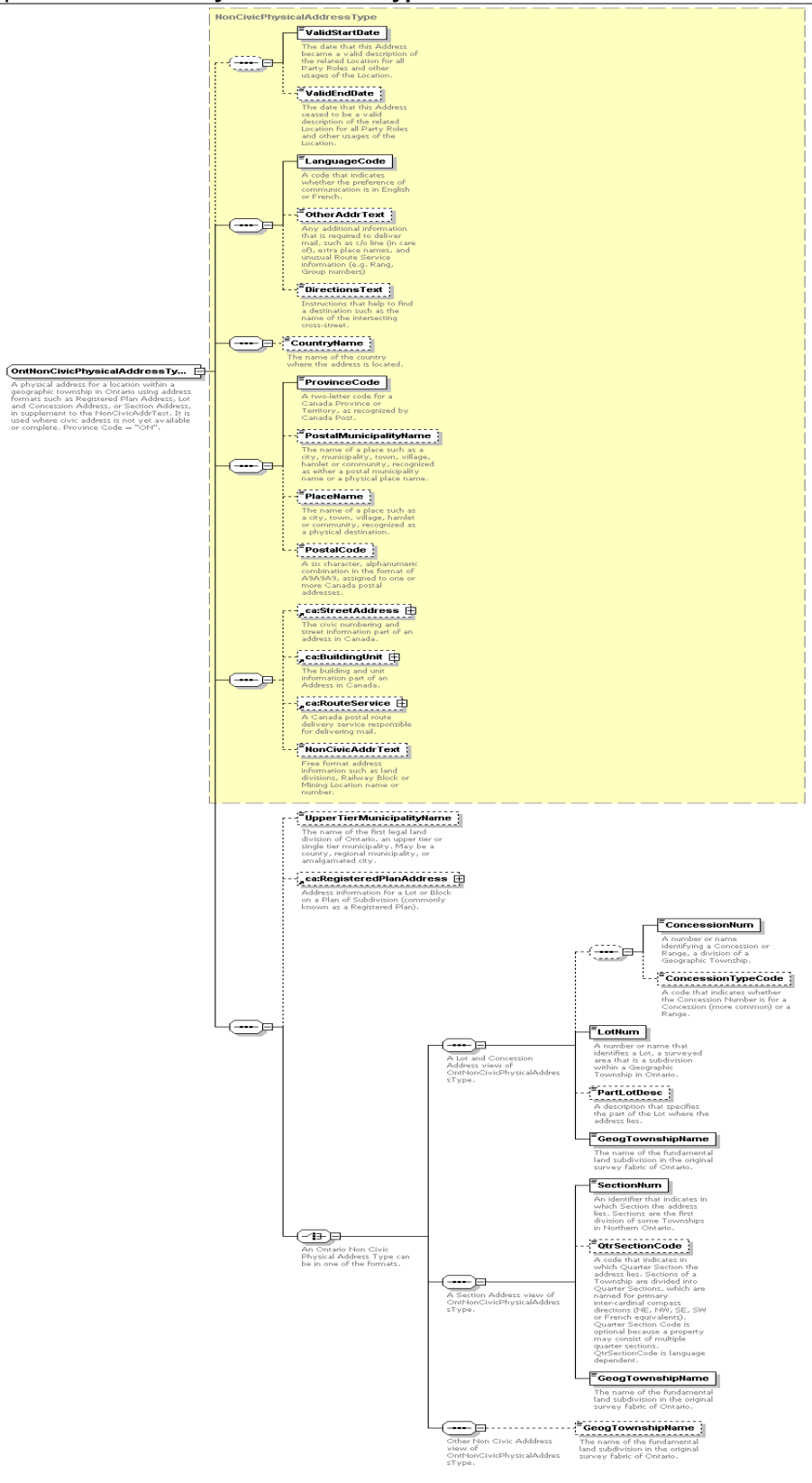


source

```
<complexType name="NonCivicPhysicalAddressType">
  <annotation>
    <documentation xml:lang="EN">A Canada physical address using an address format other than Street Name and
Civic Number. It is used where civic address is not yet available or complete.</documentation>
  </annotation>
  <complexContent>
    <extension base="ca:CanadaAddressType">
      <sequence>
        <element ref="ca:StreetAddress" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">The civic numbering and street information part of a Canada
Address.</documentation>
          <appinfo>Data Integrity Rule:
                1. If NonCivicAddrText is specified then CivicNum of StreetAddressType must NOT be specified.
                2. If ProvinceCode of CanadaAddressType = 'ON' and NonCivicAddrText is specified then LotNum
                   of OntNonCivicPhysicalAddressType must NOT be specified.
                3. If ProvinceCode of CanadaAddressType = 'ON' and NonCivicAddrText is specified then
                   SectionNum of OntNonCivicPhysicalAddressType must NOT be specified.
          </appinfo>
          </annotation>
        </element>
        <element ref="ca:BuildingUnit" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">The building and unit information part of a Address in
Canada.</documentation>
          </annotation>
        </element>
        <element ref="ca:RouteService" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">A route used by any delivery service responsible for delivering goods or
shippings.</documentation>
          </annotation>
        </element>
        <element name="NonCivicAddrText" type="com:AddrLineTextType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">Free format address information such as land divisions, Railway Block or
Mining Location name or number. </documentation>
          </annotation>
        </element>
      </sequence>
      <attribute ref="ca:recordTypeCode" fixed="0">
        <annotation>
          <documentation xml:lang="EN">A code used to indicate the types and formats of addresses.</documentation>
          <appinfo>The recordTypeCode must = '0' for a NonCivicPhysicalAddressType.</appinfo>
        </annotation>
      </attribute>
      <attribute ref="com:addrUsageCode" fixed="P">
        <annotation>
          <documentation xml:lang="EN">A code used to indicate the usage of a location address.</documentation>
          <appinfo>The addrUsageCode must = 'P' for a NonCivicPhysicalAddressType.</appinfo>
        </annotation>
      </attribute>
    </extension>
  </complexContent>
</complexType>
```

complexType **OntNonCivicPhysicalAddressType**

diagram



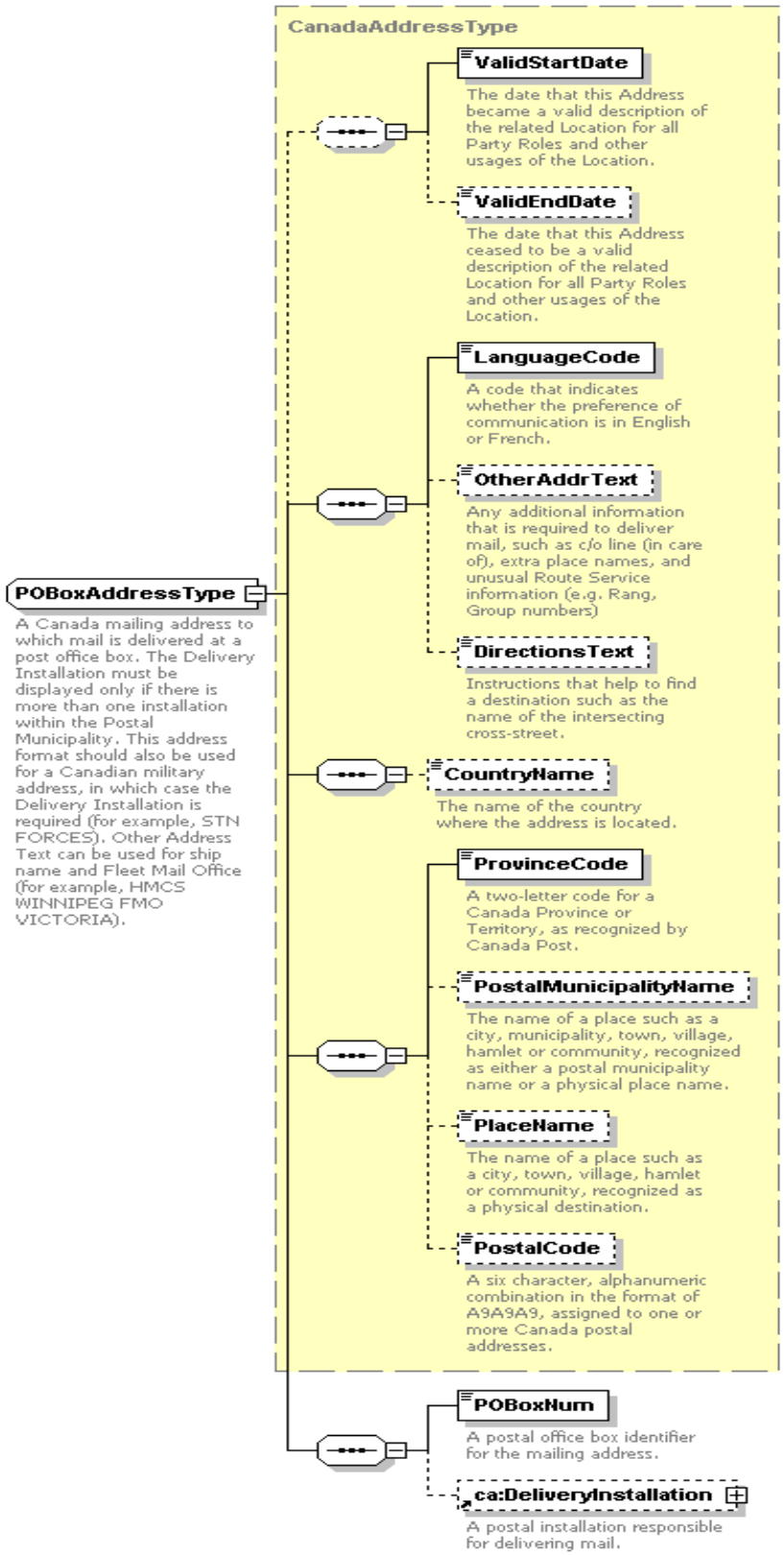
source

```
<complexType name="OntNonCivicPhysicalAddressType">
  <annotation>
    <documentation xml:lang="EN">A physical address for a location within a geographic township in Ontario using address formats such as Registered Plan Address, Lot and Concession Address, or Section Address, in supplement to the NonCivicAddrText. It is used where civic address is not yet available or complete. Province Code = "ON".</documentation>
  </annotation>
  <complexContent>
    <extension base="ca:NonCivicPhysicalAddressType">
      <sequence>
        <element name="UpperTierMunicipalityName" type="com:MunicipalityNameType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">The name of the first legal land division of Ontario, an upper tier or single tier municipality. May be a county, regional municipality, or amalgamated city.</documentation>
          </annotation>
        </element>
        <element ref="ca:RegisteredPlanAddress" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">Address information for a Lot or Block on a Plan of Subdivision (commonly known as a Registered Plan).</documentation>
          </annotation>
        </element>
        <choice>
          <annotation>
            <documentation xml:lang="EN">An Ontario Non Civic Physical Address Type can be in one of the formats.</documentation>
          </annotation>
          <sequence>
            <annotation>
              <documentation xml:lang="EN">A Lot and Concession Address view of OntNonCivicPhysicalAddressType.</documentation>
            </annotation>
            <sequence minOccurs="0">
              <element name="ConcessionNum" type="ca:ConcessionNumType">
                <annotation>
                  <documentation xml:lang="EN">A number or name identifying a Concession or Range, a division of a Geographic Township.</documentation>
                  <appinfo>Data Integrity Rules:
                    1. If ConcessionTypeCode is specified then ConcessionNum must be specified.
                    2. If LotNum is specified then ConcessionNum may be specified.
                    3. If LotNum is NOT specified then ConcessionNum must NOT be specified.
                  </appinfo>
                </annotation>
              </element>
              <element name="ConcessionTypeCode" type="ca:ConcessionType" minOccurs="0">
                <annotation>
                  <documentation xml:lang="EN">A code that indicates whether the Concession Number is for a Concession (more common) or a Range.</documentation>
                  <appinfo>Data Integrity Rules: 1. If ConcessionNum is NOT specified then ConcessionTypeCode must NOT be specified.</appinfo>
                </annotation>
              </element>
            </sequence>
            <element name="LotNum" type="ca:LotNumType">
              <annotation>
                <documentation xml:lang="EN">A number or name that identifies a Lot, a surveyed area that is a subdivision within a Geographic Township in Ontario.</documentation>
                <appinfo>Data Integrity Rules:
                  1. If LotNum is specified then SectionNum must NOT be specified.
                  2. If LotNum is specified then NonCivicAddrText of NonCivicPhysicalAddressType must NOT be specified.
                </appinfo>
              </annotation>
            </element>
            <element name="PartLotDesc" type="ca:PartLotDescType" minOccurs="0">
              <annotation>
                <documentation xml:lang="EN">A description that specifies the part of the Lot where the address lies.
</documentation>
```

```
            <appinfo>Example: "NW Corner of" in the address "NW Corner of Lot 12, Concession Kerr's Tract".
</appinfo>
          </annotation>
         </element>
         <element name="GeogTownshipName" type="com:MunicipalityNameType">
          <annotation>
           <documentation xml:lang="EN">The name of the fundamental land subdivision in the original survey fabric
of Ontario.</documentation>
            <appinfo>Data Integrity Rule: If LotNum is specified then GeogTownshipName must be specified.
</appinfo>
          </annotation>
         </element>
        </sequence>
        <sequence>
         <annotation>
          <documentation xml:lang="EN">A Section Address view of OntNonCivicPhysicalAddressType.
</documentation>
         </annotation>
         <element name="SectionNum" type="ca:SectionNumType">
          <annotation>
           <documentation xml:lang="EN">An identifier that indicates in which Section the address lies. Sections are
the first division of some Townships in Northern Ontario.</documentation>
            <appinfo>Data Integrity Rule:
                1. If LotNum is specified then SectionNum must NOT be specified.
                2. If LotNum is specified then NonCivicAddrText must NOT be specified.</appinfo>
          </annotation>
         </element>
         <element name="QtrSectionCode" type="ca:QuarterSectionType" minOccurs="0">
          <annotation>
           <documentation xml:lang="EN">A code that indicates in which Quarter Section the address lies. Sections
of a Township are divided into Quarter Sections, which are named for primary inter-cardinal compass directions (NE,
NW, SE, SW or French equivalents). Quarter Section Code is optional because a property may consist of multiple
quarter sections. QtrSectionCode is language dependent.</documentation>
            <appinfo>Codes common in both English and French are: NE and SE. Codes only valid in English are: NW
and SW. Codes only valid in French are: NO and SO. Data Integrity Rule:.
                1. If LotNum is specified then SectionNum must NOT be specified.
                2. If LanguageCode of LocationAddressType = 'EN' then use QtrSectionCodes that are valid in
                   English or common in both languages.
                3. If LanguageCode of LocationAddressType = 'FR' then use QtrSectionCodes that are valid in
                   French or common in both languages.
            </appinfo>
          </annotation>
         </element>
         <element name="GeogTownshipName" type="com:MunicipalityNameType">
          <annotation>
           <documentation xml:lang="EN">The name of the fundamental land subdivision in the original survey fabric
of Ontario.</documentation>
            <appinfo>Data Integrity Rule: 1. If SectionNum is specified then GeogTownshipName must be specified.
</appinfo>
          </annotation>
         </element>
        </sequence>
        <sequence>
         <annotation>
          <documentation xml:lang="EN">Other Non Civic Adddress view of OntNonCivicPhysicalAddressType.
          </documentation>
         </annotation>
         <element name="GeogTownshipName" type="com:MunicipalityNameType" minOccurs="0">
          <annotation>
           <documentation xml:lang="EN">The name of the fundamental land subdivision in the original survey fabric
of Ontario.</documentation>
          </annotation>
         </element>
        </sequence>
       </choice>
     </sequence>
    </extension>
  </complexContent>
</complexType>
```

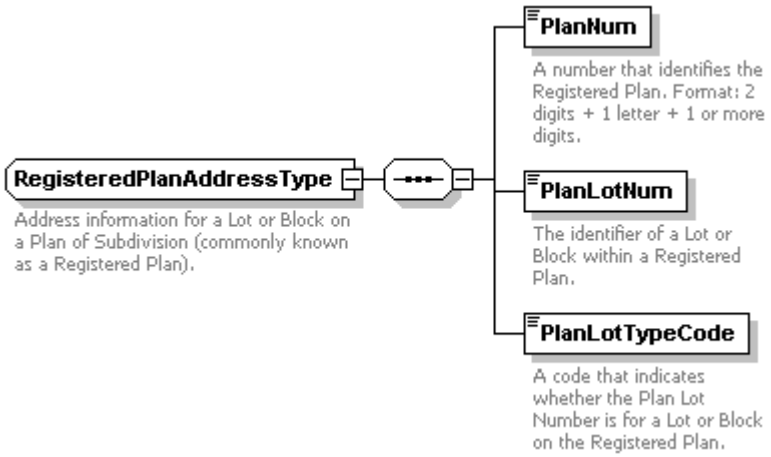
complexType **POBoxAddressType**

diagram



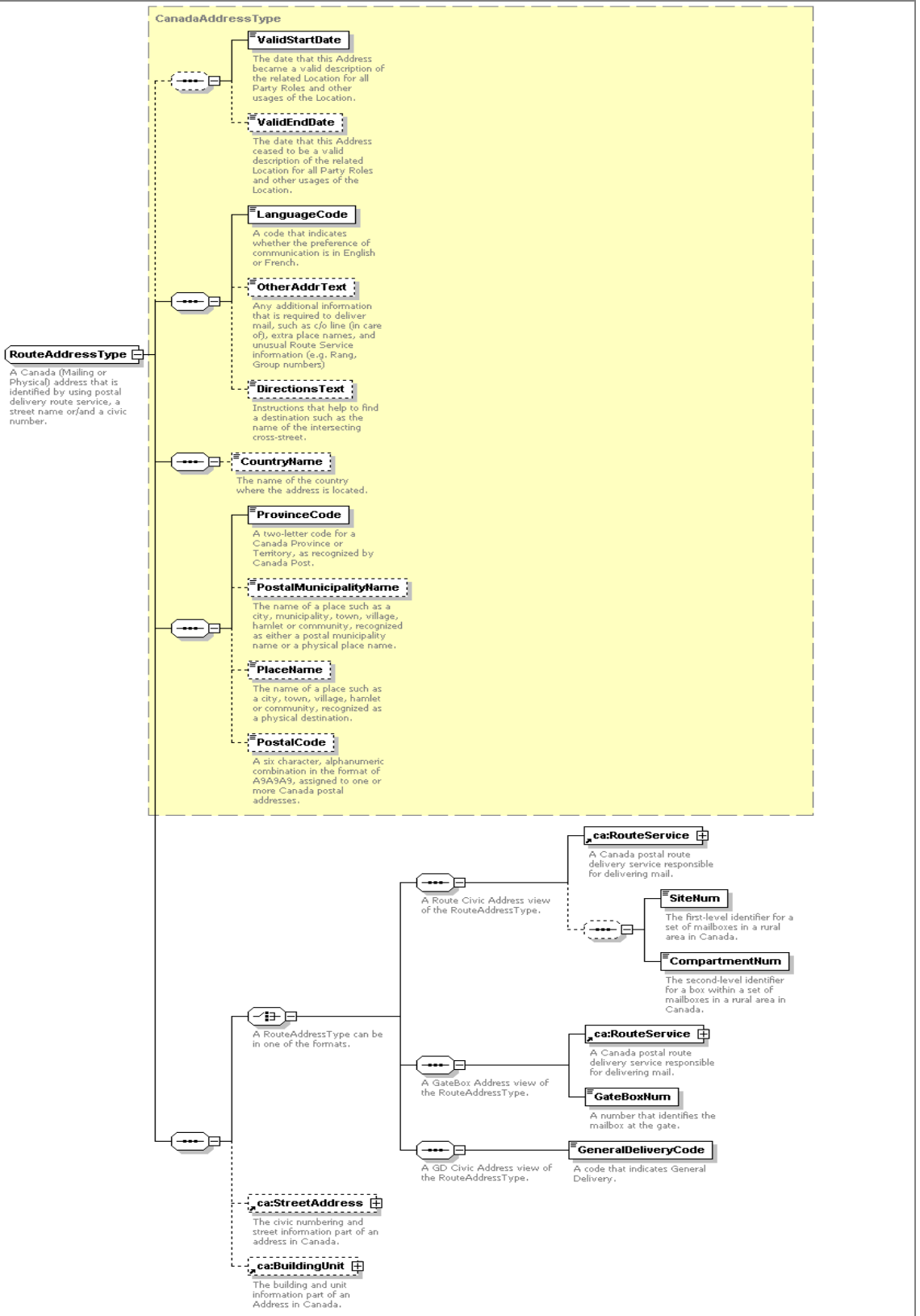
source	<complexType name="POBoxAddressType" final="#all"> <annotation> <documentation xml:lang="EN">A Canada mailing address to which mail is delivered at a post office box. The Delivery Installation must be displayed only if there is more than one installation within the Postal Municipality. This address format should also be used for a Canadian military address, in which case the Delivery Installation is required (for example, STN FORCES). Other Address Text can be used for ship name and Fleet Mail Office (for example, HMCS WINNIPEG FMO VICTORIA).</documentation> </annotation> <complexContent> <extension base="ca:CanadaAddressType"> <sequence> <element name="POBoxNum" type="com:POBoxNumType"> <annotation> <documentation xml:lang="EN">A postal office box identifier for the mailing address.</documentation> </annotation> </element> <element ref="ca:DeliveryInstallation" minOccurs="0"> <annotation> <documentation xml:lang="EN">A postal installation responsible for delivering mail.</documentation> </annotation> </element> </sequence> <attribute ref="ca:recordTypeCode" fixed="3"> <annotation> <documentation xml:lang="EN">A code used to indicate the types and formats of addresses. The recordTypeCode must = '3' for a POBoxAddressType.</documentation> </annotation> </attribute> <attribute ref="com:addrUsageCode" fixed="M"> <annotation> <documentation xml:lang="EN">A code used to indicate the usage of a location address. The addrUsageCode must = 'M' for a POBoxAddressType.</documentation> </annotation> </attribute> </extension> </complexContent> </complexType>

complexType **RegisteredPlanAddressType**

diagram	
source	<complexType name="RegisteredPlanAddressType" final="#all"> <annotation> <documentation xml:lang="EN">Address information for a Lot or Block on a Plan of Subdivision (commonly known as a Registered Plan).</documentation> </annotation> <sequence> <element name="PlanNum" type="ca:PlanNumType"> <annotation> <documentation xml:lang="EN">A number that identifies the Registered Plan. Format: 2 digits + 1 letter + 1 or more digits.</documentation> </annotation> </element> <element name="PlanLotNum" type="ca:PlanLotNumType"> <annotation> <documentation xml:lang="EN">The identifier of a Lot or Block within a Registered Plan.</documentation> </annotation> </element> <element name="PlanLotTypeCode" type="ca:PlanLotType"> <annotation> <documentation xml:lang="EN">A code that indicates whether the Plan Lot Number is for a Lot or Block on the Registered Plan.</documentation> </annotation> </element> </sequence> </complexType>

complexType **RouteAddressType**

diagram



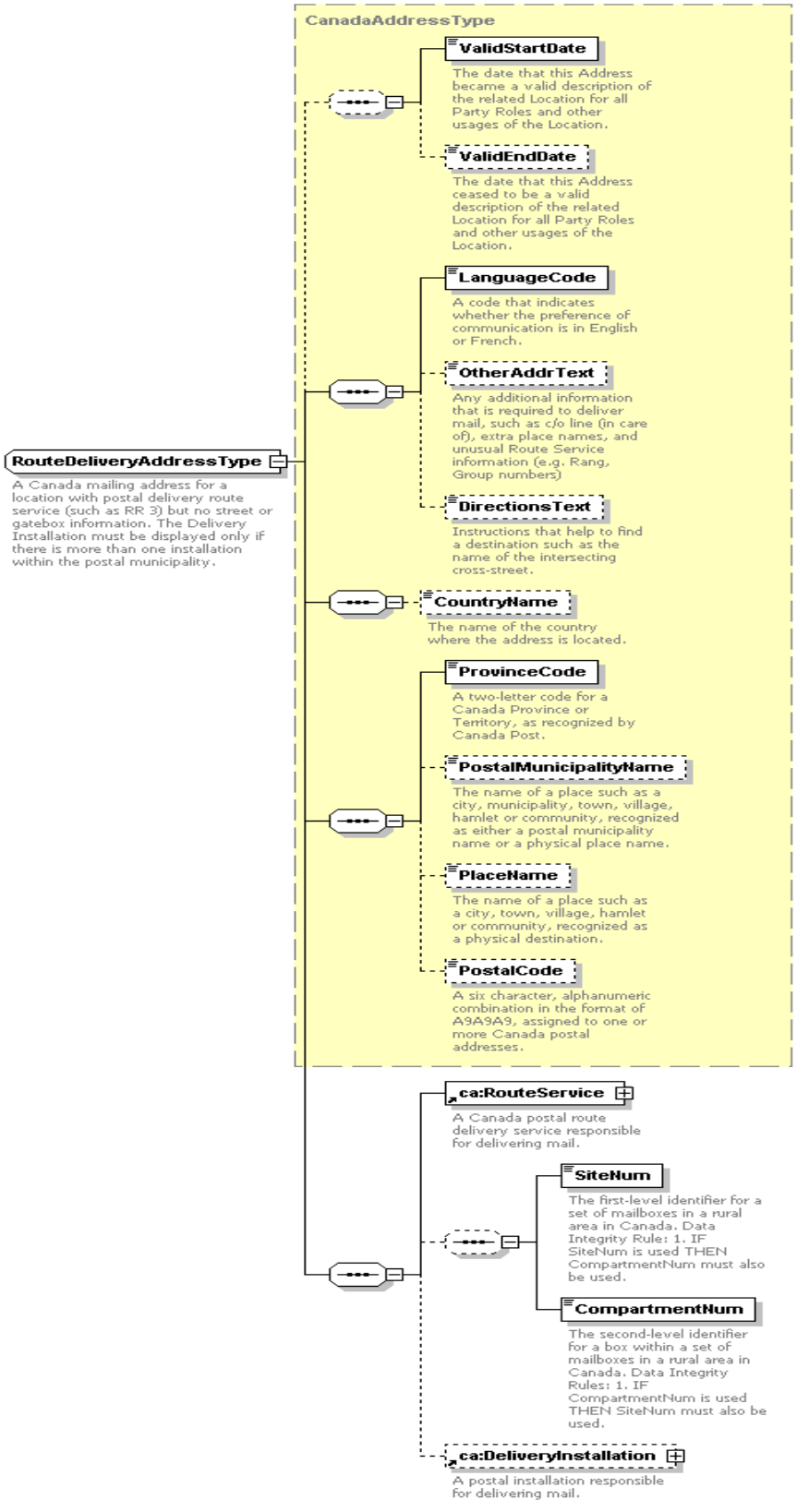
source

```
<complexType name="RouteAddressType" final="#all">
  <annotation>
    <documentation xml:lang="EN">A Canada (Mailing or Physical) address that is identified by using postal delivery route service, a street name or/and a civic number.</documentation>
  </annotation>
  <complexContent>
    <extension base="ca:CanadaAddressType">
      <sequence>
        <choice>
          <annotation>
            <documentation xml:lang="EN">A RouteAddressType can be in one of the formats.</documentation>
          </annotation>
          <sequence>
            <annotation>
              <documentation xml:lang="EN">A Route Civic Address view of the RouteAddressType.</documentation>
            </annotation>
            <element ref="ca:RouteService">
              <annotation>
                <documentation xml:lang="EN">A postal route delivery service responsible for delivering mail.</documentation>
                <appinfo>Data Integrity Rules:
                    1. If SiteNum and CompartmentNum are specified then RouteService info must also be specified.
                    2. If GeneralDeliveryCode is specified then RouteService info must NOT be specified.
                </appinfo>
              </annotation>
            </element>
            <sequence minOccurs="0">
              <element name="SiteNum" type="ca:SiteNumType">
                <annotation>
                  <documentation xml:lang="EN">The first-level identifier for a set of mailboxes in a rural area in Canada.</documentation>
                  <appinfo>Data Integrity Rules:
                      1. If addrUsageCode = 'P' then CompartmentNum must NOT be specified.
                      2. If SiteNum is specified then CompartmentNum must also be specified.
                  </appinfo>
                </annotation>
              </element>
              <element name="CompartmentNum" type="ca:CompartmentNumType">
                <annotation>
                  <documentation xml:lang="EN">The second-level identifier for a box within a set of mailboxes in a rural area in Canada.</documentation>
                  <appinfo>Data Integrity Rules:
                      1. If addrUsageCode = 'P' then SiteNum must NOT be specified.
                      2. If CompartmentNum is specified then SiteNum must also be specified.
                  </appinfo>
                </annotation>
              </element>
            </sequence>
          </sequence>
          <sequence>
            <annotation>
              <documentation xml:lang="EN">A GateBox Address view of the RouteAddressType.</documentation>
            </annotation>
            <element ref="ca:RouteService">
              <annotation>
                <documentation xml:lang="EN">A postal route delivery service responsible for delivering mail.</documentation>
                <appinfo>Data Integrity Rule:
                    1. If GateBoxNum is used then RouteService info must also be used.
                </appinfo>
              </annotation>
            </element>
            <element name="GateBoxNum" type="com:POBoxNumType">
              <annotation>
                <documentation xml:lang="EN">A number that identifies the mailbox at the gate.</documentation>
                <appinfo>Data Integrity Rules:
                    1. If addrUsageCode = 'P' then GateBoxNum must NOT be specified.
                    2. If CivicNum is specified then GateBoxNum must NOT be specified.
```

```
            </appinfo>
          </annotation>
        </element>
      </sequence>
      <sequence>
        <annotation>
          <documentation xml:lang="EN">A GD Civic Address view of the RouteAddressType.</documentation>
        </annotation>
        <element name="GeneralDeliveryCode" type="ca:GeneralDeliveryType" default="GD">
          <annotation>
            <documentation xml:lang="EN">A code that indicates General Delivery.</documentation>
            <appinfo>Allowed values are listed in the CDER table CAN_GENERAL_DELIVERY. Data Integrity Rules:
                    1. If addrUsageCode = 'P' then GeneralDeliveryCode must NOT be specified.
                    2. If LanguageCode of LocationAddressType = 'EN' then GeneralDeliveryCode must be 'GD'.
                    3. If LanguageCode of LocationAddressType = 'FR then GeneralDeliveryCode must be 'PR'.
                    4. If GeneralDeliveryCode info is specified then RouteService must NOT be specified.
            </appinfo>
          </annotation>
        </element>
      </sequence>
    </choice>
    <element ref="ca:StreetAddress" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The civic numbering and street information part of an Address in
Canada.</documentation>
      </annotation>
    </element>
    <element ref="ca:BuildingUnit" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The building and unit information part of an Address in
Canada.</documentation>
      </annotation>
    </element>
  </sequence>
  <attribute ref="ca:recordTypeCode" fixed="2">
    <annotation>
      <documentation xml:lang="EN">A code used to indicate the types and formats of addresses.</documentation>
      <appinfo>The recordTypeCode must = '2' for a RouteAddressType.</appinfo>
    </annotation>
  </attribute>
  <attribute ref="com:addrUsageCode">
    <annotation>
      <documentation xml:lang="EN">A code used to indicate the usage of a location address.</documentation>
      <appinfo>The addrUsageCode may = 'M', 'P', or 'B' for a RouteAddressType.</appinfo>
    </annotation>
  </attribute>
 </extension>
</complexContent>
</complexType>
```

complexType **RouteDeliveryAddressType**

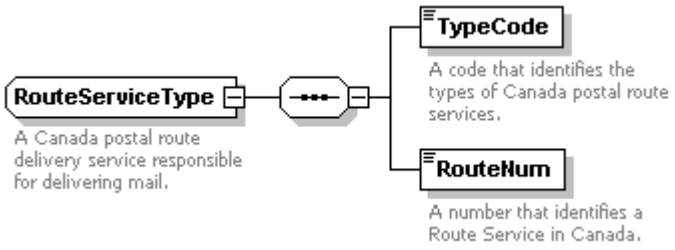
diagram



source

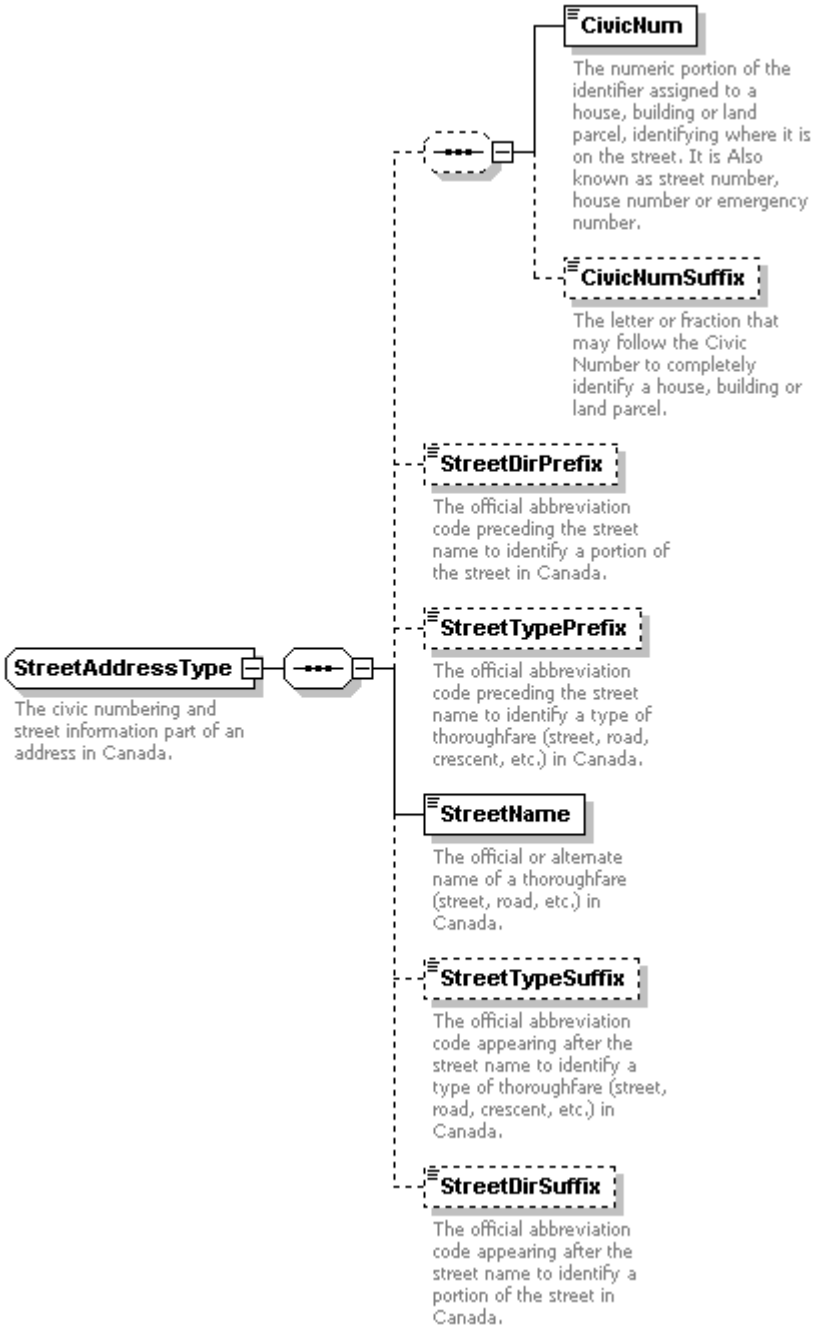
```
<complexType name="RouteDeliveryAddressType" final="#all">
  <annotation>
    <documentation xml:lang="EN">A Canada mailing address for a location with postal delivery route service (such as RR 3) but no street or gatebox information. The Delivery Installation must be displayed only if there is more than one installation within the postal municipality.</documentation>
  </annotation>
  <complexContent>
    <extension base="ca:CanadaAddressType">
      <sequence>
        <element ref="ca:RouteService">
          <annotation>
            <documentation xml:lang="EN">A postal route delivery service responsible for delivering mail.</documentation>
            <appinfo>Data Integrity Rule:
                    1. If SiteNum and CompartmentNum are specified then RouteService info must also be specified.
            </appinfo>
          </annotation>
        </element>
        <sequence minOccurs="0">
          <element name="SiteNum" type="ca:SiteNumType">
            <annotation>
              <documentation xml:lang="EN">The first-level identifier for a set of mailboxes in a rural area in Canada.
                <appinfo>Data Integrity Rule:
                    1. If SiteNum is specified then CompartmentNum must also be specified.
                </appinfo>
              </documentation>
            </annotation>
          </element>
          <element name="CompartmentNum" type="ca:CompartmentNumType">
            <annotation>
              <documentation xml:lang="EN">The second-level identifier for a box within a set of mailboxes in a rural area in Canada.</documentation>
              <appinfo>Data Integrity Rule:
                    1. If CompartmentNum is specified then SiteNum must also be specified.
              </appinfo>
            </annotation>
          </element>
        </sequence>
        <element ref="ca:DeliveryInstallation" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">A postal installation responsible for delivering mail.</documentation>
          </annotation>
        </element>
      </sequence>
      <attribute ref="ca:recordTypeCode" fixed="4">
        <annotation>
          <documentation xml:lang="EN">A code used to indicate the types and formats of addresses. The recordTypeCode must = '4' for a RouteDeliveryAddressType.</documentation>
        </annotation>
      </attribute>
      <attribute ref="com:addrUsageCode" fixed="M">
        <annotation>
          <documentation xml:lang="EN">A code used to indicate the usage of a location address. The addrUsageCode must = 'M' for a RouteDeliveryAddressType.</documentation>
        </annotation>
      </attribute>
    </extension>
  </complexContent>
</complexType>
```

complexType **RouteServiceType**

diagram	
source	<complexType name="RouteServiceType" final="#all"> <annotation> <documentation xml:lang="EN">A Canada postal route delivery service responsible for delivering mail.</documentation> </annotation> <sequence> <element name="TypeCode" type="ca:RouteType"> <annotation> <documentation xml:lang="EN">A code that identifies the types of Canada postal route services.</documentation> <appinfo>Route service type code is language dependent. Codes common in both English and French are: RR (Rural Route) and SS (Suburban Services). Code only valid in English is: MR (Mobile Route). Code only valid in French is: IM. Data Integrity Rules: 1. If LanguageCode of LocationAddressType = 'EN' then use TypeCodes that are valid in English or common in both languages. 2. If LanguageCode of LocationAddressType = 'FR' then use TypeCodes that are valid in French or common in both languages. </appinfo> </annotation> </element> <element name="RouteNum" type="com:RouteServiceNumType"> <annotation> <documentation xml:lang="EN">A number that identifies a Route Service in Canada.</documentation> </annotation> </element> </sequence> </complexType>

complexType **StreetAddressType**

diagram



source

```
<complexType name="StreetAddressType">
  <annotation>
    <documentation xml:lang="EN">The civic numbering and street information part of an address in Canada.</documentation>
  </annotation>
  <sequence>
    <sequence minOccurs="0">
      <element name="CivicNum" type="ca:CivicNumType">
        <annotation>
          <documentation xml:lang="EN">The numeric portion of the identifier assigned to a house, building or land parcel, identifying where it is on the street. It is Also known as street number, house number or emergency number.</documentation>
          <appinfo>Data Integrity Rules:
              1. If CivicNumSuffix is specified then CivicNum must be specified.
              2. If addrUsageCode = 'M' or 'B' AND recordTypeCode = '1' then CivicNum must be specified.
              3. If addrUsageCode = 'M' or 'B' AND recordTypeCode = '2' AND GateBoxNum is NOT specified then CivicNum must be specified.
              4. If addrUsageCode = 'M' or 'B' AND recordTypeCode = '2' AND GateBoxNum is specified then CivicNum must NOT be specified.
          </appinfo>
        </annotation>
      </element>
      <element name="CivicNumSuffix" type="ca:CivicNumSuffixType" minOccurs="0">
        <annotation>
          <documentation xml:lang="EN">The letter or fraction that may follow the Civic Number to completely identify a house, building or land parcel.</documentation>
          <appinfo>Data Integrity Rule:
              1. If CivicNum is NOT specified then CivicNumSuffix must NOT be specified.
          </appinfo>
        </annotation>
      </element>
    </sequence>
    <element name="StreetDirPrefix" type="ca:StreetDirType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The official abbreviation code preceding the street name to identify a portion of the street in Canada.</documentation>
        <appinfo>StreetDirPrefix codes are language dependent. Codes common in both English and French are: N, S, E, NE, and SE. Codes only valid in English are: W, NW, and SW. Codes only valid in French are: O, NO, and SO. Data Integrity Rules:
              1. If LanguageCode of LocationAddressType = 'EN' then use StreetDirTypeCodes that are valid in English or common in both languages.
              2. If LanguageCode of LocationAddressType = 'FR' then use StreetDirTypeCodes that are valid in French or common in both languages.
        </appinfo>
      </annotation>
    </element>
    <element name="StreetTypePrefix" type="ca:StreetType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The official abbreviation code preceding the street name to identify a type of thoroughfare (street, road, crescent, etc.) in Canada.</documentation>
      </annotation>
    </element>
    <element name="StreetName" type="ca:StreetNameType">
      <annotation>
        <documentation xml:lang="EN">The official or alternate name of a thoroughfare (street, road, etc.) in Canada.</documentation>
      </annotation>
    </element>
    <element name="StreetTypeSuffix" type="ca:StreetType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The official abbreviation code appearing after the street name to identify a type of thoroughfare (street, road, crescent, etc.) in Canada.</documentation>
      </annotation>
    </element>
    <element name="StreetDirSuffix" type="ca:StreetDirType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The official abbreviation code appearing after the street name to identify a portion of the street in Canada.</documentation>
```

	<appinfo>StreetDirSuffix codes are language dependent. Codes common in both English and French are: N, S, E, NE, and SE. Codes only valid in English are: W, NW, and SW. Codes only valid in French are: O, NO, and SO. Data Integrity Rules: 1. If LanguageCode of LocationAddressType = 'EN' then use StreetDirTypeCodes that are valid in English or common in both languages. 2. If LanguageCode of LocationAddressType = 'FR' then use StreetDirTypeCodes that are valid in French or common in both languages. </appinfo> </annotation> </element> </sequence> </complexType>

simpleType **AddrRecordType**

source	<simpleType name="AddrRecordType"> <annotation> <documentation xml:lang="EN">Domain definition for address record codes that indicate different types of address format.</documentation> <appinfo>Valid address record codes are: 0 - Non-civic Address, 1 - Civic Address, 2 - Route Address, 3 - PO Box Address, 4 - Route Delivery Address, and 5 - General Delivery Address. The address record codes can be found in the CDER table ADDRESS_RECORD_TYPE.</appinfo> </annotation> <restriction base="string"> <pattern value="[0-5]"/> </restriction> </simpleType>

simpleType **CivicNumSuffixType**

source	<simpleType name="CivicNumSuffixType"> <annotation> <documentation xml:lang="EN">Domain definition for civic number suffix codes used in Canada.</documentation> <appinfo>Valid civic number suffix codes can be found in the CDER table CAN_CIVIC_NUM_SUFFIX.</appinfo> </annotation> <restriction base="com:CivicNumSuffixType"> <pattern value="[A-Z,1-3]"/> </restriction> </simpleType>

simpleType **CivicNumType**

source	<simpleType name="CivicNumType"> <annotation> <documentation xml:lang="EN">Domain definition for civic numbers used in Canada.</documentation> </annotation> <restriction base="com:CivicNumType"> <pattern value="[0-9]{1,6}"/> </restriction> </simpleType>

simpleType **CompartmentNumType**

source	<simpleType name="CompartmentNumType"> <annotation> <documentation xml:lang="EN">Domain definition for the first-level identifier of a set of mailboxes in a rural area in Canada.</documentation> </annotation> <restriction base="com:POBoxNumType"> <maxLength value="5"/> </restriction> </simpleType>

simpleType **ConcessionNumType**

source	<simpleType name="ConcessionNumType"> <annotation> <documentation xml:lang="EN">Domain definition for concession numbers or names identifying a Concession or

```
Range, a division of a Geographic Townshipused in Ontario.</documentation>
  </annotation>
  <restriction base="string">
    <maxLength value="20"/>
  </restriction>
</simpleType>
```

simpleType **ConcessionType**

source

```
<simpleType name="ConcessionType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for a code that indicates whether a concession number or name is for a Concession or a Range.</documentation>
    <appinfo>Valid concession type codes are: C – Concession, R - Range. The concession type codes are available in the CDER table CONCESSION_TYPE.</appinfo>
  </annotation>
  <restriction base="string">
    <enumeration value="C"/>
    <enumeration value="R"/>
  </restriction>
</simpleType>
```

simpleType **DeliveryInstallQualNameType**

source

```
<simpleType name="DeliveryInstallQualNameType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for Canada postal service delivery installation qualifier names used in Canada.</documentation>
  </annotation>
  <restriction base="string">
    <maxLength value="15"/>
  </restriction>
</simpleType>
```

simpleType **DeliveryInstallType**

source

```
<simpleType name="DeliveryInstallType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for Canada postal service delivery installation type codes.</documentation>
    <appinfo>Valid delivery installation type codes are available in the CDER table CAN_DELIVERY_INSTALL_TYPE. Use appropriate value of LanguageCode element in LocationAddressType for table value look-up or data validation.</appinfo>
  </annotation>
  <restriction base="string">
    <maxLength value="5"/>
    <enumeration value="CDO"/>
    <enumeration value="CMC"/>
    <enumeration value="LCD"/>
    <enumeration value="PO"/>
    <enumeration value="RPO"/>
    <enumeration value="STN"/>
    <enumeration value="BDP"/>
    <enumeration value="CC"/>
    <enumeration value="COP"/>
    <enumeration value="CPC"/>
    <enumeration value="CSP"/>
    <enumeration value="PDF"/>
    <enumeration value="SUCC"/>
  </restriction>
</simpleType>
```

simpleType **GeneralDeliveryType**

source

```
<simpleType name="GeneralDeliveryType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for Canada postal service general delivery codes.</documentation>
```

```
    <appinfo>Valid general delivery codes are: GD for English and PR for French. The general delivery codes can be found in the CDER table CAN_GENERAL_DELIVERY. Use appropriate value of LanguageCode element in LocationAddressType for table value look-up or data validation.</appinfo>
  </annotation>
  <restriction base="string">
    <enumeration value="GD"/>
    <enumeration value="PR"/>
  </restriction>
</simpleType>
```

simpleType **LotNumType**

source

```
<simpleType name="LotNumType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for a number or name that identifies a lot within a geographic township in Ontario.</documentation>
  </annotation>
  <restriction base="string">
    <maxLength value="10"/>
  </restriction>
</simpleType>
```

simpleType **PartLotDescType**

source

```
<simpleType name="PartLotDescType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for a description that specifies a part of lot withiin a geographic township in Ontario.</documentation>
  </annotation>
  <restriction base="string">
    <maxLength value="20"/>
  </restriction>
</simpleType>
```

simpleType **PlanLotNumType**

source

```
<simpleType name="PlanLotNumType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for an identifier of a lot or block within a registered plan in Ontario. </documentation>
  </annotation>
  <restriction base="string">
    <pattern value="[0-9]{1,4}"/>
  </restriction>
</simpleType>
```

simpleType **PlanLotType**

source

```
<simpleType name="PlanLotType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for a code that indicates whether the plan lot number is for a Lot or Block on the registered plan in Ontario.</documentation>
    <appinfo>Valid plan lot type codes are: B - Block, L - Lot.  These codes are available in the CDER Table ONT_PLAN_LOT_TYPE.</appinfo>
  </annotation>
  <restriction base="string">
    <enumeration value="B"/>
    <enumeration value="L"/>
  </restriction>
</simpleType>
```

simpleType **PlanNumType**

source

```
<simpleType name="PlanNumType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for a number that identifies a registered plan in Ontario.</documentation>
  </annotation>
```

```
  <restriction base="string">
    <maxLength value="10"/>
  </restriction>
</simpleType>
```

simpleType **PostalCodeType**

source

```
<simpleType name="PostalCodeType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for postal codes used by Canada postal
service.</documentation>
  </annotation>
  <restriction base="com:PostalCodeType">
    <pattern value="[A-Y][0-9][A-Z][0-9][A-Z][0-9]"/>
  </restriction>
</simpleType>
```

simpleType **ProvinceCodeType**

source

```
<simpleType name="ProvinceCodeType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for Canada province and territory codes.</documentation>
    <appinfo>Valid province and territory codes can be found in the CDER table PROVINCE.</appinfo>
  </annotation>
  <restriction base="com:ProvinceStateCodeType">
    <enumeration value="AB"/>
    <enumeration value="BC"/>
    <enumeration value="MB"/>
    <enumeration value="NB"/>
    <enumeration value="NL"/>
    <enumeration value="NS"/>
    <enumeration value="NT"/>
    <enumeration value="NU"/>
    <enumeration value="ON"/>
    <enumeration value="PE"/>
    <enumeration value="QC"/>
    <enumeration value="SK"/>
    <enumeration value="YT"/>
  </restriction>
</simpleType>
```

simpleType **QuarterSectionType**

source

```
<simpleType name="QuarterSectionType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for quarter section codes used in Ontario.</documentation>
    <appinfo>Valid quarter section codes can be found in the CDER table QUARTER_SECTION_TYPE. Use
appropriate value of LanguageCode element in LocationAddressType for table value look-up or data
validation.</appinfo>
  </annotation>
  <restriction base="ca:StreetDirType">
    <enumeration value="NE"/>
    <enumeration value="SE"/>
    <enumeration value="NW"/>
    <enumeration value="SW"/>
    <enumeration value="NO"/>
    <enumeration value="SO"/>
  </restriction>
</simpleType>
```

simpleType **RouteType**

source

```
<simpleType name="RouteType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for Canada postal service route type codes.</documentation>
    <appinfo>Valid route type codes can be found in the CDER table CAN_ROUTE_SERVICE_TYPE. Use appropriate
value of LanguageCode element in LocationAddressType for table value look-up or data validation.</appinfo>
  </annotation>
  <restriction base="com:RouteType">
```

```
    <enumeration value="RR"/>
    <enumeration value="SS"/>
    <enumeration value="MR"/>
    <enumeration value="IM"/>
  </restriction>
</simpleType>
```

simpleType **SectionNumType**

source

```
<simpleType name="SectionNumType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for a number that identifies the section of geographic township in Ontario.</documentation>
  </annotation>
  <restriction base="string">
    <pattern value="[0-9]?[0-9]"/>
  </restriction>
</simpleType>
```

simpleType **SiteNumType**

source

```
<simpleType name="SiteNumType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for the second-level identifier of a set of mailboxes in a rural area in Canada.</documentation>
  </annotation>
  <restriction base="string">
    <maxLength value="5"/>
  </restriction>
</simpleType>
```

simpleType **StreetDirType**

source

```
<simpleType name="StreetDirType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for street direction codes such as E, W, NE, etc. used in Canada.</documentation>
    <appinfo>Valid street direction codes can be found in the CDER table CAN_STREET_DIRECTION_TYPE. Use appropriate value of LanguageCode element in LocationAddressType for table value look-up or data validation.</appinfo>
  </annotation>
  <restriction base="com:StreetDirType">
    <enumeration value="N"/>
    <enumeration value="S"/>
    <enumeration value="E"/>
    <enumeration value="W"/>
    <enumeration value="NE"/>
    <enumeration value="SE"/>
    <enumeration value="NW"/>
    <enumeration value="SW"/>
    <enumeration value="O"/>
    <enumeration value="NO"/>
    <enumeration value="SO"/>
  </restriction>
</simpleType>
```

simpleType **StreetNameType**

source	<simpleType name="StreetNameType"> <annotation> <documentation xml:lang="EN">Domain definition for street names used in Canada.</documentation> </annotation> <restriction base="com:StreetNameType"> <maxLength value="30"/> </restriction> </simpleType>

simpleType **StreetType**

source	<simpleType name="StreetType"> <annotation> <documentation xml:lang="EN">Domain definition for street type codes used in Canada.</documentation> <appinfo>Valid street type codes can be found in the CDER table CAN_STREET_TYPE. Use appropriate value of LanguageCode element in LocationAddressType for table value look-up or data validation.</appinfo> </annotation> <restriction base="com:StreetType"/> </simpleType>

simpleType **UnitDesignatorType**

Source

```
<simpleType name="UnitDesignatorType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for a code that identifies the types of address unit designators like Apt, Fl, etc. in Canada.</documentation>
    <appinfo>Valid unit designator codes can be found in the CDER table CAN_UNIT_TYPE. Use appropriate value of LanguageCode element in LocationAddressType for table value look-up or data validation.</appinfo>
  </annotation>
  <restriction base="com:UnitDesignatorType">
    <enumeration value="APT"/>
    <enumeration value="BACK"/>
    <enumeration value="BSMT"/>
    <enumeration value="CONDO"/>
    <enumeration value="DEPT"/>
    <enumeration value="DOOR"/>
    <enumeration value="FL"/>
    <enumeration value="FLOOR"/>
    <enumeration value="FLR"/>
    <enumeration value="FRNT"/>
    <enumeration value="FRONT"/>
    <enumeration value="HANGAR"/>
    <enumeration value="HNGR"/>
    <enumeration value="LBBY"/>
    <enumeration value="LOBBY"/>
    <enumeration value="LOCAL"/>
    <enumeration value="LOC"/>
    <enumeration value="LOWER"/>
    <enumeration value="PHASE"/>
    <enumeration value="PH"/>
    <enumeration value="PIECE"/>
    <enumeration value="PLANT"/>
    <enumeration value="REAR"/>
    <enumeration value="RM"/>
    <enumeration value="ROOM"/>
    <enumeration value="SIDE"/>
    <enumeration value="STN"/>
    <enumeration value="STE"/>
    <enumeration value="SUITE"/>
    <enumeration value="TH"/>
    <enumeration value="TOWER"/>
    <enumeration value="TWR"/>
    <enumeration value="TWNHSE"/>
    <enumeration value="UNIT"/>
    <enumeration value="UPPER"/>
    <enumeration value="UPPR"/>
    <enumeration value="WING"/>
    <enumeration value="APP"/>
    <enumeration value="BUREAU"/>
    <enumeration value="ETAGE"/>
    <enumeration value="LOG"/>
    <enumeration value="PORTE"/>
    <enumeration value="SALLE"/>
    <enumeration value="UNITE"/>
  </restriction>
</simpleType>
```

3.2.3 GOUSAddress

The GOUSAddress schema contains components (i.e. types and elements) that are associated with an US Address of physical and any structured mailing address formats that are compliant with specifications from US Postal Services. GOUSAddress is semantically identical to the US Address found in the CDES Address LDM.

Schema **GOUSAddress2.0.xsd**

targetNamespace: **GOUSAddress2.0.xsd**

Complex types	Simple types
BuildingUnitType	**AddlZipCodeType**
CivicAddressType	**CivicNumSuffixType**
GeneralDeliveryAddressType	**GDLabelType**
LocationAddressType	**MailBoxNumType**
MilitaryOverseasMailAddressType	**MilitaryPOType**
NonCivicPhysicalAddressType	**RouteType**
POBoxAddressType	**StateCodeType**
RouteAddressType	**StreetDirType**
RouteServiceType	**StreetNameType**
StreetAddressType	**UnitDesignatorType**
USAddressType	**ZipCodeType**

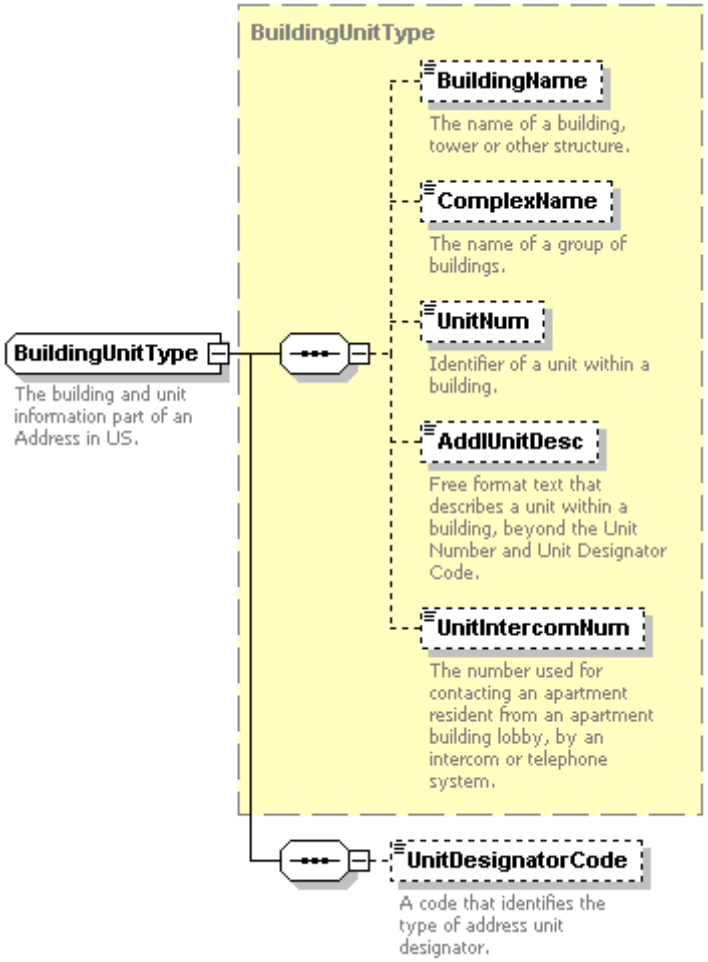
Imported Namespaces

targetNamespace: **GOCommonAddress2.0.xsd**

targetNamespace: **GOShared2.0.xsd**

complexType **BuildingUnitType**

diagram

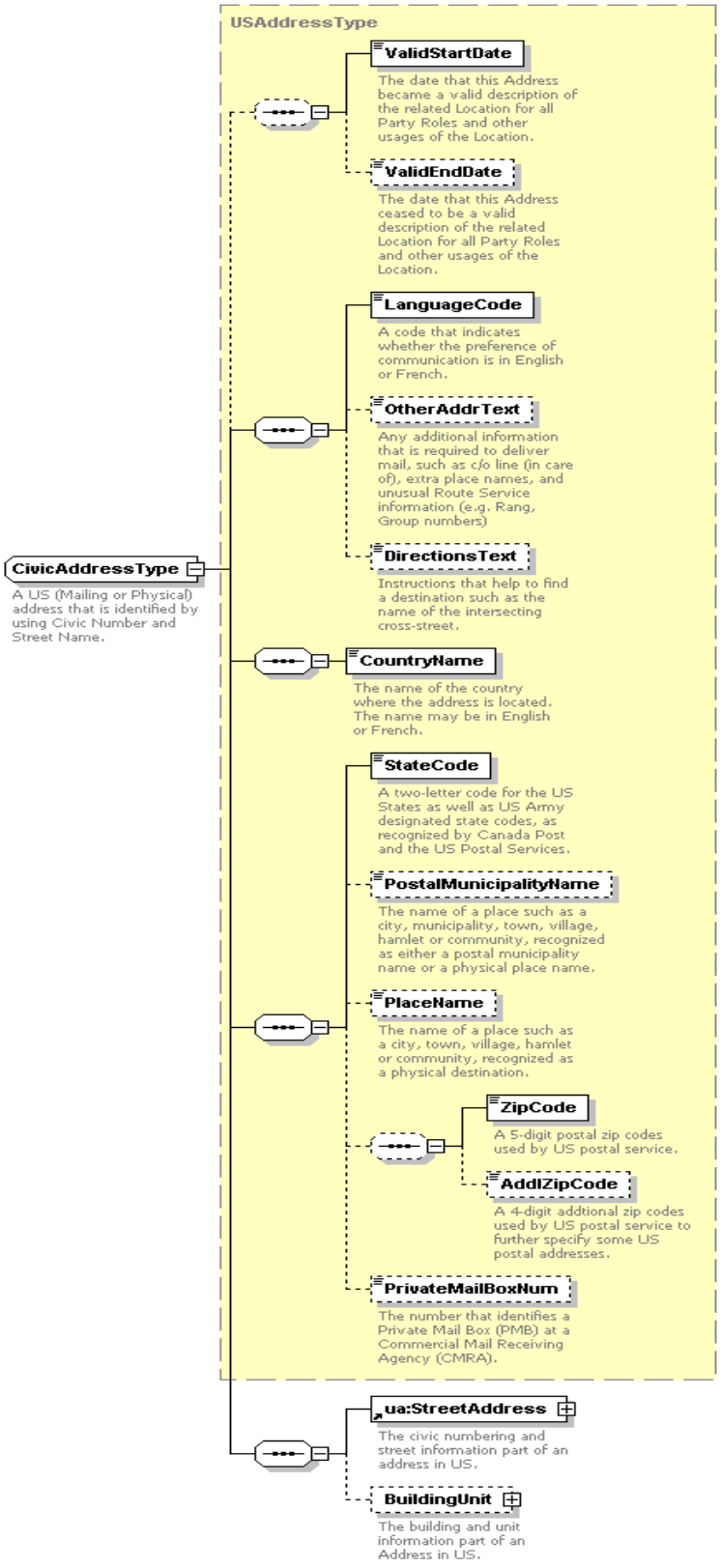


source

```
<complexType name="BuildingUnitType">
  <annotation>
    <documentation xml:lang="EN">The building and unit information part of an Address in US.</documentation>
  </annotation>
  <complexContent>
    <extension base="com:BuildingUnitType">
      <sequence>
        <element name="UnitDesignatorCode" type="ua:UnitDesignatorType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">A code that identifies the type of address unit designator.</documentation>
            <appinfo>Valid unit designator codes can be found in the CDER table US_UNIT_TYPE.</appinfo>
          </annotation>
        </element>
      </sequence>
    </extension>
  </complexContent>
</complexType>
```

complexType **CivicAddressType**

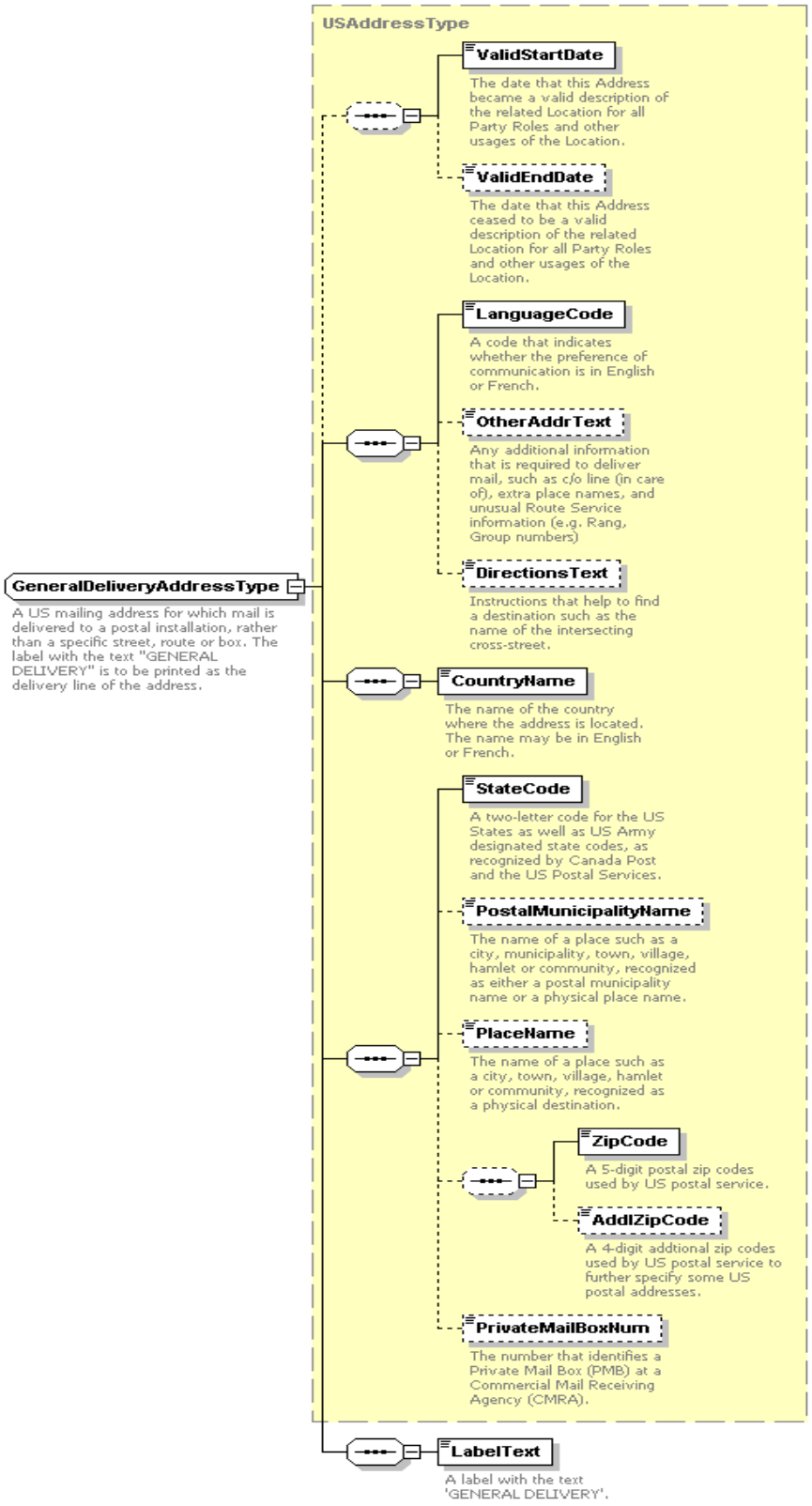
diagram



source	<complexType name="CivicAddressType" final="#all"> <annotation> <documentation xml:lang="EN">A US (Mailing or Physical) address that is identified by using Civic Number and Street Name.</documentation> </annotation> <complexContent> <extension base="ua:USAddressType"> <sequence> <element ref="ua:StreetAddress"> <annotation> <documentation xml:lang="EN">The civic numbering and street information part of a US (Mailing or Physical) Address.</documentation> </annotation> </element> <element name="BuildingUnit" type="ua:BuildingUnitType" minOccurs="0"> <annotation> <documentation xml:lang="EN">The building and unit information part of an Address in US.</documentation> </annotation> </element> </sequence> <attribute ref="com:addrUsageCode"> <annotation> <documentation xml:lang="EN">A code used to indicate the usage of a location address.</documentation> <appinfo>The addrUsageCode may = 'M', 'P', or 'B' for a CivicAddressType.</appinfo> </annotation> </attribute> </extension> </complexContent> </complexType>

complexType **GeneralDeliveryAddressType**

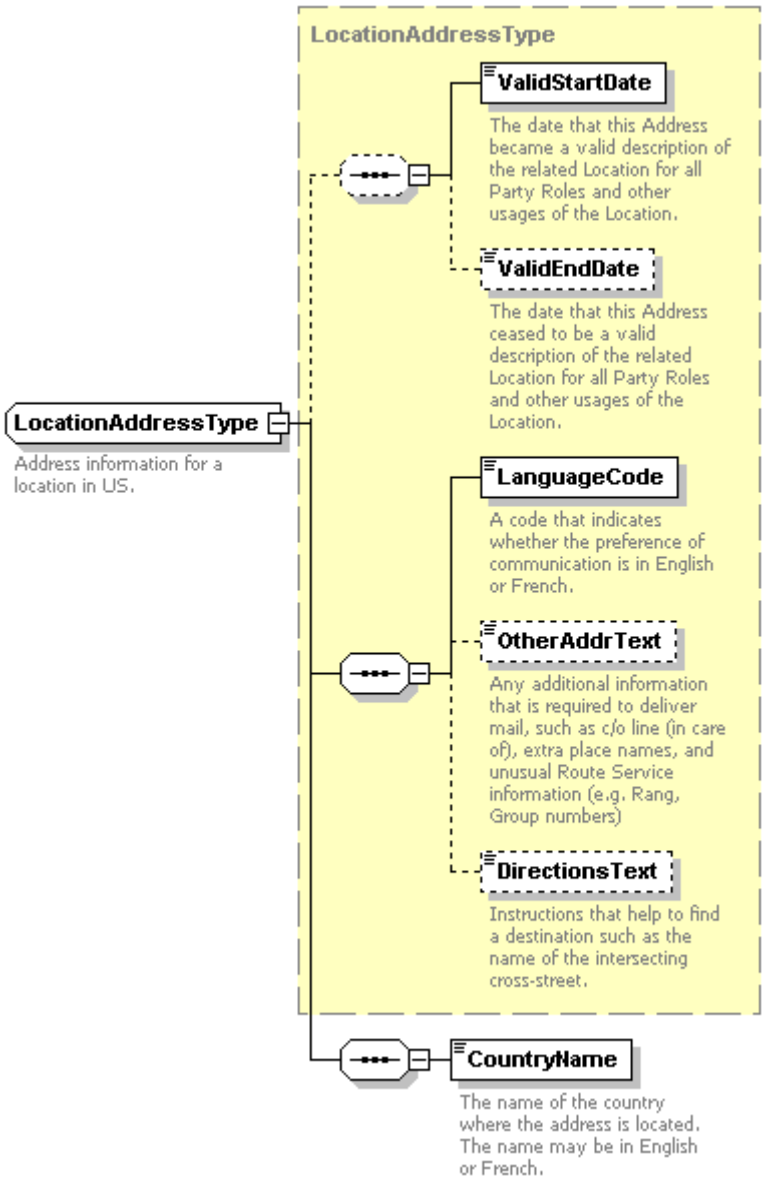
diagram



source	<complexType name="GeneralDeliveryAddressType" final="#all"> <annotation> <documentation xml:lang="EN">A US mailing address for which mail is delivered to a postal installation, rather than a specific street, route or box. The label with the text "GENERAL DELIVERY" is to be printed as the delivery line of the address.</documentation> </annotation> <complexContent> <extension base="ua:USAddressType"> <sequence> <element name="LabelText" type="ua:GDLabelType"> <annotation> <documentation xml:lang="EN">A label with the text 'GENERAL DELIVERY'.</documentation> </annotation> </element> </sequence> <attribute ref="com:addrUsageCode" fixed="M"> <annotation> <documentation xml:lang="EN">A code used to indicate the usage of a location address.</documentation> <appinfo>The addrUsageCode must = 'M' for a GeneralDeliveryAddressType.</appinfo> </annotation> </attribute> </extension> </complexContent> </complexType>

complexType **LocationAddressType**

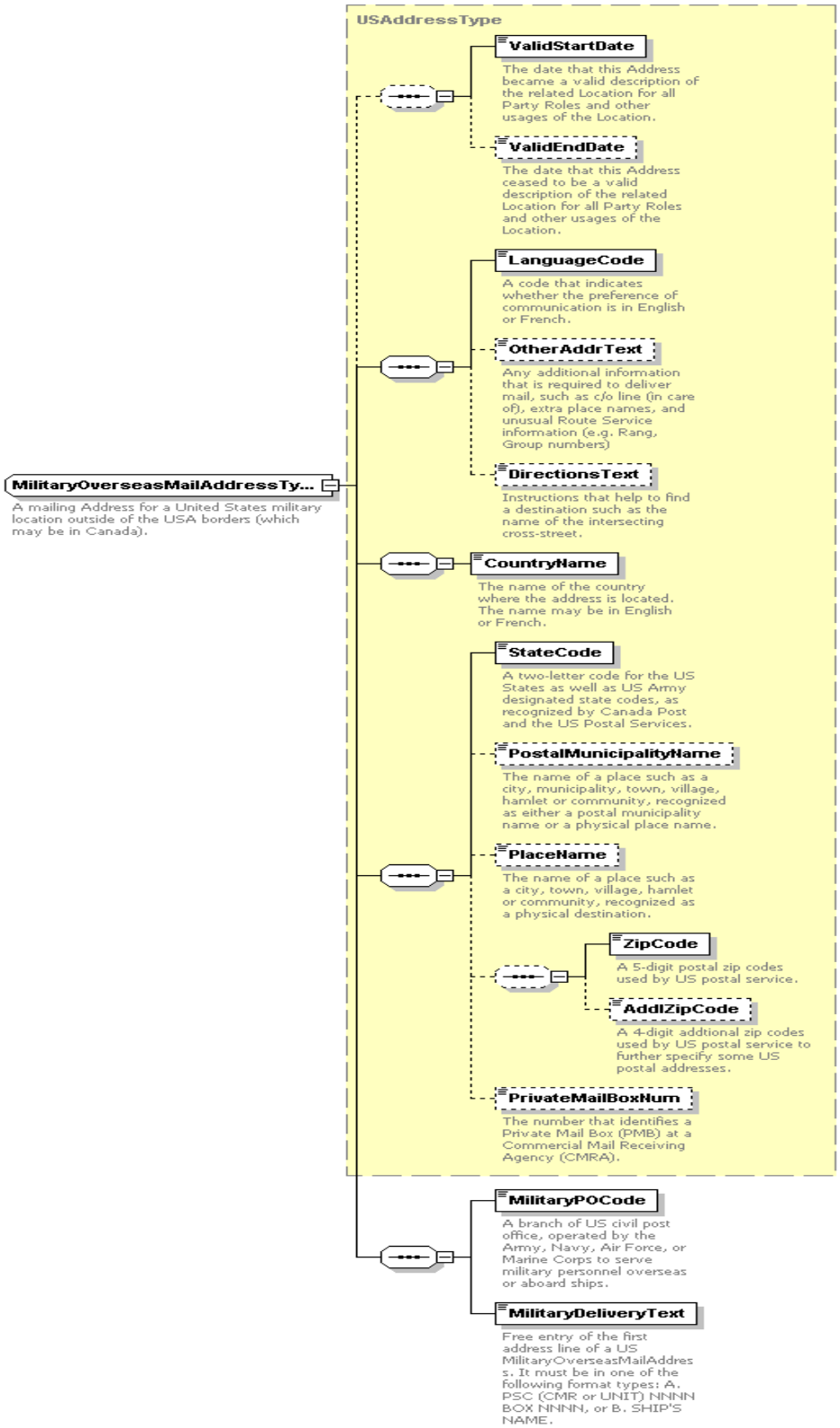
diagram



source	<complexType name="LocationAddressType"> <annotation> <documentation xml:lang="EN">Address information for a location in US.</documentation> </annotation> <complexContent> <extension base="com:LocationAddressType"> <sequence> <element name="CountryName"> <annotation> <documentation xml:lang="EN">The name of the country where the address is located. The name may be in English or French.</documentation> <appinfo>If the CountryName contains a value then the value must be = 'U.S.A.', 'USA', 'United States of America' or 'ETATS-UNIS D'AMERIQUE'.</appinfo> </annotation> <simpleType> <restriction base="com:CountryNameType"> <enumeration value="USA"/> <enumeration value="U.S.A."/> <enumeration value="United States of America"/> <enumeration value="ETATS-UNIS D'AMERIQUE"/> </restriction> </simpleType> </element> </sequence> </extension> </complexContent> </complexType>

complexType **MilitaryOverseasMailAddressType**

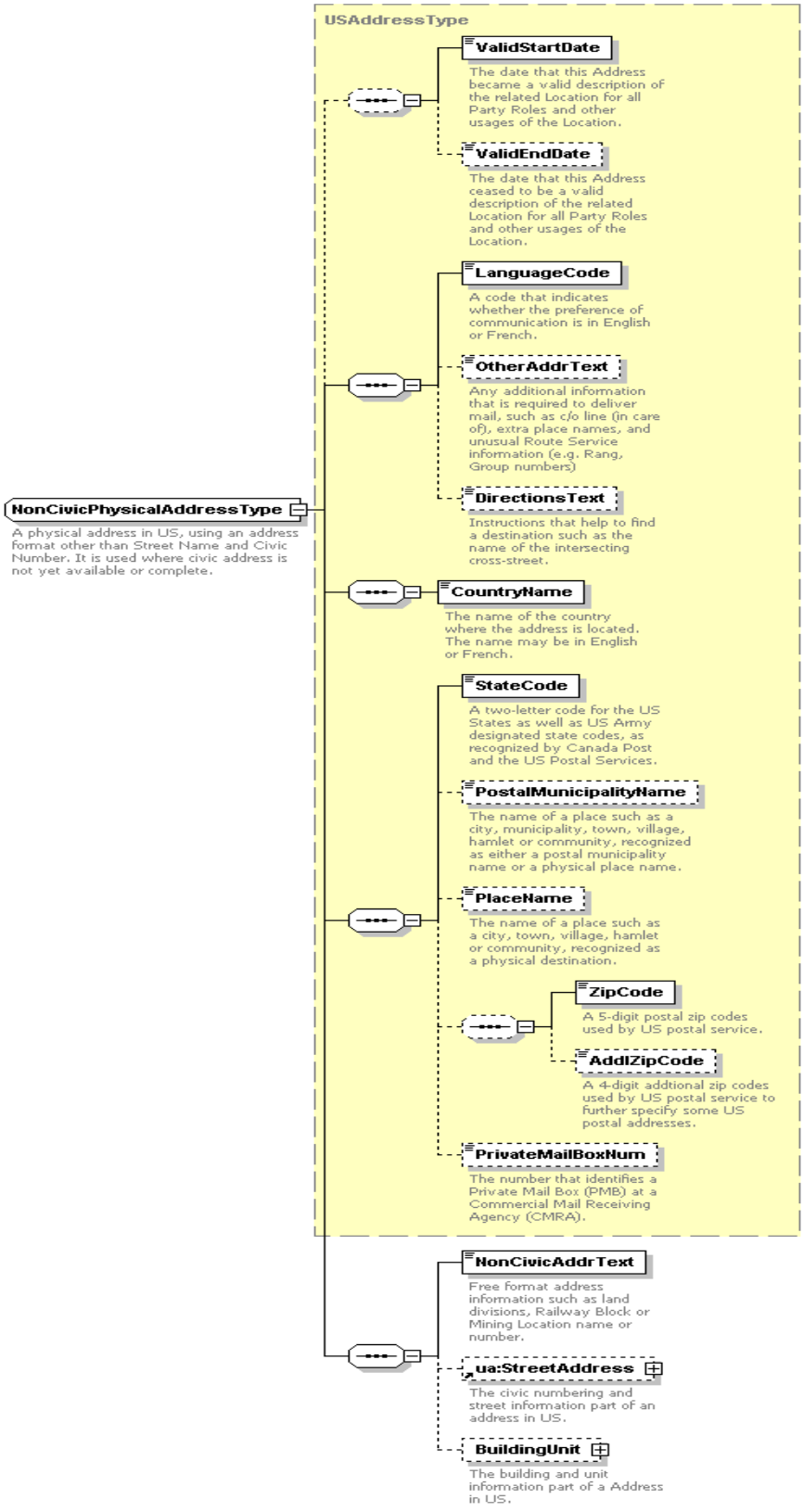
diagram



source	<complexType name="MilitaryOverseasMailAddressType" final="#all"> <annotation> <documentation xml:lang="EN">A mailing Address for a United States military location outside of the USA borders (which may be in Canada).</documentation> <appinfo>The CountryName for a MilitaryOverseasMailAddress is 'USA' or 'ÉTATS-UNIS' because the US postal service delivers the mail.</appinfo> </annotation> <complexContent> <extension base="ua:USAddressType"> <sequence> <element name="MilitaryPOCode" type="ua:MilitaryPOType"> <annotation> <documentation xml:lang="EN">A branch of US civil post office, operated by the Army, Navy, Air Force, or Marine Corps to serve military personnel overseas or aboard ships.</documentation> <appinfo>The valid Military Post Office Codes are: APO - Army Post Office, FPO - Fleet Post Office.</appinfo> </annotation> </element> <element name="MilitaryDeliveryText" type="com:AddrLineTextType"> <annotation> <documentation xml:lang="EN">Free entry of the first address line of a US MilitaryOverseasMailAddress. It must be in one of the following format types: A. PSC (CMR or UNIT) NNNN BOX NNNN, or B. SHIP'S NAME.</documentation> <appinfo>Examples: A. PSC 1650 BOX 12, A. CMR 830 BOX 51, A. UNIT 908 BOX 111, B. USS SEA DEVIL SSN-664, B. USCGC HAMILTON.</appinfo> </annotation> </element> </sequence> <attribute ref="com:addrUsageCode" fixed="M"> <annotation> <documentation xml:lang="EN">A code used to indicate the usage of a location address.</documentation> <appinfo>The addrUsageCode must = 'M' for a MilitaryOverseasMailAddressType.</appinfo> </annotation> </attribute> </extension> </complexContent> </complexType>

complexType **NonCivicPhysicalAddressType**

diagram

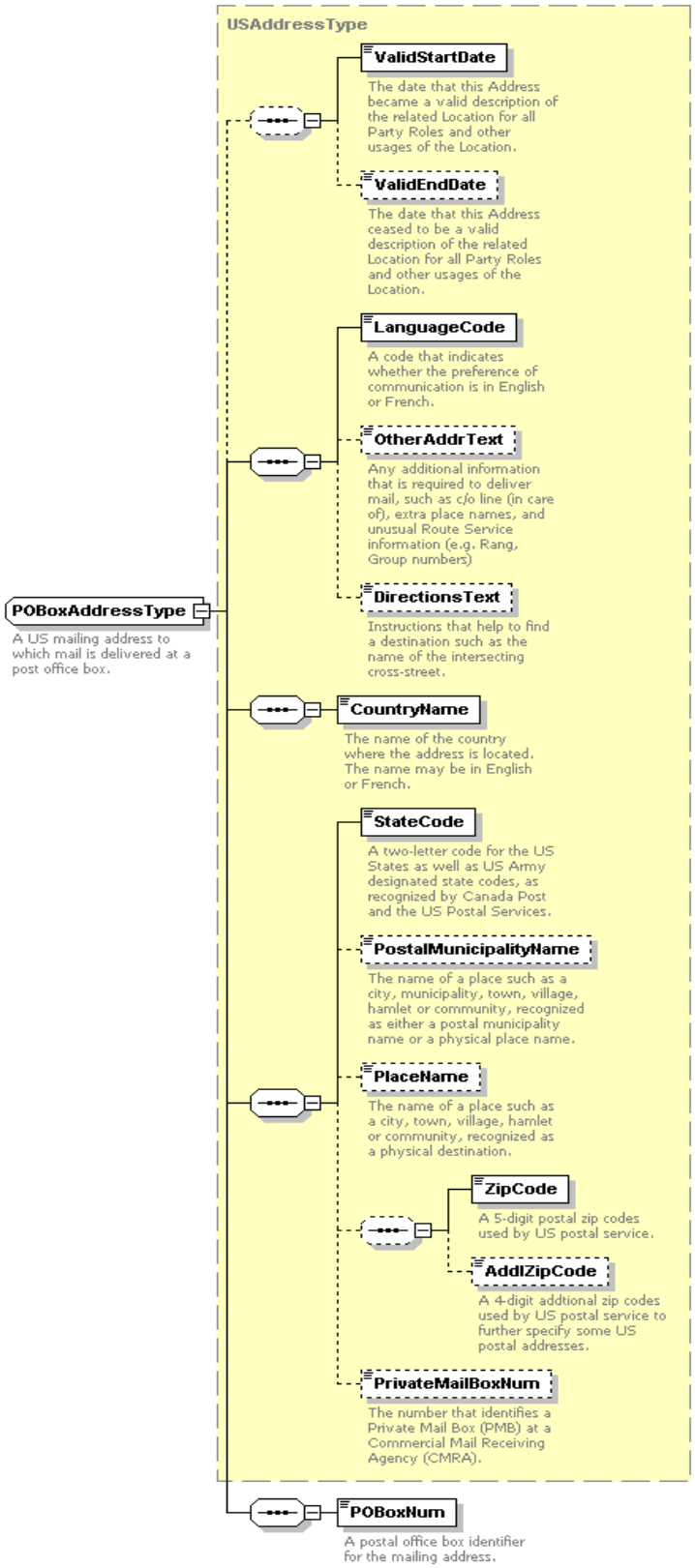


source

```
<complexType name="NonCivicPhysicalAddressType">
  <annotation>
    <documentation xml:lang="EN">A physical address in US, using an address format other than Street Name and
Civic Number. It is used where civic address is not yet available or complete.</documentation>
  </annotation>
  <complexContent>
    <extension base="ua:USAddressType">
      <sequence>
        <element name="NonCivicAddrText" type="com:AddrLineTextType">
          <annotation>
            <documentation xml:lang="EN">Free format address information such as land divisions, Railway Block or
Mining Location name or number. </documentation>
          </annotation>
        </element>
        <element ref="ua:StreetAddress" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">The civic numbering and street information part of a US Address.
</documentation>
            <appinfo>Data Integrity Rule:
              1.  If NonCivicAddrText is specified then CivicNum of StreetAddressType must NOT be specified.
            </appinfo>
          </annotation>
        </element>
        <element name="BuildingUnit" type="ua:BuildingUnitType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">The building and unit information part of a Address in US.</documentation>
          </annotation>
        </element>
      </sequence>
      <attribute ref="com:addrUsageCode" fixed="P">
        <annotation>
          <documentation xml:lang="EN">A code used to indicate the usage of a location address.</documentation>
          <appinfo>The addrUsageCode must = 'P' for a NonCivicPhysicalAddressType.</appinfo>
        </annotation>
      </attribute>
    </extension>
  </complexContent>
</complexType>
```

complexType **POBoxAddressType**

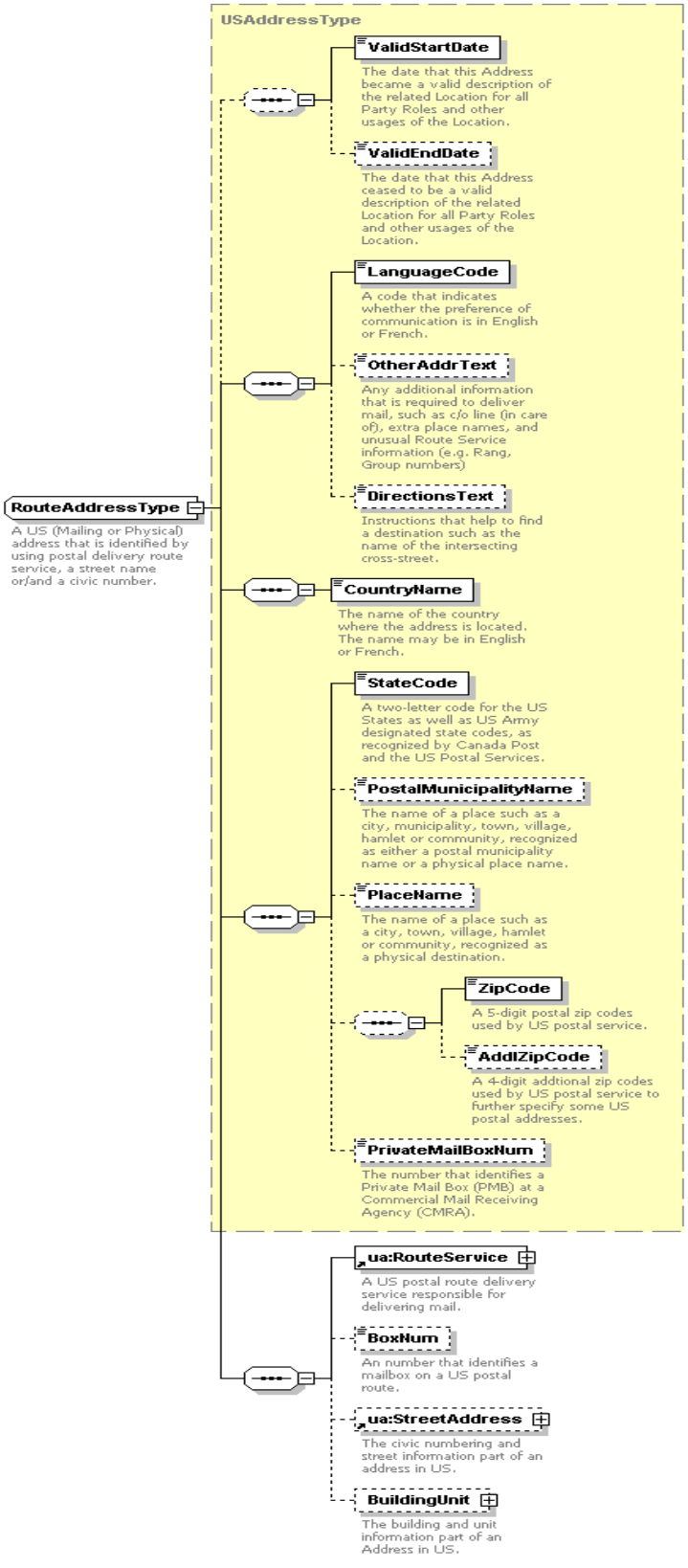
diagram



source	<complexType name="POBoxAddressType" final="#all"> <annotation> <documentation xml:lang="EN">A US mailing address to which mail is delivered at a post office box.</documentation> </annotation> <complexContent> <extension base="ua:USAddressType"> <sequence> <element name="POBoxNum" type="com:POBoxNumType"> <annotation> <documentation xml:lang="EN">A postal office box identifier for the mailing address.</documentation> </annotation> </element> </sequence> <attribute ref="com:addrUsageCode" fixed="M"> <annotation> <documentation xml:lang="EN">A code used to indicate the usage of a location address.</documentation> <appinfo>The addrUsageCode must = 'M' for a POBoxAddressType.</appinfo> </annotation> </attribute> </extension> </complexContent> </complexType>

complexType **RouteAddressType**

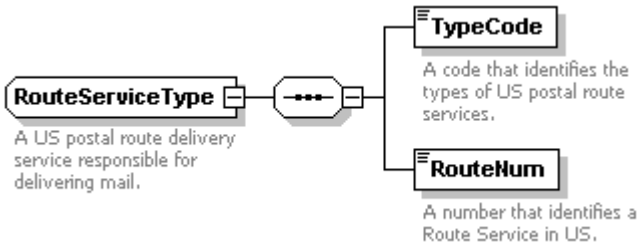
diagram



source

```
<complexType name="RouteAddressType" final="#all">
  <annotation>
    <documentation xml:lang="EN">A US (Mailing or Physical) address that is identified by using postal delivery route service, a street name or/and a civic number.</documentation>
  </annotation>
  <complexContent>
    <extension base="ua:USAddressType">
      <sequence>
        <element ref="ua:RouteService">
          <annotation>
            <documentation xml:lang="EN">A postal route delivery service responsible for delivering mail.</documentation>
          </annotation>
        </element>
        <element name="BoxNum" type="com:POBoxNumType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">An number that identifies a mailbox on a US postal route.</documentation>
            <appinfo>Data Integrity Rules: 1. If addrUsageCode = 'P' then BoxNum must NOT be specified.</appinfo>
          </annotation>
        </element>
        <element ref="ua:StreetAddress" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">The civic numbering and street information part of an Address in US.</documentation>
          </annotation>
        </element>
        <element name="BuildingUnit" type="ua:BuildingUnitType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">The building and unit information part of an Address in US.</documentation>
          </annotation>
        </element>
      </sequence>
      <attribute ref="com:addrUsageCode">
        <annotation>
          <documentation xml:lang="EN">A code used to indicate the usage of a location address.</documentation>
          <appinfo>The addrUsageCode may = 'M', 'P', or 'B' for a RouteAddressType.</appinfo>
        </annotation>
      </attribute>
    </extension>
  </complexContent>
</complexType>
```

complexType **RouteServiceType**

diagram	
source	<complexType name="RouteServiceType" final="#all"> <annotation> <documentation xml:lang="EN">A US postal route delivery service responsible for delivering mail.</documentation> </annotation> <sequence> <element name="TypeCode" type="ua:RouteType"> <annotation> <documentation xml:lang="EN">A code that identifies the types of US postal route services.</documentation> <appinfo>Valid RouteServiceType codes are: RR - Rural Route, and HC - Highway Contract, and these codes are available in the CDER table US_ROUTE_TYPE.</appinfo> </annotation> </element> <element name="RouteNum" type="com:RouteServiceNumType"> <annotation> <documentation xml:lang="EN">A number that identifies a Route Service in US.</documentation> </annotation> </element> </sequence> </complexType>

complexType **StreetAddressType**

diagram

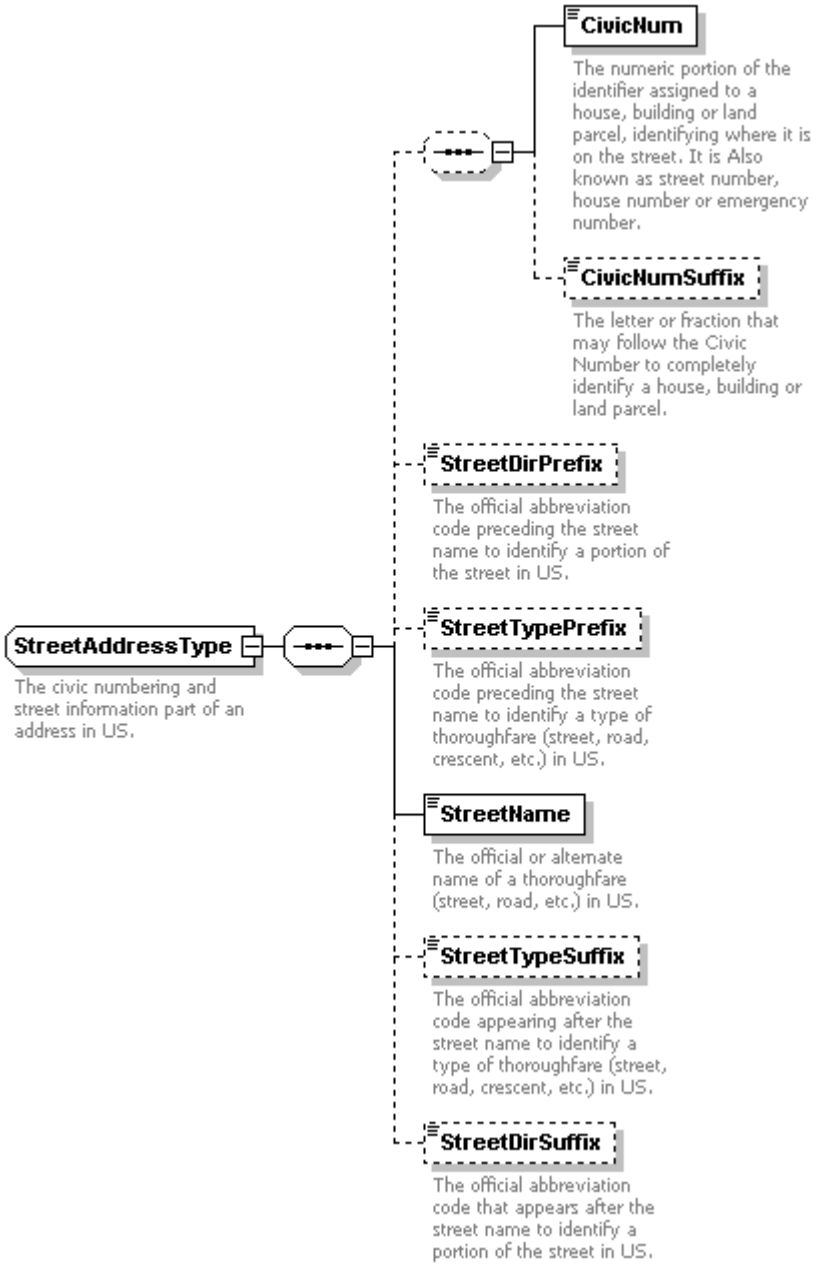


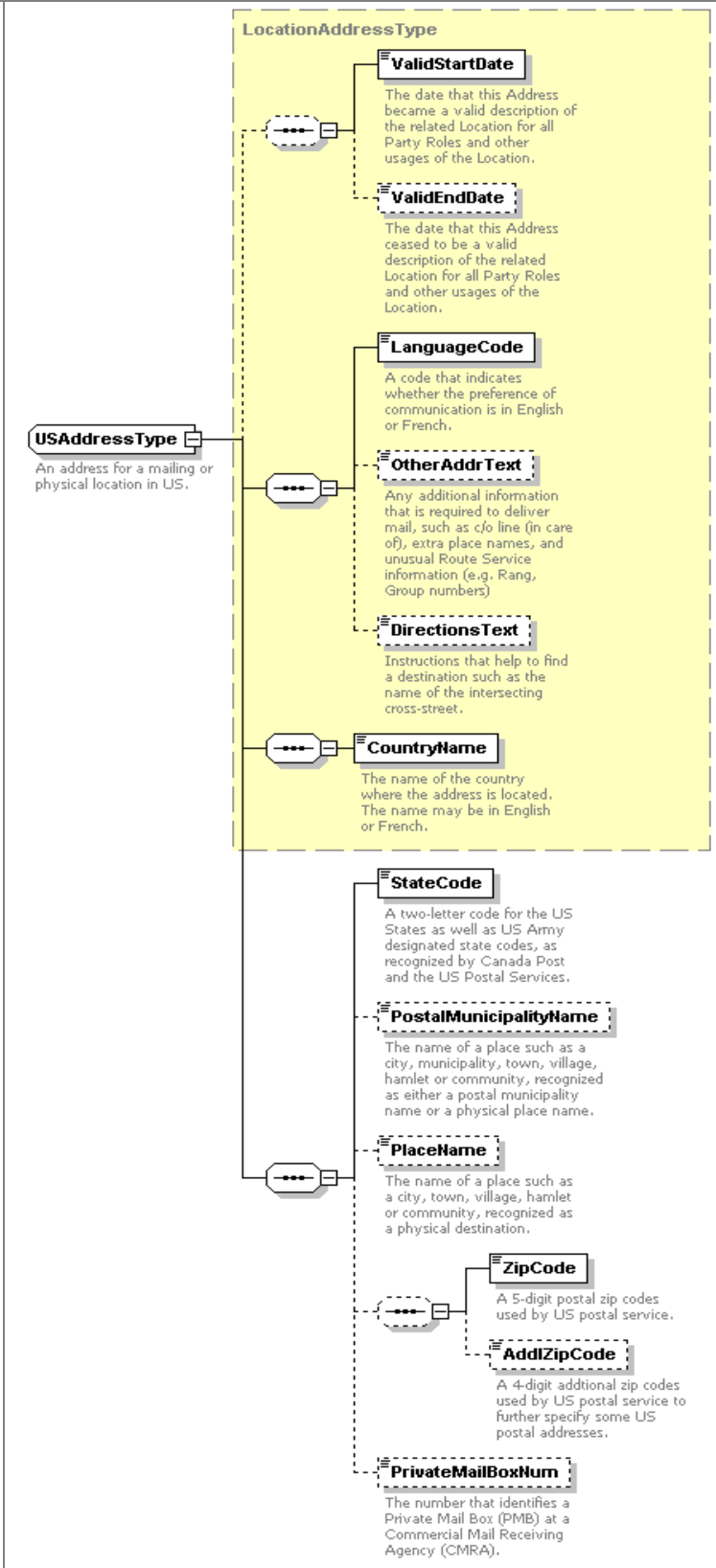
Figure 1

source

```
<complexType name="StreetAddressType">
  <annotation>
    <documentation xml:lang="EN">The civic numbering and street information part of an address in US.</documentation>
  </annotation>
  <sequence>
    <sequence minOccurs="0">
      <element name="CivicNum" type="com:CivicNumType">
        <annotation>
          <documentation xml:lang="EN">The numeric portion of the identifier assigned to a house, building or land parcel, identifying where it is on the street. It is Also known as street number, house number or emergency number.</documentation>
          <appinfo>Data Integrity Rules: 1. If CivicNumSuffix is specified then CivicNum must be specified.</appinfo>
        </annotation>
      </element>
      <element name="CivicNumSuffix" type="ua:CivicNumSuffixType" minOccurs="0">
        <annotation>
          <documentation xml:lang="EN">The letter or fraction that may follow the Civic Number to completely identify a house, building or land parcel.</documentation>
          <appinfo>Data Integrity Rule:
                1. If CivicNum is NOT specified then CivicNumSuffix must NOT be specified.
          </appinfo>
        </annotation>
      </element>
    </sequence>
    <element name="StreetDirPrefix" type="ua:StreetDirType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The official abbreviation code preceding the street name to identify a portion of the street in US.</documentation>
        <appinfo>Valid street direction codes are: N, S, E, W, NE, SE, NW, and SW. These codes are also available in the CDER table US_STREET_DIRECTION_TYPE.</appinfo>
      </annotation>
    </element>
    <element name="StreetTypePrefix" type="com:StreetType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The official abbreviation code preceding the street name to identify a type of thoroughfare (street, road, crescent, etc.) in US.</documentation>
      </annotation>
    </element>
    <element name="StreetName" type="ua:StreetNameType">
      <annotation>
        <documentation xml:lang="EN">The official or alternate name of a thoroughfare (street, road, etc.) in US.</documentation>
      </annotation>
    </element>
    <element name="StreetTypeSuffix" type="com:StreetType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The official abbreviation code appearing after the street name to identify a type of thoroughfare (street, road, crescent, etc.) in US.</documentation>
      </annotation>
    </element>
    <element name="StreetDirSuffix" type="ua:StreetDirType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The official abbreviation code that appears after the street name to identify a portion of the street in US.</documentation>
        <appinfo>Valid street direction codes are: N, S, E, W, NE, SE, NW, and SW. These codes are also available in the CDER table US_STREET_DIRECTION_TYPE.</appinfo>
      </annotation>
    </element>
  </sequence>
</complexType>
```

complexType **USAddressType**

diagram



source

```
<complexType name="USAddressType">
  <annotation>
    <documentation xml:lang="EN">An address for a mailing or physical location in US.</documentation>
  </annotation>
  <complexContent>
    <extension base="ua:LocationAddressType">
      <sequence>
        <element name="StateCode" type="ua:StateCodeType">
          <annotation>
            <documentation xml:lang="EN">A two-letter code for the US States as well as US Army designated state
codes, as recognized by Canada Post and the US Postal Services.</documentation>
            <appinfo>Valid US State Codes are available in the CDER table US_STATE.</appinfo>
          </annotation>
        </element>
        <element name="PostalMunicipalityName" type="com:MunicipalityNameType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">The name of a place such as a city, municipality, town, village, hamlet or
community, recognized as either a postal municipality name or a physical place name.</documentation>
            <appinfo>Data Integrity Rules:
                1. If addrUsageCode = ‘M’, or ‘B’ then PostalMunicipalityName must be specified.
                2. If addrUsageCode = ‘P’ then PostalMunicipalityName must NOT be specified.
                3. If StateCode = a military state code (i.e. 'AA', 'AE', or 'AP') then PostalMunicipalityName must NOT be
                   specified.
            </appinfo>
          </annotation>
        </element>
        <element name="PlaceName" type="com:MunicipalityNameType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">The name of a place such as a city, town, village, hamlet or community,
recognized as a physical destination.</documentation>
            <appinfo>Data Integrity Rules:
                  1. If addrUsageCode = 'P' or 'B' then PlaceName must be specified.
                  2. If addrUsageCode = ‘M’ then PlaceName must NOT be specified.
            </appinfo>
          </annotation>
        </element>
        <sequence minOccurs="0">
          <element name="ZipCode" type="ua:ZipCodeType">
            <annotation>
              <documentation xml:lang="EN">A 5-digit postal zip codes used by US postal service.</documentation>
              <appinfo>Data Integrity Rules:
                    1. If addrUsageCode = 'M' or 'B' then ZipCode must be specified.
                    2. If AddlZipCode is specified then ZipCode must also be specified.
              </appinfo>
            </annotation>
          </element>
          <element name="AddlZipCode" type="ua:AddlZipCodeType" minOccurs="0">
            <annotation>
              <documentation xml:lang="EN">A 4-digit addtional zip codes used by US postal service to further specify
some US postal addresses.</documentation>
              <appinfo>Data Integrity Rules:
                    1. If ZipCode is NOT specified then AddlZipCode must NOT be specified.
              </appinfo>
            </annotation>
          </element>
        </sequence>
        <element name="PrivateMailBoxNum" type="ua:MailBoxNumType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">The number that identifies a Private Mail Box (PMB) at a Commercial Mail
Receiving Agency (CMRA).</documentation>
            <appinfo>The address will include (for example) PMB 1234 or #1234 in addition to the address of the CMRA,
which may itself be a Civic, Route or PO Box address. See USPS standards for formatting addresses containing
multiple types of box number. Data Integrity Rules:
                  1. If addrUsageCode = 'P' then PrivateMailBoxNum must NOT be specified.
             </appinfo>
          </annotation>
        </element>
      </sequence>
```

```
    </extension>
  </complexContent>
</complexType>
```

simpleType **AddlZipCodeType**

source

```
<simpleType name="AddlZipCodeType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for an additional 4-digit zip code which further specify some US postal addresses.</documentation>
  </annotation>
  <restriction base="com:PostalCodeType">
    <pattern value="[0-9]{4}"/>
  </restriction>
</simpleType>
```

simpleType **CivicNumSuffixType**

source

```
<simpleType name="CivicNumSuffixType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for civic number suffix codes used in US.</documentation>
  </annotation>
  <restriction base="com:CivicNumSuffixType">
    <maxLength value="6"/>
  </restriction>
</simpleType>
```

simpleType **GDLabelType**

source

```
<simpleType name="GDLabelType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for a US postal service General Delivery label text.</documentation>
  </annotation>
  <restriction base="string">
    <enumeration value="GENERAL DELIVERY"/>
    <enumeration value="General Delivery"/>
  </restriction>
</simpleType>
```

simpleType **MailBoxNumType**

source

```
<simpleType name="MailBoxNumType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for a postal mail box number used by US postal service.</documentation>
  </annotation>
  <restriction base="com:MailBoxNumType">
    <maxLength value="6"/>
  </restriction>
</simpleType>
```

simpleType **MilitaryPOType**

source

```
<simpleType name="MilitaryPOType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for a branch of US civil post office, operated by the Army, Navy, Air Force, or Marine Corps to serve military personnel overseas or aboard ships.</documentation>
    <appinfo>The valid Military Post Office Codes are: APO - Army Post Office, FPO - Fleet Post Office.</appinfo>
  </annotation>
  <restriction base="string">
    <enumeration value="APO"/>
    <enumeration value="FPO"/>
  </restriction>
</simpleType>
```

simpleType **RouteType**

source

```
<simpleType name="RouteType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for US postal service route type codes.</documentation>
    <appinfo>Valid route type codes are: RR - Rural Route, HC - Highway Contract. All US route type codes are
available in the CDER table US_ROUTE_TYPE.</appinfo>
  </annotation>
  <restriction base="com:RouteType">
    <enumeration value="HC"/>
    <enumeration value="RR"/>
  </restriction>
</simpleType>
```

simpleType **StateCodeType**

source

```
<simpleType name="StateCodeType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for the two-letter code for the US States as well as US Army
designated state codes, as recognized by Canada Post and the US Postal Services.</documentation>
    <appinfo>Valid US State Codes are available in the CDER table US_STATE. Note that the StateCode domain and
MilitaryStateCode domain are combined.</appinfo>
  </annotation>
  <restriction base="com:ProvinceStateCodeType">
    <enumeration value="AL"/>
    <enumeration value="AK"/>
    <enumeration value="AS"/>
    <enumeration value="AZ"/>
    <enumeration value="AR"/>
    <enumeration value="CA"/>
    <enumeration value="CO"/>
    <enumeration value="CT"/>
    <enumeration value="DE"/>
    <enumeration value="DC"/>
    <enumeration value="FL"/>
    <enumeration value="GA"/>
    <enumeration value="HI"/>
    <enumeration value="ID"/>
    <enumeration value="IL"/>
    <enumeration value="IN"/>
    <enumeration value="IA"/>
    <enumeration value="KS"/>
    <enumeration value="KY"/>
    <enumeration value="LA"/>
    <enumeration value="ME"/>
    <enumeration value="MD"/>
    <enumeration value="MA"/>
    <enumeration value="MI"/>
    <enumeration value="MN"/>
    <enumeration value="MS"/>
    <enumeration value="MO"/>
    <enumeration value="MT"/>
    <enumeration value="NE"/>
    <enumeration value="NV"/>
    <enumeration value="NH"/>
    <enumeration value="NJ"/>
    <enumeration value="NM"/>
    <enumeration value="NY"/>
    <enumeration value="NC"/>
    <enumeration value="ND"/>
    <enumeration value="OH"/>
    <enumeration value="OK"/>
    <enumeration value="OR"/>
    <enumeration value="OA"/>
    <enumeration value="RI"/>
    <enumeration value="SC"/>
    <enumeration value="SD"/>
    <enumeration value="TN"/>
    <enumeration value="TX"/>
    <enumeration value="UT"/>
```

```
    <enumeration value="VT"/>
    <enumeration value="VI"/>
    <enumeration value="VA"/>
    <enumeration value="WA"/>
    <enumeration value="WV"/>
    <enumeration value="WI"/>
    <enumeration value="WY"/>
    <enumeration value="AA"/>
    <enumeration value="AE"/>
    <enumeration value="AP"/>
  </restriction>
</simpleType>
```

simpleType **StreetDirType**

source

```
<simpleType name="StreetDirType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for street direction codes such as E, W, NE, etc. used in US.</documentation>
    <appinfo>Valid street direction codes can be found in the CDER table US_STREET_DIRECTION_TYPE.</appinfo>
  </annotation>
  <restriction base="com:StreetDirType">
    <enumeration value="N"/>
    <enumeration value="S"/>
    <enumeration value="E"/>
    <enumeration value="W"/>
    <enumeration value="NE"/>
    <enumeration value="SE"/>
    <enumeration value="NW"/>
    <enumeration value="SW"/>
  </restriction>
</simpleType>
```

simpleType **StreetNameType**

source

```
<simpleType name="StreetNameType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for street names used in US.</documentation>
  </annotation>
  <restriction base="com:StreetNameType">
    <maxLength value="60"/>
  </restriction>
</simpleType>
```

simpleType **UnitDesignatorType**

source

```
<simpleType name="UnitDesignatorType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for a code that identifies the types of address unit designators like Apt, Fl, etc. in US.</documentation>
    <appinfo>Valid unit designator codes can be found in the CDER table US_UNIT_TYPE.</appinfo>
  </annotation>
  <restriction base="com:UnitDesignatorType">
    <enumeration value="APT"/>
    <enumeration value="BACK"/>
    <enumeration value="BSMT"/>
    <enumeration value="BLDG"/>
    <enumeration value="DEPT"/>
    <enumeration value="DOOR"/>
    <enumeration value="FL"/>
    <enumeration value="FLR"/>
    <enumeration value="FRNT"/>
    <enumeration value="HNGR"/>
    <enumeration value="KEY"/>
    <enumeration value="LBBY"/>
    <enumeration value="LOT"/>
    <enumeration value="LOWR"/>
    <enumeration value="OFC"/>
    <enumeration value="PH"/>
    <enumeration value="PIER"/>
    <enumeration value="REAR"/>
    <enumeration value="RM"/>
    <enumeration value="ROOM"/>
    <enumeration value="SIDE"/>
    <enumeration value="SLIP"/>
    <enumeration value="SPC"/>
    <enumeration value="STOP"/>
    <enumeration value="STE"/>
    <enumeration value="TRLR"/>
    <enumeration value="UNIT"/>
    <enumeration value="UPPR"/>
  </restriction>
</simpleType>
```

simpleType **ZipCodeType**

source

```
<simpleType name="ZipCodeType">
  <annotation>
    <documentation xml:lang="EN">Domain definition for the 5-digit postal zip codes used by US postal service.</documentation>
  </annotation>
  <restriction base="com:PostalCodeType">
    <pattern value="[0-9]{5}"/>
  </restriction>
</simpleType>
```

3.2.4 GOInternationalAddress

The GOInternationalAddress schema contains components (i.e. types and elements) that are associated with an international mailing and physical Address of unstructured format. GOInternationalAddress is semantically identical to the International Address found in the CDES Address LDM.

Schema **GOInternationalAddress2.0.xsd**

targetNamespace: **GOInternationalAddress2.0.xsd**

Complex types
InternationalAddressType
LocationAddressType

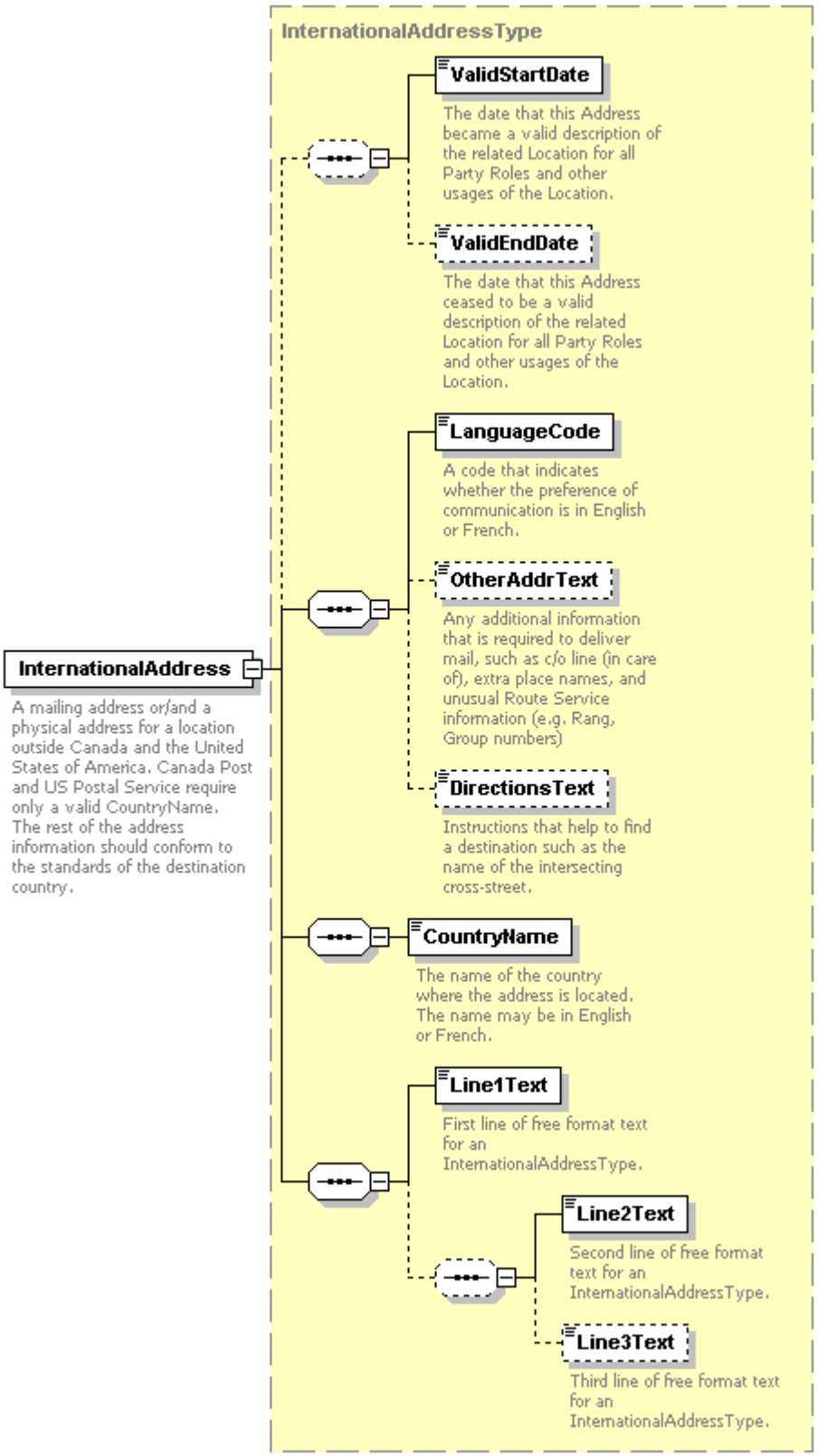
Imported Namespace

targetNamespace: **GOCommonAddress2.0.xsd**

targetNamespace: **GOShared2.0.xsd**

complexType **InternationalAddressType**

diagram



source

```
<complexType name="InternationalAddressType">
  <annotation>
    <documentation xml:lang="EN">A mailing address or/and a physical address for a location outside Canada and the United States of America.</documentation>
    <appinfo>Canada Post and US Postal Service require only a valid CountryName. The rest of the address information should conform to the standards of the destination country.</appinfo>
  </annotation>
  <complexContent>
    <extension base="ia:LocationAddressType">
      <sequence>
        <element name="Line1Text" type="com:AddrLineTextType">
          <annotation>
            <documentation xml:lang="EN">First line of free format text for an InternationalAddressType.</documentation>
            <appinfo>Data IntegrityRule: 1. If Line2Text is specified then Line1Text must be specified.</appinfo>
          </annotation>
        </element>
        <sequence minOccurs="0">
          <element name="Line2Text" type="com:AddrLineTextType">
            <annotation>
              <documentation xml:lang="EN">Second line of free format text for an InternationalAddressType.</documentation>
              <appinfo>Data Integrity Rule: 1. If Line3Text is specified then Line2Text must be specified.</appinfo>
            </annotation>
          </element>
          <element name="Line3Text" type="com:AddrLineTextType" minOccurs="0">
            <annotation>
              <documentation xml:lang="EN">Third line of free format text for an InternationalAddressType.</documentation>
            </annotation>
          </element>
        </sequence>
      </sequence>
      <attribute ref="com:addrUsageCode">
        <annotation>
          <documentation xml:lang="EN">A code used to indicate the usage of a location address.</documentation>
          <appinfo>The addrUsageCode may = 'M', 'P', or 'B' for an InternationalAddressType.</appinfo>
        </annotation>
      </attribute>
    </extension>
  </complexContent>
</complexType>
```

3.2.5 GOElectronicAddress

The GOElectronicAddress schema contains components (i.e. types and elements) that are associated with any virtual location address in the formats of Email address, phone number, or network address. GOElectronicAddress is semantically identical to the Email Address, Telephone Address, and Net Address found in the CDES Address LDM.

Schema **GOElectronicAddress2.0.xsd**

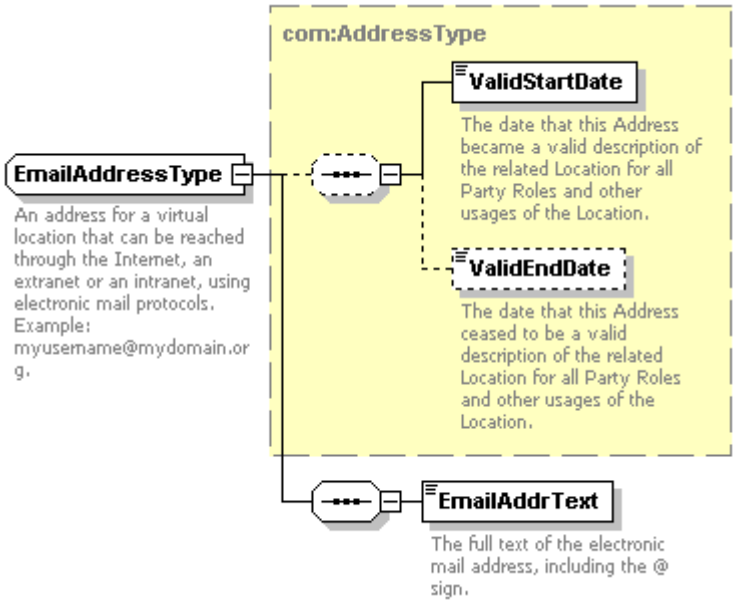
targetNamespace: **GOElectronicAddress2.0.xsd**

Complex types	Simple types
EmailAddressType	**DisplayPhoneNumType**
NetAddressType	**EmailAddrTextType**
TelephoneAddressType	**ExtensionNumType**
	IntlAreaCodeType
	IntlLocalNumType
	NANPAAreaCodeType
	NANPALocalNumType
	NetAddrPrefixType
	NetAddrTextType
	SchemeNameType
	TelecomCountryType
	TelecomType

Imported Namespaces

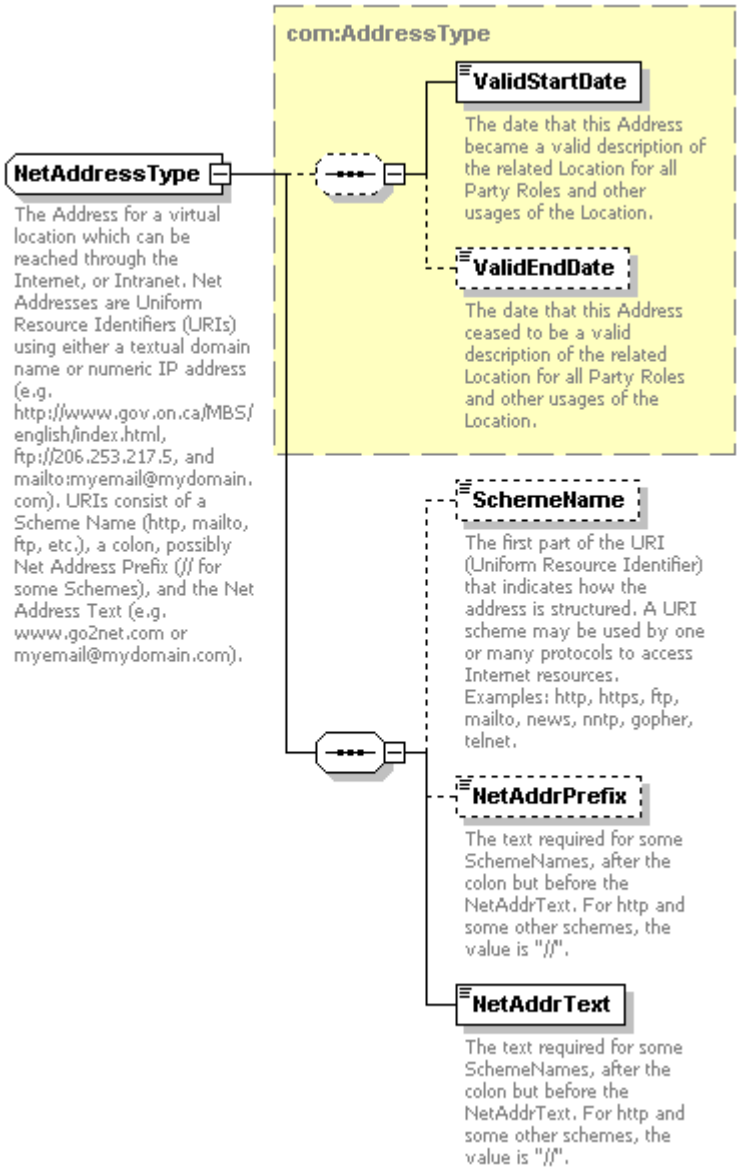
targetNamespace: **GOCommonAddress2.0.xsd**

complexType **EmailAddressType**

diagram	
source	<complexType name="EmailAddressType"> <annotation> <documentation xml:lang="EN">An address for a virtual location that can be reached through the Internet, an extranet or an intranet, using electronic mail protocols. Example: myusername@mydomain.org.</documentation> <appinfo>An Email Address is simply a record of contact information. It does not represent a physical device (computer, network equipment, etc.), a user account on a network, or a customer account with a telecommunication provider.</appinfo> </annotation> <complexContent> <extension base="com:AddressType"> <sequence> <element name="EmailAddrText" type="ea:EmailAddrTextType"> <annotation> <documentation xml:lang="EN">The full text of the electronic mail address, including the @ sign.</documentation> </annotation> </element> </sequence> </extension> </complexContent> </complexType>

complexType **NetAddressType**

diagram

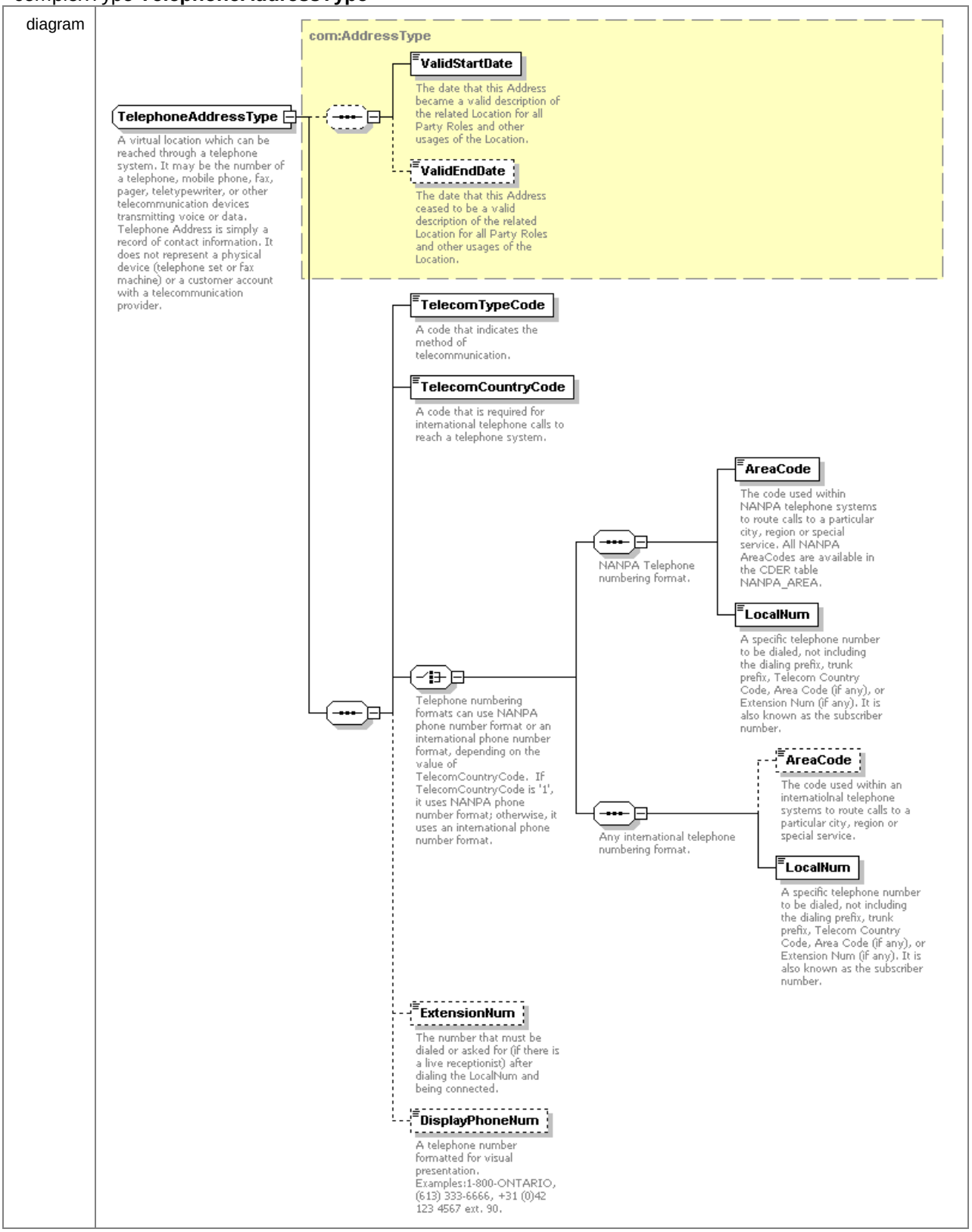


source

```
<complexType name="NetAddressType">
  <annotation>
    <documentation xml:lang="EN">The Address for a virtual location which can be reached through the Internet, or Intranet. Net Addresses are Uniform Resource Identifiers (URIs) using either a textual domain name or numeric IP address (e.g. http://www.gov.on.ca/MBS/english/index.html, ftp://206.253.217.5, and mailto:myemail@mydomain.com). URIs consist of a Scheme Name (http, mailto, ftp, etc.), a colon, possibly Net Address Prefix (// for some Schemes), and the Net Address Text (e.g. www.go2net.com or myemail@mydomain.com).</documentation>
    <appinfo>A Net Address is simply a record of contact information. It does not represent a physical device (computer, network equipment, etc.) or a customer account with a telecommunication provider.</appinfo>
  </annotation>
  <complexContent>
    <extension base="com:AddressType">
      <sequence>
        <element name="SchemeName" type="ea:SchemeNameType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">The first part of the URI (Uniform Resource Identifier) that indicates how the address is structured. A URI scheme may be used by one or many protocols to access Internet resources. Examples: http, https, ftp, mailto, news, nntp, gopher, telnet.</documentation>
          </annotation>
        </element>
        <element name="NetAddrPrefix" type="ea:NetAddrPrefixType" minOccurs="0">
          <annotation>
            <documentation xml:lang="EN">The text required for some SchemeNames, after the colon but before the NetAddrText. For http and some other schemes, the value is "//".</documentation>
          </annotation>
        </element>
        <element name="NetAddrText" type="ea:NetAddrTextType">
          <annotation>
            <documentation xml:lang="EN">The text required for some SchemeNames, after the colon but before the NetAddrText. For http and some other schemes, the value is "//".</documentation>
          </annotation>
        </element>
      </sequence>
    </extension>
  </complexContent>
</complexType>
```

complexType **TelephoneAddressType**

diagram



source

```
<complexType name="TelephoneAddressType">
  <annotation>
    <documentation xml:lang="EN">A virtual location which can be reached through a telephone system. It may be the number of a telephone, mobile phone, fax, pager, teletypewriter, or other telecommunication devices transmitting voice or data. Telephone Address is simply a record of contact information. It does not represent a physical device (telephone set or fax machine) or a customer account with a telecommunication provider.</documentation>
  </annotation>
  <complexContent>
    <extension base="com:AddressType">
      <sequence>
        <element name="TelecomTypeCode" type="ea:TelecomType">
          <annotation>
            <documentation xml:lang="EN">A code that indicates the method of telecommunication.</documentation>
            <appinfo>Valid TelecomTypes are: F – Fax, M – Mobile phone, P – Pager, T – Telephone, Y – TTY. All TelecomTypes are available in the CDER table TELECOM_TYPE.</appinfo>
          </annotation>
        </element>
        <element name="TelecomCountryCode" type="ea:TelecomCountryType" default="1">
          <annotation>
            <documentation xml:lang="EN">A code that is required for international telephone calls to reach a telephone system.</documentation>
            <appinfo>Codes are defined by the International Telecommunication Union and are commonly known as country codes. All TelecomCountryCodes are available in the CDER table TELECOM_COUNTRY.</appinfo>
          </annotation>
        </element>
        <choice>
          <annotation>
            <documentation xml:lang="EN">Telephone numbering formats can use NANPA phone number format or an international phone number format, depending on the value of TelecomCountryCode.  If TelecomCountryCode is '1', it uses NANPA phone number format; otherwise, it uses an international phone number format.</documentation>
          </annotation>
          <sequence>
            <annotation>
              <documentation xml:lang="EN">NANPA Telephone numbering format.</documentation>
            </annotation>
            <element name="AreaCode" type="ea:NANPAAreaCodeType">
              <annotation>
                <documentation xml:lang="EN">The code used within NANPA telephone systems to route calls to a particular city, region or special service. All NANPA AreaCodes are available in the CDER table NANPA_AREA.</documentation>
                <appinfo>Data Integrity Rule: 1. If TelecomCountryCode = ‘1’ then AreaCode must be a 3-digit number.
</appinfo>
              </annotation>
            </element>
            <element name="LocalNum" type="ea:NANPALocalNumType">
              <annotation>
                <documentation xml:lang="EN">A specific telephone number to be dialed, not including the dialing prefix, trunk prefix, Telecom Country Code, Area Code (if any), or Extension Num (if any). It is also known as the subscriber number.</documentation>
                <appinfo>Data Integrity Rule: 1. If TelecomCountryCode = ‘1’ then LocalNum must be a 7-digit number.
</appinfo>
              </annotation>
            </element>
          </sequence>
          <sequence>
            <annotation>
              <documentation xml:lang="EN">Any international telephone numbering format.</documentation>
            </annotation>
            <element name="AreaCode" type="ea:IntlAreaCodeType" minOccurs="0">
              <annotation>
                <documentation xml:lang="EN">The code used within an internatiolnal telephone systems to route calls to a particular city, region or special service.</documentation>
                <appinfo>Data Integrity Rule: 1. If TelecomCountryCode NOT = ‘1’ then AreaCode is optional and must conform to international area code format if it is required.</appinfo>
              </annotation>
            </element>
            <element name="LocalNum" type="ea:IntlLocalNumType">
              <annotation>
```

```
            <documentation xml:lang="EN">A specific telephone number to be dialed, not including the dialing prefix, trunk prefix, Telecom Country Code, Area Code (if any), or Extension Num (if any). It is also known as the subscriber number.</documentation>
            <appinfo>Data Integrity Rule: 1. If TelecomCountryCode NOT = '1' THEN LocalNum must conform to an international local subscriber number format.</appinfo>
          </annotation>
        </element>
      </sequence>
    </choice>
    <element name="ExtensionNum" type="ea:ExtensionNumType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">The number that must be dialed or asked for (if there is a live receptionist) after dialing the LocalNum and being connected.</documentation>
        <appinfo>Data Integrity Rule:
            1. If TelecomTypeCode = 'M', 'F', 'P' or 'Y' then ExtensionNum must NOT be specified.</appinfo>
      </annotation>
    </element>
    <element name="DisplayPhoneNum" type="ea:DisplayPhoneNumType" minOccurs="0">
      <annotation>
        <documentation xml:lang="EN">A telephone number formatted for visual presentation. Examples:1-800-ONTARIO, (613) 333-6666, +31 (0)42 123 4567 ext. 90.</documentation>
        <appinfo>May include any combination of dialing prefixes, Telephone Number attributes, spaces, punctuation, alphabetic characters, and extra characters that complete a word.</appinfo>
      </annotation>
    </element>
  </sequence>
 </extension>
</complexContent>
</complexType>
```

simpleType **DisplayPhoneNumType**

source

```
<simpleType name="DisplayPhoneNumType">
 <annotation>
  <documentation xml:lang="EN">Domain definition for a telephone number formatted for visual presentation.</documentation>
 </annotation>
 <restriction base="string">
  <maxLength value="30"/>
  <minLength value="7"/>
 </restriction>
</simpleType>
```

simpleType **EmailAddrTextType**

source

```
<simpleType name="EmailAddrTextType">
 <annotation>
  <documentation xml:lang="EN">Domain definition for an Email Address text.</documentation>
 </annotation>
 <restriction base="string">
  <maxLength value="100"/>
 </restriction>
</simpleType>
```

simpleType **ExtensionNumType**

source

```
<simpleType name="ExtensionNumType">
 <annotation>
  <documentation xml:lang="EN">Domain definition for a local phone number extension.</documentation>
 </annotation>
 <restriction base="string">
  <pattern value="[0-9]{1,5}"/>
 </restriction>
</simpleType>
```

simpleType **IntlAreaCodeType**

source	<simpleType name="IntlAreaCodeType"> <annotation> <documentation xml:lang="EN">Domain definition for a code used within an international telephone system to route calls to a particular city, region or special service.</documentation> </annotation> <restriction base="string"> <pattern value="[0-9]{1,7}"/> </restriction> </simpleType>

simpleType **IntlLocalNumType**

source	<simpleType name="IntlLocalNumType"> <annotation> <documentation xml:lang="EN">Domain definition for a local phone number used within an international telephone system.</documentation> </annotation> <restriction base="string"> <pattern value="[0-9]{1,15}"/> </restriction> </simpleType>

simpleType **NANPAAreaCodeType**

source	<simpleType name="NANPAAreaCodeType"> <annotation> <documentation xml:lang="EN">Domain definition for a code used within a North America Numbering Plan Administration (NANPA) telephone system to route calls to a particular city, region or special service.</documentation> </annotation> <restriction base="string"> <pattern value="[1-9][0-9]{2}"/> </restriction> </simpleType>

simpleType **NANPALocalNumType**

source	<simpleType name="NANPALocalNumType"> <annotation> <documentation xml:lang="EN">Domain definition for a local phone number used within the NANPA telephone system.</documentation> </annotation> <restriction base="string"> <pattern value="[2-9][0-9]{6}"/> </restriction> </simpleType>

simpleType **NetAddrPrefixType**

source	<simpleType name="NetAddrPrefixType"> <annotation> <documentation xml:lang="EN">Domain definition for a net address prefix text required for some scheme names, after the colon but before the Net Address text. For http and some other schemes, the value is "//" (two slashes).</documentation> </annotation> <restriction base="string"> <maxLength value="5"/> </restriction> </simpleType>

simpleType **NetAddrTextType**

source	<simpleType name="NetAddrTextType"> <annotation> <documentation xml:lang="EN">Domain definition for a net address text.</documentation> </annotation> <restriction base="string"> <maxLength value="255"/> </restriction> </simpleType>

simpleType **SchemeNameType**

source	<simpleType name="SchemeNameType"> <annotation> <documentation xml:lang="EN">Domain definition for the first part of the URI (Uniform Resource Identifier), indicating how the address is structured. Examples: http, https, ftp, mailto, news, nntp, gopher, telnet.</documentation> </annotation> <restriction base="string"> <maxLength value="20"/> </restriction> </simpleType>

simpleType **TelecomCountryType**

source	<simpleType name="TelecomCountryType"> <annotation> <documentation xml:lang="EN">Domain definition for a code that is required for international telephone calls to reach a telephone system.</documentation> <appinfo>Codes are defined by the International Telecommunication Union and are commonly known as country codes. These country codes are available in the CDER table TELECOM_COUNTRY.</appinfo> </annotation> <restriction base="string"> <pattern value="[0-9]{1,3}"/> </restriction> </simpleType>

simpleType **TelecomType**

source	<simpleType name="TelecomType"> <annotation> <documentation xml:lang="EN">Domain definition for a code that indicates the method of telecommunication.</documentation> <appinfo>Valid TelecomTypes are: F – Fax, M – Mobile phone, P – Pager, T – Telephone, Y – TTY. All TelecomTypes are available in the CDER table TELECOM_TYPE.</appinfo> </annotation> <restriction base="string"> <enumeration value="Telephone"/> <enumeration value="Mobile"/> <enumeration value="Fax"/> <enumeration value="Pager"/> <enumeration value="TTY"/> </restriction> </simpleType>

3.2.6 GOShared

The Shared schema contains components (i.e. types and elements) that are used by two or more GOCDES modules of the same or different subject areas.

Schema **GOShared2.0.xsd**

targetNamespace: **GOShared2.0.xsd**

Simple types
Date
FlagN
FlagType
FlagY
MonthDay
OntOfficialLanguageType
Time
Timestamp
UniqueKeyString

simpleType **Date**

source	<simpleType name="Date"> <annotation> <documentation xml:lang="EN">Domain definition for a date.</documentation> </annotation> <restriction base="date"/> </simpleType>

simpleType **FlagN**

source	<simpleType name="FlagN"> <annotation> <documentation xml:lang="EN">Domain definition for the boolean flag constant of N (for No).</documentation> </annotation> <restriction base="string"> <enumeration value="N"/> </restriction> </simpleType>

simpleType **FlagType**

source	<simpleType name="FlagType"> <annotation> <documentation xml:lang="EN">Domain definition for a boolean flag indicating Y (for yes) or N (for No).</documentation> </annotation> <restriction base="string"> <enumeration value="Y"/> <enumeration value="N"/> </restriction> </simpleType>

simpleType **FlagY**

source	<simpleType name="FlagY"> <annotation> <documentation xml:lang="EN">Domain definition for the boolean flag constant of Y (for Yes).</documentation> </annotation> <restriction base="string"> <enumeration value="Y"/> </restriction> </simpleType>

simpleType **MonthDay**

source	<simpleType name="MonthDay"> <annotation> <documentation xml:lang="EN">Domain definition for a Month and day.</documentation> </annotation> <restriction base="gMonthDay"/> </simpleType>

simpleType **OntOfficialLanguageType**

source	<simpleType name="OntOfficialLanguageType"> <annotation> <documentation xml:lang="EN">Domain definition for an official language used in the province of Ontario.</documentation> </annotation> <restriction base="string"> <enumeration value="EN"/> <enumeration value="FR"/> </restriction> </simpleType>

simpleType **Time**

source	<simpleType name="Time"> <annotation> <documentation xml:lang="EN">Domain definition for a time.</documentation> </annotation> <restriction base="time"/> </simpleType>

simpleType **Timestamp**

source	<simpleType name="Timestamp"> <annotation> <documentation xml:lang="EN">Domain definition for a date timestamp.</documentation> </annotation> <restriction base="dateTime"/> </simpleType>

simpleType **UniqueKeyString**

source	<simpleType name="UniqueKeyString"> <annotation> <documentation xml:lang="EN">Domain definition for the Universal Unique IDentifier (UUID).</documentation> </annotation> <restriction base="string"> <maxLength value="32"/> </restriction> </simpleType>

4 Usage Rules

4.1 General GOCDES Usage Rules

1. OPS XML Schemas (OPSS) that utilize concepts defined in CDES must use GOCDES XML Schema components. The use of GOCDES components in OPSS is essential for standardizing and sharing common data element specifications across all OPS applications, and particularly, across shared transactional message schemas.

2. Use of the XML Schema element is recommended when both an element and a type (simple or complex) are defined for the same concept in GOCDES. Use of the element not only guarantees the standardization of the data type structure, but also achieves the standardization of names. For example, use of the element CivicAddress should be considered first before the use of complex type CivicAddressType.

3. An OPSS may introduce new elements that make reference to the GOCDES components when
    a. The OPSS uses multiple references to the same GOCDES component.
    b. The name of an OPSS element needs to express the application specific business meaning of the GOCDES component being referenced.

    For example, an OPSS could introduce elements OldPhoneNumber and NewPhoneNumber that both make reference to the GOCDES type TelephoneAddress.

4. If an OPS application requires extension or redefinition of a GOCDES element or type, the following options should be considered (in the order of preferences as indicated):

    a. Extend a GOCDES type. For example, extend Non Civic Physical Address to model Non–Ontario Physical Addresses.
    b. Extend a component that is referenced from a GOCDES subtype. For example: Building Unit, which is referenced from CivicAddressType and RouteAddressType.
    c. Introduce a new schema element or type (simple type or complex type) by making reference to the existing GOCDES components. For example, introduce a new schema element or type with a CHOICE construct that uses GOCDES types.
    d. Add, remove or change data integrity rules.
    e. Redefine a GOCDES schema element or type.
    f. Introduce a new component that does not make reference to any existing GOCDES component.

    The above changes can be done only if a XML Schema component allows extension (indicated in its specification). The new schema components should be defined within an OPSS namespace that contains only OPSS extensions to GOCDES components.

5. Should an OPS application opt to use a JAXB tool that does not support some constructs of the W3C XML Schema specification then GOCDES 2.0 components may be modified to meet the restrictions of the selected JAXB tool. However, these modifications will be justified only if the semantics of the changed GOCDES components remains the same.

4.2 GOCDES 2.0 Address Schema Usage Rules

1. One or many of the following GOCDES 2.0 Address Schema components must be used in the OPS XML Schemas that require addressing elements:
    a. Canada (Mailing or/and Physical) Address
    b. Ontario Physical Address
    c. US (Mailing or/and Physical) Address
    d. International (Mailing or/and Physical) Address
    e. Email Address
    f. Telephone Address
    g. Net Address

2. Exceptionally, US Address format can be simplified according to the Usage Rules of BVLDM.

3. Non-Ontario, non civic physical addresses in an OPS application should be captured in one of the following two ways:
    a. By using the Non Civic Physical Address without making reference to Ont Non Civic Physical Address.
    b. By introducing an entity that is specific for a province or territory as an extension of Non Civic Physical Address.

    The element(s) defined in b should reuse elements or types already introduced in Ont Non Civic Physical Address wherever is possible.

4. If an OPS application requires only certain types of address, GOCDES can be simplified in the following way:
    a. An address namespace may be excluded if it is not required for the application. For example, US Address, Electronic Address.
    b. An address namespace may be simplified by removing address components that are not going to be used. For example, Physical or Mailing Address subtypes can be removed.
    c. An optional element in selected namespaces may be declared mandatory by applying Data Integrity Rules for the required GOCDES address types.
    d. An optional element may be removed if it is not applicable to the required address type according to a GOCDES Data Integrity Rule.
    e. GOCDES Data Integrity Rules may be simplified to consider only address types in use.

    The simplifications of GOCDES Schemas indicated above are justified only if the XML instances of the required address elements are equivalent before and after making the modifications.

5 Errata

GO-ITS Standard No. 27.0, Version 1.4

Created: Original version of GOCDES, version 1.7d, was created on March 12, 2003. Resulting GO-ITS 27 approved by ITSC on April 15, 2003

GO-ITS Standard No. 27.1, Version 2.0

Revised: Created updated version of GOCDES as version 2.0 on March 9, 2004. See GOCDES 2.0 Change Record in Appendix A for change details.

Approved: March 17, 2004

- Approved by the IT Standards Council as a revised Government of Ontario Information Technology Standard (GO-ITS)

6 Copyright

Appendix A: Additional Information

Abbreviations and Acronyms

CPADB	Canada Post Address Database
CDE	Common Data Elements
CDEM BVLDM	Common Data Elements Model, Business View Logical Data Model
CDES	Common Data Elements XML Schema
CDES LDM	CDE XML Schema Logical Data Model
ERM	Entity Relationship Model
GO	Government of Ontario
GOCDES	GO CDE XML Schemas Physical Data Model and Source Code
GOCDES Component	XML Schema element or type defined in the GOCDE XML Schema
GOCDES DOC	GO CDE XML Schema Documentation
GOCDES PDM	GO CDE XML Schema Physical Data Model
GOCDES SC	GO CDE XML Schema Source Code
JAXB	Java API for XML Binding
LDM	Logical Data Model
OPS	Ontario Public Service
OPS IMH	OPS Information Modeling Handbook
OPSS	Transactional, document , common cluster or common ministry XML Schema that uses GOCDES components
PDM	Physical Data Model (Graphical Presentation of XML Schemas)

Change Control

Technical Standards Change Control Process

Once a technical standard has received final approval, there immediately becomes a requirement for maintaining its relevance and currency. Once approved, all standards undergo an annual review process, whereby the Technical Coordinator[1] will determine if it needs to be updated in any way. The Technical Coordinator may contact the originating body as needed to contribute to this decision process. New standards development may also require a detailed review process during the first year after they have been approved, so the standard can be further refined through an iterative process. The following process describes the procedure and documentation required to accomplish this task.

Change Control Procedure

1. Identify need to modify the standard.

2. Request a change to the standard by sending an email to the Standards Coordinator or request a meeting to discuss the required change. The request for change should include the information outlined in the TODO column of the change control spreadsheet (either include this information in the email or attach a filled out copy of the TODO column).

3. The Standards Coordinator will review the request and determine if the request can be accepted as is or if more information is required. The Standards Coordinator will try and resolve any issues with the lead group and set up meetings with the domain working group(s) if required.

4. The Standards Coordinator finalizes the revision request including the resolutions recommended by the appropriate lead group/working group personnel.

5. The Standards Coordinator records the modifications required to the standard in the TODO column of the change control spreadsheet.

6. When significant changes have been requested, or every three months, which ever comes first, the spreadsheet will be reviewed by the ITSC for approval/decline of requested changes.

7. After final review by the ITSC, and upon approval of the Technical Standards Manager, the spreadsheet is implemented by the Technical Coordinator for implementation by a requested date.

8. The Technical Coordinator updates the standard, and updates the TODO column in the change control spreadsheet with the revision date and informs (via email) the standards section staff and all ITSC members, that the changes in the attached spreadsheet have been completed. The revised standard is posted on the ITSC intranet site.

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[1] *Note that for change control of XML code such as CDE schema, the role of Technical Coordinator is performed by the corporate XML specialist in the Information & Business Architecture Section and can be reached by phone at 416-212-4436.*

9. The updated standard then goes to ARB for final approval. ARB will cancel or approve the process. If approved, the revised standard is posted on the GO-ITS public web site. The Technical Coordinator then moves the requested changes to the DONE column of the change control spreadsheet.

Note: This process is followed for significant (definitive) technical standards during their first year when it is expected that they will undergo refinement. It is not routinely applied every year to every standard. It may be applied to an existing standard, if during the annual review by the Technical Coordinator, it is determined that the standard requires significant revision/replacement.

Change Control Documentation

This procedure requires that the Standards Coordinator maintain a spreadsheet. A spreadsheet that logs:

- all pending changes in the TODO column
- all completed changes in the DONE column

The columns on the spreadsheet (e.g. Technical Standards Change Request) represent the following information:

Table 1: Technical Standards Change Request	
Change Request Column	**Description**
ID	A sequential number assigned to track change requests
Standard Name and GO-ITS number	Name of the standard affected by the change
Change Description	Type of change being requested
Request Date	Date the change request was submitted
Requested By	Name of the person submitting the change request
Request Description	Justification for the requested change
Date Updated/or Date of Decision to Decline Change Request	Date that the change was implemented in the standard, or if not, the date the decision was made not to implement the change
If Declined: Justification	Justification for the requested change to be declined, if applicable
Completed by	Name of the person that completed the change request

GOCDES 2.0 Change Record

1. Implemented all changes elaborated in the CDEM BVLDM. Please see the corresponding BVLDM Addressing 2.0 documentation.

2. Implemented solutions to all known issues listed in the section 5 of GO-ITS Standard Document No. 27, Release 1.4, *Known issues with CDEM Address v1.7d*.

3. Integrated components of Mailing and Physical Addresses, and introduced attribute AddressUsageCode (Mailing, Physical or Both) to indicate the usage of the address in each GOCDES 2.0 XML instance.

4. Reorganized Location Address by geographic region, and introduced separate namespaces for Canada Address, US Address, International Address, Electronic Address, Common Address elements, and Shared elements.

5. Introduced the attribute RecordTypeCode to enable mapping of CDES 2.0 elements into Canada Post Corporation's Postal Address data records.

6. Specified Data Integrity Rules in the application information section of the XML Schema annotations. These rules should be implemented in the OPS applications that utilize GOCDES 2.0 XML Schemas.

7. Applied Data Integrity Rules to control consistent use of French or English codes for address elements in each XML Instance.

8. Removed attributes for hints, helps and prompts.

9. Removed XML Schema "building blocks". The building blocks in GOCDES 1.7d presented a redundant specification of CDES address concepts in the form of composition rather than generalization.

Known Issues

N/A

List of Related Documents

1. *Common Data Elements XML Schema, Address Subject Area, Logical Data Model and Schema Design, Version 2.0*, Corporate Architecture Branch, Ontario Government Management Board Secretariat, March 2004.

2. *Information Standard for Address Specification using Government of Ontario CDE Schema*, GO-ITS Standard Document No. 27, Version 1.4, April 15, 2003, http://www.gov.on.ca/MBS/techstan/GO_ITS_27.pdf

3. *Government of Ontario CDES Address Subject Area Physical Data Model and Schema Documentation, Version 2.0*, Corporate Architecture Branch, Ontario Government Management Board Secretariat, March 2004,

4. *Government of Ontario CDES Address Schema, Version 2.0*, Corporate Architecture Branch, Ontario Government Management Board Secretariat, March 2004.

5. *Government of Ontario CDES Address Schema XML Sample Instances*, Corporate Architecture Branch, Ontario Government Management Board Secretariat, March 2004.

References

1. *Common Data Elements Model, Addressing Subject Area, Business View Logical Data Model, Version 2.0*, Corporate Architecture Branch, Ontario Government Management Board Secretariat, November 2003, http://intra.eia.cio.gov.on.ca/mbs/eia/frame00.nsf/Items/50E8DA2430BC343985256D2D006847B5?opendocument

2. *Common Data Elements Model, Addressing Subject Area, Business View Logical Data Model, Version 2.0, Supplementary Documentation,* Corporate Architecture Branch, Ontario Government Management Board Secretariat, November 2003, http://intra.eia.cio.gov.on.ca/mbs/eia/frame00.nsf/Items/50E8DA2430BC343985256D2D006847B5?opendocument

3. *Canadian Addressing Guide,* Canada Post Corporation, http://www.Canadapost.ca/business/tools/pg/manual/b03-e.asp

4. *OPS Information Modeling Handbook*, *Version 3.0,* Corporate Architecture Branch, Ontario Government Management Board Secretariat, June 2003, http://intra.eia.cio.gov.on.ca/mbs/eia/frame00.nsf/Items/50E8DA2430BC343985256D2D006847B5?opendocument

5. *OASIS CIQ International Standards (xAL, xNL, xNAL, xCIL, etc.), Version 2.0*, http://www.oasis-open.org/committees/ciq/ciq.html

6. *Postal Code Address Data Technical Specifications* (the data dictionary for postal code address ranges), Canada Post Corporation,

7. *Software Evaluation and Recognition Program (SERP) Handbook*, Canada Post Corporation,

8. *W3C XML Schema Standard Recommendation Version 1.0*, http://www.w3.org/TR/xmlschema-1/

9. *XML Schemas: Best Practices, Tutorial on XML Schemas, xFront, February 17, 2003,* http://www.xfront.com/BestPracticesHomepage.html