

ORDNANCE SURVEY GB

ADDRESSBASE PLUS – TECHNICAL SPECIFICATION

Version history

Version	Date	Description
2.4	10/2018	Updated RPC Code descriptions. Changed order of items in code lists for layout purposes.
2.5	03/2021	Updated formatting.
2.6	09/2023	Updated StateCode definition

Purpose of this document

This is the Technical Specification for the AddressBase Plus product. This Specification provides greater insight into this product and its potential applications. For information on the contents and structure of AddressBase Plus, please refer to the Overview and Getting Started Guide.

The terms and conditions on which AddressBase Plus is made available to you and your organisation are contained in that Ordnance Survey customer contract. Please ensure your organisation has signed a valid current customer contract to be able to use AddressBase Plus.

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AddressBase Plus contains data created and maintained by English, Welsh and Scottish Local Government as well as Royal Mail and Valuation Office Agency.

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Contents

1. Introduction.....	5
1.1 Data formats.....	5
1.1.1 CSV.....	5
1.1.2 GML.....	6
1.2 Supply and update	7
1.3 Coordinate reference system	8
1.4 Unique Property Reference Number	9
2. AddressBase Plus structure	9
2.1 Structure.....	9
2.1.1 Model overview CSV.....	9
2.1.2 Model overview GML.....	11
2.2 Features	13
2.3 Code lists and enumerations	30
3. CSV to GML mapping	34
4. COU supplies.....	37
4.1 Non-geographic chunked COU.....	37
4.2 Geographic chunked COU (tile-based)	37
4.3 Archiving.....	37
5. Example record.....	38
5.1 CSV supply	38
5.1.1 Original feature – AddressBase Plus CSV	38
5.1.2 COU feature – AddressBase Plus CSV.....	38
5.2 GML supply	38
5.2.1 Original feature – AddressBase Plus GML.....	38
5.2.2 COU feature – AddressBase Plus GML.....	39

I. Introduction

AddressBase Plus contains current properties including addresses sourced from local authorities, Ordnance Survey and Royal Mail, all provided with a Unique Property Reference Number (UPRN). It has more records than AddressBase as it includes objects without postal addresses and live records captured by Local Authorities but not matched to Royal Mail PAF data.

The product enables the end-user to locate an address or property on a map using either X, Y coordinates supplied on a British National Grid or Latitude and Longitude coordinates provided on an ETRS89 projection.

The product also includes cross references to OS MasterMap products via OS MasterMap Topography Layer and OS MasterMap Highways Network Layer TOID references.

I.1 Data formats

The AddressBase Plus product will be distributed as a comma-separated values (CSV) file or Geography Markup Language (GML) version 3.2. Both of these formats can either be supplied as a full supply or a change-only update (COU) supply.

I.1.1 CSV

The CSV supply of AddressBase Plus means:

- There will be one record per line in each file
- Fields will be separated by commas
- String fields will be delimited by double quotes
- No comma will be placed at the end of each row in the file
- Records will be terminated by Carriage Return / Line Feed
- Double quotes inside strings will be escaped by doubling

Where a field has no value in a record, two commas will be placed together in the record (one for the end of the previous field and one for the end of the null field). Where the null field is a text field, double quotes will be included between the two commas, for example, - , ""

AddressBase Plus CSV data will be transferred using Unicode encoded in UTF-8. Unicode includes all the characters in ISO-8859-14 (Welsh characters). Some accented characters are encoded differently.

The transfer will normally be in a single file, but the data can be split into multiple files using volume numbers. Most files will only be split where there are more than one million records.

The header row for the CSV is supplied separately and can be downloaded from the product support pages.

1.1.2 GML

The GML Encoding standard is an Extensible Markup Language (XML) grammar for expressing geographical features. XML schemas are used to define and validate the format and content of GML. The XML specifications that GML is based on are available from the World Wide Web Consortium (W3C) website: <http://www.w3.org>. More information can be found in the Open Geospatial Consortium (OGC) document, Geography Markup Language v3.2.1: https://portal.ogc.org/files/?artifact_id=20509. The GML 3.2.1 specification provides a set of schemas that define the GML feature constructs and geometric types. These are designed to be used as a basis for building application-specific schemas, which define the data content.

A GML document is described using a GML Schema. The AddressBase Plus schema document (addressbaseplus.xsd) defines the features in AddressBase Plus GML. This is available on the GeoPlace website at: <http://www.geoplace.co.uk/addressbase/schema/2.1/addressbaseplus.xsd>.

It imports the GML 3.2.1 schemas which rely on XML, as defined by W3C at: <https://www.w3.org/XML/1998/namespace.html>.

The application schema uses the following XML namespaces, for which definitions are available as given here:

Prefix	Namespace Identifier	Definition Available at
gml	http://www.opengis.net/gml	http://schemas.opengis.net/gml/3.2.1/gml.xsd
xsi	http://www.w3.org/2001/XMLSchema-instance	Built into XML – http://www.w3.org/TR/xmlschema-1/
xlink	Xlink – http://www.w3.org/1999/xlink	http://www.w3.org/1999/xlink.xsd

Information about Unicode and UTF-8, the character encoding we have chosen, is available on the Unicode Consortium website: <http://www.unicode.org/>.

Features

Each feature within the AddressBaseSupplySet:FeatureCollection is encapsulated in the following member element according to its feature type:

Member Element	Feature Type
<abpl:addressMember>	Address

The UPRN of the feature is provided in the XML attribute of the gml:id

```
<abpl:addressMember>
<abpl:Address gml:id="uk.geoplace.uprn.1000011535314">
.....
</abpl:Address>
</abpl:addressMember>
```

See [Section 5.2](#) for specific GML examples.

Envelope

In the GML supply, you can determine the extent of your supply by the <gml: Envelope>. For example:

```
<gml:boundedBy>  
<gml:Envelope srsName="urn:ogc:def:crs:EPSG::27700">  
<gml:lowerCorner>82643.6 5333.6</gml:lowerCorner>  
<gml:upperCorner>655989 657599.5</gml:upperCorner>  
</gml:Envelope>  
</gml:boundedBy>
```

1.2 Supply and update

The primary supply mechanism of AddressBase Plus data is referred to as non-geographic chunks. This is a way of dividing up the data into chunks that are supplied in separate volumes, which have a fixed maximum number of records. The supply is not supplied with any reference to the geographic position of records.

Public Sector Geospatial Agreement (PSGA) customers can order geographic chunks (5km tiles) as well as non-geographic chunks, although geographic chunks are not considered the main form of supply.

All customers are also able to take a complete supply (referred to as a Managed Great Britain Set: MGBS) or an Area of Interest (AOI) as a full supply or a COU supply.

Non-geographic chunks (unzipped)

If you receive your data as non-geographic chunks, the filename will be constructed as follows:

- productName_supply_ccyy-mm-dd_vvv.format

Where:

ProductName	is AddressBasePlus
supply	is defined as FULL or COU
ccyy-mm-dd	is the date the file was generated
vvv	is the volume number of the file
format	is the format of the files received, for example, CSV or GML

For example:

- AddressBasePlus_FULL_2013-05-28_001.gml (GML full supply)
- AddressBasePlus_COU_2013-05-28_001.csv (CSV COU supply)

Non-geographic chunks (zipped)

If the data has been provided in a zip file, the filename will be constructed as follows:

- productName_supply_ccyy-mm-dd_vvv_format.zip

For example:

- AddressBasePlus_FULL_2013-05-28_001_gml.zip (GML full supply zipped)

Geographic chunks (unzipped)

If you receive your data as geographic chunks (PSGA customers only), the filename will be constructed as follows:

- `productName_supply_ccyy-mm-dd_ngxxyy.format`

Where:

ProductName	is AddressBasePlus
supply	is defined as FULL or COU
ccyy-mm-dd	is the date the file was generated
ngxxyy	Is the four-digit grid reference belonging to the 1km south-west corner of the 5km chunk
format	is the format of the files received, for example, CSV or GML

For example:

- `AddressBasePlus_FULL_2013-05-28_NC4040.gml` (GML full supply)
- `AddressBasePlus_COU_2013-05-28_NC4040.csv` (CSV COU supply)

Geographic chunks (zipped)

If the data has been provided in a zip file, the filename will be constructed as follows:

- `productName_supply_ccyy-mm-dd_ngxxyy_format.zip`

For example:

- `AddressBasePlus_COU_2013-05-28_NC4040_csv.zip` (CSV COU supply zipped)

1.3 Coordinate reference system

AddressBase Plus has two coordinate reference systems (CRS) present within the data:

1. British National Grid (BNG)
2. European Terrestrial Reference System 89 (ETRS89)

BNG uses the OSGB36 geodetic datum and a single Transverse Mercator projection for the whole of Great Britain. Positions on this projection are described using Easting and Northing coordinates in units of metres. The BNG is a horizontal spatial reference system only; it does not specify a vertical (height) reference system.

ETRS89 is the EU recommended frame of reference for European data and is represented as Latitude and Longitude values. ETRS89 is a horizontal spatial reference system only; it does not specify a vertical (height) reference system.

View our [guide](#) to coordinate systems in Great Britain.

1.4 Unique Property Reference Number

A UPRN is a unique numeric identifier for every addressable location in Great Britain. The UPRN is the persistent identifier providing consistency across the AddressBase product range.

Each address record has a UPRN, assigned by Local Authorities in England, Wales and Scotland or Ordnance Survey depending on the type of address. This is the primary key of the AddressBase product.

Throughout its lifecycle, information on the address of a property can change. This may be due to a change of name, change of use, or the eventual demolition of the property. Independent of any changes being made the UPRN associated to an address is never changed, meaning the unique identifier remains persistent and reliable.

2. AddressBase Plus structure

AddressBase Plus is structured as a flat file. The data structure in this document is described by means of Unified Modeling Language (UML) class diagrams and accompanying tables containing text.

2.1 Structure

The AddressBase Plus product is constructed as per the following UML diagrams.

2.1.1 Model overview CSV

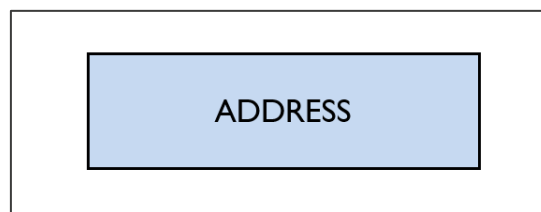


Figure 1: High level data model representing the address feature (CSV)

AddressBase Plus CSV	
Definition	The address of a property or object which is defined as the main / preferred address by the Local Land and Property Gazetteer (LLPG) custodian, Ordnance Survey or Royal Mail.

The UML model of AddressBase Plus in CSV format can be seen in Figure 2. In the UML diagram, classes from the Ordnance Survey product specification are coloured orange; all code lists are coloured blue, while enumerations are coloured green.



Figure 2: UML model showing AddressBase Plus feature types, enumerations and code lists for the CSV supply

2.1.2 Model overview GML

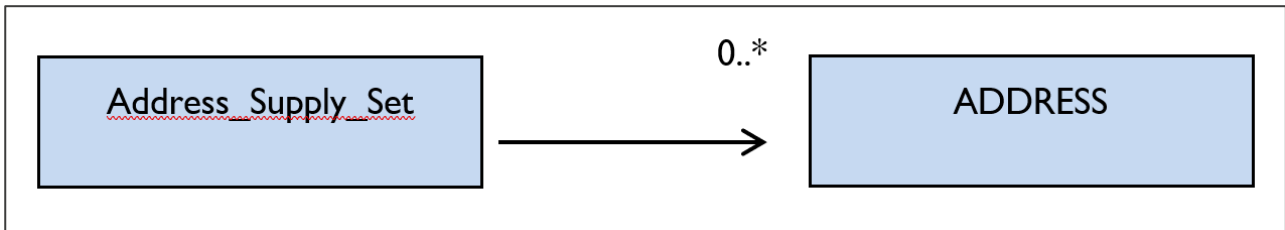


Figure 3: High level data model representing the address relationships (GML)

AddressBase GML	
Definition	The address of a property or object which is defined as the main / preferred address by the Local Land and Property Gazetteer (LLPG) custodian, Ordnance Survey or Royal Mail.

The UML model of AddressBase Plus in GML format can be seen in Figure 4. In the UML diagram, classes from the Ordnance Survey product specification are orange, all code lists are coloured blue and enumerations are green.

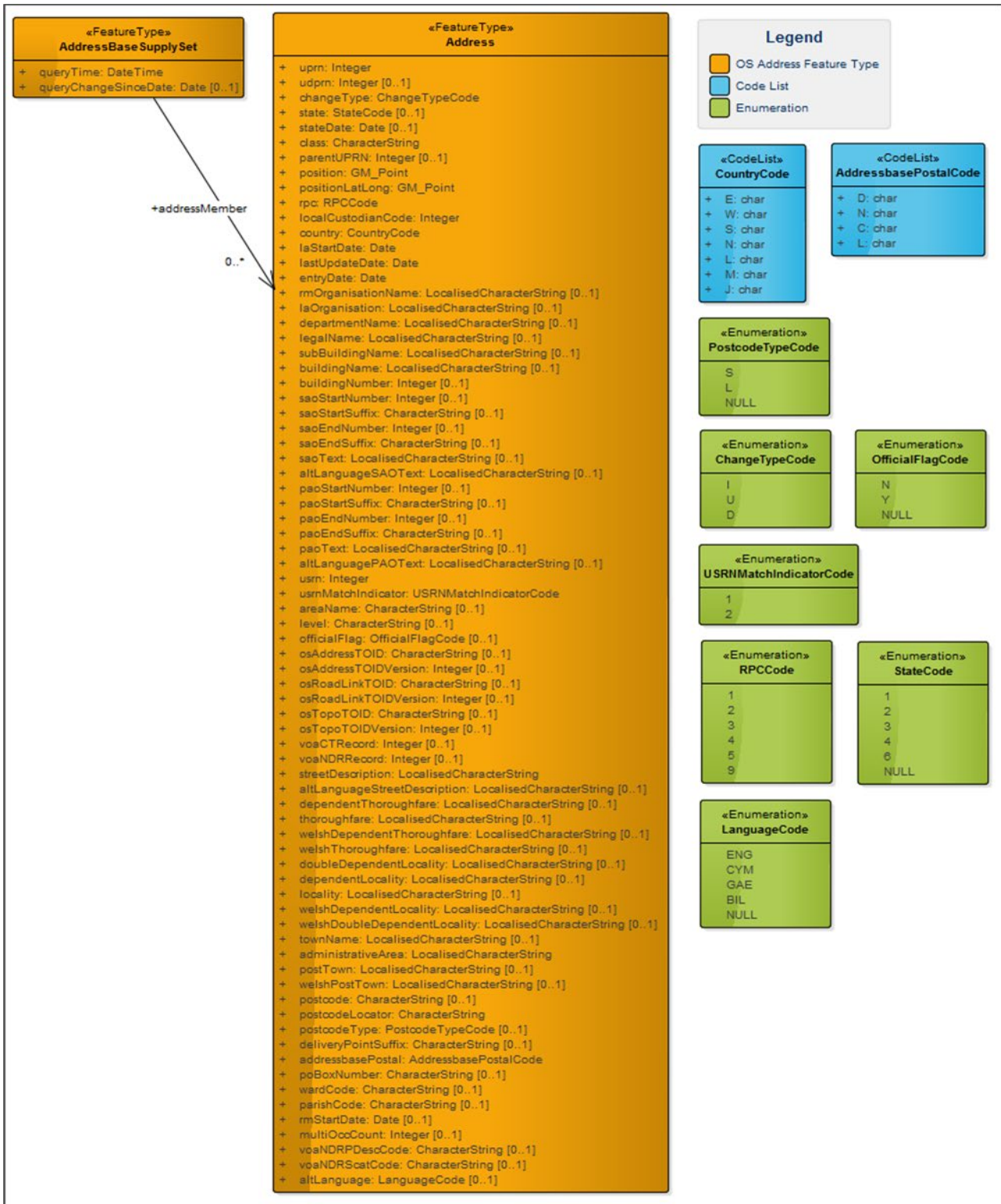


Figure 4: UML model showing AddressBase Plus feature types, enumerations and code lists for the GML supply

2.2 Features

This section describes the features (one for CSV and two for GML) which make up the AddressBase Plus product, giving the following information about each attribute:

Name and Definition: The name of the attribute and what it is describing.

Condition: A condition associated with this attribute. (Optional).

Attribute Type: The nature of the attribute, for example a numeric value or a code list value.

Multiplicity: Describes how many times this element is expected to be populated in the data. An attribute may be optional or mandatory within the AddressBase Plus product. These are denoted by:

- '1' there must be a value
- '0..1' population is optional but a maximum of one attribute will be returned.

These values may be used in combination.

The tables which follow in this Technical Specification use orange for a feature type, blue for a code list and green for enumerations.

Address

GML: uprn		CSV: UPRN
Definition: Unique Property Reference Number (UPRN) assigned by the LLPG Custodian or Ordnance Survey. Source: Contributing Local Authority / Ordnance Survey.		
Type: Integer	Size: 12	Multiplicity: [1]
GML: udprn		CSV: UDPRN
Definition: Royal Mail's Unique Delivery Point Reference Number (UDPRN). Source: Royal Mail		
Type: Integer	Size: 8	Multiplicity: [0..1]
GML: changeType		CSV: CHANGE_TYPE
Definition: Type of record change – Please see Section 4 for more information.		
Type: ChangeTypeCode	Size: 1	Multiplicity: [1]
GML: state		CSV: STATE
Definition: A code identifying the current state of the property. Source: Contributing Local Authority		
Type: StateCode	Size: 1	Multiplicity: [0..1]

GML: stateDate		CSV: STATE_DATE	
<p>Definition: Date on which the property achieved its current state in the real world. Source: Contributing Local Authority</p>			
<p>Condition: State Date must be present if State is present.</p>			
Type: Date		Multiplicity: [0..1]	
GML: class		CSV: CLASS	
<p>Definition: Classification of the address record. Source: Contributing Local Authority.</p>			
Type:			
GML – CharacterString	Size: 6	Multiplicity: [1]	
CSV – char			
GML: parentUPRN		CSV: PARENT_UPRN	
<p>Definition: UPRN of the parent record if a parent child relationship exists. Source: Contributing Local Authority</p>			
Type: Integer	Size: 12	Multiplicity: [0..1]	
GML: position		CSV: X_COORDINATE, Y_COORDINATE	
<p>Definition: A value in metres defining the x and y location in accordance with the British National Grid. Source: Contributing Local Authority/Ordnance Survey</p>			
Type:	Size:		
GML – GM_Point	X_COORDINATE (precision, scale) – (8, 2)	Multiplicity: [1]	
CSV – Float	Y_COORDINATE (precision, scale) – (9, 2)		
GML: positionLatLong		CSV: LATITUDE, LONGITUDE	
<p>Definition: A value defining the Latitude and Longitude location in accordance with the ETRS89 coordinate reference system. Source: Ordnance Survey</p>			
Type:	Size:		
GML – GM_Point	LATITUDE (precision, scale) – (9, 7)	Multiplicity: [1]	
CSV – Float	LONGITUDE (precision, scale) – (8, 7)		
GML: rpc		CSV: RPC	
<p>Definition: Representative Point Code. This code is used to reflect positional accuracy.</p>			

Source: Contributing Local Authority		
Type: RPCCode	Size: 1	Multiplicity: [1]
GML: localCustodianCode	CSV: LOCAL_CUSTODIAN_CODE	
Definition: Unique identifier of the LLPG Custodian.		
Type: Integer	Size: 4	Multiplicity: [1]
GML: country	CSV: COUNTRY	
Definition: The country in which a record can be found.		
Type: CountryCode	Size: 1	Multiplicity: [1]
GML: laStartDate	CSV: LA_START_DATE	
Definition: The date on which the address record was inserted into the database. Source: Contributing Local Authority.		
Type: Date	Multiplicity: [1]	
GML: lastUpdateDate	CSV: LAST_UPDATE_DATE	
Definition: The date on which any of the attributes on this record were last changed.		
Type: Date	Multiplicity: [1]	
GML: entryDate	CSV: ENTRY_DATE	
Definition: The date on which this record was inserted into the Local Authority database. Source: Contributing Local Authority.		
Type: Date	Multiplicity: [1]	
GML: rmOrganisationName	CSV: RM_ORGANISATION_NAME	
Definition: The organisation name is the business name given to a delivery point within a building or small group of buildings. For example: TOURIST INFORMATION CENTRE. This field could also include entries for churches, public houses and libraries.		
Source: Royal Mail		
Condition:		
<ul style="list-style-type: none"> RM Organisation Name must be present if Building Name or Building Number or PO Box Number are all not present. RM Organisation Name must be present if Department Name is present. 		

Type: GML – LocalisedCharacterString CSV – char	Size: 60	Multiplicity: [0..1]
GML: laOrganisation		CSV: LA_ORGANISATION
<p>Definition: Name of current occupier as provided by the Local Authority Custodian. Source: Contributing Local Authority</p>		
Type: GML – LocalisedCharacterString CSV – char	Size: 100	Multiplicity: [0..1]
GML: departmentName		CSV: DEPARTMENT_NAME
<p>Definition: For some organisations, department name is indicated because mail is received by subdivisions of the main organisation at distinct delivery points. For example: Organisation Name: ABC COMMUNICATIONS RM Department Name: MARKETING DEPARTMENT Source: Royal Mail</p>		
Type: GML – LocalisedCharacterString CSV – char	Size: 60	Multiplicity: [0..1]
GML: legalName		CSV: LEGAL_NAME
<p>Definition: Registered legal name of the organisation. Source: Contributing Local Authority</p>		
Type: GML – LocalisedCharacterString CSV – char	Size: 60	Multiplicity: [0..1]
GML: subBuildingName		CSV: SUB_BUILDING_NAME
<p>Definition: The sub-building name and/or number are identifiers for subdivisions of properties. For example: Sub-building Name: FLAT 3 Building Name: POPLAR COURT Thoroughfare: LONDON ROAD</p> <p><i>Note: If the above address is styled 3 POPLAR COURT, all the text will be shown in the Building Name attribute and the Sub-building Name will be empty. The building number will be shown in this field when it contains a range, decimal or non-numeric character (see Building Number).</i></p> <p>Source: Royal Mail</p>		

Type: GML – LocalisedCharacterString CSV – char	Size: 30	Multiplicity: [0..1]
GML: buildingName		CSV: BUILDING_NAME
<p>Definition:</p> <p>The building name is a description applied to a single building or a small group of buildings, such as Highfield House. This also includes those building numbers that contain non-numeric characters, such as 44A.</p> <p>Some descriptive names, when included with the rest of the address, are sufficient to identify the property uniquely and unambiguously, for example, MAGISTRATES COURT.</p> <p>Sometimes the building name will be a blend of distinctive and descriptive naming, for example, RAILWAY TAVERN (PUBLIC HOUSE) or THE COURT ROYAL (HOTEL).</p> <p>Source: Royal Mail</p>		
<p>Condition:</p> <p>Building Name must be present if RM Organisation Name or Building Number or PO Box Number are all not present.</p>		
Type: GML – LocalisedCharacterString CSV – char	Size: 50	Multiplicity: [0..1]
GML: buildingNumber		CSV: BUILDING_NUMBER
<p>Definition:</p> <p>The building number is a number given to a single building or a small group of buildings, thus identifying it from its neighbours, for example, 44. Building numbers that contain a range, decimals or non-numeric characters do not appear in this field but will be found in the buildingName or the sub-BuildingName fields.</p> <p>Source: Royal Mail</p>		
<p>Condition:</p> <p>Building Number must be present if RM Organisation Name or Building Name or PO Box Number are all not present.</p>		
Type: Integer	Size: 4	Multiplicity: [0..1]
GML: saoStartNumber		CSV: SAO_START_NUMBER
<p>Definition:</p> <p>The number of the secondary addressable object (SAO), or the start of the number range.</p> <p>Source: Contributing Local Authority</p>		
<p>Condition:</p> <p>If a SAO Start Number is present a PAO Start Number or PAO text must also be present.</p>		
Type: Integer	Size: 4	Multiplicity: [0..1]
GML: saoStartSuffix		CSV: SAO_START_SUFFIX
<p>Definition:</p> <p>The suffix to the SAO_START_NUMBER.</p>		

Source: Contributing Local Authority		
Condition: If a SAO Start Suffix is present a SAO Start Number must also be present.		
Type: GML – CharacterString CSV – char	Size: 2	Multiplicity: [0..1]
GML: saoEndNumber		CSV: SAO_END_NUMBER
Definition: The end of the number range for the SAO where SAO_START_NUMBER contains the start of the range. Source: Contributing Local Authority		
Condition: If SAO End Number is present a SAO Start Number must also be present.		
Type: Integer	Size: 4	Multiplicity: [0..1]
GML: saoEndSuffix		CSV: SAO_END_SUFFIX
Definition: The suffix to the SAO_END_SUFFIX Source: Contributing Local Authority		
Condition: If a SAO End Suffix is present a SAO End Number must also be present.		
Type: GML – CharacterString CSV – char	Size: 2	Multiplicity: [0..1]
GML: saoText		CSV: SAO_TEXT
Definition: Describes the SAO, such as Maisonette. Source: Contributing Local Authority		
Condition: If SAO Text is present a PAO Start Number or PAO Text must also be present.		
Type: GML – LocalisedCharacterString CSV – char	Size: 90	Multiplicity: [0..1]
GML: altLanguageSAOText		CSV: ALT_LANGUAGE_SAO_TEXT
Definition: Describes the SAO, such as Maisonette, in an alternative language (defined by the language code). Source: Contributing Local Authority		

Type: GML – LocalisedCharacterString CSV – char	Size: 90	Multiplicity: [0..1]
GML: paoStartNumber		CSV: PAO_START_NUMBER
<p>Definition: The number of the primary addressable object (PAO) or the start of the number range. Source: Contributing Local Authority</p>		
<p>Condition: PAO Start Number must be present if PAO Text is not present.</p>		
Type: Integer	Size: 4	Multiplicity: [0..1]
GML: paoStartSuffix		CSV: PAO_START_SUFFIX
<p>Definition: The suffix to the PAO_START_NUMBER. Source: Contributing Local Authority</p>		
<p>Condition: If a PAO Start Suffix is present, a PAO Start Number must also be present.</p>		
Type: GML – CharacterString CSV – char	Size: 2	Multiplicity: [0..1]
GML: paoEndNumber		CSV: PAO_END_NUMBER
<p>Definition: The end of the number range for the PAO where PAO_START_NUMBER contains the start of the range. Source: Contributing Local Authority</p>		
<p>Condition: If a PAO End Number is present, a PAO Start Number must also be present.</p>		
Type: Integer	Size: 4	Multiplicity: [0..1]
GML: paoEndSuffix		CSV: PAO_END_SUFFIX
<p>Definition: The suffix to the pao_end_number. Source: Contributing Local Authority</p>		
<p>Condition: If a PAO End Suffix is present, a PAO End Number must also be present.</p>		
Type: GML – CharacterString CSV – char	Size: 2	Multiplicity: [0..1]

GML: paoText		CSV: PAO_TEXT
<p>Definition: Name describing the PAO, such as Sunrise Towers. Source: Contributing Local Authority</p>		
<p>Condition: PAO Text must be present if PAO Start Number is not present.</p>		
<p>Type: GML – LocalisedCharacterString Size: 90 Multiplicity: [0..1] CSV – char</p>		
GML: altLanguagePAOText		CSV: ALT_LANGUAGE_PAO_TEXT
<p>Definition: Name describing the PAO, such as Sunrise Towers, in an alternative language. Source: Contributing Local Authority</p>		
<p>Type: GML – LocalisedCharacterString Size: 90 Multiplicity: [0..1] CSV – char</p>		
GML: usrn		CSV: USRN
<p>Definition: Unique Street Reference Number (USRN). Source: Contributing Local Authority</p>		
<p>Type: Integer Size: 8 Multiplicity: [1]</p>		
GML: usrnMatchIndicator		CSV: USRN_MATCH_INDICATOR
<p>Definition: This field indicates how the item was matched to a USRN. 1 is matched manually to the most accessible USRN and 2 is matched spatially to the nearest USRN, which may not be the nearest accessible street. Source: Contributing Local Authority/Ordnance Survey</p>		
<p>Type: USRNMatchIndicatorCode Size: 1 Multiplicity: [1]</p>		
GML: areaName		CSV: AREA_NAME
<p>Definition: Third level of geographic area name, for example, to record island names or property groups such as crofts. Source: Contributing Local Authority</p>		
<p>Type: GML – CharacterString Size: 40 Multiplicity: [0..1] CSV – char</p>		

GML: level		CSV: LEVEL
<p>Definition: Memorandum of the vertical position of the property. Source: Contributing Local Authority</p>		
Type: GML – CharacterString CSV – char	Size: 30	Multiplicity: [0..1]
GML: officialFlag		CSV: OFFICIAL_FLAG
<p>Definition: Status of the address. Source: Contributing Local Authority</p>		
Type: OfficialFlagCode	Size: 1	Multiplicity: [0..1]
GML: osAddressTOID		CSV: OS_ADDRESS_TOID
<p>Definition: Unique identifier provided by Ordnance Survey. Source: Ordnance Survey</p>		
Type: GML – CharacterString CSV – char	Size: 20	Multiplicity: [0..1]
GML: osAddressTOIDVersion		CSV: OS_ADDRESS_TOID_VERSION
<p>Definition: The version of the OS Address TOID that the product relates to. Source: Ordnance Survey</p>		
<p>Condition: OS Address TOID Version must be present if OS Address TOID is present.</p>		
Type: Integer	Size: 3	Multiplicity: [0..1]
GML: osRoadLinkTOID		CSV: OS_ROADLINK_TOID
<p>Definition: The OS MasterMap Highways Network road link that the addressable object refers to. Source: Ordnance Survey</p>		
Type: GML – CharacterString CSV – char	Size: 20	Multiplicity: [0..1]
GML: osRoadLinkTOIDVersion		CSV: OS_ROADLINK_TOID_VERSION
<p>Definition: The version of the OS Road Link TOID the product relates to. Source: Ordnance Survey</p>		

Condition: OS Roadlink TOID Version must be present if OS Road Link TOID is present.		
Type: Integer	Size: 3	Multiplicity: [0..1]
GML: osTopoTOID		CSV: OS_TOPO_TOID
Definition: The OS MasterMap Topography Layer TOID that the addressable object refers to. Source: Ordnance Survey		
Type: GML – CharacterString CSV – char	Size: 20	Multiplicity: [0..1]
GML: osTopoTOIDVersion		CSV: OS_TOPO_TOID_VERSION
Definition: The version of the OS Topo TOID the product relates to. Source: Ordnance Survey		
Condition: OS Topo TOID Version must be present if OS Topo TOID is present.		
Type: Integer	Size: 3	Multiplicity: [0..1]
GML: voaCTRecord		CSV: VOA_CT_RECORD
Definition: The unique reference to the Valuation Office Agency (VOA) council tax record which the addressable object refers to. Source: Valuation Office Agency		
Type: Integer	Size: 50	Multiplicity: [0..1]
GML: voaNDRRecord		CSV: VOA_NDR_RECORD
Definition: The unique reference to the VOA non-domestic rate which the addressable object refers to. Source: Valuation Office Agency		
Type: Integer	Size: 50	Multiplicity: [0..1]
GML: streetDescription		CSV: STREET_DESCRIPTION
Definition: Name taken from the Local Land and Property Gazetteer (LLPG) street name. Source: Contributing Local Authority		
Type: GML – LocalisedCharacterString CSV – char	Size: 100	Multiplicity: [1]

GML: altLanguageStreetDescription		CSV: ALT_LANGUAGE_STREET_DESCRIPTION	
<p>Definition: Name taken from the LLPG street name in an alternative language. Source: Contributing Local Authority</p>			
<p>Type: GML – LocalisedCharacterString CSV – char</p>		<p>Size: 100</p>	<p>Multiplicity: [0..1]</p>
GML: dependentThoroughfare		CSV: DEPENDENT_THOROUGHFARE	
<p>Definition: In certain places (for example, town centres), there are named thoroughfares within other named thoroughfares (for example, parades of shops on a high street where different parades have their own identity), for example, KINGS PARADE, HIGH STREET and QUEENS PARADE, HIGH STREET. Source: Royal Mail</p>			
<p>Type: GML – LocalisedCharacterString CSV – char</p>		<p>Size: 80</p>	<p>Multiplicity: [0..1]</p>
GML: thoroughfare		CSV: THOROUGHFARE	
<p>Definition: A thoroughfare in AddressBase is fundamentally a road, track or named access route on which there are Royal Mail delivery points, for example, HIGH STREET. Source: Royal Mail</p>			
<p>Condition: Thoroughfare must be present if dependent thoroughfare is present.</p>			
<p>Type: GML – LocalisedCharacterString CSV – char</p>		<p>Size: 80</p>	<p>Multiplicity: [0..1]</p>
GML: welshDependentThoroughfare		CSV: WELSH_DEPENDENT_THOROUGHFARE	
<p>Definition: The Welsh translation of DEPENDENT_THOROUGHFARE Source: Royal Mail</p>			
<p>Condition: If a Welsh Dependent Thoroughfare is present, a Welsh Thoroughfare must also be present.</p>			
<p>Type: GML – LocalisedCharacterString CSV – char</p>		<p>Size: 80</p>	<p>Multiplicity: [0..1]</p>

GML: welshThoroughfare		CSV: WELSH_THOROUGHFARE	
<p>Definition: The Welsh translation of THOROUGHFARE Source: Royal Mail</p>			
<p>Type: GML – LocalisedCharacterString CSV – char</p>		<p>Size: 80</p>	<p>Multiplicity: [0..1]</p>
GML: doubleDependentLocality		CSV: DOUBLE_DEPENDENT_LOCALITY	
<p>Definition: This is used to distinguish between similar thoroughfares or the same thoroughfare within a dependent locality. For example, Millbrook Industrial Estate and Cranford Estate in this situation: BRUNEL WAY, MILLBROOK INDUSTRIAL ESTATE, MILLBROOK, SOUTHAMPTON and BRUNEL WAY, CRANFORD ESTATE, MILLBROOK, SOUTHAMPTON. Source: Royal Mail</p>			
<p>Condition: If a Double Dependent Locality is present, a Dependent Locality must also be present.</p>			
<p>Type: GML – LocalisedCharacterString CSV – char</p>		<p>Size: 35</p>	<p>Multiplicity: [0..1]</p>
GML: dependentLocality		CSV: DEPENDENT_LOCALITY	
<p>Definition: Dependent locality areas define an area within a post town. These are only necessary for postal purposes and are used to aid differentiation where there are thoroughfares of the same name in the same locality. For example, HIGH STREET in SHIRLEY and SWAYTHLING in this situation: HIGH STREET, SHIRLEY, SOUTHAMPTON and HIGH STREET, SWAYTHLING, SOUTHAMPTON. Source: Royal Mail</p>			
<p>Type: GML – LocalisedCharacterString CSV – char</p>		<p>Size: 35</p>	<p>Multiplicity: [0..1]</p>
GML: locality		CSV: LOCALITY	
<p>Definition: A locality defines an area or geographical identifier within a town, village or hamlet. Source: Contributing Local Authority</p>			
<p>Type: GML – LocalisedCharacterString CSV – char</p>		<p>Size: 35</p>	<p>Multiplicity: [0..1]</p>

GML: welshDependentLocality		CSV: WELSH_DEPENDENT_LOCALITY	
<p>Definition: The Welsh translation of DEPENDENT_LOCALITY. Source: Royal Mail</p>			
<p>Type: GML – LocalisedCharacterString CSV – char</p>		<p>Size: 35</p>	<p>Multiplicity: [0..1]</p>
GML: welshDoubleDependentLocality		CSV: WELSH_DOUBLE_DEPENDENT_LOCALITY	
<p>Definition: The Welsh translation of Double Dependent Locality. Source: Royal Mail</p>			
<p>Condition: If a Welsh Double Dependent Locality is present, a Welsh Dependent Locality must also be present.</p>			
<p>Type: GML – LocalisedCharacterString CSV – char</p>		<p>Size: 35</p>	<p>Multiplicity: [0..1]</p>
GML: townName		CSV: TOWN_NAME	
<p>Definition: The name of the town the address is within. Source: Contributing Local Authority</p>			
<p>Type: GML – CharacterString CSV – char</p>		<p>Size: 30</p>	<p>Multiplicity: [0..1]</p>
GML: administrativeArea		CSV: ADMINISTRATIVE_AREA	
<p>Definition: Local Highway Authority name. Source: Contributing Local Authority</p>			
<p>Type: GML – CharacterString CSV – char</p>		<p>Size: 30</p>	<p>Multiplicity: [1]</p>
GML: postTown		CSV: POST_TOWN	
<p>Definition: The town or city in which the Royal Mail sorting office is located which services this record. There may be more than one, possibly several, sorting offices in a town or city. Source: Royal Mail</p>			
<p>Condition: Post Town must be present if Royal Mail’s Unique Delivery Point Reference Number (UDPRN) is present.</p>			

Type: GML – LocalisedCharacterString CSV - char	Size: 35	Multiplicity: [0..1]
GML: welshPostTown		CSV: WELSH_POST_TOWN
<p>Definition: The Welsh translation of post town value. Source: Royal Mail</p>		
Type: GML – CharacterString CSV – char	Size: 30	Multiplicity: [0..1]
GML: postcode		CSV: POSTCODE
<p>Definition: A postcode is an abbreviated form of address made up of combinations of between five and seven alphanumeric characters. These are used by Royal Mail to help with the automated sorting of mail. A postcode may cover between 1 and 100 addresses. There are two main components of a postcode, for example, NW6 4DP:</p> <ul style="list-style-type: none"> • The outward code (or ‘outcode’). The first two–four characters of the postcode constituting the postcode area and the postcode district, for example, NW6. It is the part of the postcode that enables mail to be sent from the accepting office to the correct area for delivery. • The inward code (or ‘incode’). The last three characters of the postcode constituting the postcode sector and the postcode unit, example, 4DP. It is used to sort mail at the local delivery office. <p>Source: Royal Mail</p>		
<p>Condition: Postcode must be present if Royal Mail’s Unique Delivery Point Reference Number (UDPRN) is present.</p>		
Type: GML – CharacterString CSV – char	Size: 8	Multiplicity: [0..1]
GML: postcodeLocator		CSV: POSTCODE_LOCATOR
<p>Definition: This field contains the Royal Mail Postcode Address File (PAF) postcode where the local authority address has been matched to PAF, i.e. the POSTCODE field. Where a match has not been made, the postcode information is sourced from the local authority in collaboration with Royal Mail. Where the local authority does not hold a current valid postcode, Code-Point with Polygons is used to spatially derive the postcode based on the position of the coordinates. This field is always assigned the Code-Point with Polygons Postcode for Street Records (Classification “PS”). This field must be used in conjunction with the RPC field to determine the accuracy of its position. Source: Royal Mail, Contributing Local Authority or Ordnance Survey</p>		
Type: GML – CharacterString CSV – char	Size: 8	Multiplicity: [1]

GML: postcodeType		CSV: POSTCODE_TYPE	
<p>Definition: Describes the address as a small or large user as defined by Royal Mail. Source: Royal Mail</p>			
<p>Condition:</p> <ul style="list-style-type: none"> Postcode Type must be present if Royal Mail's Unique Delivery Point Reference Number (UDPRN) is present. Postcode Type Code must equal 'L' if PO Box Number is present. 			
Type: PostcodeTypeCode	Size: 1	Multiplicity: [0..1]	
GML: deliveryPointSuffix		CSV: DELIVERY_POINT_SUFFIX	
<p>Definition: A two-character code uniquely identifying an individual delivery point within a postcode. Source: Royal Mail</p>			
<p>Condition: Delivery Point Suffix must be present if Royal Mail's Unique Delivery Point Reference Number (UDPRN) is present.</p>			
Type: GML – CharacterString CSV – char	Size: 2	Multiplicity: [0..1]	
GML: addressbasePostal		CSV: ADDRESSBASE_POSTAL	
<p>Definition: Identifies addresses which are believed to be capable of receiving mail as defined specifically for the AddressBase product and details their relationship with other AddressBase Postal records. N.B. This field identifies some addresses which the AddressBase product believes to be capable of receiving mail which are not contained within the Royal Mail PAF database, such as flats behind a front door which has a single letter box.</p>			
<p>Condition:</p> <ul style="list-style-type: none"> If AddressBase Postal value is 'D', UDPRN must be present. 			
Type: AddressbasePostalCode	Size: 1	Multiplicity: [1]	
GML: poBoxNumber		CSV: PO_BOX_NUMBER	
<p>Definition: Post Office Box (PO Box) number. Source: Royal Mail</p>			
Type: GML – CharacterString CSV – char	Size: 6	Multiplicity: [0..1]	

GML: wardCode		CSV: WARD_CODE	
<p>Definition: The ONS GSS code of the electoral ward (England and Scotland) or the electoral division (Wales) name in which the property is situated, as assigned spatially from the latest Boundary-Line set. Boundary-Line ward boundary areas are produced directly from Statutory Instruments, which are authorised from the owning boundary changing bodies, namely, The Local Government and Parliamentary Boundary Commissions. Source: Ordnance Survey</p>			
Type:			
GML – CharacterString	Size: 9	Multiplicity: [0..1]	
CSV – char			
GML: parishCode		CSV: PARISH_CODE	
<p>Definition: The ONS GSS code of the parish, town or community in which the property is situated, as assigned spatially from the latest Boundary-Line set. Boundary-Line parish boundary areas are produced directly from Statutory Instruments, which are authorised from the owning boundary changing bodies, namely, The Local Government and Parliamentary Boundary Commissions. Source: Ordnance Survey</p>			
Type:			
GML – CharacterString	Size: 9	Multiplicity: [0..1]	
CSV – char			
GML: rmStartDate		CSV: RM_START_DATE	
<p>Definition: Date on which the Royal Mail address was loaded into the NAG (National Address Gazetteer – as maintained by Geoplace) hub. Source: Royal Mail</p>			
<p>Condition: RM Start Date must be present if Royal Mail’s Unique Delivery Point Reference Number (UDPRN) is present.</p>			
Type: Date		Multiplicity: [0..1]	
GML: multiOccCount		CSV: MULTI_OCC_COUNT	
<p>Definition: This is a count of all the child UPRNs for this record if a parent-child relationship exists. Source: Ordnance Survey</p>			
Type: Integer	Size: 4	Multiplicity: [0..1]	
GML: voaNDRPDescCode		CSV: VOA_NDR_P_DESC_CODE	
<p>Definition: VOA non-domestic rates primary description code, for example, ‘IF2’. The first letter is the primary category:</p> <ul style="list-style-type: none"> • C = commercial • E = education 			

- F = formula-assessed utility
- I = industrial
- L = leisure
- M = miscellaneous
- N = non-formula-assessed utility
- T = Treasury (crown)

The second letter provides further detail, for example:

- O = office, F = factory
- The third and fourth digit is Optional and occurs where further subdivision is required, for example, IF1 = mill, IF2 = works, IF3 = workshop and IF4 = business unit.

Source: Valuation Office Agency

Type: GML – CharacterString CSV – char	Size: 5	Multiplicity: [0..1]
GML: voaNDRScatCode		CSV: VOA_NDR_SCAT_CODE

Definition:

VOA non-domestic rates special category code, for example, '016'. While the Primary Description code above provides a general level of classification, there is a SCat code for every kind of premise that VOA rates. For example, within PDesc IF2 (industrial, factory, works) there are 009 (aluminium smelting works), 016 (artificial fibre works), 052 (cement works), 055 (chemical works), 110 (foundries), 142 (iron and/or steel works), 192 (motor vehicle works) and 198 (newspaper printing works).

Source: Valuation Office Agency

Type: GML – CharacterString CSV – char	Size: 4	Multiplicity: [0..1]
GML: altLanguage		CSV: ALT_LANGUAGE

Definition:

Field describing the language of the alternative records.

Source: Contributing Local Authority

Type: LanguageCode	Size: 3	Multiplicity: [0..1]
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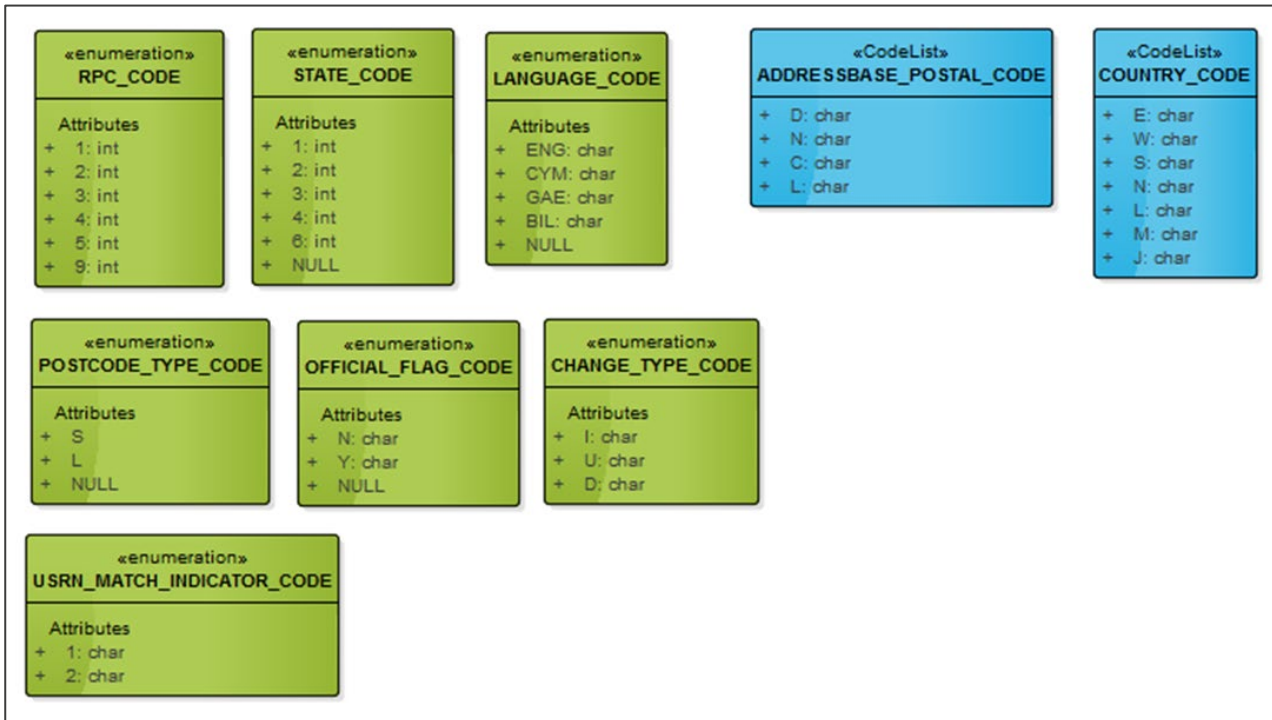
AddressBase supply set

This is not supplied as part of the CSV supply. Please see Model Overviews earlier in this section.

GML: queryTime		CSV: Not in CSV
Definition: Time the data was extracted from the database.		
Type: DateTime	Multiplicity: [1]	
GML: queryChangeSinceDate		CSV: Not in CSV
Definition: The date given as part of a change-only query.		
Type: Date	Multiplicity: [0..1]	

2.3 Code lists and enumerations

A code list or enumeration is a controlled set of values which can be used to populate a specific column. The code list and enumeration UML models associated with AddressBase Plus can be found below, with their appropriate descriptions.



AddressbasePostalCode

This code list is used in association with the attribute *addressbasePostalCode* / *ADDRESSBASE_POSTAL_CODE*. The code list describes the record as postal or not as defined by AddressBase logic.

Code List: AddressbasePostalCode	
Value	Description
D	A record which is linked to PAF
N	Not a postal address
C	A record which is postal and has a parent record which is linked to PAF
L	A record which is identified as postal based on Local Authority information

CountryCode

This code list is used in association with the attribute *country* / *COUNTRY*. The code list describes within which country the address feature falls within.

Code List: CountryCode	
Value	Description
E	This record is within England
W	This record is within Wales
S	This record is within Scotland
N	This record is within Northern Ireland
L	This record is within the Channel Islands
M	This record is within the Isle of Man
J	This record is not assigned to a country

StateCode

This enumeration is used in association with the attribute *stateCode* / *STATE_CODE*. This enumeration describes the physical nature of the address record.

Enumeration: StateCode	
Value	Description
1	Under construction
2	In use
3	Unoccupied / vacant / derelict
4	No longer existing
6	Planning permission granted

LanguageCode

This enumeration is used in association with the attribute *language* / *LANGUAGE*. This enumeration identifies the language of the address displayed.

Enumeration: LanguageCode	
Value	Description
ENG	English
CYM	Welsh
GAE	Gaelic (Scottish)
BIL	Bilingual

RPCCode

This enumeration is used in association with the attribute *rpc* / *RPC*. This enumeration identifies the accuracy value of the coordinates allocated to the address.

Enumeration: RPCCode		
Value	Description	Implementation notes
1	Central Internal Position	The address seed is contained within an OS MasterMap Topography Layer building and within 2.5m of its calculated centre . <i>Or</i> The seed is in the best possible position based on the nature of the premises, for example, Development Land, House Boat, Wind Farm.
2	General Internal Position	The address seed is contained within an OS MasterMap Topography Layer building but is more than 2.5m away from its calculated centre. <i>Or</i> The seed is in an internal position based on the nature of the premises, for example, Development Land, House Boat.
3	Transitional Position	The address seed has been changed from provisional to live in the last six months . It has been captured to a high level of positional accuracy, but the OS MasterMap Topography Layer feature is not yet captured . <i>Please note the address seed will only be moved pending any imminent mapping updates.</i>
4	Street Location	The address seed is plotted in accordance with the declared street start or end coordinates. <i>Please note this is the highest accuracy possible for Street Records.</i>
5	Postcode Unit Position	The address seed has been captured to Postcode Unit level . It will be updated when more information becomes available.
9	Low accuracy – marked for priority review	This address seed has been captured to a lower level of accuracy and will be updated as a priority over the coming releases.

PostcodeTypeCode

This enumeration is used in association with the attribute *postcodeType* / *POSTCODE_TYPE*. This enumeration identifies the code used by Royal Mail to describe the user as a small or large user. This is defined for postal services based upon the number of letters delivered to that user.

Enumeration: PostcodeTypeCode	
Value	Description
S	A small user, for example, a residential property
L	A large user, for example, a large commercial company

OfficialFlagCode

This enumeration is used in association with the attribute *officialFlag* / *OFFICIAL_FLAG*. This enumeration is an indicator of whether an address record corresponds to an entry in the official Street Name and Numbering register.

Enumeration: OfficialFlagCode	
Value	Description
N	Unofficial Address
Y	Official Address

ChangeTypeCode

This enumeration is used in association with the attribute *ChangeType* / *CHANGE_TYPE*. This enumeration identifies the type of change that has been made to a feature. The change type must be set when a feature is inserted, updated or deleted. Please see [Section 4](#) for more information.

Enumeration: ChangeTypeCode	
Value	Description
I	Insert
U	Update
D	Delete

USRNMatchIndicatorCode

This enumeration is used in association with the attribute *usrnMatchIndicator* / *USRN_MATCH_INDICATOR*. This enumeration identifies how the USRN has been allocated to an address record.

Enumeration: USRNMatchIndicatorCode	
Value	Description
1	Matched manually to the nearest accessible Street.
2	Matched spatially to the nearest USRN. Not necessarily the access street.

Date

There are many *Date* columns within the AddressBase Plus product. Where a type format of *Date* has been used in the above attribute tables, the data will be defined in the following format:

Value	Type	Notes
2007-10-24	Date	Date columns will follow the structure: CCYY-MM-DD.

Time

There are columns within the AddressBase product which provide a *Time* value. Where this is declared, the data will be provided in the following format:

Value	Type	Notes
14:11:15	Time	Time will follow the structure of HH:MM:SS, based on a 24-hour clock.

3. CSV to GML mapping

The naming of attributes between GML and CSV will be different due to the requirements of the file formats. The attributes are listed together in [Section 2](#), but for convenience the following table maps the CSV attribute name to the GML attribute name.

CSV	GML
UPRN	uprn
UDPRN	udprn
CHANGE_TYPE	changeType
STATE	state
STATE_DATE	stateDate
CLASS	class
PARENT_UPRN	parentUPRN
X_COORDINATE	position
Y_COORDINATE	
LATITUDE	positionLatLong
LONGITUDE	
RPC	rpc
LOCAL_CUSTODIAN_CODE	localCustodianCode
COUNTRY	country
LA_START_DATE	laStartDate
LAST_UPDATE_DATE	lastUpdateDate
ENTRY_DATE	entryDate
RM_ORGANISATION_NAME	rmOrganisationName
LA_ORGANISATION	laOrganisation
DEPARTMENT_NAME	departmentName
LEGAL_NAME	legalName
SUB_BUILDING_NAME	subBuildingName
BUILDING_NAME	buildingName
BUILDING_NUMBER	buildingNumber
SAO_START_NUMBER	saoStartNumber
SAO_START_SUFFIX	saoStartSuffix
SAO_END_NUMBER	saoEndNumber

CSV	GML
SAO_END_SUFFIX	saoEndSuffix
SAO_TEXT	saoText
ALT_LANGUAGE_SAO_TEXT	altLanguageSAOText
PAO_START_NUMBER	paoStartNumber
PAO_START_SUFFIX	paoStartSuffix
PAO_END_NUMBER	paoEndNumber
PAO_END_SUFFIX	paoEndSuffix
PAO_TEXT	paoText
ALT_LANGUAGE_PAO_TEXT	altLanguagePAOText
USRN	usrn
USRN_MATCH_INDICATOR	usrnMatchIndicator
AREA_NAME	areaName
LEVEL	level
OFFICIAL_FLAG	officialFlag
OS_ADDRESS_TOID	osAddressTOID
OS_ADDRESS_TOID_VERSION	osAddressTOIDVersion
OS_ROADLINK_TOID	osRoadLinkTOID
OS_ROADLINK_TOID_VERSION	osRoadLinkTOIDVersion
OS_TOPO_TOID	osTopoTOID
OS_TOPO_TOID_VERSION	osTopoTOIDVersion
VOA_CT_RECORD	voaCTRecord
VOA_NDR_RECORD	voaNDRRecord
STREET_DESCRIPTION	streetDescription
ALT_LANGUAGE_STREET_DESCRIPTION	altLanguageStreetDescription
DEPENDENT_THOROUGHFARE	dependentThoroughfare
THOROUGHFARE	thoroughfare
WELSH_DEPENDENT_THOROUGHFARE	welshDependentThoroughfare
WELSH_THOROUGHFARE	welshThoroughfare
DOUBLE_DEPENDENT_LOCALITY	doubleDependentLocality
DEPENDENT_LOCALITY	dependentLocality
LOCALITY	locality

CSV	GML
WELSH_DEPENDENT_LOCALITY	welshDependentLocality
WELSH_DOUBLE_DEPENDENT_LOCALITY	welshDoubleDependentLocality
TOWN_NAME	townName
ADMINISTRATIVE_AREA	administrativeArea
POST_TOWN	postTown
WELSH_POST_TOWN	welshPostTown
POSTCODE	postcode
POSTCODE_LOCATOR	postcodeLocator
POSTCODE_TYPE	postcodeType
DELIVERY_POINT_SUFFIX	deliveryPointSuffix
ADDRESSBASE_POSTAL	addressbasePostal
PO_BOX_NUMBER	poBoxNumber
WARD_CODE	wardCode
PARISH_CODE	parishCode
RM_START_DATE	rmStartDate
MULTI_OCC_COUNT	multiOccCount
VOA_NDR_P_DESC_CODE	voaNDRPDescCode
VOA_NDR_SCAT_CODE	voaNDRScatCode
ALT_LANGUAGE	altLanguage

4. COU supplies

As detailed in [Section 1](#), AddressBase Plus is available as a full or a COU supply.

A COU supply of data contains records or files that have changed between product refresh cycles. The primary benefit in supplying data in this way is that data volumes are smaller therefore reducing the amount of data that requires processing when compared to a full supply.

COU data enables a user to identify three types of change:

1. Deletes (CHANGE_TYPE 'D') are objects that have ceased to exist in your AOI since the last product refresh.
2. Inserts (CHANGE_TYPE 'I') are objects that have been newly inserted into your AOI since the last product refresh.
3. Updates (CHANGE_TYPE 'U') are objects that have been updated in your AOI since the last product refresh.

4.1 Non-geographic chunked COU

A COU file for non-geographic chunked data can be identified by its naming convention as highlighted in [Section 1](#).

Any change record will be provided as a full record with the appropriate change type, as listed above.

4.2 Geographic chunked COU (tile-based)

A geographic chunked COU is not supplied as per the non-geographic chunked COU outlined above. Its file naming convention can be found in [Section 1](#). If a single record has changed within a specified 5km tile, the entire 5km tile containing all features will be supplied. This means the user will need to remove all features that previously existed in the provided tile(s) and insert the entire new tile(s) in its place.

4.3 Archiving

When users are deleting, inserting or updating features, it is up to the user to consider their archiving requirements. If deleted records are important to your business requirements, you must take appropriate action to archive previous records.

5. Example record

The following section provides example records for both the CSV and GML supplies. Please note the data given is to provide an example only and is not to be used as accurate data.

5.1 CSV supply

5.1.1 Original feature – AddressBase Plus CSV

```
100100077917, 4201646, "I",,, "R",,316348.00,177163.00,50.7268511, -3.5366289,1,6815, "E",2001-05-10,2007-08-29,2001-05-10, "EXAMPLE ORGANISATION",,,,,,34,, "",, "",,34, "",, "",,5801201, "I", "",, "Y",,"osgb4000002163886501",5, "osgb1000024541781541",3, "osgb1411000054782110",2,,2014788192, "JENKINS ROAD",,,,,,"JENKINS ROAD",,,,,,"MILLBROOK",,,,,,"SOUTHAMPTON",,"SOUTHAMPTON",,"SOUTHAMPTON",,,,,,"SO16 5AS",,"SO16 5AS", "L", "2F",,"D",,,,,,2001-04-25,, "IF3",,"93",,"
```

5.1.2 COU feature – AddressBase Plus CSV

Changed fields are highlighted in red.

```
100100077917, 4201646, "U",,, "C",,316348.00,177163.00, 50.7268511, -3.5366289,1,6815, "E",2001-05-10,2015-03-31,2001-05-10, "EXAMPLE ORGANISATION",,,,,,34,, "",, "",,34, "",, "",,5801201, "I", "",, "Y",,"osgb4000002163886501",5, "osgb1000024541781541",3, "osgb1411000054782110",2,,2014788192, "JENKINS ROAD",,,,,,"JENKINS ROAD",,,,,,"MILLBROOK",,,,,,"SOUTHAMPTON",,"SOUTHAMPTON",,"SOUTHAMPTON",,,,,,"SO16 5AS",,"SO16 5AS", "L", "2F",,"D",,,,,,2001-04-25,, "IF3",,"93",,"
```

5.2 GML supply

5.2.1 Original feature – AddressBase Plus GML

Please note how not all attributes are provided where the field is null.

```
<abpl:addressMember>
<abpl:Address gml:id="uk.geoplace.uprn.100100077917">
<abpl:uprn>100100077917</abpl:uprn>
<abpl:udprn>4201646</abpl:udprn>
<abpl:changeType>I</abpl:changeType>
<abpl:class>R</abpl:class>
<abpl:position>
<gml:Point srsName="urn:ogc:def:crs:EPSG::27700"
gml:id="uk.geoplace.uprn.p.100100077917">
<gml:pos>316348.00 177163.00</gml:pos>
</gml:Point>
</abpl:position>
<abpl:positionLatLong>
<gml:Point srsName="urn:ogc:def:crs:EPSG::4258" gml:id="uk.addressbase.uprn.pl.100040205844">
```

```
<gml:pos>50.7268511 -3.5366289</gml:pos>
</gml:Point>
</abpl:positionLatLong>
<abpl:rpc>1</abpl:rpc>
<abpl:localCustodianCode>6815</abpl:localCustodianCode>
<abpl:country>E</abpl:country>
<abpl:laStartDate>2001-05-10</abpl:laStartDate>
<abpl:lastUpdateDate>2007-08-29</abpl:lastUpdateDate>
<abpl:entryDate>2001-05-10</abpl:entryDate>
<abpl:buildingNumber>166</abpl:buildingNumber>
<abpl:paoStartNumber>166</abpl:paoStartNumber>
<abpl:usrn>5801201</abpl:usrn>
<abpl:usrnMatchIndicator>1</abpl:usrnMatchIndicator>
<abpl:osAddressTOID>osgb100002283010753</abpl:osAddressTOID>
<abpl:osAddressTOIDVersion>12</abpl:osAddressTOIDVersion>
<abpl:osRoadLinkTOID>osgb4400000021638865</abpl:osRoadLinkTOID>
<abpl:osRoadLinkTOIDVersion>5</abpl:osRoadLinkTOIDVersion>
<abpl:osTopoTOID>osgb1000027126870</abpl:osTopoTOID>
<abpl:osTopoTOIDVersion>3</abpl:osTopoTOIDVersion>
<abpl:voaCTRecord>214788192</abpl:voaCTRecord>
<abpl:streetDescription xml:lang="en">LLANDAFF ROAD</abpl:streetDescription>
<abpl:altLanguageStreetDescription xml:lang="cym">LLANDAFF
ROAD</abpl:altLanguageStreetDescription>
<abpl:thoroughfare xml:lang="en">LLANDAFF ROAD</abpl:thoroughfare>
<abpl:welshThoroughfare xml:lang="cym">LLANDAFF ROAD</abpl:welshThoroughfare>
<abpl:locality xml:lang="en">PONTCANNA</abpl:locality>
<abpl:townName xml:lang="en">CARDIFF</abpl:townName>
<abpl:administrativeArea xml:lang="en">CARDIFF</abpl:administrativeArea>
<abpl:postTown xml:lang="en">CARDIFF</abpl:postTown>
<abpl:postcode>CF11 9PX</abpl:postcode>
<abpl:postcodeLocator>CF11 9PX</abpl:postcodeLocator>
<abpl:postcodeType>L</abpl:postcodeType>
<abpl:deliveryPointSuffix>2F</abpl:deliveryPointSuffix>
<abpl:addressbasePostal>D</abpl:addressbasePostal>
<abpl:rmStartDate>2011-07-19</abpl:rmStartDate>
<abpl:multiOccCount>0</abpl:multiOccCount>
<abpl:altLanguage>BIL</abpl:altLanguage>
</abpl:Address>
</abpl:addressMember>
```

5.2.2 COU feature – AddressBase Plus GML

Changed fields are highlighted in red.

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<abpl:addressMember>
<abpl:Address gml:id="uk.geoplace.uprn.100100077917">
<abpl:uprn>100100077917</abpl:uprn>
<abpl:udprn>4201646</abpl:udprn>
<abpl:changeType>U</abpl:changeType>
<abpl:class>R</abpl:class>
<abpl:position>
<gml:Point srsName="urn:ogc:def:crs:EPSG::27700" gml:id="uk.geoplace.uprn.p.100100077917">
```

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<gml:pos>316348.00 177163.00</gml:pos>
</gml:Point>
</abpl:position>
<abpl:positionLatLong>
<gml:Point srsName="urn:ogc:def:crs:EPSG::4258" gml:id="uk.addressbase.uprn.pl.100040205844">
<gml:pos>50.7268511 -3.5366289</gml:pos>
</gml:Point>
</abpl:positionLatLong>
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<abpl:localCustodianCode>6815</abpl:localCustodianCode>
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<abpl:paoStartNumber>166</abpl:paoStartNumber>
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<abpl:osTopoTOIDVersion>3</abpl:osTopoTOIDVersion>
<abpl:voaCTRecord>214788192</abpl:voaCTRecord>
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ROAD</abpl:altLanguageStreetDescription>
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<abpl:locality xml:lang="en">PONTCANNA</abpl:locality>
<abpl:townName xml:lang="en">CARDIFF</abpl:townName>
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<abpl:postTown xml:lang="en">CARDIFF</abpl:postTown>
<abpl:postcode>CF11 9PX</abpl:postcode>
<abpl:postcodeLocator>CF11 9PX</abpl:postcodeLocator>
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<abpl:deliveryPointSuffix>2F</abpl:deliveryPointSuffix>
<abpl:addressbasePostal>D</abpl:addressbasePostal>
<abpl:rmStartDate>2011-07-19</abpl:rmStartDate>
<abpl:multiOccCount>0</abpl:multiOccCount>
<abpl:altLanguage>BIL</abpl:altLanguage>
</abpl:Address>
</abpl:addressMember>
```


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