



A coordinate(d) hub

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Wales and contains more than 30 million residential, business and non-mailing addresses.

Local authorities have a statutory responsibility for creating all addresses. However, until the advance of the NLPG, those same local authorities did not hold a unified and consistent list of addresses within their areas. This led to various services within individual local authorities maintaining separate and incompatible address databases. It was quite normal to find that across a local authority, a single property may have many different variants in numerous data-



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The National Land and Property Gazetteer (NLPG) is the definitive, national address list that provides unique identification of land and property and conforms to the British Standard, BS 7666. Updated on a continual basis by each local authority, the NLPG covers the whole of England and

bases and so be referred to in many different ways. The aim of the NLPG was to rationalise these databases right across the authority. NLPG is a central repository or "hub" for all LLPGs and coordinates the 376 LLPGs created by local authorities. It also enforces the compliance of all LLPGs with the national standard for the representation of address information, BS 7666 Parts 1 and 2, to ensure data format consistency across the countries. Each record has a unique property reference number (UPRN) which provides a reference key to join related address records across different datasets.

NLPG ARCHITECTURE

The Mapping Services Agreement enforces the compliance of all LLPGs with the national standard for the representation of address information, BS7666:2006 Parts 0, 1 and 2 to ensure data format consistency across the countries. Each gazetteer entry has an unchanging centrally managed Unique Property Reference Number (UPRN) which provides a reference key to join related object records across different datasets. Postcodes, which are invaluable to many, may change. Even if a property is demolished, the UPRN can never be reused & retains this historical information. In order to fully and efficiently represent the required information, the BS7666:2006 data structure relies on a relational system of streets, Basic Land and Property Units (BLPUs) and Land and Property Identifiers (LPIs). BLPU represents the real world objects recorded within the gazetteer and can be thought of as relating to "properties" or "locations". Land and Property Identifiers are labels used to identify a BLPU in a meaningful way and can be thought of as relating to "addresses". An LPI must be referenced to a single BLPU and one or more streets which provide access to the object in question.

Multiple addresses

One of the main advantages of NLPG and BS 7666 data model is that it supports the inclusion of multiple addresses for a single location. Each BLPU can be referenced to an approved address (LPI) but may also have any number of alternative, provisional or historic addresses which will aid cross-organisation address identification. As all of these records are referenced back to the same



Fire and Rescue Service Community is increasingly using NLPG

UPRN, this facilitates the linking of asset and application data to the same identifier.

Objects without postal addresses (OWPAs)

Usually, when people consider addresses, they think purely of residential properties or properties which receive mail. However, in addition to comprehensive sets of these records, the NLPG scope extends far beyond this and includes many OWPAs.

'Parent-child' relationships

Many locations that are within the scope of the gazetteer comprise of a number of subdivisions or sub-buildings. This may happen "vertically" (for example in a block of flats) or "horizontally" (for example in a hospital complex with many different buildings). The complete block or site is known as the "parent record" and all of the subdivisions are known as the "child records". NLPG captures all of this information. In each case, there is one gazetteer entry for the parent record in its own right and one for each of the child records.

Usage of the NLPG

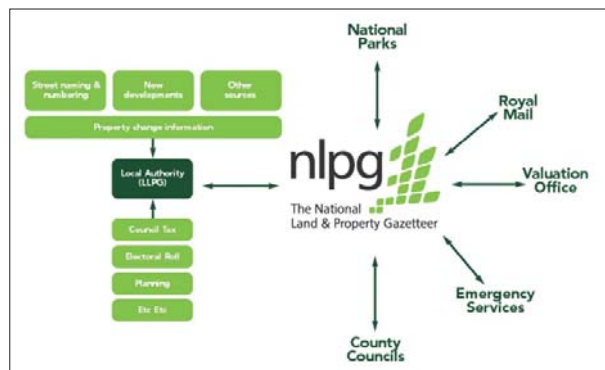
NLPG is used extensively by local authorities throughout



THE 02, PENINSULA SQUARE, GREENWICH: Data provided by London Borough of Greenwich. Aerial photography and map data provided by Google Maps, Digital Globe, Infoterra Ltd & Bluesky, GeoEye, Bluesky, The GeoInformation Group, copyright Map Data 2008 Tele Atlas.

England and Wales to underpin service delivery across a range of departments including planning, Council tax, electoral roll, estates, local land charges, non-domestic rating list, housing, fire and police, building control/development control and customer relationship management.

A number of police authorities have taken NLPG data in order to evaluate the possibility of using the dataset as their trusted data source. The British Transport Police is moving to a single corporate gazetteer, based on the NLPG to link all of its systems.



BENEFITS OF NLPG

The NLPG brings intangible as well as tangible financial benefits. Intangible benefits have been evaluated through a study prepared by CEBR (2006). There is evidence of savings in excess of £ 50m per annum. In terms of tangible benefits: Plymouth identified savings of around £150,000 pa simply by avoiding the duplication of addresses; Huntingdonshire increased tax receipts by around £180,000pa. The CEBR estimated a saving of £ 54 million annually to those who create the data and £ 40 million for those who could potentially use the data across local governments. Social benefits include enhanced customer services, improved customer experience and improved community safety.

An example of environmental benefits is in the optimisation of the routes for refuse collection vehicles. One local authority has quantified a saving of one vehicle, which not only saves pollution but also £100,000 per annum. Nationally there is great interest in the dataset from in-car navigation systems providers whose information at present is incomplete and out of date, resulting in many wasted and frustrated vehicle movements. ■