

## t1.10

## What the NLPG means in practice

Michael Nicholson, Managing Director, Intelligent Addressing

### Introduction

The first step has been taken towards the objective of having a National Land and Property Gazetteer (NLPG) because in May the gazetteer was compiled for England and Wales, and 24.6m Basic Land and Property Units (BLPUs) were identified. So after all the preparatory work of agreeing a specification to meet the requirements of a broad based information industry (BS7666), and refining the processes for creating and maintaining it, the gazetteer has been built and is being maintained. However, whilst the initial creation is important, it is just the first step in improving the process leading to a nationally consistent dataset of the quality users require. In practice 24.6m unique property reference numbers (UPRNs) have been allocated which will never change. This means that organisations can now build their systems around the gazetteer both with confidence and in the knowledge that the NLPG will be the linking mechanism to other organisations' data. In effect the fundamental building block of the Information Age has been created. However, there are a range of issues which still need to be resolved and much work needs to be undertaken to ensure the gazetteer develops to its full potential and is maintained at the levels of currency and completeness that a diverse range of applications require.

This paper is a report on progress. There is a range of supporting documents that explain various aspects of the gazetteer concept (see References).

### Progress (resume)

The model for creating and maintaining the national gazetteer is for local authorities to compile local LPGs for their areas. Therefore the decision to build the national version was delayed until the National Land Information Service (NLIS) channels were ready to take it and the datasets of other organisations were ready to be matched to it (see Wider initiatives). This gave authorities more time to work on their gazetteers and as a result, when the Local Government Information House gave the instruction to build the NLPG in April, there were 81 LLPGs that had been submitted. 10 of these were found to have problems as a result of the quality control procedures carried out on them before they were incorporated and these are being remedied. So 71 LLPGs out of the 375 authorities in England and Wales were included. However, it transpired that this 20% of authorities is responsible for about 30% of the BLPUs in the gazetteer. This is because a lot of the large urban conurbations, such as Merseyside, Manchester, London Boroughs etc were submitted. [N.B. a list of the authorities is on the web site 'www.nlpg.org.uk'] The remaining areas had first cut LLPGs created for them by matching the Council Tax and Non-Domestic Ratings lists from the Inland Revenue Valuation Office, along with a gazetteer of commercial properties maintained by Property Intelligence Plc, (the parent company of Intelligent Addressing Ltd.). This was matched to the National Street Gazetteer (NSG) and finally a link was created to Ordnance Survey's ADDRESS-POINT product to identify coordinates for many of the BLPUs.

This is the gazetteer that has been made available to the 3 NLIS channels for testing purposes. They have given some very useful feedback and the smaller problems have been resolved. However, there are some broader issues and the prime one concerns the NSG. This has been a problem ever since authorities started compiling their LLPGs because all the BLPUs have to link to a street reference. The NSG has been

maintained primarily to enable the Electronic Transfer of Notices (ETON) project to proceed and there are a range of inconsistencies in it. A revised process has been agreed with the Highway authorities whereby the LLPG custodians take responsibility for their local street gazetteers. However, this process of improvement will take time to implement through the whole country.

Another issue is coordinates and this has two sides. On the one hand authorities with LLPGs have identified the most suitable point (pair of coordinates) to represent the BLPUs. However, in areas where the national datasets have been used, only the postally addressable BLPUs have had coordinates linked via ADDRESS-POINT. For other BLPUs the coordinates come from other sources, such as the street gazetteer and will be flagged for the authorities to improve when they take over custodianship of their LLPGs.

Having built the NLPG the process is now one of continuous improvement. This comes in a variety of forms. The first is to increase the number of authorities who are responsible for their LLPGs. The number incorporated in the gazetteer is 81 at the time of writing and more are being added every week. The number of BLPUs has risen to 24.8m. These authorities are also maintaining their gazetteers and supplying updates to the NLPG at varying intervals. Some supply them every week, whilst others forward them monthly. A further 150 authorities are involved at some level in creating their gazetteers. The ultimate model is for the LLPGs and NLPG to be synchronised, which can be achieved using the web.

Then there are the candidate entries which are being identified from the national datasets but which will increasingly be submitted by other organisations linking their records to the gazetteer e.g. HM Land Registry (see Wider Initiatives). Where these arise in areas covered by LLPGs they are forwarded to the LLPG custodian. Where they are in the first cut NLPG areas, the custodian adds them and flags them for future attention by the LLPG custodian.

To bring rigour to the processes and confidence to the local authorities and other organisations embarking on the NLPG, the LGIH has introduced a second form of accreditation. The first is to evaluate systems and their functionality in dealing with BS7666 and the ability to import and export data in the NLPG's transfer format version 6.3. The second concerns matching data according to BS7666 and helping authorities to create LLPGs (and other organisations to match their data to the NLPG). The Information Age Practice Unit at the Improvement and Development Agency (IDeA) maintains a list of the companies that are accredited.

[N.B. There is another paper that goes into many of these issues in more detail, including the extents of BLPUs. The author is Simon Barlow, the NLPG Hub Manager at Intelligent Addressing.]

### Local Government drivers

The benefits of having a LLPG as a master list of references (UPRNs), with addresses and coordinates, are extensive. The main ones are that it is an index that all the authority's applications refer to and therefore there is less duplicated work in maintaining this core data in each of them. Having a gazetteer will enable more joined-up working across the organisation and there are some key initiatives which are encouraging authorities to implement them:

- a) authorities are submitting their Implementing E-Government Plans by the end of July. These lay out how they intend meeting the target of 2005 for the electronic provision of services. There are three guidance documents (available on the IDeA web site "www.idea-infoage.gov.uk") all of which highlight the role of the LLPG and linking it to the NLPG. The plan is for all authorities to comply with this by July 2002. There is money available for authorities to help them implement their plans.
- b) the next stage of the National Land Use Database (NLUD) project is in hand and one of the objectives is to link the data to the gazetteer.
- c) the Local Authority Secure Electoral Role (LASER) project is currently at the stage where a short list of companies has been selected to help deliver the solution. This is to link all the electoral registers in the UK to the NLPG, by January 2002 and compile them into a hub, which will be maintained. The Electoral Commission and other organisations will then access the database, with a further activity being to make the list available to others, where individuals agree to their data being included.

- d) in addition there are a number of local authority activities where guidance notes and standard forms are encouraging people to identify the property they are interested in finding out more information about, using the UPRN. Authorities' Asset Management Plans can incorporate UPRNs and it is proposed that the revised Con29 Local Land Charge search form will also incorporate a field for the UPRN.
- e) there is on-going discussion about how to implement a single notification of change of residence to be reflected in all the relevant authority applications. This is a wider issue for government departments and agencies as well, with the utilities also very interested. The NLPG is the proposed core of such a facility as this is the role that it was designed to enable.

Already over 200 authorities are actively involved at some stage of creating and maintaining LLPGs and the likelihood is that this number will increase significantly over the coming months. The model is for the NLPG to be a compilation of the 407 LLPGs in GB being maintained by authorities on a regular basis.

### The wider agenda

The key project that will use the NLPG is NLIS. The process is designed to enable users, whether they are solicitors or surveyors etc. to identify the property they want information about through a Locate Process offered by one of the 3 channels. It will then be the UPRN which is transferred to the selected Data Providers (HMLR, Local Authority, Coal Authority, utilities etc.) to pick up information they have linked to the reference. The channels are providing such a service and when the NLPG is 'fit for purpose' they will swap over to use it. This will be a significant step for the NLPG, as it will start the process of continuous improvement because when BLPUs are not identified, candidate BLPUs will be sent to the NLPG hub to be considered for inclusion. N.B. there will not be a BLPU for every enquiry and there is a facility for identifying a polygon overlay on a map to highlight an area of interest but the majority of enquiries will be address related, which will be facilitated by the NLPG.

For internal HM Land Registry benefit and to enable Title Deed information to be accessed via the NLIS channels, the Computerised Property Descriptions (CPD) database is being matched to the NLPG. Not all title deeds have addresses and those that cannot be linked to current entries in the gazetteer will be added as new BLPUs, so that the NLPG can be a look up facility to all the deeds in the registry. This is scheduled to go live in October this year.

A BS7666 XML schema has been agreed as part of the e-government interchange format (EGIF). The details are available on 'govtalk.gov.uk' and 'e-envoy.gov.uk'.

There are on-going discussions about how other organisations should link to the NLPG as part of the Crime and Disorder, and Social Exclusion agenda. The Office for National Statistics (ONS) has the remit for collating neighbourhood statistics from a variety of sources, including local authorities, government departments and agencies etc. and making them available. There is scope for using the NLPG as the linking mechanism between the datasets.

### Marketing

Now that the gazetteer exists there has been increased interest in accessing it. However, whilst it is being tested to ensure it is fit for purpose, Market Research is being undertaken into both the demand and the price organisations might pay. The quantitative part of the research has been completed with organisations in a wide range of sectors expressing enthusiasm. An extremely encouraging 82% of those who responded want to be positively approached when the NLPG is available and the terms and conditions have been decided.

The qualitative part of the research is about to be concluded and the presentation at the conference will brief attendees on this aspect.

A pricing model has been developed at the high level with the intention of meeting LGIH's remit of striking a balance between recouping enough revenue to sustain the process, whilst ensuring that price isn't an obstacle to organisations taking licences. The qualitative part of the research has been undertaken to help determine the prices that will be introduced.

Another task that is being carried out is the drawing up of licences. Local authorities are signing licences with the LGIH covering their LLPGs and access to the NLPG. Terms and conditions are being drafted to enable other organisations in the local authority community, such as counties and National Parks to access the NLPG. A licence for the NLIS channels to use the NLPG for the Locate Process is in the final stages of being agreed, including a charge for each transaction. One of the key facilitators of the NLIS/NLPG projects is the drawing up of a set of linked licences to cover the different functions but also the use of the data in different situations. This was recognised in putting together a bid for Invest to Save funds several years ago. The Treasury in allocating the full amount requested to support the NLIS, ScotLIS and NLPG projects, recognised the importance of having a suite of generic licence agreements to support multi-organisational joined-up initiatives. For the NLPG these are being taken further to cover the inclusion of data items from other organisations. Both Royal Mail and Ordnance Survey recognise the opportunities to be derived from joined-up working as identified in the market research. The objective is to include current postcodes in the gazetteer and coordinates from ADDRESS-POINT for those BLPUs not maintained by local authorities. The nature and extent of the relationships between the organisations, as part of a bigger vision, is being investigated, with the intention of establishing a simple business model.

As well as End User licences for the NLPG, there will be a Value Added Reseller licence and probably an Agents licence as well.

The intention is to have a fit for purpose gazetteer, the pricing model and the relevant licences all ready so that organisations can use the NLPG later this year. The situation will be a lot clearer by the time of the AGI 2001 conference and the presentation there will update attendees on the plans at that time.

In the meantime a second newsletter is being produced, along with a suite of supporting material, though this is still primarily targeted at local authorities, upon whom so much depends with their role of creating and maintaining the LLPGs for their areas.

The support for the NLPG is extremely encouraging, though one aspect is surprising, which is that the greatest understanding of the benefits comes from organisations outside of the GI industry. However, this can be turned to the positive because there is therefore considerable scope for using the NLPG as the link to the mainstream information management sector and open up opportunities for the GI industry.

## Conclusions

The NLPG concept is well on its way to becoming a reality. The first cut for England and Wales exists and is already the largest single address list. The Master Address Database for Scotland is scheduled for completion later this year and will be incorporated into the NLPG.

With more authorities creating LLPGs and other organisations beginning to link to the NLPG, its completeness is being improved all the time. The intention is for it to be more comprehensive than any one application requires. It will then be the master list, which other organisations can both match their data to but also use to ensure that they are covering 100% of the population they need for their applications. The more organisations match to the gazetteer the more alternative addresses will be recorded. As a result those organisations matching later will find that the effort of reconciling alternative addresses will have been significantly reduced!

Because the structure of the gazetteer includes coordinates, the implication is that address based datasets that aren't currently geospatially referenced will then have the benefits of being able to use geography as an additional dimension in the data.

As a result of more organisations matching their data to the gazetteer and using it as a master list, there will be the additional benefit of being able to participate in inter-departmental; inter-organisational 'joined-up' initiatives. This will be enabled through the use of the UPRN to identify records relating to the same objects, which is the model currently being implemented by NLIS.

Because addresses are of such wide use as the identifiers for the building blocks of land and property units, their incorporation in the NLPG means that the gazetteer will soon take its place as the key piece of the information infrastructure. The information age is still in its infancy and the technology led approach has

been proven to be flawed. There is now an opportunity to move to the next stage where information is the driver, and the NLPG will be supporting it!

## References

BS7666 Parts 1 to 3 – for British Standards institute (BSi)

NLPG Data Transfer Format v6.3 (NLPG web site)

NLPG conventions document (NLPG web site)

A series of publications available from the Improvement and Development Agency (IDeA)