



LOOKING FOR A MATCH MADE IN HEAVEN

CARL HANCOCK ON CENTRAL
GOVERNMENT INITIATIVES TO
STANDARDISE ADDRESS DATASETS IN UK
LOCAL AUTHORITIES



Central Governments across the world have always liked to have a say in local affairs. Not content with setting tax rates, maintaining the peace and generally dictating national policy, often they are to be found commenting on the frequency of refuse collection or capping local taxation.

In the UK, the creation of local authorities has always been more a question of evolution over design with the current system being the result of reforms dating back to the 19th Century. With both county and district councils, divided into metropolitan and non-metropolitan, not to mention unitary authorities that encompass both, as well as the London Boroughs that populate the Greater London Authority, the situation can often seem somewhat confusing.

Within this cacophony of names some will be responsible for transport, some for education, some for social services, and some for all of them. Though responsibilities may vary, one common denominator that is present within them all is the need for address databases. It is here that central Government is now beginning to get involved with their drive toward consistency and standardisation.

This movement has its origins in the formation of the National Land and Property Gazetteer (NLPG), which was established through the amalgamation of each authority's Local Land and Property Gazetteer (LLPG). This amalgamation was only possible through the adherence to British Standard 7666, which allowed for the creation of address databases throughout England and Wales that all had identical formats.

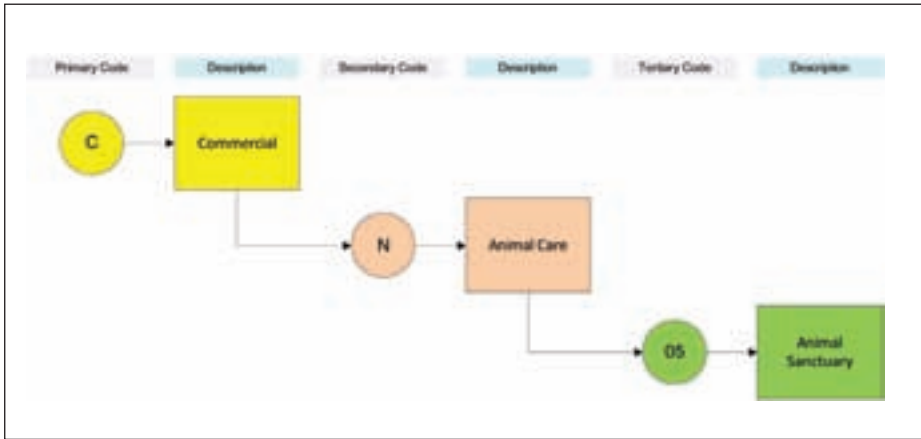


FIGURE 1. Property descriptions

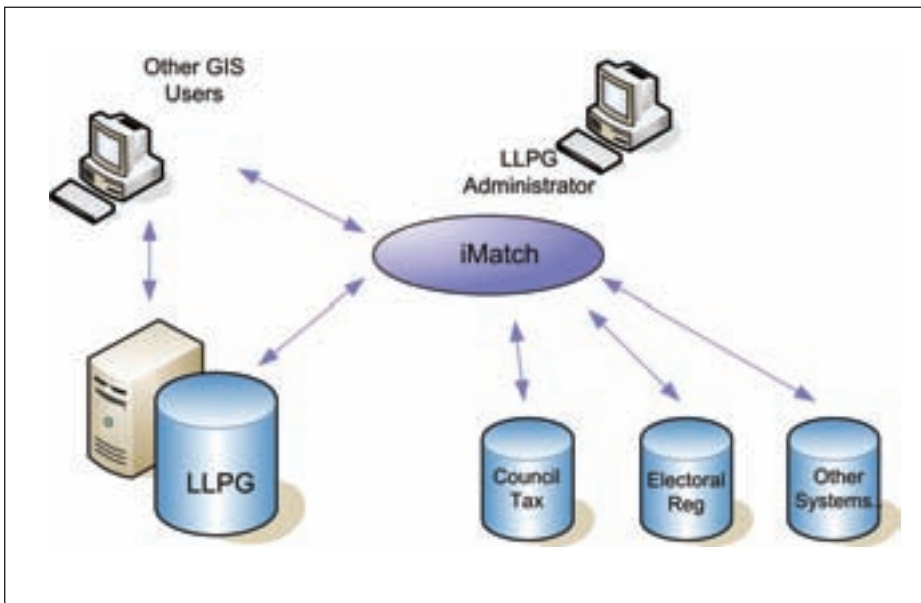


FIGURE 2. iMatch linking the LLPG to other address datasets and matching the data]

The current format (DTF 7.3) allows for the insertion of a vast multitude of data and metadata including primary address object name (PAON), secondary address object name (SAON), ward, parish etc., as well as the ability to give primary, secondary and tertiary descriptions to objects. See Figure 1 for an example.

Through this standardisation it will be possible to definitively search the NLPG and in this instance find all Animal Sanctuaries throughout England and Wales.

During the creation of the LLPGs, local authorities took much of their base data from other council systems such as the electoral roll, council tax, planning and benefits and then spent a lengthy and often arduous process converting this data over to the new format. Whilst this was happening however the original data was still being used within those other departments, being added to and developing in isolation from the LLPG.

Some might argue that this was the result of a lack of joined up thinking, but more likely a question of needs and necessities. Someone working within the council

tax department might see little need for BS7666 data and even if they did would not have the resources to produce this. Meanwhile, the LLPG custodians would have far too much on their plates to think about making their data available to other departments, even if it was to have been expected.

With the NLPG now a reality (the last remaining authority signing up in February 2008), this is all beginning to change. Through the NLPG the ability of national databases to actually work became apparent and the concept of standardisation throughout all address databases moved one step closer to becoming a reality.

One of the most recent developments in this field was the Ministry of Justice's requirements for all electoral registers to be converted to BS7666 and matching them to the NLPG. As a result of this requirement, by December 2009 each address entry must contain a Unique Property Reference Number (UPRN). These UPRNs, which are a key component of BS7666 remove all possibility of address duplication to the

extent that even when a property is demolished, that UPRN will never be reused.

The standardisation within the Electoral Register will lead onto the Co-ordinated On-line Record of Electors (CORE), which will be a national database of all local registers. This national register will allow for much easier access to the data since a request for information can then be derived from only the one source as opposed to separate requests going out to different authorities.

This is just the start though and soon everything from customer relationship management through to waste collection will be required to meet BS7666 compliance. In principle this idea has merit and central government should be applauded for the initiative. Through the data matching and the linking of information with the UPRNs, services can be delivered more efficiently, resulting in better services for the public and the saving of money for the councils.

This whole process might seem like a fantastic idea, but as anyone who has ever worked for a local authority will no doubt testify, time and money are not exactly in abundance. Questions such as who will do the work and which department would pay for it have to be asked i.e. should it all fall on the shoulders of the LLPG custodian? An often mentioned statistic is that 85% of all council data contains an address component; that is a tremendous amount of data therefore that needs conversion and will touch virtually every department within a council.

The solution is the employment of data matching services from an external agency, alleviating some of the time concerns on the council but not coming without a considerable expense. As a one off this expense could be justified, but when one starts looking at the matching of numerous address datasets, that few thousand pounds quickly ends up being tens of thousands of pounds which could cover the cost of a new employee. Not only that but in addition to the expense, these services are often incomplete and a portion of the matching process is likely to be thrown back to the local authority when the resolution of these matches requires local knowledge.

A secondary option that works very much toward long term gains is data matching software that allows for the simplification of the data matching when performed by the council itself. One such example of this is a product from Aligned Assets called iMatch that works within its gazetteer management system.

iMatch, as its name suggests, is a powerful and easy-to-use tool for matching address data to the LLPG. It works by taking an address entry from a dataset and search-

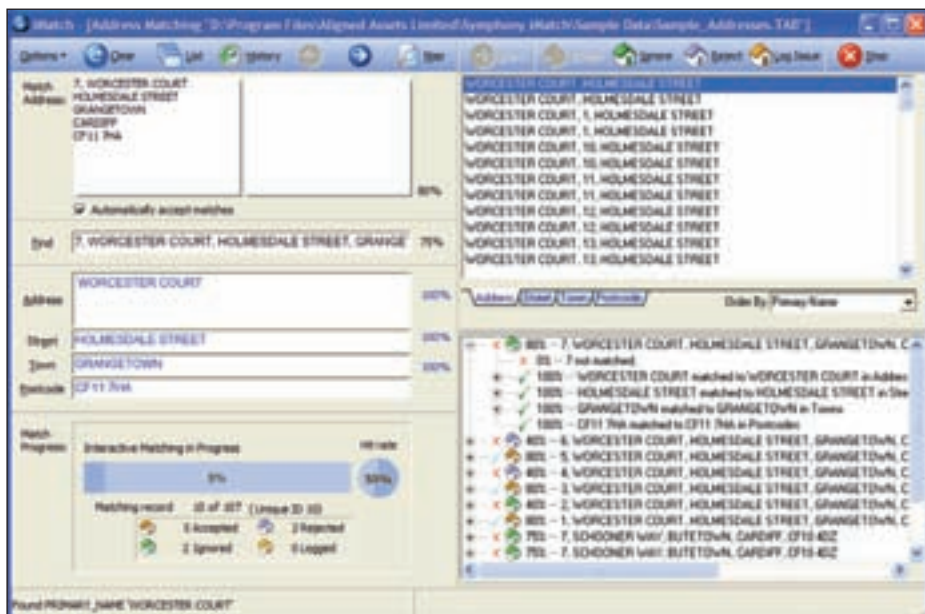


FIGURE 3. Automatic matching being performed by iMatch with progress bar visible in bottom left]



FIGURE 4. LLPG extraction data flow

ing for it within the LLPG. If an exact match is found then the UPRN from the LLPG can be attributed to it, and a permanent and lasting linkage can be made. If no exact match is made then the closest matches will be shown and the correct one selected by the custodian.

By automating this matching process not only is much of the time-consuming work removed from the custodian, but once installed the software can be used to match as many address datasets to the LLPG as is required. Populating these datasets with UPRNs will fulfil central government's

current minimum requirement, but it is likely that this requirement will be expanded to include full BS7666 compliance sometime in the future.

Currently, only requesting UPRN matching as a minimum, i.e. the form the address takes in non-LLPG datasets can remain the same is relatively painless using tools such as iMatch but since full BS7666 compliance is likely to come later this will involve considerably more work. The process will involve either manually changing the datasets to the correct format or extracting data from the LLPG and

replacing the incorrect data – both a time-consuming and costly procedure.

Beyond initial compliance though one enters into the realm of maintenance and as any LLPG custodian will tell you, BS7666 compliance is not exactly simple. To expect all new non-domestic rate entries or all library service entries to be entered in the BS7666 format is asking a lot, but it is likely to be only a matter of time until that request is made that will result in the retraining of all council staff that have cause to enter address data.

A simpler solution, but one that central Government may well have missed is the option of using the LLPG as the one master dataset. It would seem inefficient to have many datasets containing replica information when it would be possible for all address data to be held centrally, all BS7666 compliant, that could be sourced when required by any department within the council, and maintained and updated by already qualified people. Figure 4 illustrates the LLPG shown as the only recipient of new address data, which is then accessible by all other departments.

Web services such as Aligned Assets' new SinglePoint that allows for sub-second NLPG-searching could easily be used to facilitate this data extraction. As quickly as a council department could search its own database it could search the entire LLPG, or for out of area enquiries the entire NLPG, and thus have access to the most comprehensive, up-to-date address data available from only a few clicks of the mouse.

Central Government might like to force the hand of their local counterparts, but it is at that local level that these dictations must be put into practice. Policy often seems to desire results for results sake and it is only through innovative thinking that what might previously have seemed an unnecessary distraction can be converted into tangible results at a local level. No one likes to have extra work forced upon them, but this is one Government initiative that could end up saving local authorities considerable time and money, and central Government of course would have their wish of BS7666 compliance.

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