THE CASE FOR AN OPEN NATIONAL ADDRESS DATASET

ODUG (Open Data User Group) - November 2012

This paper represents the views of the Open Data User Group, on behalf of the Open Data Community. The views contained are independent of government bodies and private sector organisations. It has been shared with the Data Strategy Board for information.

Note that Annexes are provided in a separate document.
Please direct correspondence regarding this paper to: addressing@odug.co.uk

"There is no doubt that addressing – the network of road names and house numbers – constitutes a key element of functioning societies. While a single address in itself does not constitute a public good, the national address infrastructure, of which it forms a part, is an essential public good, and through interoperability with international systems the totality of addressing networks can be determined as global public good.

Address infrastructure provides access to the rights and duties of citizens from the local to the international level, as well as providing businesses with access to markets. All echelons of society should thus have equal access to address infrastructure in order to capture the social and economic benefits at the local, national and international levels."

From the Executive Summary:

Addressing the world – An address for everyone
The White Paper
Universal Postal Union, Berne Switzerland, 2012

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Executive Summary

An address is a formal textual description of a specific location. The most usual objects that are addressed are buildings although other entities can be assigned addresses too, for example land parcels or items of infrastructure like electricity sub-stations. The most frequent uses of an address are to register individual residences and business locations. Addresses are also used to identify postal and other delivery points, properties in land transactions, utility service connection points and destinations for blue light emergency calls and other journey destinations.

Addresses are so central to our lives that the generation and maintenance of a collection of individually addressed locations is essential to the efficient operation of modern society. The combination of a name and an address usually identifies a single individual, a company has to have an official registered address to identify it uniquely and addresses are used to identify entities subject to land and property based taxation.

With so many aspects of our society dependant on addresses an accurate national address dataset is fundamental to public service delivery and is a core input to most private sector products and services. Our current national address database, the National Address Gazetteer (NAG)[1] and its derivatives, AddressBase Products[2] delivered through Ordnance Survey, although developed and delivered by a collection of publicly owned and publicly funded bodies, are not freely available to the public.

The argument ODUG makes in this paper, is that the national core-reference datasets of the Postcode Address File (PAF) and the National Address Gazetteer (NAG)/OS AddressBase Plus products are fully and adequately funded by the public and should be delivered as Open Data, for free, under the Open Government Licence (OGL).

Our views are based on discussions and research across a wide community of stakeholders. To underpin our arguments and draw our conclusions we have gathered evidence from publicly available information. However, our work had been hampered by a lack of transparency in the data available from various organisations who, although fully publicly owned or in receipt of public funds, fail to make the business models and operating costs for their publicly funded responsibilities available for open scrutiny. As an aside to the findings of this report on national addressing we wish to comment that we find this lack of transparency unsatisfactory as a matter of public policy and business practice on a matter of such profound public interest as a national address dataset.

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[1] http://www.geoplace.co.uk
[2] https://www.ordnancesurvey.co.uk/oswebsite/products/addressbase/index.html

An Open National Address Dataset

ODUG, supported by many data users and Open Data Community stakeholders, believes that a national address dataset should be made available as open data, under the Open Government Licence, freely accessible to all at the point of use and re-use. At a meta-level two simple facts justify this proposition:

- Addressing Data is *public data* - the underlying cost of delivering and maintaining all the components of the current address datasets are covered by public finds or within the remit or public task of various publicly owned and funded bodies.

- Substantial *benefits* will accrue to society if this core-reference data is: (a) made available as open data, and (b) produced more efficiently. The benefits set out elsewhere in this paper include improvements in the transparency and delivery of public services, benefits to business innovation and growth, immediate cost savings as a result of streamlining address data aggregation and delivery mechanisms, and improved address data quality as a result of a single central data repository.

ODUG recommendations:

Recommendation on Postcodes – the future of the Postcode Address File (PAF)

Royal Mail should make the Postcode Address File (PAF) available as open data under an Open Government Licence. We argue that paid for PAF licensing should be removed in its entirety because the current PAF licensing regime is over-complex, costly to manage, an unnecessary administrative burden across the public sector and both a burden and a barrier to private sector innovation.

ODUG believes that the total revenue generated by the PAF no longer reflects a 'reasonable' price for the data as is required by the Postal Services Act 2000[3] and that inflated costs are a result of Royal Mail exploiting its monopoly on postal address data rather than reflecting the minimum costs necessary to maintain the data.

Furthermore, ODUG recommends that the Royal Mail should be relieved of its custodianship of the PAF prior to any forthcoming privatisation, and that the delivery and maintenance of the PAF should be carried out by a single body which is entirely responsible for delivering and maintaining a national address dataset as open core-

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[3] http://www.legislation.gov.uk/ukpga/2000/26/section/116#text%3DPostcodes

reference data. The nature of this body should be determined through a review of the public funding flows, internal operation and cost models and existing business arrangements of each of the three bodies who currently deliver the PAF, the National Address Gazetteer (NAG) and AddressBase products; namely, the Royal Mail, GeoPlace[4] and Ordnance Survey, also the business relationships in place between each of these bodies.

The Postal Services Act 2000 granted the Royal Mail plc ownership of Postcodes (essentially Crown copyright material) "for the time being"[5]. The UK would not be alone in concluding that this core-reference data should remain fully in public ownership. Similar conclusions have been drawn in other European countries, most notably the Netherlands, where the government sold their equivalent to the PAF to the new private owner of their Post Office and recently fought and won an EU court case[6] to enable them to buy it back in order to create a national address and buildings register.

The Danish Government evaluated the advantages and disadvantages of different ownership models for address data and concluded that a publicly owned free to use address data set served their national interest best; free-of-charge address data was released in 2002.

The current PAF licensing regime is complex, costly, restricts growth and innovation and should be simplified. However, ODUG is not proposing that the public should buy the PAF back from the Royal Mail. Our proposal is that the Royal Mail should simply release the PAF, under Open Government Licence, for free. Making the PAF open data would reduce one (relatively small) area of Royal Mail operating costs and the Royal Mail would have equal access to the open data PAF, alongside all other users.

ODUG expects Royal Mail to argue that the PAF is central to their value as an organisation. Our evidence does not support this view. Within Royal Mail's own business landscape, the revenues generated by PAF licensing are a drop in the ocean. In 2011-12 Royal Mail, a £1.5bn publicly owned corporation, made £9.5bn in revenue[7], of which

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[4] http://www.geoplace.co.uk
[5] The Postal Services Act 2000 (part VII paragraph 116.1)
[6] www.prlog.org/11794884-dutch-data-from-the-key-register-of-addresses-and-buildings-bag-now-available-for-re-use.html
[7] www.royalmailgroup.com/sites/default/files/Annual_Report_2012.pdf.

only £27.1m (0.3%) is attributed to the PAF[8]. Royal Mail is currently regulated to make no more than 10% surplus and the PAF contribution to RM 2011-12 operating profit is £2.6m or 1.2% of realised 2012 profit[9]. The only reason ODUG can surmise that Royal Mail might wish to keep hold of the PAF would be a future intention to charge more for PAF licences. This option is not in the interests of our society.

Recommendation on the delivery of an Open National Address Dataset as core-reference data

To deliver the national address dataset ODUG proposes that the Ordnance Survey AddressBase Plus product, together with a free PAF licence, should be made available for free as open data under the Open Government Licence. We also propose that the National Street Gazetteer, which underpins the current National Address Gazetteer (NAG) should be made available for free open data.

Our research and analysis reveals that there is scope for considerable efficiency in the infrastructure currently in place to deliver the NAG and AddressBase products. The PAF licensing role here is to increase complexity of use since the current licensing regime requires separate PAF licences for both the data aggregators and the users of the resulting addressing products; essentially licensing the same thing twice over in the supply chain.

ODUG is convinced that an open national address dataset could be provided, at no additional cost, from within existing publicly funded resources. Our estimates indicate that an open national address dataset could be maintained for as little as £10m p.a. A higher estimate of costs at £17m p.a.[10] also falls easily within the existing £55m funding envelope provided by government under the current Public Sector Mapping Agreement (PSMA)[11].

ODUG recommends that:
1. The emphasis needs to shift from creating competition in the creation of addresses to one of creating opportunity in the exploitation, enhancement and innovation in the use of addresses. A national address dataset should be set up in a central data

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[8] www.pafboard.org.uk/documents/PAF(12)24%20Estimating%20the%20Economic%20Value%20of%20PAF.pdf
[9] £2.6m as a % of £211m 2012 operating profit. Note this is a rather high percentage in comparison with the ROI of the bulk of the Royal Mail's business.
[10] See Annex C
[11] www.ordnancesurvey.co.uk/psma

repository, as open data, with the data available under the Open Government Licence to all users.

2. Oversight and delivery of the national address dataset should be the responsibility of a single public sector organisation.

3. Organisations with the statutory responsibility for creating or modifying address data should each have direct access to national address dataset.

4. The rights to this dataset should continue to vest as crown copyright, since all the data contained therein is collected, collated and managed by publicly owned or publicly financed organisations to fulfill their various public tasks and duties.

Overview of the benefits of an Open National Address Dataset

There is strong evidence that free-of-charge address data will deliver tangible benefits. The Postcode Address File (PAF) Advisory Board's 2011 study 'Estimating the Economic Value of PAF'[12] estimated the value of PAF data to the economy at between £992m and £1.38bn per annum, reporting that approximately 250 Solutions Providers license the data. If the PAF were free we anticipate at least a doubling of users which, based on the figures quoted above, would deliver an immediate minimum return of £992m of economic value per annum, and possibly deliver billions of pounds of additional benefits.

In a 2010 report[13] analysing the benefits associated with the Danish free-of-charge address data release the Danish Enterprise and Construction Agency (DECA) states that:

"Free and unrestricted access to addresses of high quality is beneficial to the public and forms the basis for reaping substantial benefits in public administration and in industry and commerce. This is why, in 2002, the official Danish address data was made available free of charge. Making public data "free of charge" means setting the price of data to zero, so that users can use the official address data without paying the authorities who create and maintain the data."

The conclusion of the report is that the direct financial benefits for society in the period 2005-2009 amounted to around EUR 62 million for a total cost of about EUR 2 million. In

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[12] http://www.pafboard.org.uk/documents/PAF(12)24%20Estimating%20the%20Economic%20Value%20of%20PAF.pdf

[13] www.adresse-info.dk/Portals/2/Benefit/Value_Assessment_Danish_Address_Data_UK_2010-07-07b.pdf

2010 the report estimates that the benefits will be about EUR 14 million, with costs reduced to the costs of distribution only at around EUR 0.2 million. Around 30% of the benefits will be in the public sector and around 70% will be in the private sector. These benefits are direct financial benefits. A national address dataset will also support transparency, improvements in public services, innovation and enterprise as follows:

(i) *Transparency and improved public service delivery* - by helping to hold government to account. Accessing government data by address/location is fundamental to achieving transparency about how the government collects data about us and delivers local services. Also, creating an open national register of addresses would enable a significant part of the Government's ICT strategy[14] which calls for mandatory open standards to create a platform from which government can deliver new models of open and innovative public services.

(ii) *Public sector efficiency* - by saving unnecessary costs and reducing duplication of effort and complexity within government. All new services can be tied to the same address register, which can also be used to underpin an improved census mechanism for the UK.

(iii) *Growth* - by inspiring and enabling innovation and enterprise to spur social and economic growth. The Open Data White Paper[15] commits that the public data underlying the Government's own websites will be published in re-usable form. Addresses underpin this data and should be openly available to help developers make effective use of public datasets.

(iv) *A level playing field for the private sector* – the Government should not have a monopoly on the provision of web services and mobile applications in the improved delivery of its digital services but make data and APIs available so that others can produce alternative, innovative views of government data and access to government services[16]. A national address dataset has a key role here.

(v) *Efficiency, Innovation and Enterprise* - opening up national address data will cut out the bureaucracy and overheads associated with the complex licensing regimes which burden the use of government address data, where the financial return to public

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[14] http://www.cabinetoffice.gov.uk/content/government-ict-strategy
[15] http://www.cabinetoffice.gov.uk/resource-library/open-data-white-paper-unleashing-potential
[16] Direct Gov 2010 and Beyond, March 2011

sector bodies does not appear to justify the cost and complexities of managing the licensing. The licensing complexity and costs are a pure burden for businesses of all sizes, in particular start-ups and SMEs. All commercial licensing should be removed for the national address dataset. This would allow private businesses to compete on a level playing field with public sector organisations who currently gain access to this data more easily and more cheaply.

An open national address dataset delivers multiple benefits and should not require additional public funding of the bodies currently tasked with delivering address data solutions. The public bodies, funded to collect, collate and deliver this core-reference data, should stop viewing national addresses and postcodes as a source of internal revenue. Their role is to do what is right for society and, with the governments backing, make an open national address dataset available to all, under an Open Government Licence.