Ofcom PAF Consultation Questions – response from Dotted Eyes Limited

Question 3.1: We welcome views from stakeholders on whether the setting of quality targets for PAF would be constructive. If so, would stakeholders find the publication of achievement against those targets helpful? Please state why.

The concept of PAF as a file of "complete" addresses is now something of an anachronism. Our view is that the number of fields should be reduced substantially. We would then expect there to be a clear tolerance band for any aspects of PAF which are incomplete or inaccurate. The information on those quality targets and actual performance against them, together with other relevant metadata such as the update cycle, should be published. The main reason is that this would help to establish confidence in the data set.

The consultation document (paragraph 3.1) points out that PAF is defined as the collection of 'relevant information' defined as 'postcodes in the United Kingdom which may be used to facilitate the identification of delivery points for the purpose of providing postal services'. It also states (paragraph 3.2) that: In its 2007 review, Postcomm interpreted 'postcodes' as both the familiar alpha numeric codes themselves plus the additional pieces of information that are needed to give those codes meaning: elements such as delivery point suffixes and the unique delivery point reference number ('UDPRN'), thereby enabling them to identify delivery points.

We do not agree that all the elements listed in Annex 5 need to fall within the scope of PAF. We would expect that a delivery point, and therefore UDPRN, can uniquely be identified from the combination of postcode with building number or name (including sub-name where necessary). The common experience of 'rapid addressing' when giving one's own address over the phone or online would appear to confirm this. Table I below sets out our views on the required scope.

Fields currently in PAF	Our views as to whether each one should be in PAF
Organisation name	No; this is admittedly not kept up to date effectively in PAF
PO Box	Yes
Sub Building Name	Yes
Building Name	Yes
Building Number	Yes
Dependent Thoroughfare	No; this duplicates similar information in the NSG / NLPG
Thoroughfare	No; this duplicates similar information in the NSG / NLPG
Dependent Locality	No; postcode and building should be sufficient for the UDPRN
Double Dependent Locality	No; postcode and building should be sufficient for the UDPRN
Post Town	No; postcode and building should be sufficient for the UDPRN
Postcode	Yes
Address/Organisation Keys	Yes
Alias Data	No; this duplicates similar information in the NSG / NLPG
Welsh Alternative	No; this duplicates similar information in the NSG / NLPG
UDPRN	Yes

Table I

Some background is necessary to set the scene and explain our proposals in context.

First assembled in the days of mainframe computers and rigid, structured databases, PAF was a very welcome first attempt at creating a national core reference data set of addresses covering the UK. In 1987 the report of the Committee on Handling Geographic Information, chaired by Lord Chorley, recommended that in future a look-up from postcode to location could provide a convenient, though approximate, means of geographically referencing the vast amount of business information that includes an address.

Between 1993 and 1996 Ordnance Survey progressively matched PAF records to its large-scale topographic maps of Great Britain (then marketed as Land-Line) in order to add location coordinates to each delivery point record in a product called ADDRESS-POINT. From 1997 a new product called Code-Point extracted the 'average' location coordinates for each postcode, snapping them to those of the nearest delivery point, which finally delivered the look-up capability that had been recommended a decade earlier.

Inadequacies in the specification and quality of PAF and the geographical products based on it had already become apparent for users outside Royal Mail when in 1994 BS7666 Part 3 was prepared by the Address Standard Working Party on behalf of the LGA Geographic Information Steering Group. This set out a more complete and rigorous approach to the capture and management of addresses. Its vision was to assemble a National Land and Property Gazetteer (NLPG) covering Great Britain from a complete set of Local Land and Property Gazetteers, in which each Basic Land and Property Unit (BLPU) would have a persistent Unique Property Reference Number. The NLPG was to be built on the foundation of the National Street Gazetteer (NSG), maintained by the local highways authorities.

This initiative marked the start of the 'address wars' between local authorities and Ordnance Survey, whose address products were based on PAF. For many years, public sector resources were wasted in running two 'competing' national address systems in parallel. For a few years from 2002, Project Acacia attempted to bridge the divide, but was ultimately unsuccessful. It was not until 2011 that Ordnance Survey and local authority community were able to bury the hatchet and create a joint venture business – Geoplace LLP – which acquired Intelligent Addressing, the private sector concessionaire of the NLPG hub.

Since then Ordnance Survey has marketed the products of Geoplace under the name AddressBase. The product with the most complete specification, AddressBase Premium, contains both the full NLPG and also the whole of PAF. The first point to note is that there are substantially more addresses in the NLPG than in PAF, but because only Royal Mail can define whether a particular address should count as a delivery point it is not possible to assess to what extent PAF is **incomplete**.

The second point is that AddressBase makes it simple to compare the PAF address for each delivery point with its equivalent in the NLPG. There are often clear differences, amongst other areas, in spelling and punctuation (apostrophes, abbreviations, etc.) and in the presentation of ranges of building numbers (such as 67-71 Northwood Street). The Public Health Act 1925 in Sections 17, 18 and 19 gives every local highways authority the responsibility of approving all new street names and changes to street names, so where PAF does not agree with the local authorities' own records it must be suspected as **inaccurate**.

The emergence of AddressBase as a single, definitive list of addresses was a huge breakthrough, though its supply chain is still highly inefficient and wasteful. Figure I below only hints at the multiple interactions between the various parties currently involved in exchanging batches of change information on a daily basis.

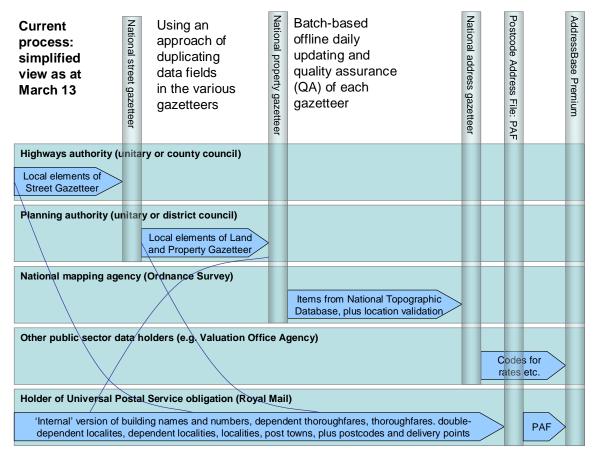


Figure I

This diagram illustrates that much of the effort of collecting information for PAF in its present form duplicates work done by others who have the relevant statutory responsibility. This supports our views on the limited elements that PAF should contain, as expressed in Table I.

In 2010 a slightly simplified version of Code-Point was released free at the point of use as Code-Point Open as part of the OS OpenData portfolio. This has led to rapid growth in its use as an approximate look-up for location, particularly in online applications. Unfortunately this may lead to conclusions that are misleading or wrong – for example not all of the 17 or so buildings in any one postcode will necessarily lie in the same parliamentary constituency, so to find the local MP it is necessary to use the full address as the location key. That is why we consider a full national address list to be such a vital core reference dataset which should be available free of charge.

Question 6.1: Do stakeholders agree with our analysis of the options for cost recovery against the principles of cost causation, and our proposal on cost recovery? Please give reasons for your response.

Our view is that the costs currently incurred in collecting and distributing address data sets, including PAF, are outrageously high. This activity is at least partly funded by taxpayers, in view of the announcement this month that BIS will "make a single, central payment to Royal Mail that will cover... public sector organisations' use".

We do not agree that the relatively modest adjustments to the cost recovery envisaged in the consultation are the only options, or the most appropriate. The main reason is that we strongly believe the whole business process should be radically re-engineered to reduce dramatically the

costs of collection. If there were no revenue at all from the resulting data sets, the total costs involved could well be met by the same (undisclosed) amount of BIS funding mentioned above.

We understand that there are about 80 staff in the Address Management Unit, and that a significant proportion of the operating cost of Royal Mail's delivery staff is also allocated to PAF, though the exact amount has unfortunately been redacted from the consultation document. In addition there are about 35 staff in Geoplace LLP, as well as an Ordnance Survey product management team of perhaps 4 people for AddressBase. If each of about 400 local authorities in Great Britain devotes on average half the time of an LLPG custodian to address capture, that would account for a further 200 full-time equivalent staff.

So well over 300 people are engaged at present in the process of address maintenance illustrated in Figure I, from organisations which are either in the public sector or government-owned.

What is the alternative? Figure II below shows how a complete national address register could be simply maintained if all the organisations responsible for specific elements of the address simply edited their own published online data sets, online in real time.

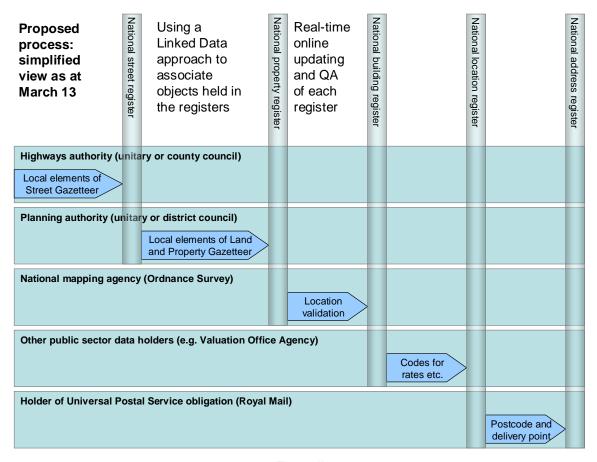


Figure II

Subsequent address elements would not duplicate existing elements, but link to them using the Linked Data principles of the semantic web – www.w3.org/standards/semanticweb/data. For example the object for property number 23 would be linked to the object for High Street. The postcode and UDPRN from the simplified PAF we envisage would then simply be linked to all the other address objects in a chain, in order to complete the national address register.

Only a modest investment would be required to set up the online platform. Its functionality need be no more sophisticated than, for example, that of data.gov.uk or OpenStreetMap.

Question 7.1: Do stakeholders agree with our proposed approach to the terms on which PAF is made available, and our guidance on those terms? Please give reasons for your response.

We agree with the analysis in the consultation report (paragraphs 5.13 to 5.22) of the complexities of the current PAF licensing model. However we do not agree with the extent of simplification envisaged, as we consider that it does not go nearly far enough.

The reason is that a major contributor to the re-engineering and cost reduction we propose would be that all the address elements should be free to use and re-use, published under the Open Government Licence mentioned in the consultation document (paragraphs 7.8 and 7.9). This would completely eliminate the costs of preparing, administering and managing compliance with the existing complex licence agreements.

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