

Address List Development Update

Introduction

AG (06) 03

1. This paper outlines the approach that ONS is taking to the selection and development of address sources for the 2011 Census. The paper is provided for information, to give advisory groups an update on the current position.

Action for Advisory Groups

2. The paper is for information only, but questions and comments will be welcome at the meeting.

Background

- 3. A comprehensive address register is fundamental to the success of the 2011 Census. Current initiatives to create a National Spatial Addressing Infrastructure appear to have stalled. Planning for the next Census is therefore based around the assumption that no single national source for addresses will be available. ONS is currently assessing Ordnance Survey's MasterMap Address Layer 2 and the National Land and Property Gazetteer (NLPG) as potential sources to support the 2011 Census.
- 4. The assessment of national spatial address products against their ability to support the Census is a long-term exercise. ONS plans to make a final decision about which address sources to use in May 2008. This will allow Census planners to go into a 2009 Dress Rehearsal with settled systems that they can take forward to 2011. In the interim one product will be used operationally to support the 2007 Test. The choice of this product will be made in May 2006 but will not necessarily be significant to the longer-term decision. The two major products mentioned above will both be used to support activities in the field designed to improve address information.

Current activity

- 5. ONS is currently engaged in four major streams of activity associated with addressing:
 - ONS Geography has begun to assess national spatial address products against the Census requirement matrix in Annex A.
 - ONS Census has agreed a process through which Local Authorities will be actively engaged in the quality assurance of addresses for the 2007 Test with a view to building on this for 2011.

- ONS Census is investigating the use of other sources of information to accurately categorise addresses in order to distinguish residential properties and identify communal establishments.
- ONS Census is carrying out a series of small scale tests to determine the most effective way of using field staff to increase the quality of address information

Assessment of products

- 6. Phase 1 of ONS Geography's assessment of address products began in **November 2005** with a comparison of an alpha release of Ordnance Survey's MasterMap Address Layer 2 for Manchester and National Land and Property Gazetteer (NLPG) data for the same area. The initial investigation has now ended and the results have been shared with the data providers.
- 7. Phase 2 of the assessment will focus on the 5 Test Local Authorities and will again assess OS and NLPG data. Information gathered from the field during the Test will feed into the assessment. Results of this research will be shared with data providers and Local Authorities. **By the end of 2007** ONS will have a good understanding of the strengths and weaknesses of the address products in the test areas.
- 8. Phase 3 of the assessment will be driven by what ONS Census has found out in the Test and from discussions with Local Authorities. It is also likely that further enhancements to data sources will have been made. ONS may need to assess the affect of changes to the BS7666 address standard. Both address products may be enhanced by improved linking to other sources such as Valuation Office Agency Data. Detailed planning of phase 3 of the assessment will begin in **June 2007**.

Local Authority Liaison

- 9. ONS is committed to engaging Local Authorities in quality assurance of addresses and has outlined a realistic approach to:
 - identifying and isolating inconsistencies in address sources;
 - reconciling differences; and
 - ensuring that addresses remain consistent during the operation.
- 10. The following procedures will be assessed during the 2007 Test:
 - ONS will create counts of residential addresses from both the NLPG and the OS Address product by area in the five Test areas;
 - significant difference between the counts will be isolated to a lower level:
 - Postcode; (and possibly)
 - Building;
 - Local Authorities and ONS will jointly investigate discrepancies and agree on areas affected, but not matching at address level;

- Information will be passed on to Census field staff;
- ONS will target more intensive address checking procedures;
- Share results of address checking in order to identify areas for further checks closer to Census

Following the Test ONS and Local Authorities will jointly review these procedures and agree proposals for 2011.

Categorisation of addresses

- 11. As part of the Local Authority Liaison Action Plan, ONS will share its categorisation of addresses with Local Authorities. A significant part of this work will involve the identification of communal establishments. Identification of communal establishments is important for two main reasons:
 - the categorisation will determine the way in which an address is enumerated; and
 - categorisation of addresses as communal establishments has an impact on the number of addresses enumerated in an area.
- 12. To expand on the second point ONS needs to think about properties such as University Halls of Residence. In one address source these may be disaggregated to separate individual addresses while in another they may appear as a single aggregated address. ONS Census and Local Authorities need to agree how such properties should be counted.
- 13. The current plan is that ONS will send the information on communal establishments at the beginning of May 2006. Local Authorities will be asked to asses the information, suggest improvements, provide additional data and agree the final breakdown of establishments before the 2007 Test.

Field procedures

14. Fieldwork remains a significant factor in improving the address framework underpinning the Census. Current thinking on an address checking methodology is outlined in paper AG (06) 01 and needs to be seen as part of the overall commitment to address improvements.

Martin Ede 2011 Census, ONS April 2006

Annex A

Census Requirements for an address register

REQUIREMENT	WEIGHT	ASSESSMENT				STANDARD
		N	NLPG OSAI		SAI	
	В	A	Weighted	Α	Weighted	
	(%)	Score	Score	Score	Score	
		(1-100)	A*B/10	(1-100)	A*B/10	
1. COMPLETENESS						
1.1 Territorial Extent						
Suitable for use in Census as a framework for	2					Territorial extent of UK(<i>NB although delivery and collection will</i>
delivery, collection and coding of Census						be limited to England and Wales the coding of address responses will
questionnaires in England and Wales						require access to UK addresses)
1.2 Coverage						
All residential units and their postal address.	38					- high level of coverage (99.9%) of residential addresses
						- consistent coverage across all areas
All static non-permanent structures						- no duplication
- caravans						- no spurious entries
- houseboats						
- temporary buildings						
Locations for mobile non-permanent structures						
together with size						
- campsites						
- boat moorings						
- caravan sites						
- travellers sites						
- work camps						
- persons sleeping rough						
1.3 Building identification						
Association of addresses with buildings.	5					The ability to determine the building in which an address sits. This
						information is important in being able to isolate disparities in address
						information between adddress products and may also be useful in
						supporting enumeration procedures.
1.4 Area variation						
The ability to determine the degree of	5					An indicator of whether an address has been checked for multiple
confidence in address coverage by area.						occupation and how the check was carried out
2. KELEVANCE						
2.1 Address type	10					
Address type identified	10					99.9% accurate identification of following address types :
						• residential
						• business
						• mixed

2.2 Occupancy type		
Occupancy type identified	8	99.9% accurate identification of following address types :
		• private
		• communal
2.3 Occupancy status		
Occupancy status identified	1	90% accurate of identification of following occupancy status:
		• vacant
		occupied
2.4 Property status		
Property status identified	1	90% accurate of identification of following property status:
		• planned
		• existing
		• demolished
		derelict
2.5 Access to address or site		
Indicator of site and property access restriction	2	90% accurate identification of sites with controlled access
		gated communities
		military bases
		other restricted access sites
		buildings with controlled access
3. POSITIONAL ACCURACY		
3.1 Positional accuracy		
A high resolution grid reference including	2	99.9% of all surveyed residential addresses located within the correct
accurate grid reference for all business		building footprint
addresses.		90% of business addresses located with the correct building footprint
		An indicator of how the grid reference has been assigned having the
		following categories
		• unsurveyed new address
		• approximate reference applied
		• accurate reference assigned during survey
		<i>ND many business datesses are associated currently with a main</i>
A TIMELINESS		sorting office intolign 10 boxes and non-geographic posicodes
4.1 Currency of address		
On the ground changes undated rapidly	4	Changes to an address recorded in the data source within 1 month of
on the ground enanges updated rupidry	-	change on the ground
4.2 Currency with Census		
Releases timed to support Census timetable	2	2007 Test Areas available for use by June 2006
rr		2009 Test Areas available for use by June 2008
		Fully developed England and Wales version by June 2010
4.3 Availability		
Frequency of production	3	Updates available on customer-driven spot dates, such as Census day
.		Facility for electronic access

5. COMPARABILITY			
5.1 Data linkage			
Addresses can be linked to other sources to	4		Assigned Unique Property Reference Number (UPRN)
facilitate data linkage.			Assigned Ordnance Survey Address-Point reference (OSAPR)
			Assigned PAF address key
5.2 Historic data			
Ability to code historic addresses.	1		Data source contains historic addresses. (NB this requirement is
			associated with the need to code data sassociated with workplace
			and previous addresses that are no longer current)
5.3 Address format			
Addresses compliant with national standards	1		Addresses compliant with BS 7666 standard
			Compliant with government interoperability standards (e-GIF)
5.4 Business Addresses			
Consistent business names	1		Addresses matched to IDBR
5.5 Names and codes			
Names and codes to an acceptable standard	1		Names and codes to follow National Statistics standard names and
			codes
6. ACCESSIBILITY AND CLARITY			
6.1 Management & ownership			
Effectively managed	2		Maintained through a regular streamlined process
			Clear ownership and accountability
			Held centrally
			Address introduction and termination dates recorded
6.2 Quality assurance			
Effectively quality assured	3		Subject to constant quality assurance including
			 Assessment against local government sources
			 Assessment against central government sources
			Regular on the ground assessment
			Of a high reputation among key users
			Local Authorities
			Other local bodies
			• Government
			Academics
6.3 Welsh language			
Welsh addresses available in the welsh	1		Welsh language version of addresses located in Wales.
language			