

Advisory Group paper AG (08) 09 - Update on Design of Output Areas and Super Output Areas for 2011

1 Introduction

This paper discusses:

- a summary of the outcome from last year's consultation on Small Area Geographies;
- a draft high-level strategy for maintaining Output Areas (OAs) and Super Output Areas (SOAs) for 2011;
- plans for researching and assessing methods of maintaining OAs/SOAs for 2011.

Advisory Group members are asked to:

- note the plans for maintaining OAs/SOAs for 2011;
- provide views on the strategy for OAs/SOA maintenance for 2011.

2 OA/SOA Consultation - Summary of Results

2.1 The National Statistics Consultation on Small Area Geographies (England and Wales) ran for three months up to the end of February 2007. Its aim was to inform thinking on the future policy for small area geographies for National Statistics, and specifically the way forward on the use of OAs and SOAs.

2.2 243 completed questionnaires were collected, as well as 40 direct comments on specific aspects of the proposed policy and a further 65 comments from an online 'blog'. The consultation was considered by ONS to be successful, due to the amount and quality of the responses.

Need for Stability

2.3 There was strong and clear demand for stability at the SOA level, although this was less clear at the OA level. While some asked that OAs should reflect 'reality' at the time of the 2011 Census, just as many argued for no change. Overall the case was not made for significant change to OAs.

Boundaries

There was support:

- 2.4 (strongly) for OA and SOA boundaries to continue to be freely available, and licencing kept simple for sharing and distribution.
- 2.5 for a common boundary between England and Scotland.

- 2.6 for a set of boundaries to mean-high-water, to better represent a more recognisable coastline, as well as those extending to the extent of the realm, as for 2001
- 2.7 (less strongly) to improve the alignment of boundaries to real world features.

Other Issues

There was

- some support for separating large communal establishments from households,
- a little support for constructing business or workplace OAs, and for incorporating 'empty' OAs, containing only land without population, and
- very little support for creating a set of Upper layer of SOAs.

3 Draft Strategy for OA/SOAs for 2011

Informed by the consultation exercise the strategy for 2011 is:

- 3.1 Retain a high degree of stability at both the OA and SOA level.
 - no change will be made to existing OA/SOAs before 2011
 - a set of OAs/SOAs very similar to those of 2001 will be the prime output geographies for 2011
 - where changes are made to 2001 OAs/SOAs, this will be to no more than 5% of the OAs, and may be significantly less than 5%.
- 3.2 Minimal changes will be made to take account of significant population changes to OA/SOAs since 2001.
 - where population increases significantly above the upper thresholds for population/household size the OAs will be split;
 - where population declines to below the lower threshold for population/household size the OA will merge with the most appropriate adjacent OA;
 - changes to the Lower layer SOAs will be similarly minimised;
 - changes to Middle layer SOAs will only be made in exceptional circumstances.
- 3.3 Assess methods of merging/splitting OAs/SOAs and of aligning OA boundaries to real life features
 - consider rules for merging/splitting;
 - consider how upper and lower thresholds affect the levels of change needed;
 - consider how effective the alignment of OAs/SOAs to real life features is. This will also take account of the Ordnance Survey licencing costs of implementing any realignment.
- 3.4 Secure similar licencing arrangements to 2001 for sharing and distributing OA/SOA boundaries created for 2011, and to secure licencing arrangements for commercial use of OA/SOA boundaries

- 3.5 Investigate options for extending the central registry of local names for SOAs
- for local authorities who wish to supply names, ONS would maintain a central downloadable list
 - the names would be to a standard format
 - ONS would not accredit, validate or recommend the SOA names provided.
- 3.6 Retain the titles 'Lower' and 'Middle' SOAs
- 3.7 Try to align the Scottish and English OAs at the border.
- 3.8 Provide mean-high-water boundaries so that familiar coastlines are displayed.

The following have been ruled out for the time being:

- constructing a set of Upper layer SOAs
- creating a set of 'empty' OAs for land without population

No decision has been made on:

- the creation of business or workplace OAs: a business case and funding would be required;
- separating communal establishments from households: views from the consultation will feed into thinking on disclosure and outputs.

4. Assessing methods for maintaining OAs/SOAs for 2011

- 4.1 A growing trend for people to live in smaller family or single occupancy units, and Government policies to create more and affordable housing has increased the number of households and population in many areas. Recent work in ONS indicates that, if current trends were to continue, by 2011 approximately 5% of OAs, 0.7% of LSOAs, and 0.4% of MSOAs would be above the 2001 thresholds set ¹, and may also challenge their homogeneity. Locally, the percentages can be much higher resulting in a significant impact in specific areas.
- 4.2 There were lower percentages of zones falling below-threshold ². Where this occurs, it can be temporary, e.g. demolition prior to new development, or permanent, e.g. dwindling rural communities. Temporary below-threshold instances put uncertainty into the design process as decisions taken on the basis of being below-threshold will soon be overtaken once the new developments are in place.

¹ >250 dwellings for OAs; >1200 dwellings for LSOAs; and >6000 dwellings for MSOAs

² <40 dwellings for OAs, <400 dwellings for LSOAs and <2000 dwellings for MSOAs

- 4.3 ONS is supporting ESRC funded work by Southampton University on evaluating automated zone design methods for maintaining OAs and SOAs for 2011. This work is due to run from June 2008 to May 2009. Samantha Cockings and Prof David Martin will lead this work, liaising with staff in ONS Census, Geography, and Methodology. The work will inform and support decisions on output geography for 2011.
- 4.4 The main aim of the work is to create automated procedures for splitting, merging or re-designing 2001 output geographies, in order to create the 2011 output geographies.
- 4.5 A review of upper and lower threshold values will clearly affect the amount of areas that need to be maintained. Where areas need to be split then there are other design considerations, such as the building blocks used to construct the areas. The research aims to consider whether street blocks, as well as postcodes, could be used in the maintenance procedures.
- 4.6 The work will be guided by a Project Advisory Group, informed by the results of the user consultation exercise. Results from the study will be published in relevant peer-reviewed journals, and at key Census, population and methodological conferences.
- 4.7 Results will inform the Census policy for maintaining output geographies in 2011. It is intended that algorithms from the research will be adapted to run against 2009 Rehearsal data.