



**2011 Census Output Geography Consultation
(England and Wales)**

Report and Recommendations

December 2010

Contents

Executive summary	3
Summary of conclusions	5
Background	6
1.0 Introduction	6
2.0 Background – Output Areas and Super Output Areas	7
3.0 Background - 2011 Census Output Geography Consultation	8
Consultation	9
4.0 Responses to the consultation	9
5.0 Workplace Zones	10
6.0 Upper layer Super Output Areas	12
7.0 Badly performing OAs and SOAs	15
8.0 2011 Census Output Geography Policy	16
Appendix I – 2011 Census Output geography questionnaire	20
Appendix II – 2011 Census Geography Policy - summary	27
Appendix III – List of accepted OA/SOA submissions	28
Appendix IV – List of respondents to the consultation	32

Executive summary

- 1.1 This report details the responses to the 2011 Census Output Geography Consultation which ran from 14 December 2009 through to 26 March 2010.
- 1.2 A total of 78 responses to the consultation were submitted with the views of 129 organisations represented. A complete list of the organisations which responded to the consultation can be found in Appendix III.
- 1.3 The purpose of the consultation was to determine user requirements, in three unresolved areas of the 2011 Census Output Geography Policy, and to gauge general response to the current version of the policy.

Workplace Zones

- 1.4 **A new geography - 'Workplace Zones' - specifically for the publication of workplace statistics will be developed as part of the 2011 Census.** The consultation identified strong support for the creation of a nested geography for the publication of workplace statistics. This differed from the response to the 2007 consultation, when users opposed having a separate workplace geography. The strong support now is for a workplace geography that nests within Output Areas.
- 1.5 **ONS will investigate the feasibility of using industry classification as a constraint for Workplace Zones.** A number of potential constraints for Workplace Zones were identified by users, of which the strongest supported was industry type. Work to identify whether industry can be used as a constraint will be done as part of the feasibility and testing undertaken by University of Southampton.
- 1.6 **ONS will investigate the feasibility of releasing age, gender, qualification, industry, travel to work and occupation statistics on Workplace Zones subject to disclosure control.** Users have requested a wide range of tabular outputs to be released on Workplace Zones. ONS will accommodate as many of these outputs as disclosure control will allow.

Upper Super Output Areas

- 1.7 **An Upper Super Output Area (USOA) layer will not be created as part of the 2011 Census geography outputs.** There was insufficient demand for the creation of a USOA layer, with few users having a strong opinion on the geography.
- 1.8 **Users already have the ability to aggregate Middle Super Output Areas (MSOAs) into a higher geography to meet local requirements should they desire. ONS will not hold these centrally however, as they would not be consistent with the OAs, LSOAs and MSOAs that have been designed to a different methodology.** Although support for a USOA layer was insufficient to warrant its creation, there was stronger support that any USOA layer that may be created should be done by local government, rather than centrally by ONS (as has been done with OAs, LSOAs and MSOAs). This would allow users to aggregate a geography which would meet local requirements. This can currently be done anyway, but ONS would not hold these centrally and publish them as they would be inconsistent with the OA, LSOA and MSOA layers.

‘Badly performing’ OA/SOAs

- 1.9 A total of 973 OA/SOAs were submitted as not being ‘fit for purpose’ when they were created in 2001.
- 1.10 Of those only 181 met the criteria of not being socially homogenous when they were created in 2001.
- 1.11 These will be redesigned where feasible.

2011 Census Output Geography Policy

- 1.12 There is strong demand from some users for the release of exact estimates at ward level, rather than estimates best-fitted from OAs in line with National Statistics policy. ONS’s position is that it is minded to produce estimates at ward level on a best-fit basis only. The decision on whether exact estimates for wards will be published will be a decision for the ONS Statistical Policy Committee, with the requirements of the NS policy, user responses to the 2011 Geography consultation, and research into the differences between best-fit and exact estimates in those wards/divisions affected by boundary change since 2003.

Summary of conclusions

- C1** A new geography, Workplace Zones, specifically for the publication of workplace statistics will be developed as part of the 2011 Census.
- C2** ONS will investigate the feasibility of using industry classification as a constraint for Workplace Zones.
- C3** ONS will investigate the feasibility of releasing age, gender, qualification, industry, travel to work and occupation statistics on Workplace Zones, subject to disclosure control.
- C4** An Upper Super Output Area (USOA) layer will not be created as part of the 2011 Census geography outputs.
- C5** Users already have the ability to aggregate Middle Super Output Areas (MSOAs) into a higher geography to meet local requirements should they desire. ONS will not hold these centrally however, as they would not be comparable with OAs, LSOAs and MSOAs, having been designed to a different methodology.
- C6** ONS is minded to produce ward level data solely on a best fit basis, and to align with the Geography Policy for National Statistics. However, ONS will make a final decision following the 2011 Outputs and Geography consultations, and the outcome of research into the differences between best-fit and exact estimates in those ward/divisions affected by boundary change since 2003.

Background

1.0 Introduction

- 1.1 The 2001 Census produced a set of geographies specifically for the purpose of publishing statistical data. These Output Areas were built around a target number of populations and households, so that they had roughly similar sized populations. For the 2011 Census, it is anticipated that a number of these Output Areas will have significantly changed their populations since 2001, so a policy was required to manage the maintenance of the Output Areas.
- 1.2 In 2007, ONS ran a consultation to inform a policy for the 2011 Census output geographies. A report and recommendations from this consultation were published in September 2007, along with the proposed policy. The recommendations from this consultation formed the basis for the 2011 Census output geography policy, which can be found in Appendix II.
- 1.3 There were a number of questions within the 2007 consultation which did not provide conclusive responses from users. The 2010 consultation was therefore run to try to resolve some of the outstanding policy decisions.

2.0 Background – Output Areas and Super Output Areas

Output Areas

- 2.1 Output Areas (OAs) were created for the 2001 Census specifically for the output of census statistics. They were created from 2001 census data using an automated process. For England and Wales, 175,434 OAs were created. Scotland and Northern Ireland created their own set of OAs, using similar methods.
- 2.2 OAs were designed to:
- i. Be a stable geography that would not change, allowing better comparison of statistics over time and between censuses
 - ii. Have roughly similar sized populations
 - iii. Serve as a non-disclosive unit for the output of statistics
 - iv. Be used as a building block that can be used to build statistics for any higher level output geography
 - v. Align with local authority, ward and parish boundaries current at the time the OAs were created in 2003
 - vi. Be produced using postcodes as a building block rather than topographic features
 - vii. Where possible, to have boundaries that geographically coincide with road centrelines
 - viii. Contain roughly socially homogeneous populations

Super Output Areas

- 2.3 In 2004, using the modified OA algorithm, OAs were grouped together to form higher level tiers for statistical reporting known as Super Output Areas (SOAs). These tiers, known as SOA layers, were designed to support Neighbourhood Statistics. These would allow statistics to be disseminated at the lowest reporting level in the hierarchy that would not risk disclosure. A lower and middle layer of SOA were produced, although a planned upper layer was not produced due to lack of demand. Local agencies were given an opportunity to comment on the design of the MSOAs.
- 2.4 Like the OAs from which SOAs were aggregated, they were designed to:
- i. Be a stable geography for comparing statistics over time
 - ii. Have roughly similar sized populations
 - iii. Have national (England and Wales) coverage
 - iv. Provide producers of statistics with a standard hierarchy for the reporting of statistics
 - v. Be used as building blocks to build statistics for higher level output geography
- 2.5 Lower layer SOAs aligned to wards, while middle layer SOAs aligned to local authorities, current at the time the OAs were created in 2003.
- 2.6 OAs and SOAs have generally been very successful, and are now widely used to create and disseminate social and demographic statistics. Their usefulness was improved by their being freely available for non-commercial use, and by their status as a stable statistical geography which would not be subject to change.

3.0 Background - 2011 Census Output Geography Consultation

- 3.1 The 2011 Census Output Geography Consultation ran from 14 December 2009 to 26 March 2010.
- 3.2 The consultation was designed to inform users of the proposed policy for the 2011 Census, gauge general opinion of the policy in its current form and request detail of user requirements for three aspects of the policy which had not yet been resolved. Any views expressed through the consultation have then informed the final policy for 2011 Census Geography which is outlined in section 9 of this document.
- 3.3 The three remaining aspects of 2011 Census Output Geography Policy that were consulted on were:
- i. The requirement for a new nested geography that will better support the reporting of statistics relating to the workplace;
 - ii. The requirement for an upper layer of Super Output Areas (USOAs);
 - iii. Asking users for exceptional instances of current Output Areas (OAs) and Super Output Areas (SOAs) where it is felt they are unfit for purpose as a statistical geography. [This consultation often refers to SOAs, Lower Super Output Areas (LSOAs), Middle Super Output Areas (MSOAs) and Upper Level Super Output Areas. Where LSOAs, MSOAs or USOAs are referenced, this refers to the specific level of the SOA hierarchy but any reference to SOAs is a reference to the hierarchy as a whole, as designed for 2001].
- 3.4 The paper also set out the full 2011 Census Output Geography Policy.
- 3.5 The full consultation questionnaire can be found in Appendix I of this document on page 23.
- 3.6 The full consultation paper can be found here:

<http://www.ons.gov.uk/census/2011-census/consultations/open-consultations/census-output-geography-consultation/outputs-geography.doc>

Consultation

4.0 Responses to the consultation

4.1 The consultation ran from 14 December 2009 to 26 March 2010. The consultation was widely and actively publicised through Census Liaison Officers, the Association for Geographic Information (AGI), Intra-governmental Group on Geographic Information (IGGI), Neighbourhood Statistics Service (NeSS), Market Research Society Census and Geodemographics Group (MRSCG, Association of Census Distributors, Local Authorities Research and Intelligence Association (LARIA) and Demographics User Group (DUG).

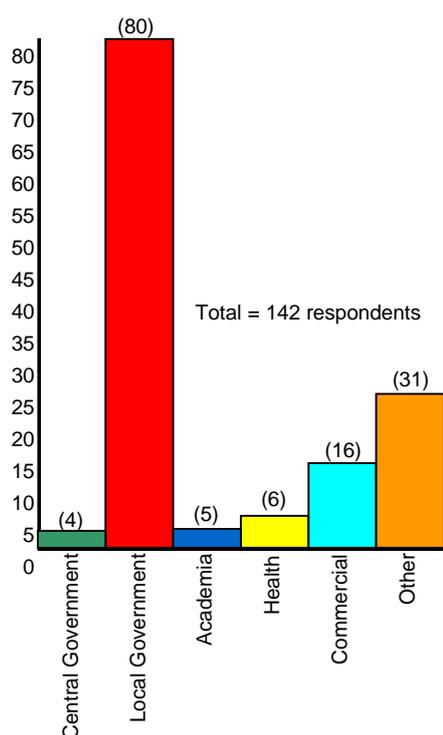


Figure 1 – number of respondents to the consultation by sector

- 4.2 A total of 97 complete consultation responses were received representing the views of 142 different organisations, and the breakdown is outlined in Figure 1 above. The responses were dominated by 80 (56 per cent) from local government, which matches the consultation response to the 2007 small area geography policy consultation.
- 4.3 The commercial sector also provided a strong response to the consultation both through individual organisations, and through the Demographics User Group.
- 4.4 In the analysis of the data, no responses to the consultation have been given weighting. However, where a group has responded on behalf of a number of organisations, each of those organisations have been counted as one response to ensure that the views and requirements of these organisations are not disadvantaged by the decision to respond through a single representative.
- 4.5 A complete list of the respondents to the consultations can be found in Annex III.

5.0 Workplace Zones

5.1 The analysis for this section is focussed primarily on the responses to question 1 and the requirements for Workplace Zones.

Q1.1 There would be value in establishing a small area geography, by splitting and merging existing OAs, for reporting workplace data.

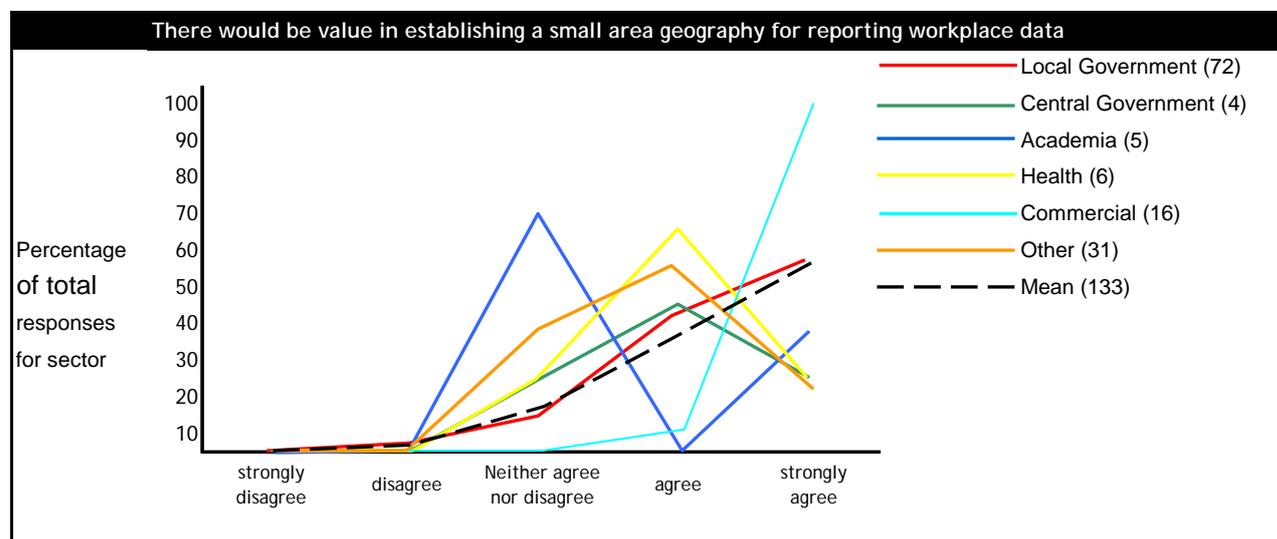


Figure 2 – Percentage of support for a workplace geography by sector

The proposal to produce a new nested geography (Workplace Zones) for the dissemination of business statistics was strongly supported, and generated the most response in the consultation (93 per cent).

In total, 83 per cent of respondents either strongly or moderately supported the adoption of Workplace Zones as a new geography. This compared to just 1 per cent who strongly or moderately disagreed with the proposal.

“Such a geography would allow us to develop a greater understanding of businesses and the people who work in these areas” – Blackburn with Darwen Borough Council.

“(a) separate workplace geography would improve the quality of the census data and make it easier to use and interpret” – Ceredigion County Council

“Workplace zones are of great value to commercial users” – Demographics User Group

C1 A new geography specifically for the publication of workplace statistics will be developed as part of the 2011 Census.

Q1.2 Are there any other factors (such as the industry classification of the workplace) that should be included in the design of a workplace geography?

A total of six different constraints were suggested for the creation of Workplace Zones. These were occupation, industry classification, land use,

town and country planning use classification, qualification and transport hubs. Of these industry classification was the most supported constraint representing 79 per cent of all responses to this question.

C2 Investigate the feasibility of using industry classification as a constraint for Workplace Zones.

Q1.3 On what variables (age, gender, qualification level, etc.) should a workplace geography report on?

A total of 17 variables were suggested for publishing on Workplace Zones and these are included in the table below. Of these the most supported were age, gender, qualification, industry, travel to work and occupation. ONS will attempt to release as much data as possible on Workplace Zones but the most supported outputs here will be considered a priority in Workplace Zone design.

C3 Investigate the feasibility of releasing age, gender, qualification, industry, travel to work and occupation statistics on Workplace Zones, subject to disclosure control.

Variable	Submissions	% of total submissions
Qualification	47	15%
Gender	51	16%
Age	51	16%
Industry	36	11%
Occupation	32	10%
Tenure	4	1%
Travel to work	35	11%
Ethnicity	23	7%
Language	3	1%
Full/part time	14	4%
Hrs worked	6	2%
NS-SEC	11	3%
Health status	6	2%
Deprivation	2	1%
No. of vehicles	3	1%
Country of birth	1	1%
Citizenship	1	1%

Table 1 – Variables suggested for publication on Workplace Zones

Q 1.4 Please list any factors that you feel may define the success or failure of a geography for workplace statistics.

53 per cent of users responded to this question.

There were a number of criteria which a majority of users felt would indicate that a workplace geography had been successful. Some of these were quite clear such as the geography being adopted by a wider range of users, and that they could be used to identify differing characteristics in the workforce of areas. There were however, some conflicting responses with some users having a no requirement for detail, as long as the geographies are kept small.

Other users, however, felt that detailed outputs were important, and would rather have large detailed geographies, than small generalised ones.

All suggestions of what would make the geography successful will be considered by ONS, in the design of Workplace Zones.

Q 1.5 Please list any additional requirements you may have for a workplace geography.

As this question was an opportunity for users to raise any issues which they could not address with any of the previous questions, this question had the lowest response rate (39 per cent).

Generally users used this opportunity to reiterate requirements which they had already identified within the previous questions. However there were some additional issues which consistently came out of this question for ONS to consider.

Should ONS produce Workplace Zones on 2001 data for comparability?

This is something that ONS has considered, and 2001 data will be used for pilot areas. However it is felt that priority should be given to ensuring that the 2011 Workplace Zones have maximum value. There are no plans for 2001 Workplace Zones to be developed retrospectively.

Could Inter-departmental Business Register (IDBR) data be released on Workplace Zones?

In much the same way that the Neighbourhood Statistics Service has adopted the OA/SOA hierarchy for the release of non-census statistics, we would like to see the release of non-census workplace data on Workplace Zones. Equally Workplace Zones could become the stable statistical building brick for disseminating workplace statistics, to ensure their consistency and their comparability with other published workplace statistics. Business registers representatives from ONS currently sit on the Workplace Zone working group and are aware of the opportunities that Workplace Zones will provide.

6.0 Upper layer Super Output Areas

6.1 This section summarises the responses to question 2 on the requirement for an upper layer of SOAs.

Q2.1 There would be value in establishing a nationally agreed set of upper layer SOAs.

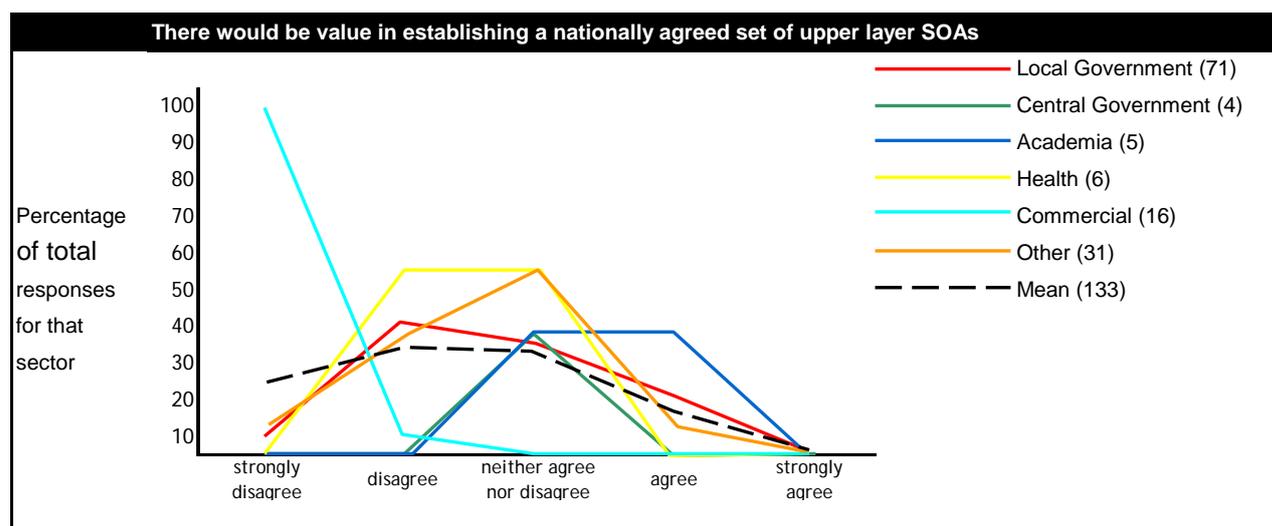


Figure 3 – Percentage of support for a national set of Upper Layer SOA by sector

There was no clear consensus on whether an upper layer of SOAs should be produced as an output of the 2011 Census. 93 per cent of consultation responses provided feedback on this question.

Thirteen per cent of users supported or strongly supported the introduction of USOAs, 50 per cent disagreed or strongly disagreed with the proposal and 29 per cent neither agreed nor disagreed with the proposal to create an upper layer of SOAs.

The strongest support came from academia (3.5 mean average response) although this is based on a low response rate for this sector.

Although the local government sector produced no clear consensus on USOAs (2.7 mean average response), it should be noted that there was very strong support from within the Welsh authorities who already have access to a USOA layer for Wales. This may demonstrate firstly that they continue to find an upper layer SOA a useful resource, but also that English authorities may find a similar resource useful.

“DfT has no need for upper layer SOAs” – Department for Transport

“This level of geography would be of more value in urban areas. We are more concerned about getting detailed information for small geographical areas” – Suffolk County Council

“They have been especially useful for analysing health data within areas” – Neath Port Talbot County Borough Council

C4 An upper Super Output Area (USOA) layer for England and Wales will not be created as part of the 2011 Census Geography Outputs.

Q2.2 There would be value in letting local authorities create their own upper layer SOAs to meet their own requirements.

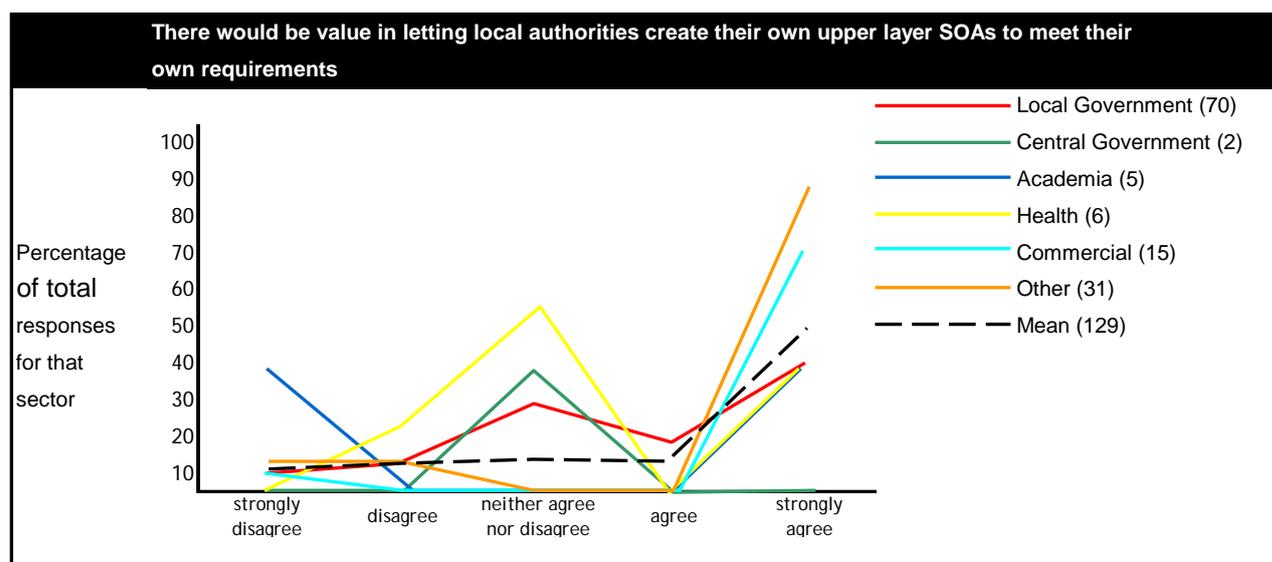


Figure 4 – Percentage of support for locally created upper layer SOAs by sector

This question produced a slightly lower response rate than the first question on USOAs (90 per cent). This difference is likely to be those users who answered that they disagreed that there was a requirement for an upper layer SOA, and so did not feel that they should/could respond to a question on how such a layer, if it were to exist, may be produced.

Of those users who did respond, there was strong support for creating an upper SOA layer locally and having it held centrally by ONS rather than using a similar methodology to that used to produce LSOAs and MSOAs (4.1 mean average score). The strongest support came from the commercial sector (4.7 mean average score). This is in line with the commercial sector strongly opposing a national set being created. All sectors felt that it was better to produce USOAs locally rather than centrally.

Users already have the ability to create USOAs to support local requirements should they wish by aggregating groups of MSOAs. This however would create inconsistencies between each local authority in the aggregation of MSOAs as well as between England and Wales where a centrally created USOA layer already exists. ONS would not therefore hold any locally created USOAs, as these inconsistencies would eliminate them from forming part of the OA hierarchy.

“Due to the inconsistency that would result from this method it would be preferable to create a set of USOAs nationally and consult with local authorities on their use” – Lancashire County Council

“If it is decided to implement this geography structure it would be beneficial if local authorities could define their own areas, subject to criteria” – South Gloucestershire Council

- C5 Users already have the ability to aggregate MSOAs into a higher geography to meet local requirements should they desire. ONS will not hold these centrally however, as they would not be comparable with OAs, LSOAs and MSOAs, having been designed to a different methodology.**

Q 2.3 If a national set of upper layer SOAs are produced, what considerations should ONS make when designing them?

This question had the lowest response of all the questions on USOAs, with just 54 per cent of organisations providing a response.

Most users felt that any USOA layer should relate to some other boundary with PCOs, the OA hierarchy and locally defined boundaries all suggested. If a USOA layer were created, it would certainly be constrained by the OA hierarchy (MSOA to LA) with the possibility of users defining their own to meet local requirements and identify community boundaries.

In addition it was also felt that producing consistently sized USOAs to a clearly identified methodology should be a consideration.

A number of Welsh authorities suggested that the methodology used to identify USOAs in Wales would be suitable for England and would allow comparability.

7.0 Badly performing OAs and SOAs

- 7.1 This section summarises responses to Section 3 of the questionnaire, asking for instances where users feel that OA/SOAs are unfit for purpose.
- 7.2 A total of 1096 OAs and SOAs which users felt were not fit for purpose when they were designed in 2001 were submitted for consideration for redesign.
- 7.3 Of those that were submitted, 723 (66 per cent) were OAs and 373 (34 per cent) were SOAs.
- 7.4 The grounds on which users submitted OAs/SOAs can be divided into five broad categories:
- lack of social homogeneity,
 - irregular design
 - split features (e.g. buildings or communities split across an OA boundary),
 - accessibility issues (e.g. communities within a single OA which have no direct access) and
 - population change during the intercensal period.
- 7.5 Of those OA/SOAs that were submitted, 120 OAs and 61 LSOAs were accepted as meeting the criteria set out in the consultation document. These OA/SOAs went on to be considered for redesign by an OA Review Panel.
- 7.6 Those OA/SOAs which were submitted to the consultation on the grounds that the OA/SOA was under counted during the 2001 Census, or that its population had significantly changed since 2001, may still be redesigned as part of the Output Area Maintenance procedures of the 2011 Census. Where the 2011 Census population is measured to have grown or decreased to such an extent that it has breached set upper or lower thresholds, the OA/SOAs will either be split (where they are over threshold and therefore too large a population for a small area consistent with other areas in the layer) or merged with a neighbouring OA/SOA (where they are under threshold and therefore potentially disclosive), to bring them back within threshold.

- 7.7 Those OA/SOAs which were submitted under the criteria that they were irregularly designed, or have split geographical features, will not be redesigned. The original OA methodology limited its use of real-world features for constraining the drawn OA boundaries to residential addresses, road centre lines and rail-lines. A requirement to constantly realign to changing boundaries and buildings would undermine the policy of stability for OAs, and make them less useful as statistical geographies. Additionally such alignment to real-world features would have made the boundaries significantly more expensive for users to licence their use.
- 7.8 The OA Review Panel comprised Ian Coady and Andy Tait from ONS Geography Policy, Joe Traynor from ONS Census Outputs, Dave Blythe from ONS Neighbourhood Statistics, Professor David Martin from the University of Southampton, Dr Gesche Schmid of the Local Government Association and Nick Holmes of the Local Government Data Unit – Wales. The Market Research Society Census and Geodemographics Group were invited to submit a member to the panel to represent the private sector.
- 7.9 A list of those OAs and SOAs that have been accepted by the OA Review Panel and will be considered for redesign is at Appendix III.

8.0 2011 Census Output Geography Policy

- 8.1 In total, 74 per cent of consultation returns commented on the 2011 Census Output Geography Policy.
- 8.2 Approximately half of respondents (48 per cent) fully supported the policy in its current form by explicitly stating support, or make no comment on the policy.

Of the other 52 per cent who chose to make a comment on the current state of the 2011 Census Output Geography Policy, there were three themes which continued to come up in responses:

- 8.2.1 Exact fit estimates are requested at ward/division level from the 2011 Census

“(we) would be interested to know whether any of the existing tables that will be produced at ward level, could also be produced at LSOA level” – NHS Warrington

“Current Ward/Electoral Division areas remain the key local small area geography for local authorities” – City and County of Swansea

Some users have requested “exact” estimates for electoral wards/divisions, as it is still such an important political and widely understood geography. These users have concerns that the best-fit estimates will not be accurate enough for their purposes, as they will comprise the estimates of the aggregated and indivisible OAs that are best-fitted to those wards. Instead, the users want each individual person and household to be allocated directly to the ward/division, not via its OA.

When OAs were created in 2003 from 2001 Census data they nested exactly within the ward/division and parish boundaries that existed at the time. Since then there have been many ward boundary changes which now split OAs.

The requirement for exact fit estimates does present problems as it does not align with the Geography Policy for National Statistics, which seeks to deliver consistency and comparability within all National Statistics, by always best-fitting statistics from OAs to higher geographies.

At the moment ONS is minded to provide only best-fit estimates for wards/divisions, in line with the Geography Policy for National Statistics. However, this will be determined by further research on the difference between best-fit and exact estimates where wards have been changed since 2003. It will also be informed by whether ONS or how ONS could practically provide exact estimates for affected wards without confusing users.

8.2.2 Keeping the OA/SOA hierarchy stable should be the priority for the 2011 Census

“The ACD believes that the goal should be consistency and minimal variability in small area geography as a whole” – Association of Census Distributors

“CURDS work would be severely affected if there is a weakening of the current stated policy of minimising change in OAs” – Centre for Urban and Regional Development Studies, Newcastle University

One of the main objectives for creating a geography specifically for publishing statistics is that it is not subject to the continuing boundary changes implemented for administrative and electoral boundaries. This requirement for stability has been reflected in a number of the policy elements, and the strong support for stability in the consultation responses supports the decision that ONS has made regarding the 2011 Census Output Geography Policy.

Where ONS has decided to redesign OAs/SOAs it is only when:

- they have undergone significant population change since 2001
- they have been split by local authority boundary change since 2003
- they have been independently assessed as lacking social homogeneity

In any case the level of redesign will be no more than 5 per cent of the total OA/SOA hierarchy, and could be significantly lower.

8.2.3 The algorithm used in 2001 to generate the building blocks produced irregular shapes which had little meaning at community level.

The algorithm used to generate building blocks in 2001 was built mainly around two constraints. Firstly the aggregation of postcode building blocks to a target population of around 125 households/300 persons, and secondly keeping these aggregations as socially homogenous as possible. The social homogeneity requirement has a weaker weighting, resulting in some instances where the OA/SOAs had poor social homogeneity. Instances of these were considered by the OA Review Panel.

Some users commented that they would like to see more alignment with real life features. OAs are designed to be stable statistical building blocks, and aligning OAs to real world features such as buildings and boundaries would make them subject to change on a scale which would undermine the key policy element of stability. Redesigning those OAs which were not socially

homogenous in 2001, should address some of the issues of OAs having meaning at community level, but they will not be redrawn just to respect buildings and boundaries, as this would make them unstable, as well as introducing potential problems with licensing and cost which would be passed on to users.

- 8.3 *“The failure to amend boundaries has led to some anomalies across Wales and highlights the need for ONS to not only have regard to statistical integrity but also have regard to what local authorities are telling them about on the ground characteristics and geography.” – Carmarthenshire County Council*

“Whilst it is appreciated that a stable geography has its benefits for comparing changes to areas over time, what it does is remove for many Census users the ability to identify with the geography of the area of output.” – Pembrokeshire County Council

“The 2007 consultation involving adjacent authority Pembrokeshire confirmed our view that the original OA methodology was flawed for rural areas...” – Ceredigion County Council

It is acknowledged that there were a number of responses from Welsh local authorities that reflected dissatisfaction with the composition of many Output Areas and Super Output Areas in rural areas. It is considered that many rural OA/SOAs contain large areas of empty land, bounded by a few disparate settlements with no social interaction between them. This issue was noted by Pembrokeshire and Cardiff during a pilot of the 2001 OA Production System algorithm, but a decision to proceed with the algorithm was taken based on several policy decisions.

Output Areas are not, and have never been, designed to reflect communities as they exist on the ground. This was part of a wider policy decision by ONS to support the stability of the geography, as communities are, by their nature subject to change in their social profile and geographic distribution. This would mean that if OA/SOAs were to represent communities, they would be subject to regular change to maintain this, and thus could not be considered a stable geography. The relationship between community and geography would also degrade during the inter-censal period, limiting their use as statistical geographies.

It is understood, that in rural areas, the requirement to apportion empty space to OA/SOAs, has the potential to create large geographies containing separate communities, but OA/SOAs were designed to provide consistent and comparable statistics both between geographies, and over time, and for this purpose the geography has been successful. It was also a design consideration to have an algorithm which could produce a consistent set of geographies across the whole of England and Wales, something that was done in 2001.

The requirement for local authority users to identify statistics for discrete rural settlements cannot be supported by ONS, as OAs are designed to prevent the identification of populations of less than 100 individuals. This policy decision is set by the Statistical Disclosure Control team, and supports the wider policy for National Statistics. OAs in rural areas will therefore need to consist of at least 40 households and 100 individuals, and contain any

surrounding hinterland to remove the possibility of empty OAs. This is the reason for the current OA methodology in rural areas.

- 8.4 In addition to these common themes, there were a number of individual responses relating to specific issues with the organisation responding. ONS has addressed every issue raised during the consultation as part of the consultation feedback following the publication of this report.

If any respondent feels that this is not the case please contact us. This can be done as follows:

1. You can email comments, titled *2011 Census Geography Consultation* to

CensusOutputConsultation@ons.gsi.gov.uk

2. You can post written responses to:

Census 2011 – Output Geography Consultation
Room 1300
Office for National Statistics (ONS)
Segensworth Road
Titchfield
Fareham
Hampshire PO15 5RR

3. You can discuss any aspect of the output geography consultation on:

Telephone: +44 (0) 1329 447897 (Ian Coady) or
+44 (0) 1329 444081 (Andy Tait)

Appendix I – 2011 Census Output geography questionnaire

Please note, all responses to the consultation will be made public.

When answering questions, please continue writing on a separate sheet where necessary.

A. About you

What is your name? _____

Which of the following best describes the organisation that you represent?

[please tick one box only]

No organisation (member of the public) → Go to question 1

Central government

Local government & partner organisations

Government statistical agency

Neighbourhood renewal

Academia

Commercial sector

Community group

Health sector

Other → Please specify

What is the name of your organisation? _____

Are you willing for ONS to contact you to explore your answers further?

2011 Census Output Geography Consultation – Report and Recommendations

Yes No

If yes: Telephone _____
Email _____
Address _____

B. Policy and Design

Please circle your response (1-5)

1. The Requirement for Workplace Zones

Please refer to the Topic Notes on page 21

- 1.1 There would be value in establishing a small area geography, by splitting and merging existing OAs, for reporting workplace data.

Disagree strongly -	1	2	3	4	5	- Agree strongly
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Please note any further comments including, if applicable, details of the benefits that such a geography would bring to you.

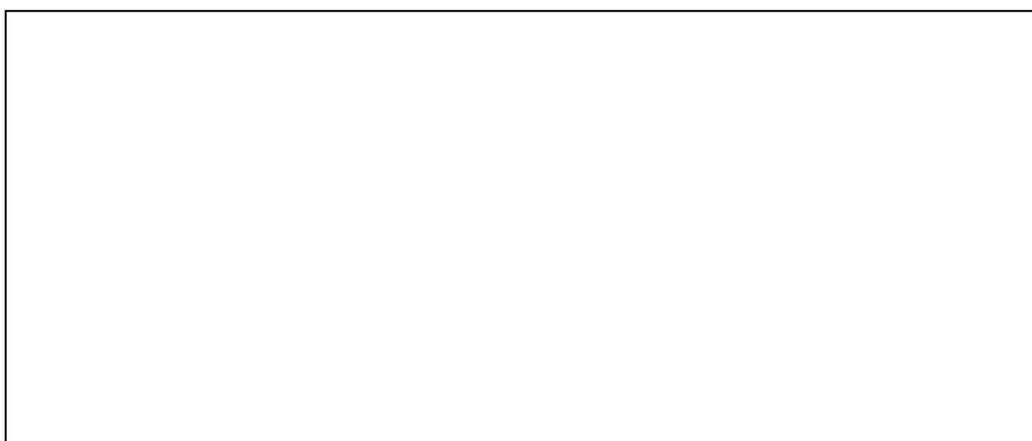
- 1.2 Are there any other factors (such as the industry classification of the workplace) that should be included in the design of a workplace geography?

- 1.3 On what variables (age, gender, qualification level, etc.) should a workplace geography report on? (details are included on page 21 of the Topic Notes)

- 1.4 Please list any factors that you feel may define the success or failure of a geography for workplace statistics.

A large, empty rectangular box with a thin black border, intended for the respondent to list factors defining the success or failure of a geography for workplace statistics.

- 1.5 Please list any additional requirements you may have for a workplace geography such as those listed on page 21.

A large, empty rectangular box with a thin black border, intended for the respondent to list additional requirements for a workplace geography.

2. The need for an Upper Layer Super Output Area

Please refer to the topic notes on page 22

- 2.1 There would be value in establishing a Nationally agreed set of Upper Layer SOAs.

Disagree strongly - 1 2 3 4 5 - Agree strongly

Please note any further comments including, if applicable, details of the benefits that a national set of Upper Layer SOAs would bring.

- 2.2 There would be value in letting local authorities create their own Upper Layer SOAs to meet their own requirements.

Disagree strongly - 1 2 3 4 5 - Agree strongly

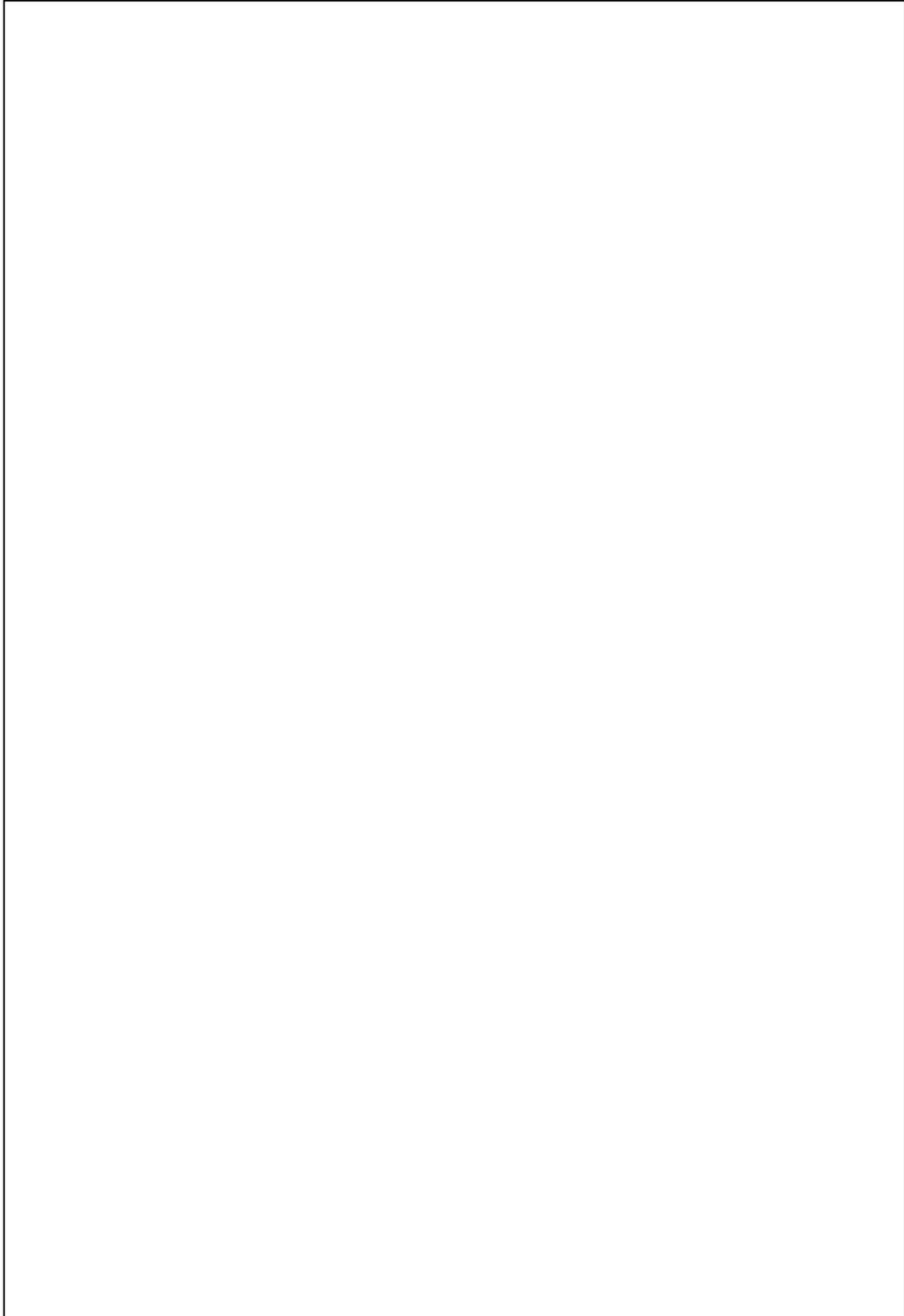
Please note any further comments.

- 2.3 If a national set of Upper Layer SOAs are produced, what considerations should ONS make when designing them?

3. Output Areas and Super Output Areas unfit for purpose

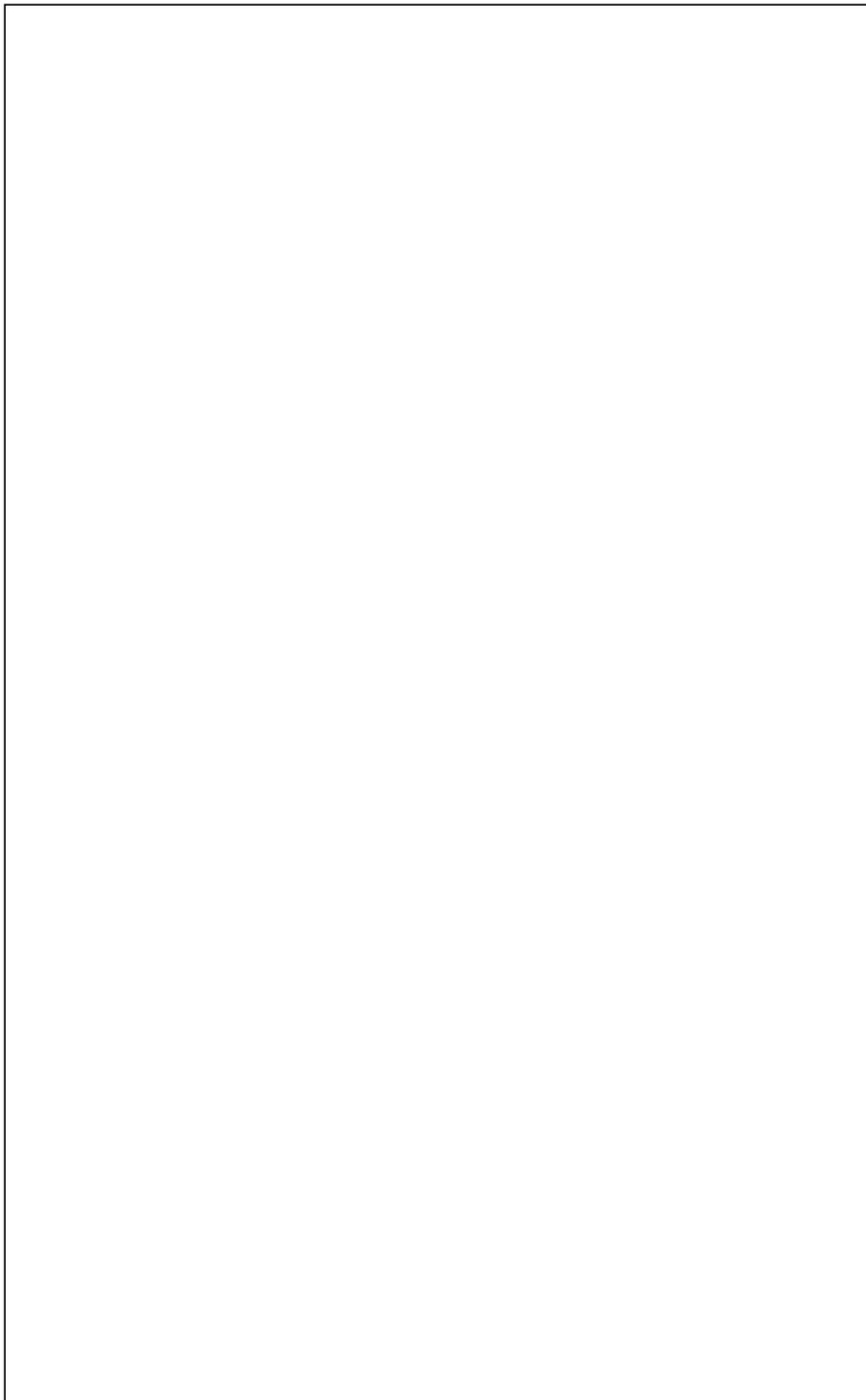
Please refer to the Topic Notes on page 23.

- 3.1 Please provide details of any OAs/SOAs that meet the criteria outlined within the Topic Notes for being a candidate for redesign. Please provide, as a minimum, the OA/SOA code together with an explanation of why the OA/SOA cannot currently be used, and what statistical benefits of realigning the boundary would produce. Accompanying maps [on a separate sheet] and further details that may support an application are invited.



4. ONS Census Output Geography Policy

- 4.1 Please comment on any other aspects of 2011 Census Output policies outlined in Section 3. You may also use this opportunity to ask questions. (on a separate sheet if necessary)

A large, empty rectangular box with a thin black border, intended for users to provide comments or ask questions regarding the 2011 Census Output policies.

Appendix II – 2011 Census Geography Policy - summary

1. **ONS will maintain the stability of the OA/SOA hierarchy between 2001 and 2011**

OAs/SOAs will be redesigned only where:

- 1.1 they have undergone significant population change since 2001
 - 1.2 they have been split by local authority boundary change since 2003
 - 1.3 they have been independently assessed as lacking social homogeneity
2. **Redesign of OAs/SOAs will be limited to the above circumstances and limited to maximum of 5% of the total OA/SOA hierarchy. These OAs/SOAs will be redesigned through splits and mergers of the current hierarchy, to support comparability between 2001 and 2011, and other national statistics**

Where OAs/SOAs are redesigned they will:

- 2.1 not align to ward and parish boundaries that have changed since 2003
 - 2.2 not align to real-world features
 - 2.3 not contain only a single large communal establishment
 - 2.4 not contain less than 100 persons and 40 households
3. **OAs/SOAs will align to local authority boundaries including those that have changed since 2003**
 4. **OAs/SOAs will align at the Scotland/England border**
 5. **OA/SOA boundaries will be available as Clipped to the Coastline, as well as to the Extent of the Realm**
 6. **All OAs/SOAs will have new 9 character codes in line with the coding and naming policy that forms part of the Geography Policy for National Statistics**
 7. **A new Workplace Zones geography, nesting within the OAs/SOAs hierarchy, will be developed as part of the 2011 Census**
 8. **An Upper Super Output Area (USOA) layer will not be created as part of the 2011 OA/SOA hierarchy**
 9. **Boundaries will remain freely available, subject to agreement with third parties**
 10. **Statistical tables and outputs from 2011 Census for OAs and SOAs (and local authorities which align with OAs/SOAs) will be exact estimates. Estimates at all other geographies above OA will be best fitted from OA, on geographies as were current on 31st December 2011, in line with the Geography Policy for National Statistics.**
[A final decision on also providing exact estimates for wards for 2011 Census outputs will be made following this consultation]

Appendix III – List of accepted OA/SOA submissions

OA Code	Hierarchy	Submission
00AEHA0002	OA	Brent Council
00BPFB0033	OA	Oldham Council
00BPFJ0001	OA	Oldham Council
00BPFK0001	OA	Oldham Council
00BPFK0002	OA	Oldham Council
00BPFK0004	OA	Oldham Council
00BPFK0006	OA	Oldham Council
00BPFK0008	OA	Oldham Council
00BPFK0009	OA	Oldham Council
00BPFK0011	OA	Oldham Council
00BPFK0017	OA	Oldham Council
00BPFK0020	OA	Oldham Council
00BPFK0033	OA	Oldham Council
00BPFK0034	OA	Oldham Council
00BPFK0038	OA	Oldham Council
00BPFN0012	OA	Oldham Council
00BPFQ0031	OA	Oldham Council
00BPFQ0032	OA	Oldham Council
00BYFB0004	OA	Liverpool City Council
00BYFB0015	OA	Liverpool City Council
00BYFB0034	OA	Liverpool City Council
00BYFG0009	OA	Liverpool City Council
00BYFG0016	OA	Liverpool City Council
00BYFM0006	OA	Liverpool City Council
00BYFN0033	OA	Liverpool City Council
00BYFN0038	OA	Liverpool City Council
00BYFN0040	OA	Liverpool City Council
00BYFN0042	OA	Liverpool City Council
00BYFZ0043	OA	Liverpool City Council
00BYGB0018	OA	Liverpool City Council
00BYGC0002	OA	Liverpool City Council
00BYGH0019	OA	Liverpool City Council
00BYGJ0011	OA	Liverpool City Council
00BYGJ0033	OA	Liverpool City Council
00BYGK0018	OA	Liverpool City Council
00BYSF0028	OA	Liverpool City Council
00CHFJ0011	OA	Gateshead Council
00CMFQ0033	OA	Sunderland City Council
00DAFA0075	OA	Leeds City Council
00DAFB0019	OA	Leeds City Council
00DAFB0032	OA	Leeds City Council
00DAFF0051	OA	Leeds City Council
00DAFJ0074	OA	Leeds City Council
00DAFR0005	OA	Leeds City Council
00DAFR0006	OA	Leeds City Council
00DAFS0009	OA	Leeds City Council
00DAFS0047	OA	Leeds City Council
00DAFW0078	OA	Leeds City Council
00DAGB0044	OA	Leeds City Council

OA Code	Hierarchy	Submission
00DAGC0015	OA	Leeds City Council
00DAGK0040	OA	Leeds City Council
00EBMR0007	OA	Tees Valley Joint Strategy Unit
00EENK0014	OA	Tees Valley Joint Strategy Unit
00EFMN0002	OA	Tees Valley Joint Strategy Unit
00EFMN0009	OA	Tees Valley Joint Strategy Unit
00EFNB0002	OA	Tees Valley Joint Strategy Unit
00EFND0005	OA	Tees Valley Joint Strategy Unit
00EFND0013	OA	Tees Valley Joint Strategy Unit
00EFND0015	OA	Tees Valley Joint Strategy Unit
00EUNB0016	OA	Warrington Partnership
00EUNB0019	OA	Warrington Partnership
00EUNB0020	OA	Warrington Partnership
00EUNB0023	OA	Warrington Partnership
00EUNB0025	OA	Warrington Partnership
00EUND0014	OA	Warrington Partnership
00EUND0017	OA	Warrington Partnership
00EUND0018	OA	Warrington Partnership
00EUND0026	OA	Warrington Partnership
00EUND0034	OA	Warrington Partnership
00EUNF0012	OA	Warrington Partnership
00EUNF0020	OA	Warrington Partnership
00EUNF0023	OA	Warrington Partnership
00EUNF0024	OA	Warrington Partnership
00EUNF0025	OA	Warrington Partnership
00EUNJ0004	OA	Warrington Partnership
00EUNJ0007	OA	Warrington Partnership
00EUNJ0014	OA	Warrington Partnership
00EUNJ0015	OA	Warrington Partnership
00EUNJ0017	OA	Warrington Partnership
00EUNK0008	OA	Warrington Partnership
00EUNK0019	OA	Warrington Partnership
00EUNK0022	OA	Warrington Partnership
00EUNK0024	OA	Warrington Partnership
00EUNM0004	OA	Warrington Partnership
00EUNM0005	OA	Warrington Partnership
00EUNM0006	OA	Warrington Partnership
00EUNM0007	OA	Warrington Partnership
00EUNM0008	OA	Warrington Partnership
00EUNQ0022	OA	Warrington Partnership
00EUNQ0031	OA	Warrington Partnership
00EUNQ0032	OA	Warrington Partnership
00EUNQ0034	OA	Warrington Partnership
00EUNQ0035	OA	Warrington Partnership
00EUNZ0002	OA	Warrington Partnership
00EUNZ0011	OA	Warrington Partnership
00EUNZ0014	OA	Warrington Partnership
00EUNZ0018	OA	Warrington Partnership
00FYNL0034	OA	Nottingham City Council
00FYNZ0003	OA	Nottingham City Council
00FYNZ0004	OA	Nottingham City Council

OA Code	Hierarchy	Submission
00FYNZ0007	OA	Nottingham City Council
00HBNN0010	OA	Bristol City Council
00HBNN0037	OA	Bristol City Council
00HBNW0013	OA	Bristol City Council
00HBNW0014	OA	Bristol City Council
00NNQS0005	OA	Powys County Council
00NNRN0001	OA	Powys County Council
00NNRN0007	OA	Powys County Council
00NNRU0005	OA	Powys County Council
00NNSK0004	OA	Powys County Council
00NNSN0006	OA	Powys County Council
00NNSZ0002	OA	Powys County Council
00NNSZ0003	OA	Powys County Council
00NNSZ0011	OA	Powys County Council
00NNTB0004	OA	Powys County Council
00PTNZ0001	OA	Cardiff Council
00PTPD0002	OA	Cardiff Council
42UCFU0012	OA	Suffolk County Council
42UEHK0011	OA	Suffolk County Council
42UGHN0003	OA	Suffolk County Council
E01004758	LSOA	City of Westminster Council
E01007407	LSOA	Barnsley Metropolitan Borough Council
E01009141	LSOA	Birmingham City Council
E01009144	LSOA	Birmingham City Council
E01009191	LSOA	Birmingham City Council
E01009534	LSOA	Coventry City Council
E01009546	LSOA	Coventry City Council
E01009551	LSOA	Coventry City Council
E01009572	LSOA	Coventry City Council
E01009581	LSOA	Coventry City Council
E01009601	LSOA	Coventry City Council
E01009635	LSOA	Coventry City Council
E01009638	LSOA	Coventry City Council
E01009642	LSOA	Coventry City Council
E01009675	LSOA	Coventry City Council
E01009677	LSOA	Coventry City Council
E01009678	LSOA	Coventry City Council
E01009679	LSOA	Coventry City Council
E01009680	LSOA	Coventry City Council
E01009685	LSOA	Coventry City Council
E01009703	LSOA	Coventry City Council
E01011288	LSOA	Leeds City Council

OA Code	Hierarchy	Submission
E01011290	LSOA	Leeds City Council
E01011387	LSOA	Leeds City Council
E01011450	LSOA	Leeds City Council
E01011486	LSOA	Leeds City Council
E01011487	LSOA	Leeds City Council
E01011498	LSOA	Leeds City Council
E01011517	LSOA	Leeds City Council
E01011542	LSOA	Leeds City Council
E01011575	LSOA	Leeds City Council
E01011631	LSOA	Leeds City Council
E01011644	LSOA	Leeds City Council
E01012004	LSOA	Tees Valley Joint Strategy Unit
E01012052	LSOA	Tees Valley Joint Strategy Unit
E01012086	LSOA	Tees Valley Joint Strategy Unit
E01012103	LSOA	Tees Valley Joint Strategy Unit
E01012108	LSOA	Tees Valley Joint Strategy Unit
E01012123	LSOA	Tees Valley Joint Strategy Unit
E01012133	LSOA	Tees Valley Joint Strategy Unit
E01012137	LSOA	Tees Valley Joint Strategy Unit
E01012171	LSOA	Tees Valley Joint Strategy Unit
E01012220	LSOA	Tees Valley Joint Strategy Unit
E01012222	LSOA	Tees Valley Joint Strategy Unit
E01012321	LSOA	Tees Valley Joint Strategy Unit
E01012331	LSOA	Tees Valley Joint Strategy Unit
E01012626	LSOA	Blackburn with Darwen Borough Council
E01012627	LSOA	Blackburn with Darwen Borough Council
E01013937	LSOA	Nottingham City Council
E01013949	LSOA	Nottingham City Council
E01014497	LSOA	Bristol City Council
E01014604	LSOA	Bristol City Council
E01014625	LSOA	Bristol City Council
E01014637	LSOA	Bristol City Council
E01014638	LSOA	Bristol City Council
E01014650	LSOA	Bristol City Council
E01014728	LSOA	Bristol City Council
E01028589	LSOA	Oxford City Council
E01028593	LSOA	Oxford City Council
W01000436	LSOA	Powys County Council
W01000468	LSOA	Powys County Council

Appendix IV – List of respondents to the consultation

ONS received 97 responses to the consultation with the views of 144 organisations represented by the closing date. The names of organisations that responded either individually or through membership of a group or committee which responded are listed below.

Association of Census Distributors
Association of Royal Observatories
Barclays (Demographics User Group)
Barnsley Metropolitan Borough Council
Beacon Dodsworth
Birmingham City Council
Blackburn with Darwen Borough Council
Blackburn with Darwen Primary Care Trust
Blackpool Council
Boots (Demographics User Group)
Bournemouth Borough Council
Brent Council
Bridgend County Borough Council
Bristol City Council
CACI Ltd
Call Credit Marketing Solutions
Camarthenshire County Council
Cardiff Council
Central Bedfordshire Council
Ceredigion County Council
Cheshire Constabulary
Cheshire East Council
Cheshire West and Chester Council
The Children's Mutual (Demographics User Group)
City and County of Swansea
City of London Corporation
Connexions Oldham (Oldham Partnership)
Co-operative Group (Demographics User Group)
Coventry City Council
Darlington Borough Council (Tees Valley Joint Strategy Unit)
Dartford Borough Council
Demographics User Group
Department for Health
Department for Transport
Derby City Council
Durham County Council
Eastbourne Borough Council
East Sussex County Council
E.ON (Demographics User Group)
Experian Plc
First Choice Homes Oldham (Oldham Partnership)
Forest Heath District Council
Gallery Oldham (Oldham Partnership)
Gateshead Council
Golden Gates Housing Warrington
Gosport Borough Council
Government Office North West (Oldham Partnership)
Greater London Authority

Greater Manchester Chamber of Commerce (Oldham Partnership)
Greater Manchester Fire & Rescue Service (Oldham Partnership)
Greater Manchester Police (Oldham Division) (Oldham Partnership)
Greater Manchester Probation Service (Oldham Partnership)
Greater Manchester Public Transport Executive (Oldham Partnership)
Greater Manchester Strategic Health Authority (Oldham Partnership)
Greater Manchester Waste Disposal Authority (Oldham Partnership)
Groundwork Oldham and Rochdale (Oldham Partnership)
Hampshire County Council
Hartlepool Borough Council (Tees Valley Joint Strategy Unit)
Herefordshire Council
Hertfordshire county Council
Hull City Council
Inga Doherty
Ipswich Borough Council
Jobcentre Plus (Oldham Partnership)
John Lewis (Demographics User Group)
Kent County Council
Kirklees Council
Lancashire County Council
Lancaster City Council
Leeds City Council
Liverpool City Council
Local Government Association
Local Government Data Unit – Wales
London Borough of Camden
London Borough of Newham
London Borough of Waltham Forest
London School of Economics
Manchester City Council
Market Research Society Census and Geodemographics Group
Marks & Spencer (Demographics User Group)
Middlesbrough Council (Tees Valley Joint Strategy Unit)
Milton Keynes Council
National Health Service Information Centre
Neath Port Talbot County Borough Council
Neighbourhood Statistics Service
Newcastle University
Nottingham City Council
North East Regional Information Partnership
North Somerset Council
Northumberland County Council
North West Development Agency (Oldham Partnership)
North West Learning & Skills Council (Oldham Partnership)
North West Regional Assembly (Oldham Partnership)
Oldham Chronicle (Oldham Partnership)
Oldham College (Oldham Partnership)
Oldham Housing Investment Partnership (Oldham Partnership)
Oldham Metropolitan Borough Council (Oldham Partnership)
Oldham Primary Care Trust (Oldham Partnership)
Oldham Sixth Form College (Oldham Partnership)
Oldham Trade Union Council (Oldham Partnership)
One North East
Orange (Demographics User Group)
Ordnance Survey

Output Area Classification User Group
Oxford City Council
Oxfordshire Primary Care Trust
Pembrokeshire County Council
Pennine Acute Hospitals NHS Trust (Oldham Partnership)
Positive Steps Oldham (Oldham Partnership)
Powys County Council
Redcar and Cleveland Borough Council (Tees Valley Joint Strategy Unit)
Royal Borough of Kensington and Chelsea
Sainsbury's (Demographics User Group)
Salford City Council
Shropshire Council
Solihull Metropolitan Borough Council
South Gloucestershire Council
South Oxfordshire District Council
Staffordshire County Council
Stockton on Tees Borough Council (Tees Valley Joint Strategy Unit)
Stoke On Trent City Council
Suffolk County Council
Sunderland City Council
Surrey County Council
Tees Valley Joint Strategy Unit
Telford and Wrekin Council
Tesco (Demographics User Group)
Thanet District Council
Torfaen County Borough Council
Tower Hamlets Council
University Campus Oldham (Oldham Partnership)
Vale of White Horse District Council
Voluntary Action Oldham (Oldham Partnership)
Wakefield Metropolitan District Council
Wandsworth Council
Warrington Borough Council
Warrington Partnership
Warrington Primary Care Trust
Welsh Assembly Government
Westminster City Council
West Oxfordshire District Council
Whitbread (Demographics User Group)
Wiltshire County Council
Zetex Semiconductors (Oldham Partnership)