

2009 Census Rehearsal Evaluation Geography

December 2009

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2009 Rehearsal – Geography

1. Definition and scope for rehearsal

The scope for the rehearsal was to develop, test and implement systems that would produce the geographic products and geographic information required by the many business areas within census which are dependent on geographic information. They are print, the various strands that make up the field operation, helpline, internet, data capture and coding activity, downstream processing, creation of census outputs and Census Coverage Survey (CCS) work.

The geographic products and information included:

- an address list production system to populate Enumerator Record Books (ERBs) and personalise census questionnaires;
- an Enumerator District Planning (EDP) system to enable Geography to create enumerator workloads to support management of field operations;
- a map production system to enable Geography to produce maps for both census and CCS field staff;
- a Communal Establishment Register (CER) to support the enumeration of Communal Establishments (CE's), Print, Paper Data Coding and Capture (PDCC) and Downstream Processing (DSP);
- a Geography database to support all depending workpackages;
- to supply ad hoc geographic material - non Scottish postcode file and offshore file to support PDCC activity; and
- to produce management Information system (MIS) reports.

The scope was also to measure:

- whether the systems and processes developed, worked satisfactorily;
- whether contingency arrangements were adequate;
- whether the geography products were fit for purpose; and
- whether the Geography Integrated Project Team (IPT) met its objectives.

What was tested:

- Geography IPT (Integrated Project Team);
- Postcode Address File (PAF) processing;
- EDP and map production;
- address list production system and address files;
- address list coverage;
- geography database (content, creation, maintenance and update. Security arrangements and availability);
- Communal Establishment Register (CER);
- address coding: resolving address and CE coding queries;

- system performance;
- data supply arrangements; and
- contingency arrangements.

What could not be tested:

- EDP system: No EDP system was available for the rehearsal so Geography planned enumeration districts (ED)s manually. A system of continuous ED planning has now been developed for 2011 and Geography will create and Quality Assure (QA) an early set of Census District (CD) and ED boundaries. EDs will then be updated on a continuous basis with postcode changes. A key advantage to this approach is that planning of the field operations begins much earlier than in previous Censuses.

Census Output Areas (OAs) are created after DSP and outwith the scope of this evaluation.

2. Evaluation findings

Description	Success Criteria	Outcome	Recommendation	Timeframe
Geography IPT	Were IPT objectives met?	<p>Achieved: The scope of the Geography IPT was covered and the geography products created on time.</p> <p>In practice the IPT membership was too big. Full meetings of the IPT proved non productive and so were replaced with small topic specific sub groups which proved a much more effective forum to educate members as Geography's previous census experience was heavily relied upon.</p>	Continue along existing lines.	
Processing the Postal Address File (PAF)	Was PAF processing completed in time for freezing the geography database?	<p>Achieved: The Geography database was updated with postcode information from the October 2008 and January 2009 versions of PAF. The special arrangements put in place to facilitate early processing of PAF worked well.</p>	No change to existing arrangements required but some improvements to the management of technical back up arrangements will be necessary.	Ongoing

Description	Success Criteria	Outcome	Recommendation	Timeframe
Enumeration District Planning (EDP) system	Not tested.	<p>Outwith the scope of the rehearsal.</p> <p>A decision was taken not to produce a full system for the rehearsal, but development was progressed far enough to allow the manual production of EDs (which took only a few days). Whilst this was somewhat of a hybrid approach for the rehearsal, it did bring the benefit of being able to test 'future functionality' whilst ensuring the deadline for producing EDs for the rehearsal was met. It also allowed field operations additional time to finalise requirements.</p>	Develop a new planning system to enable Geography to produce first cut planning areas early, whilst keeping the Geography database open until the last possible moment so that new postcode information could be incorporated into the geography database.	December 2009
Enumeration District (ED) planning.	<p>Did EDs meet planning criteria?</p> <p>Was the approach to ED planning suitable?</p>	<p>Achieved: EDs were created manually and all met planning thresholds.</p> <p>It would have been beneficial to have been able to assess and understand in advance of the rehearsal, the impact of complex planning criteria. This was not fully understood</p>	Ensure systems are developed at the rehearsal stage and governed by a project board comprising suitably qualified staff for a 2021 Census.	

Description	Success Criteria	Outcome	Recommendation	Timeframe
Map production	Were the right maps produced and did they support Field and CCS operations?	<p>until after the rehearsal.</p> <p>Partly Achieved: The maps were produced to the agreed specifications.</p> <p>a) Urban maps Urban maps to support hand delivery were well received by enumerators.</p> <p>b) Rural maps A mix of Ordnance Survey (OS) and General Register Office for Scotland (GROS) maps were used to support follow up in post out areas. Unfortunately they were not used as intended. Instead post out enumerators relied on their local knowledge of the area. As a result we have little evidence, other than that gleaned from our own trial, to confirm a strategy for 2011.</p> <p>c) CCS CCS maps were reported as satisfactory with a few comments on map scale.</p>	<p>a) No change to the specification for urban hand delivery maps.;</p> <p>b) Continue with a mix of OS and GROS produced maps for rural post out areas;</p> <p>c) Amend CCS specification to improve the map scale of the end product; and</p>	March 2010

Description	Success Criteria	Outcome	Recommendation	Timeframe
		<p>d) Semi rural areas There were no semi rural areas in the rehearsal so no map strategy tested.</p> <p>The map production system worked well.</p>	<p>d) Develop a strategy for maps for semi rural areas.</p>	
Address list production	Did address list production enable successful personalisation of the census questionnaire and ERB?	<p>Achieved: The address list files were produced to timescale for the printer.</p>	Continue to refine existing processes but with some improvements to the management of back up arrangements for technical staff.	Ongoing
Address list coverage	Was the quality of PAF fit for purpose?	<p>Achieved: No adverse comments from Field operations about missing addresses but there were a number of undelivered questionnaires in Lewis and Harris. The actual numbers of new addresses found or old addresses deleted are not yet available</p> <p>The status of the addresses of undelivered questionnaires has been investigated and erroneous records removed from the PAF. However there</p>	Continue to apply planned improvements to the address base; and Ensure the PSP processes address queries raised by Geography in time for the 2011 Census.	Ongoing

Description	Success Criteria	Outcome	Recommendation	Timeframe
		<p>are certain circumstances when the Postal Service Provider (PSP) cannot deliver mail to a legitimate delivery point and non delivery is not necessarily down to PAF error.</p> <p>Geography staff also conducted a quick check of ERBs and whilst some evidence of change was noted, nothing pointed to serious deficiencies in the PAF.</p> <p>The postal service provider was unable to complete the check of post out address queries which GROS generated for the Western Isles before the rehearsal. We therefore have no indication whether our check could have reduced the numbers of undelivered questionnaires or other addressing errors found in the rehearsal.</p>		
Geography database	Database created and populated with	Achieved: The geography database was	Continue as planned but with some improvements to the management of back up	Ongoing

Description	Success Criteria	Outcome	Recommendation	Timeframe
	the relevant information and updated with new postcode information.	created and populated as required by the Geography IPT. Some requirements for geography information were made known late in the day, but this was not unexpected. The geography database was successfully updated with new postcode information.	arrangements for technical staff.	
Common Establishment Register (CER)	Was the CER delivered on time for the Rehearsal and was it fit for purpose?	<p>Achieved: No adverse comments were reported by Field Operations Branch (FOB). Geography carried out a post census check on the communal ERB's which revealed one new home had been found during the field operation and noted that a few hotels/guest houses/B&Bs had been deleted. The new home had been opened after the Geography database had been frozen.</p> <p>We are awaiting further feedback from the rehearsal as a result of data capture and coding activity though we're aware of one instance where an address was wrongly</p>	Continue with existing plans for maintaining the CER	Ongoing

Description	Success Criteria	Outcome	Recommendation	Timeframe
		classified as household when it should have been a CE.		
Resolving address and CE queries from the Processing site.	Queries resolved correctly and on time?	<p>a) Geography did not receive many genuine queries to resolve, although we did review all of the address queries that appeared in the query log resolved by staff at the processing site. There were no serious issues arising but we did notice enumeration address queries appearing in the query log when the postcode on the form was correct and valid for the ED. Continuing along these lines could result in an excessive number of queries in 2011</p> <p>b) An Excel spreadsheet was used to record coding queries for authority staff to resolve. Updating the spreadsheet was difficult because many users required simultaneous access and this would be impractical in 2011.</p> <p>No CE coding queries were received.</p>	<p>a) Clarify Geography's role in resolving queries in 2011 Census.</p> <p>b) Develop a system to process coding queries that allows multi user access.</p>	March 2010

Description	Success Criteria	Outcome	Recommendation	Timeframe
Supply of other geographic material to support Paper Data Capture and Coding: <ul style="list-style-type: none"> • Non Scottish postcodes; • Offshore postcodes; and • British Forces Post Office (BFPO). 	Was the relevant material supplied?	Geography supplied this information but it is not clear whether this information was needed or not.	Geography to clarify what material is required.	Jan 2010.
External data supply arrangements	Were they effective?	Achieved: Arrangements to ensure the timely delivery of PAF worked well. There is a service level agreement (SLA) to govern the supply of Mastermap and these service levels were met.	No change to current arrangements necessary.	
System performance: Geographical Information System (GIS)	What was the system availability?	Internal arrangements worked well. The liaison procedures between Geography, GROS IT and SCOTS worked well though not tested to any great degree because no problems emerged. No new issues to report about the Postcode Geography system.	No change to current arrangements necessary.	