Title: Note for Andrew Phelps on Adaptive Design project for TO

Categorisation
BUS Field - Research\Response\TO
Responsive Design\Key Documents

In 2014-15, ONS is conducting a project to explore introducing an adaptive design to collection of Labour Force Survey (LFS) data in Telephone Operations (TO). Whereas in most surveys all sample units receive the same treatment and the same design features apply to all selected people and households, adaptive designs assume that different people or households may receive different treatments.

Because TO deals mainly with waves 2 to 5 of the LFS, most of the sample units it attempts to contact have already taken part in the LFS and have agreed to be recalled by phone in future waves. Something is therefore usually already known about the characteristics of those units. By introducing an adaptive design, ONS aims to allocate limited resources more efficiently, to maintain or improve response rates while taking care not to introduce non-response bias.

We will allocate sample units to pre-defined 'domains' to ensure that groups which have the potential for under-representation - either because they are under-represented at wave 1 of the LFS, or because they are more likely to drop out of the survey between waves - are not ignored. We will develop a model - based on information from the previous wave(s) and from the first week of data collection in the current wave - to calculate the propensity of each unit within each domain responding in the second week of data collection.

In the second week of data collection we will focus resources on the units most likely to respond within each domain to try to maximise response within each domain. This will mean that resources will be focused on the units where we are most likely to have success, in domains where representation or the overall likelihood of responding is low, as well as in groups which are well represented or where the overall likelihood of responding is high.

This project can be pursued because of technological advances already implemented in TO. The introduction of a new call scheduler in 2012 allows TO managers to have more flexibility in how individual sample units are treated. The approach is based on a body of literature from the USA (University Michigan) and from other National Statistical Institutes (in Canada and the Netherlands) which are pursuing the introduction of adaptive survey designs.