

Converting Social Survey Blaise 4 questionnaires to Blaise 5 Update

The Survey for Living Cost and Food (LCF) Record of Spending (RoS) application, and the redesign of the International Passenger Survey (IPS)

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1. Introduction

The Office for National Statistics (ONS) Social Surveys Research and Production (SSRP) runs numerous Longitudinal, annual and ad-hoc surveys. Most of these surveys are conducted as face-to-face interviews on Blaise 4. The decision has been made to upgrade these surveys to Blaise 5 so that future surveys can more easily incorporate mixed mode elements such as Computer Assisted Web Interviewing (CAWI) and Computer Assisted Telephone Interviewing (CATI).

The Blaise 5 uplift project was initiated to transform all the SSRP surveys from Blaise 4 to Blaise 5 and all the associated legacy support systems.

Currently we have six surveys in various stages of development in SSRP:

Transformed Labour Force Survey (TLFS)

Family Resource Survey (FRS)

Crime Survey for England and Wales (CSE)

Crime Sexual Victimization (CSV)

Living Cost and Food Survey (LCF)

Record of Spending (RoS)

Surveys currently using Blaise 5 for data collection are:

Opinions and Lifestyle Survey (OPN)

International Passenger Survey (IPS)

There have also been a number of Ad-Hoc surveys collected in Blaise 5 such as the Humanitarian Response Survey (HRS).

1.1 The Survey for Living Cost and Food (LCF)

The Living Costs and Food Survey (LCF) collects information on spending patterns and the cost of living that reflects household budgets across the country. The study provides information about household spending patterns, which is used to update the contents of the consumer inflation basket of goods and services. It is also used to provide information about food consumption and nutrition. It is an important source of economic and social data for government and other research agencies.

The study is conducted throughout the year across the whole of the UK and is the most significant consumer study undertaken in the UK. The results are essential for understanding society and planning to meet its needs.

Government departments use the results of the study to identify how and where they should be using public resources.

They use the information to check how different groups in the community are affected by existing policies and to inform future policy changes.

1.2 The International Passenger Survey (IPS)

The International Passenger Survey (IPS) collects information on tourism to the UK, and UK residents travelling abroad, reasons for travel and money spent. The statistics on UK residents travelling abroad are an informal indicator of living standards.

In July 2024, the Office for National Statistics (ONS) changed the data collection and methodology for estimating overseas travel and tourism to allow for more accurate and coherent statistics. The IPS departures data will be harmonised with the Civil Aviation Authority's (CAA) departing passenger survey data and will use data collected from both sources in our estimates and move to new interviewing locations at airports and at Dover seaport.

The IPS arrivals survey has stopped, and the overseas expenditure data of Great Britain (GB) residents will be collected through the Great Britain Tourism Survey (GBTS).

2. Behind the surveys

2.1 LCF

The Living Costs and Food (LCF) study provides information which is used to update the contents of the consumer inflation basket of goods and services. It is also used to provide information about food

consumption. It is an important source of economic and social data for government and other research agencies.

Currently, detailed expenditure data is collected by interviewers using Excel spreadsheets and embedding images of receipts within them. The process was developed at pace when the pandemic hit in March 2020. No user testing was carried out prior to delivery, due to the pace of implementation needed to minimise the pause in data collection for the LCF.

2.1.1 LCF Methodology

The overall response rate for the Living Costs and Food Survey (LCF) in Great Britain was 22% in financial year ending (FYE) 2023. This is a 5% decrease in comparison with FYE 2022. The issued sample was approximately 1,000 households fewer than FYE 2022.

Of the eligible sample for FYE 2023, we were unable to contact 37% of addresses, a further 41% refused to take part and 4% had another reason for non-response. Non-response remains high since the coronavirus (COVID-19) pandemic.

Of the 4,061 responding households in Great Britain, 3,993 co-operated fully, meaning they completed both interview and diary sections of the survey. This report refers to the Great Britain sample as these data are directly collected by the Office for National Statistics (ONS) field force, while the Northern Ireland data are collected by the Northern Ireland Statistics and Research Agency (NISRA).

In FYE 2023, partial responses accounted for 2% of all co-operating households. These 68 partial responses occurred because one or more adults in the household refused to keep the diary but were happy to take part in the interview and the Main Diary Keeper (MDK) of the household completed both the interview and the diary.

Interviewers record the main reason why people refuse before or during an interview. These are spontaneous results, which are coded against a list of preset answers, with an "other" option available where applicable. In FYE 2023, the two most commonly cited reasons for refusing to take part in the survey were:

- cannot be bothered (33%), which was the top reason cited, as in the previous year
- temporarily too busy (15%), which is a level similar to the previous year

2.1.2 LCF Collection

Data collection for the LCF is done face-to-face by field force interviewers in the homes of the respondents. Advanced letters are sent to all sampled respondents and follow up contact is made by the interviewers to arrange a convenient time for the interview. An In-house case management system, Casebook, is used to manage all the interviewer's cases every month.

The respondent is asked to keep track of all their spending over a two-week period, by either making note of what they purchase but preferably by keeping the receipts for all purchases. When the two-week period ends the interviewer returns to the respondents address to collect this data.

The interviewer enters this detailed expenditure data using Excel spreadsheets and embedding images of receipts within them. The process was developed at pace when the pandemic hit in March 2020. No user testing was carried out prior to delivery, due to the pace of implementation needed to minimise the pause in data collection for the LCF.

2.2 IPS

The Office for National Statistics (ONS) changed the way data are collected on overseas travel and tourism. On 1 July 2024 we moved away from the International Passenger Survey (IPS) being our main source of data and will be using several different surveys and data collection methods.

Several changes have been made to the International Passenger Survey (IPS) data collection; this includes harmonisation with the Civil Aviation Authority departing passenger survey, and

replacement of the IPS arrivals survey with the Great Britain Tourism Survey (GBTS) to collect the post-departure spend of Great Britain (GB) residents abroad.

2.2.1 IPS Methodology

The data collected from both the IPS and CAA on departures will be combined by the ONS, to create one larger overseas residents dataset. This is expected to produce more precise estimates of residency, trip destination, trip purpose and expenditure of overseas residents. It will also increase confidence in estimates at sub-national level, an aspect of the statistics requested by users in our [2021 user consultation](#).

Changes to the IPS sample design mean we need to implement a new weighting approach that is appropriate. This will ensure that the survey data captured through the IPS produce statistics that are representative of the population.

The sample design follows three stages of selection. Interviewer shift times are sampled at the first stage, followed by a selection of scheduled flights within those shifts. Interviewers then select passengers at the departure gate for the selected flights.

Different types of design weights are required to produce the final travel and tourism estimates from those three stages:

- shift design weights, which account for the random selection of shifts from dates and timeslots
- flight design weights (used for airport passengers only), which account for differences in flight schedule at different times of day
- passenger design weights (used for airport passengers only), which account for the number of booked passengers and the number interviewed for each sampled flight

2.2.2 IPS Collection

Collection of data through the IPS has moved from interviewing passengers immediately after airport security checks to interviewing them at airport departure gates or lounges at smaller airports. Interviewers will move around the airport gates, selecting passengers for interviews according to a new sample design that will select departing flights. Data provided by the Official Airline Guide (OAG) will be used as the sampling frame for both surveys.

Travel through our seaports, on Eurostar and the Channel Tunnel, will continue to be collected by the IPS departures survey as before, apart from at Dover. From 1 July onwards IPS interviews at Dover seaport will take place on the quayside rather than on the ferries. This is an operational change to reflect that IPS arrivals interviews are no longer occurring on return trips on these routes.

3 LCF Questionnaire

The questionnaire is written in in Blaise 4.8 in a Computer Aided Personal Interviewing (CAPI) format, with the interviewer leading the respondent through the questionnaire.

3.1 The Diary

The Diary is a separate collection to the Main LCF questionnaire, it is collected by the interview and imputed into a Blaise 4 questionnaire by Coders. The coders are asked to apply a Classification of Individual Consumption According to Purpose (COICOP) Code for each item so that types of purchase can be analysed at a granular level.

A small household section is completed first that includes First Name, Surname and Diary Type. Diary Type establishes if the household member is an Adult or a Youth. All household members are asked to fill in a Diary but can refuse. This needs to be captured to establish household size.

The Usual purchases section records what type of items the household usually purchases, so that if any information is incomplete an informed decision can be made to complete the coding.

I.e. If the answer to 'What type of sausages do you normally buy?' is Pork, then when an entry of 'Sausages - £2.50' is entered. They will be coded as Pork Sausages.

The diary Collects 10 main areas of interest on Expenditure within a household.

1. Food and drink
2. Takeaway food
3. Eating out
4. Clothing and footwear
5. Winnings
6. Home grown food
7. Trips abroad
8. Business refunds
9. Pocket money
10. All other purchases and payments

The diary is completed at person level, meaning each person within the household (unless they have refused) has a record of their spending over the two-week period.

There is a Main Food Spender [MFS], this person is identified within the household as the person who does the 'weekly' shop for the household and usually has the most recorded items.

The main diary food spender keeps all large receipted 'family' shops as well as populating the 'Usual Purchases'

Each person enters their individual Spending Pattern information, which references whether the household member has any reasons for any unusual spending patterns. It may be that they were on holiday for the two weeks and did not do a weekly shop etc.

Non-Receipted items listed separately and usually cover small amounts of items that are bought on an ad-hoc basis. Like going to the Newsagents and buying a newspaper and a can of coke. Whereas receipted items are entered as a total amount on the receipt. For these items, only the Shop name and the total amount are recorded at this point, The coders then enter each item separately applying COICOP codes as they go.

3.1.1 Existing process

The interviewer sets up an excel spreadsheet for each member of the household which contains a Tab for each day of the collection period and a separate 'Area' on that Tab for each expenditure block. The interviewer then must scan the receipts to create a digital version.

The excel spreadsheets and digital receipts are then submitted to HQ for the coders to pick up for manual entry into the Blaise 4 questionnaire.

3.2 The Blaise 5 design

The new requirement is to be able to enter the information into a Blaise 5 questionnaire so that some of the Data can be transferred automatically.

It needs to be a single questionnaire, but with the manoeuvrability of an Excel spreadsheet. It should still gather the same data as the multiple files.

Using a 'two-part' questionnaire and with the support of our Digital services team change to the core code in the servers' token system allowed the movement from one URL to another using the same token, allowing us to jump from one questionnaire (A) to another (B).

The 'A' section of the new questionnaire would collect the household information, people in the house, usual purchases etc. and then from a menu page containing a list of valid members of the household, and a button that then launches the 'B' section.

The new 'B' section would then hold the household members information at 'Person-Level' database. Each person would enter all expenditure for all days.

A – 10 Parallels (1 for each person)

B – 140 Parallels (14 days, each with 10 Expenditure blocks)

Although this required two questionnaires, doubling monthly resource requirements, this development greatly reduced both the compilation time and page load times at runtime.

3.4 Further Functionality Updates and Developments.

Through the development and engagement with our field force colleagues it was realised that a summary page showing a list of all the entries of the expenditure types on the day of entry would be required. This summary page would show particular fields such as the item number, the shop, item purchased, amount paid or if the entry is receipted.

The functionality allows the user to 'edit' or 'delete' existing entries and to 'add' the next entry or if they want to move to a different 'day' or back to the 'expend menu' and chose a different area of expenditure.

The summary page also displays what person you are on 'P1 – Name' if they are the 'Main Food Spender (MFS)' the 'Day' number, day of the week, date and expenditure area. We also display the number of items added out of the max array size available. We do this across all 10 expenditure areas.

A recent piece of research was carried out to test how a respondent facing version of the diary collection could work. The test showed that 17 out 19 households would use this way of inputting data again, 18 out 19 households would recommend the study and an average score of 8.2/10 for overall experience using a digital diary.

4 The International Passenger Survey (IPS)

The questionnaire was originally converted from paper and written in in Blaise 4.8 (2017) in a Computer Aided Personal Interviewing (CAPI) format, with the interviewer leading the respondent through the questionnaire at a designated UK Port. Then it was decided that a redesign of the IPS collection would be needed to harmonise with the Civil Aviation Authority (CAA) and an opportunity to move from Blaise 4.8 to 5 was realised.

4.1 Required Changes

The survey is to collect data on departing passengers only, questions asked of arrival passengers would be completely removed from the questionnaire. A redesign of how interviewers would set up their shift for the day and port they would be interviewing at. The introduction of a flight selection-based sample, where interviews take place at the gates of departing flights. Harmonising a number of new and current questions with the Civil Aviation Authority (CAA) and finally uplifting the current IPS departure questions.

A new sample design was required, IPS is unique to other SSRP surveys as they can't sample addresses and households. A sample of ports and flights is drawn, and shifts are created and 'stocked' with our field force interviewing teams to achieve a number of interviews. Interviewers used to enter their shift details in manually from their shift allocation, this was often prone to error and needed to be check and adjusted if these details were entered incorrectly, this was quite labour intensive for the Survey Validation teams. A new shift lookup and system date checks were introduced in Blaise 5 to aid the interviewer to select the correct shift, they can now search via three different options (by port, by shift number or by date). There is check that a shift on the day of interviewing has been selected against the system date on the device (Microsoft Surface Pro using CAPI mode).

Flights are then selected via the data supplied by the Official Airline Guide (OAG). This is also assigned to the sample file used for the shift look up. Once the interviewer has selected the port on the day of their interviewing shift, they are then asked to select the flight from a list of flights departing that day. They will then check the flight departure board and head to the gate to obtain 8 achieved Face-to-Face interviews, Interviewers go off in pairs and loop around the gate room so as to not overlap selecting 1 in every 5 persons.

Further requirement was to align with the CAA on collecting postcode areas for where the respondent began their journey. This was quite challenging and involved using a manipula script to search through a number of CSV files to match the first part of the postcode entered by the interviewer. This would then populate a database to return a certain value to display to the respondent to check it was the correct area/region of the UK.

This is the first Blaise 5 questionnaire to be offline by our field force. We use the Case Manager Application (CMA) interface for interviewers to see what questionnaire they are currently using and manage their cases. A unique key is created by there user ID and the number of the form. Once one form is completed the system creates the next form ready for the next interview to take place.

4.2 Looking Ahead

This method of collection started on 1st July 2024, and the data is currently with the Methodology and Quality Directorate (MQD) going through various weighting techniques and development. The Travel and Tourism team gave an update with some high-level figures on Q3 (July to September 2024) included which was released on the 25th February 2025.

Now we have successfully moved from Blaise 4.8 to Blaise 5 on the IPS we will look towards some continuous improvements for the questionnaire's functionality like the 'Postcode' manipula and the possible use of tables on certain questions that previously used those layouts. Some good work by a colleague

Links and References

[Improving our travel and tourism statistics: February 2025 update](#)

[Living Costs and Food Survey technical report: financial year ending March 2023](#)