

New Statistical System on Households and Persons

Monitoring for the future



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Federal Department of Home Affairs FDHA
Federal Statistical Office FSO

Neuchâtel, 2007

New Statistical System on Households and Persons (SHAPE)

Monitoring for the future

Author Marco Buscher

Editor Federal Statistical Office

Publisher Federal Statistical Office FSO

Information: Christoph Freymond

Section Surveys, FSO, Tel. 032 713 67 06, E-Mail :christoph.freymond@bfs.admin.ch

Sales: Federal Statistical Office, CH-2010 Neuchâtel

Area of focus: 0 Methodological Principles

Original text: German

Cover image: photocase.com

Graphics/Layout: FSO

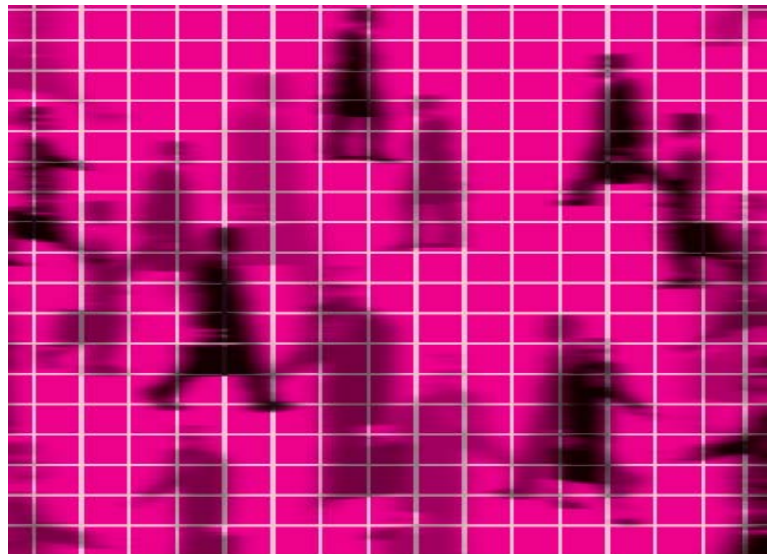
Copyright: FSO, Neuchâtel 2007

Copying with acknowledgement of the source is, except for commercial purposes, permitted.

A total concept for the next decade

With SHAPE (statistical system on households and persons) the Federal Statistical Office (FSO) is pursuing a new strategy to acquire and analyse data for the purpose of creating an integrated information system on persons and households for the years 2010 to 2019. This requires surveys to be coordinated and integrated, using available administrative records held by federal offices, cantons and municipalities. The aim is to bring about a system of harmonised household surveys that will take into account both European and Swiss needs and minimise the burden on respondents.

Presently, the Swiss Labour Force Survey (SLFS) and the Household Budget Survey (HBS) are conducted annually. The Swiss Health Survey and the Microcensus on Transport are conducted every five years. The new Survey on Income and Living Conditions (SILC) is in preparation.



To be in line with the bilateral statistics agreement signed by Switzerland and the EU, SLFS and SILC will have to meet the Eurostat requirements by 2010. The SLFS will therefore no longer be conducted on an annual basis only but throughout the year instead. Results will be delivered quarterly as well as annually. From the very beginning, the SILC was designed as a representative, cross-sectional and longitudinal survey meeting the European requirements. Initial results from this survey are expected in 2008.

Why a new system?

SILC is intended to complement the present and proven procedure of conducting SLFS and HBS, two independent annual surveys focussing on social economic factors. Nonetheless important indicators for many key political issues are missing (e.g. in the areas of social security, family and generation relationships, cultural diversity, information technology and its effect on society, social participation, discrimination and social exclusion, living conditions and environment). Regular statistical reporting is not ensured and surveys are not integrated into a single system. Thus far, little effort has been made to tap into potential synergies when it comes to organising and conducting surveys as well as analysing data.

Social and economic changes make new topics politically relevant. Official statistics need to be comparable both regionally and across Europe. The information must be up-to-date and relate to the current range of political issues. This means that the present system of conducting separate topic-based surveys needs to be improved and enlarged, and new and flexible survey methods and modules need to be introduced. Only this way the short term political and scientific needs can be met.

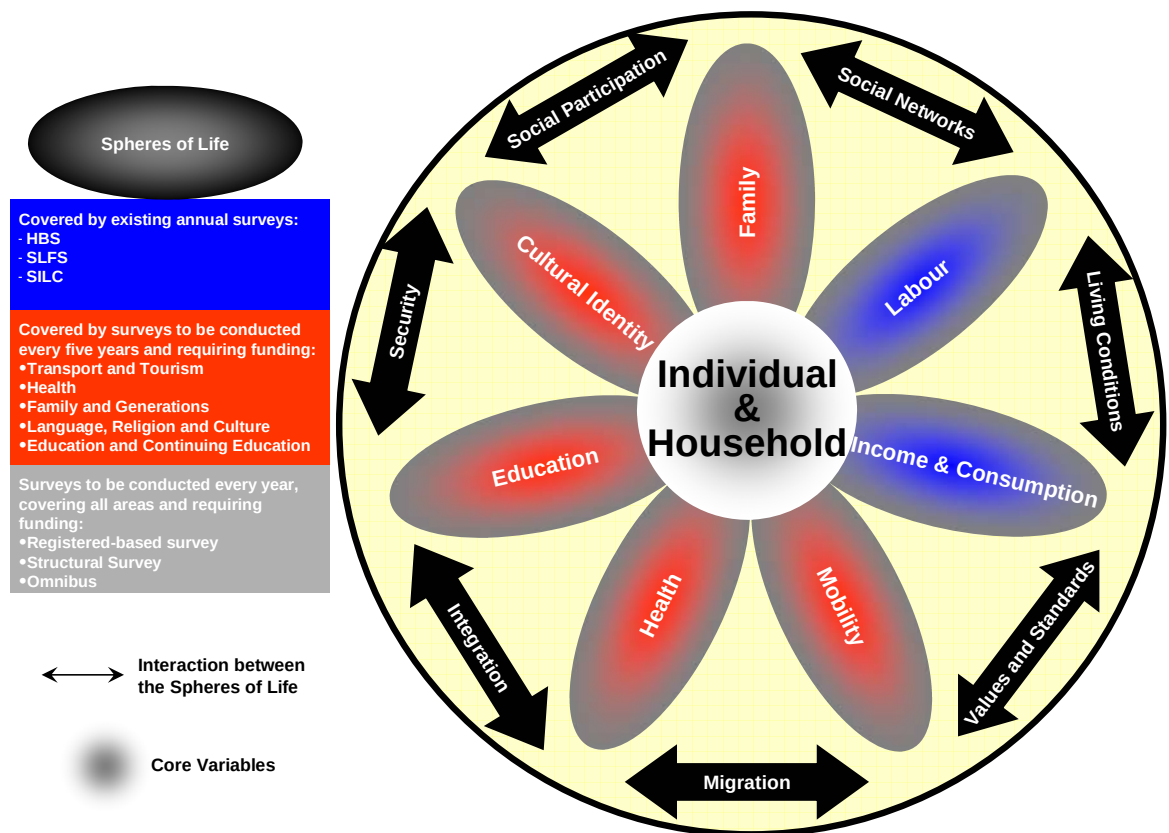
The new system at a glance

The new statistical information system centres on persons and their households. As members of society, they are involved in seven aspects of daily life, namely: "Work", "Family", "Income and Consumption", "Education", "Health", "Mobility" and "Cultural Identity". All of these aspects are interdependent and have a mutual influence upon one another.

While "Work" and "Income and Consumption" are covered satisfactorily by the three annual surveys SLFS, HBS and SILC, the five other topics mentioned above are not systematically included in any present-day survey system of official statistics. To meet this demand, an infrastructure will be created to provide in a targeted and systematic way to provide the information needed.

The aim is to reflect the above seven topics together and show how they interact within the social system, thereby ensuring that issues of importance to government policymakers are covered by statistical monitoring.

Surveys within the Social System



Topic-based Surveys

The system of annual surveys (SLFS, SILC and HBS) is to be complemented in the years 2010 to 2019 by further surveys on additional topics, each involving responses from between 20,000 and 40,000 persons.

The proven surveys on health and transport (Swiss Health Survey and the Microcensus on Transport) will be integrated into this new system every five years and will be extended to meet the requirements of the EU (e.g. *Transport and Tourism*).

New topics such as family and generations, language, religion and culture, as well as education and continuing education will be added, also every five years. This cyclic repetition will make it possible for changes to be observed over time. Synergies will result from the standardisation of core variables, sampling and methodology which, together with the increased consistency of the surveys, will help reduce costs.

Omnibus survey

In addition to these topic-based surveys, a new survey on households is planned as an omnibus survey. It is intended to create an annual, flexible instrument to answer current political questions. This omnibus survey is designed to meet the increasing need for information on various topics (e.g. living conditions, environment, information technology and its effect on society). A module for science and research could be included with special questions on values, standards and attitudes. The new omnibus survey on households should reduce the need for these topics to be covered in SLFS, HBS and SILC.

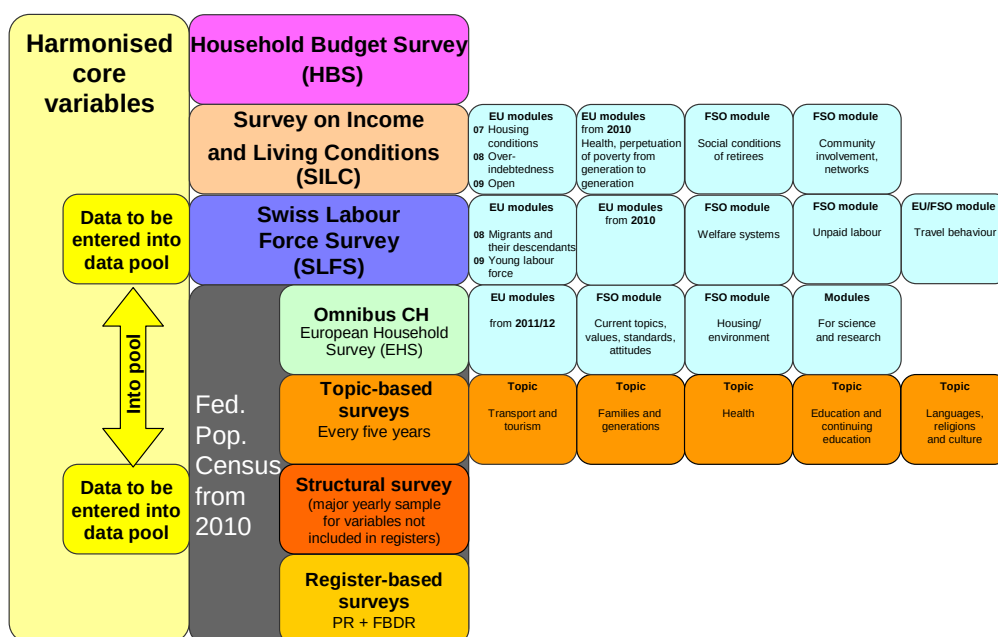
The political importance of topics can change virtually overnight, which is why it is so essential that the omnibus system be able to produce and publish data quickly. Generally speaking, figures should be made available within six months after the date the survey was conducted. The relatively small sample sizes (about 3000 respondents) enable the Omnibus to produce findings for the whole of Switzerland, making the survey ideally suited for analysis at the national level.

Core variables and data pool

The core variables of the integrated system (e.g. social demographic and social economic variables) need to be coordinated and harmonised. These core variables will feature in all the surveys. The aim is to increase the uniformity of methodology and the comparability of data. Once this is achieved, it will be possible to pool these harmonised core variables for specific analyses, for one year or over several years.

Over time, a larger data pool of core variables will be available, that is a substantially larger data set than that coming from separate surveys. The benefit will be two-fold: Firstly, these data sets can be used to study smaller sub-populations in greater detail; secondly, the data can be analysed for smaller geographical areas at a regional level. Hence, a significantly greater return can be achieved with neither additional costs nor increased burden on respondents.

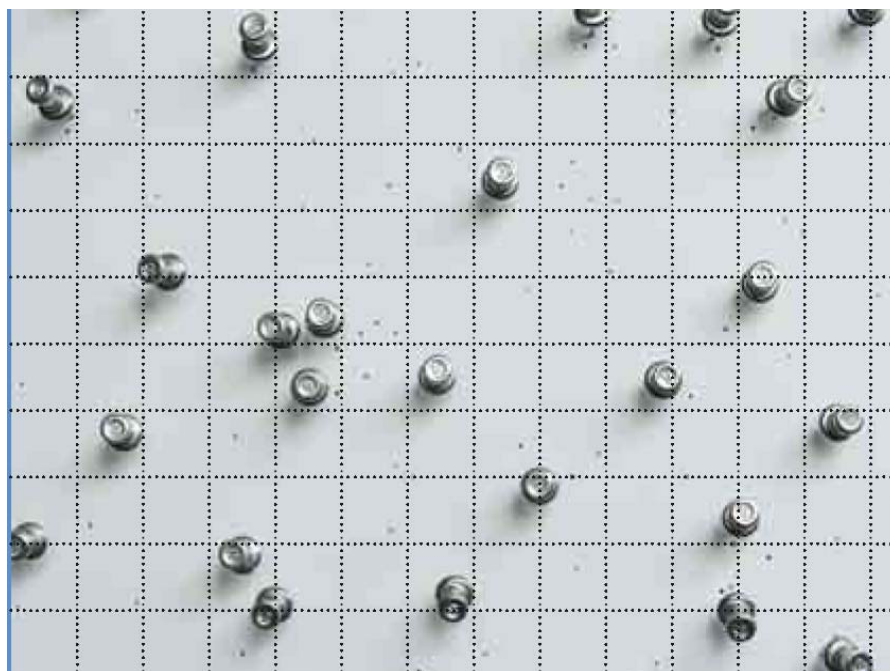
Core variables and the integrated System of Surveys



New register of addresses for random sampling

The FSO intends to establish a new register of addresses so that random samples can be drawn and administered as efficiently as possible. Art. 16, Pgh. 3 of the Federal Harmonisation of Registers Act serves as the legal basis. The register will take advantage of a harmonised set of variables in the over 2800 local administrative registers containing the inhabitants of Swiss municipalities. With this new register, random sampling will be based on individuals rather than telephone numbers, which is currently the case.

The quality of the sampling will improve immensely since potential respondents will no longer be limited to the list of telephone subscribers but rather will be drawn from the resident population as a



whole. The register can also be used to select particular demographic groups (e.g. specific age groups), which again makes the procedure more efficient and reduces the burden on respondents.

The sampling process will be managed in such a way as to ensure that the burden on respondents is kept within reasonable limits. No person should be interviewed more than once in five years.

Combination of information from various administrative registers

Quite often, the statistical value of register data is limited because the amount of information available is limited. This can be partly rectified by linking the various registers so that individual administrative data entries relating to the same person are combined. Depending upon the registers available, a considerable amount of data may be compiled in this manner.

Accordingly, starting in 2011 the new annual demographic statistics will be produced by combining data from the harmonised Population Registers (PR) with data from the Federal Buildings and Dwellings Register (FBDR). Data on living conditions, as well as number, size and type of households in municipalities, will thus be available every year, whereas until now this information was produced by the population census which took place only every ten years.

Another example relates to statistics on the recently retired. In order to obtain income information of new pensioners as they leave the labour market and start to draw a pension, data from tax registers and state pension scheme records will be combined, so that direct questioning will no longer be necessary.

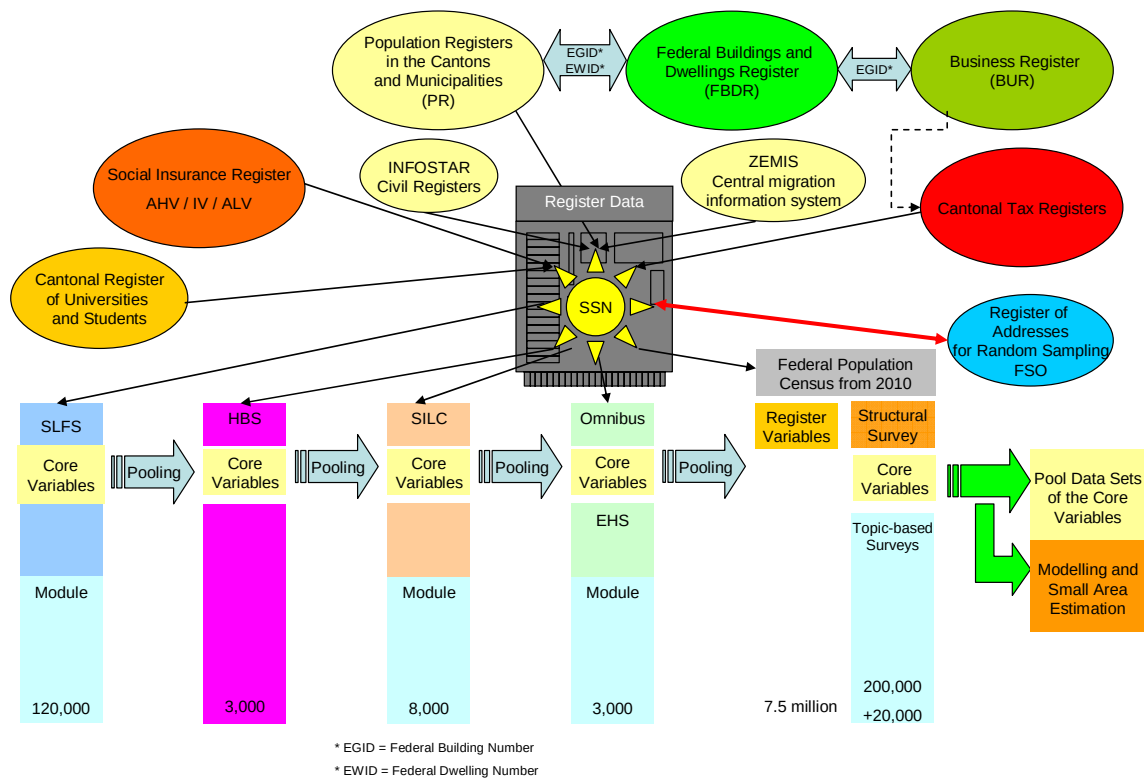
Besides the possibility of collating information from separate registers which could otherwise be analysed only in isolation, the described method reduces the burden placed on respondents and leads to reduced costs.

Creating an integrated system

The coordination of different surveys, the use and the coupling of existing administrative registers are prerequisites for the next and final step toward creating an integrated statistical information system. In this final step, a sample of the population will be drawn including the relevant information already available in registers. This information will be combined with the survey results.

The following diagram illustrates the maximum potential combination, but coupling of data should be undertaken only when the topics are related and when it makes sense to do so. Of course, strict data protection procedures apply. The new social security number (SSN), as laid down in the Federal Harmonisation of Registers Act and in the revision of the Old Age and Survivors Insurance Act, both passed by parliament in June 2006, offers the greatest potential as the key variable for coupling information from different sources.

The integrated system



Three examples will be described to illustrate how register and survey data can be combined. The first example is the SESAM Project (which stands for *Syntheseerhebung Soziale Sicherheit und Arbeitsmarkt* - Synthesised Survey of Social Security and the Labour Market). SESAM will combine data from the SLFS with data from the Register of Pensioners, Surviving Dependents and Invalids as well as from the Unemployment Register. Using SESAM, more information on the labour market and on the social structure of the population will be made available.

Another example is a test currently underway whereby data from cantonal and municipal tax registers are combined with data from the SILC as part of the overall development of SILC. In the long-term, this should make it possible for the quality of SILC data to be assessed. It should also enable us to shorten the SILC questionnaire, leading to a substantial reduction in the burden placed on respondents.

The combination of register and survey data helps correct methodological weaknesses in sample surveys. HBS will be described here as the third example. HBS results are not sufficiently representative for persons with high or low incomes (c.f. FSO 1998: data on income and wealth used to draft a report on poverty). A combination of the HBS results with data from tax registers could alleviate this problem. The information in those registers would allow sampling to be weighted accordingly, thereby improving the results of HBS.

Combining register and survey data leads to a statistical information system that strengthens the degree of integration described earlier (coordination of surveys and collation of data in the various registers). The combination of all possible and suitable variables of the reference units will increase the relevance of the data and maximize reliability because the available information can be collated optimally. Data will also be made available more quickly and thus its topicality increased. In addition, the system ensures greater comparability both internationally and over time.

Relationship with the new Concept for the Federal Population Census

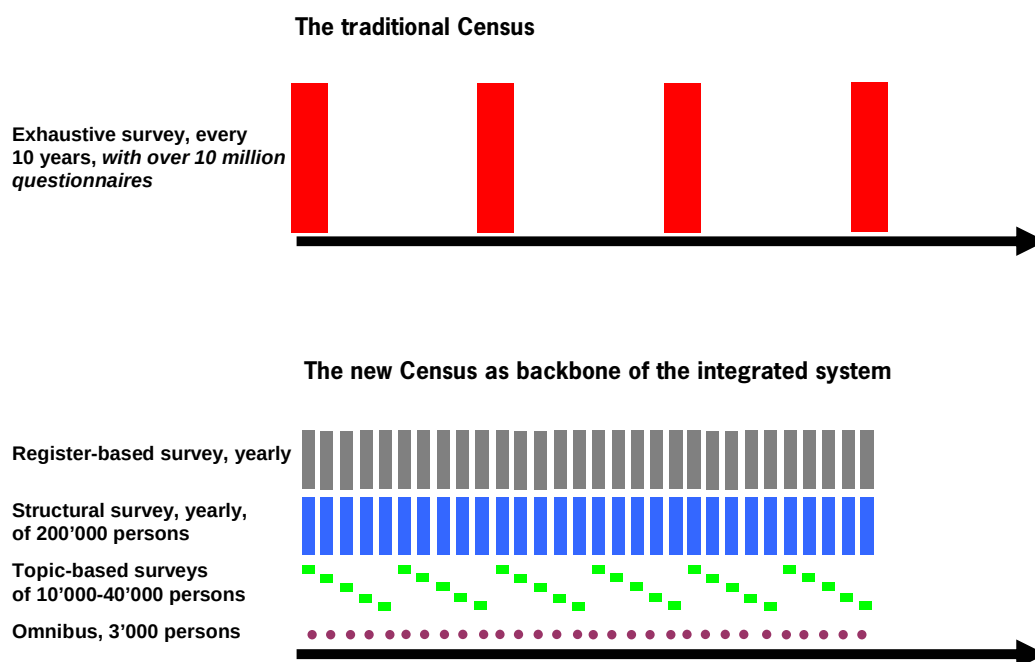
From 2010 the modernised Federal Population Census will form the backbone of the new complete statistical system covering households and persons.

The Population Census will be integrated into a comprehensive demographic statistical system. Using harmonised data from the federal, cantonal and municipal registers of residents as well as from the Federal Buildings and Dwellings Register, the quality of the annual demographic statistics will be improved immensely. The result will be detailed information on the residents of the municipalities, on the natural population fluctuations and on migration. This collation of information from the registers will be achieved without any additional demand on the citizens.

Using the combination with the Federal Buildings and Dwellings Register the improved statistical information will be geo-encoded, that is made available for very small geographical areas. In future it will be possible to produce basic demographic information down to the level of city neighbourhoods.

Information not available in registers will be gathered by means of an annual structural survey involving some 200,000 persons, which represents slightly more than 2.5% of the Swiss population. In the new system, the results of this structural survey and those of the topic-based surveys can be coupled with those of the register-based survey using the new social security number as identifier. All this reduces the burden on the respondents. The topic-based and the omnibus surveys will complement the census data collected annually in the register-based survey and the structural survey.

The new orientation of the Census



Uses and advantages of the new integrated system

The integrated system has the following advantages.

- Basic statistical information will be consistently made available and guaranteed on the long term.
- Important information gaps will be closed.
- An economic and flexible survey system will emerge thanks to synergies arising from coordination with the modernised population census.
- Results will be published more frequently and will be more up-to-date than has been the case in the past.
- Comparability of results will improve.
- Current political questions can be answered quickly.
- The quality of information will improve by including data from administrative registers.
- Burden on respondents will be less.