## **Statistics Netherlands**

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# Brief description of the methodology plan for the 2011 Census of population and housing in the Netherlands



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## Brief description of the methodology plan for the 2011 Census of population and housing in the **Netherlands**

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Remarks: The views expressed in this paper are those of the author and do not necessarily reflect the policies of Statistics Netherlands.

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#### Again a register-based census with sample surveys

The next virtual Census (of 2011) for the Netherlands is planned to be conducted with a very similar methodology to the one used for the last virtual Census of 2001. For the new census the Netherlands will be using registers and other administrative sources, together with information from sample surveys, to provide census statistics. The Netherlands has many registers available for statistical purposes, but some variables are only available in surveys. Therefore, some census tables for the Netherlands will be produced by simply counting from register information, whereas for other census tables information from surveys has to be weighted to population totals. The consistency among the tables is guaranteed by using the technique of repeated weighting. More information about how this method was used for the virtual Census of 2001 and the results of that Census can be found in Schulte Nordholt, Hartgers and Gircour (2004).

The Netherlands can choose for the option of a register-based census with sample surveys as all census information is available in the different sources. Moreover, it is possible (both legally and technically) to link the information from the different sources at the record level. Before one can start producing tables in a register-based census with sample surveys, micro-integration of the different sources is important. In the micro-integration process the data are checked and incorrect data are adapted. It is strongly believed that micro-integrated data will provide more reliable results, because they are based on a maximum amount of information. Also the coverage of subpopulations will be better, because when data are missing in one source, another source can be used. Another advantage of micro-integration is that there is no reason for confusion among users of statistical information anymore, because there will be one figure on each socio-economic phenomenon, instead of several figures depending on which sources have been used. Houbiers (2004) describes the process how Statistics Netherlands developed the Social Statistical Database that became the main source for the 2001 Census.

# Advantages and disadvantages of a register-based census with sample surveys

The advantages of a register-based census with sample surveys are that it is much cheaper than a census with interviewing inhabitants (a virtual census costs only a small fraction of a traditional census) and that no extra burden is put on the population of a country. A traditional census can meet with many privacy objections against the collection of integral information about the population living in the country. This increases the non-response problem. There are almost no objections to a virtual census and the non-response problem only plays a role in the surveys of which the data are used. If non-response can be corrected in a survey, it will

certainly be possible to correct for the selectivity of that survey in the census where it is used.

The disadvantage is that it involves more work to produce the tables from the microdata as weighting problems may arise. Moreover, it may be more difficult to get attention for the census results when people are no longer interviewed. Finally, one has to realise that for some small domains sample information will not be reliable enough to produce good estimates. Therefore, one must realize that for some small domains only the register information can be published in a register-based census with sample surveys.

# Implications of the choice for a register-based census with sample surveys

A virtual census is normally off to a later start than a traditional census. It does not make sense to really start the census project until all sources are available. Nevertheless, a virtual census is normally quicker ready as it has the advantage that the incoming census forms do not need to be checked and corrected. However, one must realise that for some variables only sample information is available, which implies that it is sometimes impossible to meet the level of detail required in some tables.

Some variables required have to be constructed from different sources and information in registers may be a bit different from the result that one would have got if the people in the country were interviewed. This may damage the comparability of the results among countries and over time. Registers have on the other hand the advantage that complete information is available. It is crucial that statistical bureaus may make use of registers that are relevant for the census. This implies normally a renewal of the statistical law. The last change in the statistical law in the Netherlands dates back from 2004 and has strengthened further the possibilities for Statistics Netherlands to use register data for statistical purposes. This has also implied that Statistics Netherlands had to take very strict security measures about the admissibility of the microdata. Nevertheless, after the renewal of the statistical law the statistical bureau will have to keep good contacts with register holders. Timely deliveries with relevant variables for the statistical bureau are crucial for statistical production. Originally, the censuses had several aims. In the Netherlands the central Population Register has taken over many features from the census. The census data are now mainly used to get extra information about the socio-economic phenomena in the country and for comparisons between countries.

### References

- Houbiers, M., 2004. Towards a social statistical database and unified estimates at Statistics Netherlands. *Journal of Official Statistics*, Volume 20, No. 1, pp. 55-75.
- Schulte Nordholt, E., M. Hartgers and R. Gircour (Eds.), 2004. The Dutch Virtual Census of 2001, Analysis and Methodology, Statistics Netherlands, Voorburg / Heerlen, July, 2004. <u>http://www.cbs.nl/nr/rdonlyres/d1716a60-0d13-4281bed6-3607514888ad/0/b572001.htm</u>.