

RECOMMENDED DESIGN FOR THE 1990-ROUND CENSUS  
SAMPLES DRAWN AS PART OF UNECE/PAU'S PROJECTS ON POPULATION  
AGEING

As part of two consecutive projects on population ageing the Population Activities Unit (PAU) of the Economic Commission for Europe assembled a collection of depersonalised microdata samples from the 1990-round of censuses in 15 European and North American countries. The samples were designed so as to allow research on a wide range of issues related to ageing, as well as on other social phenomena. A common set of nomenclatures and classifications, derived from a study of census data comparability in Europe and North America, were adopted as standards for recoding. The processing of the datasets, which included drawing of the samples (when requested by the National Statistical Offices), cleaning (where necessary), and standardisation/harmonisation, was performed by the PAU and every effort was made to ensure quality and comparability. One of the important aspects of the work on the harmonisation was the development of recommendations for the standardisation of the sampling design. These recommendations were discussed among the project's advisors and participants and agreed upon in three meetings that took place between December 1992 and January 1994. The recommendations envisaged that the design and size of the samples should conform to the following criteria:

- (1) drawing individual-based samples of about one million persons, so as to ensure sufficiently high sampling densities;
- (2) progressive over-sampling with age in order to ensure sufficient presentation of various categories of older people;
- (3) retaining the records of all persons co-residing in the sampled individual's dwelling unit, so as to preserve the information on living arrangements; and
- (4) drawing the samples with a simple procedure and to the extent possible ensuring that they are self-weighting.

To comply with these recommendations and after consulting with numerous experts<sup>1</sup>, the PAU proposed a design that incorporates four sampling universes, of each of which a simple random sample is to be drawn (i.e. four sub-samples are to be created). The first universe is the entire population, out of which a sample of about 450,000 persons is to be drawn randomly. The second universe consists of the population aged 50 and over,

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<sup>1</sup> Particularly insightful and helpful were the contributions of Richard Pottoff (formerly with the Center for Population Studies, Duke University), Samuel H. Preston (Population Studies Center, University of Pennsylvania) and Ib Thomsen (Methodology Unit, Norwegian Central Bureau of Statistics). In addition, Statistics Canada and the United States Census Bureau provided technical documentation describing the sampling procedures used to create the 1990 Public Use Microdata Samples that each of these institutions are producing. Mitchell Eggers drafted an earlier version of the sampling strategy, parts of which were based on the "User's Guide: Public Use Sample of the 1910 United States Census of Population".