B. General purpose and description of enterprise or establishment surveys

6.6. Business surveys can be conducted at the establishment or enterprise level and can provide coverage across the full range of services. They have proven successful for the collection of trade in services data and FATS in many countries. Detailed descriptions of the types of surveys and their design, as well as sampling techniques and related data editing and compilation procedures, are described in a number of publications, most notably in chapters 2 and 3 of the BPM6 Compilation Guide, which compilers are advised to consult when developing enterprise or establishment surveys for trade in services and balance of payment purposes. Compilers also are advised to make sure that the national definitions of the statistical unit (see chapter 5) comply with the standard definitions, and document any deviations in metadata.

6.7. One of the first decisions to be made in collecting data is whether to undertake a census, or to compile data from a sample survey that balances data quality with other considerations, such as reporting burden (see chapter 11 for a comparison of data sources). In determining the reporting population, various approaches are possible, including a census, a partial coverage collection survey, a random sample survey and a stratified random sample survey. In practice, compilers in many countries use a combination of two or three approaches when collecting data from enterprises, benefiting from their respective different advantages.

6.8. Surveys should always be based on clearly defined objectives, sound collection methodology and a well-established legal basis. Properly designed collection forms, full coverage of the population and well-defined data structures and classifications, as well as effective data validation and aggregation procedures, are also required. The principal steps of good survey design include the following:

(a) Specification of the objectives and coverage;
(b) Establishment of the sampling unit and the information to be collected;
(c) Determination of the appropriate sample size, if a sample will be used;
(d) Development of a sampling frame, i.e. an exhaustive list from which sampled units are selected;
(e) Development of the sample design, i.e. how the sample is selected from the frame;
(f) Determination of the method of collection (paper or electronic form, interview, etc.).

6.9. Sampling techniques and contacts with respondents: Compilers can choose from a wide variety of sampling techniques; generally, these are either probabilistic or non-probabilistic. In probability sampling, every unit in a population has a calculable probability of being selected in the sample. That approach is objective and defensible. There is a theoretical basis for the process of extending the sample results back to the population. In probability sampling, estimates of sampling error can be calculated, and inferential statistics can be derived. Non-probability sampling methods should be used with caution, because there is no way to measure their precision. The only way to address the quality of the survey data produced in non-probability sampling is to compare the results of the survey to some known information about the population. A frequently used non-probability sampling method is cut-off sampling (see box 6.1).

6.10. Whether selecting a sample using probability or non-probability techniques, compilers must define the universe (population) from which they will sample, that is, in practical terms, construct a sampling frame. In most countries, it is possible to define the population using various lists of enterprises (business registers), compiled for administrative purposes. For more information on sampling techniques, sample frame, sample structure and sample allocation (how to allocate the data collection among the strata), it is suggested that compilers consult chapter 5 of the IMF Producer Price Index Manual. While the Manual focuses on price collection, much of the information can be applied more generally to enterprise or establishment surveys.

6.11. Collaboration with respondents to surveys is essential for the production of good-quality statistics, as explained in more detail in chapter 2 of the BPM6 Compilation Guide. It is recommended that compilers hold consultation meetings to make respondents aware of the purpose of the survey and to help the statistical agency design the survey.
Cut-off sampling is a strategy frequently used by countries to select samples. In that approach, a predetermined threshold is established, with the inclusion in the sample of all units at or above the threshold (selected with certainty). Units below the threshold are not included (zero probability of selection). Cut-off sampling is a common technique in economic surveys in cases in which most economic activity is generated by the largest firms. It can be used to reduce the number of firms required to report in non-benchmark years, thus reducing the burden on a set of firms by their exclusion and reducing processing costs.

Cut-off sampling generally results in a high degree of coverage among a small number of prospective units, because the distribution of the selection variable, such as production or sales, is concentrated in a small number of large establishments. Limiting the target population enables the exclusion of small enterprises and/or enterprises that are not primarily engaged in providing services. That method is resource efficient and ensures that large firms are included. However, there is no way to determine if firms that fall below the cut-off behave in similar ways to the firms in the survey.

Sample frame cut-offs are revaluated regularly. If benchmark surveys are conducted, cut-offs are typically left unchanged between benchmark surveys, and are often increased at each benchmark, for a number of reasons. First, since cut-offs are set in nominal terms, inflation will eventually cause enterprises that did not grow in real terms to exceed cut-offs. Therefore, small enterprises may face a higher reporting burden owing simply to price changes. Second, industry consolidation may increase the share of economic activity of the largest firms. Therefore, it may be possible to increase thresholds without significant loss of coverage.

Compilers must consider resources when using cut-off sampling. Lower cut-offs reduce the amount of data that must be estimated. Since more enterprises are required to respond, a greater share of the estimates are actual data from reports. Estimates with lower cut-offs are likely to be more precise. However, lower cut-offs also impose a number of costs on both respondents and the compiling agency. Requiring more firms to respond imposes a burden on respondents since firm employees must devote time and effort to gathering information and filling out forms (and these costs are proportionally higher at small firms compared with large firms). Once a report is received, it requires substantial effort by editors to process. Processing more reports is more costly and slows the issuance of data. Cut-off sampling significantly reduces the costs of a survey by reducing the number of both reports and items filled out and processed.

Next: C. Enterprise and establishment surveys for trade in services statistics purposes

[3] Ibid., pp.13-14, for a more detailed explanation about survey forms and their advantages and disadvantages.
[4] Ibid., para. 2.3.
[6] Likewise, the Eurostat *Survey Sampling Reference Guidelines* provide more detailed information on that topic.