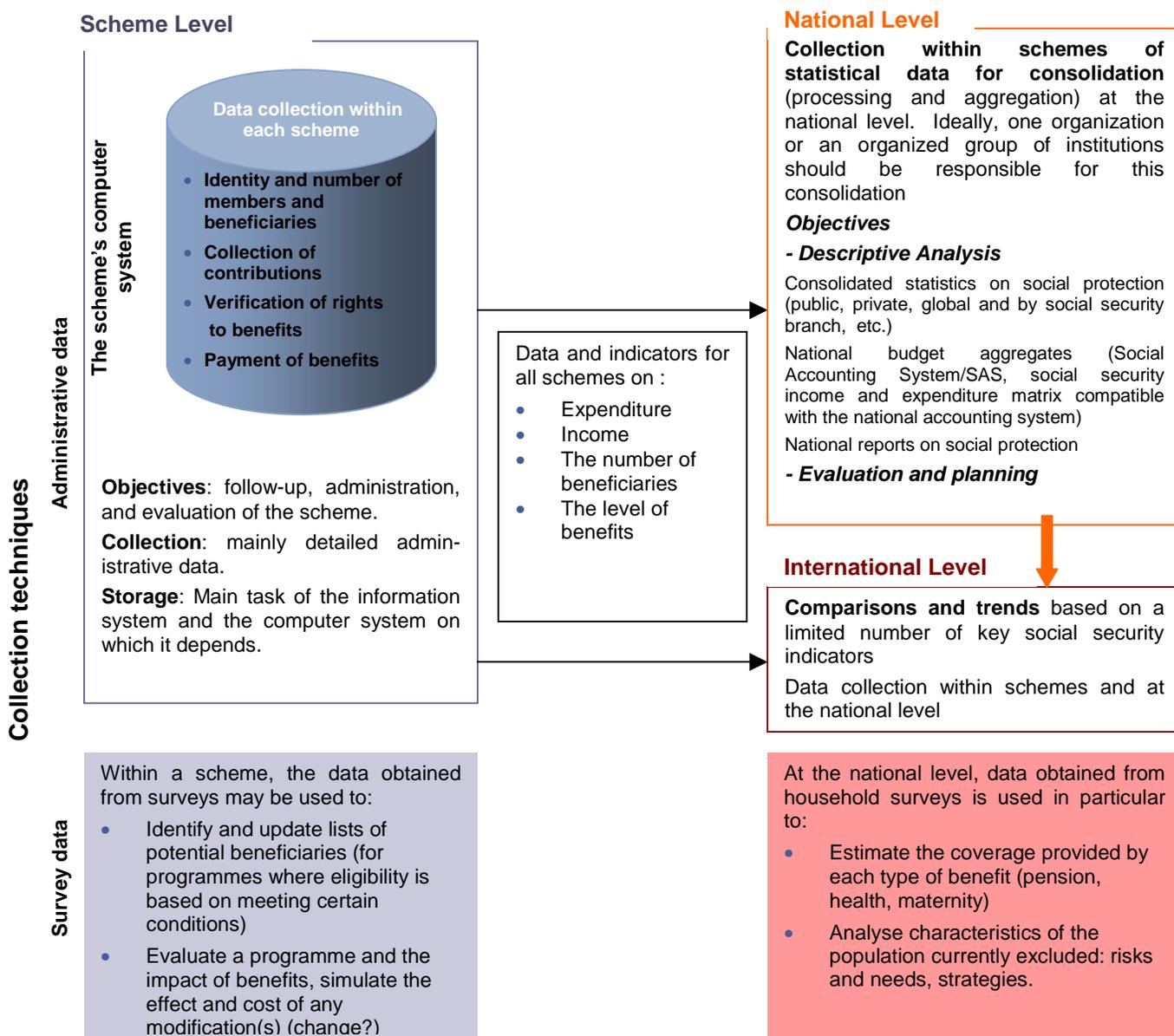


The techniques for collecting, storing and processing data vary depending on the users and their objectives. This note distinguishes between scheme administrators whose main aim is to ensure the efficient management of the activity and outside users, in particular analysts and political decision-makers, researchers and institutions at both national and international levels who are more interested in descriptive analysis, or analysis for policy-making.

The first section provides information on the collecting and storage of data within schemes. The second deals with data at national and international levels.

The following diagram shows the main levels in the collection of data on social protection - the schemes and the objectives of their administrators are shown on the left; outside users are shown on the right.

Diagram 1 – Levels of data collection, objectives and main techniques



## 1) Information concerning the collection, storage and processing of data in order to follow-up the activities of the scheme

The data collected and processed at the level of each scheme is raw data, it provides a “foundation” for follow-up of the activities of the scheme as well as reference data for actuarial studies. This section deals mainly with the data required for follow-up.

Follow-up can be defined as a continuous activity which consists of:

- Keeping track of the progress of planned activities
- Providing timely information for good management and effective decision-making.

The follow-up system includes all the procedures, tools, information networks and tasks which enable the collection and processing of the data obtained as part of the follow-up process.

### a) Principal data required for on-going administrative follow-up of a social security scheme.

Certain data and collection techniques are common to all systems; others are confined to only some of them depending on the nature of the scheme, in particular:

- The distinction between contributory and non-contributory systems
- The method of selection of beneficiaries including the distinction between universal coverage (of the entire population or a given population group) and defined target groups on the basis of means testing or the behaviour of the beneficiary (mainly in terms of education and health).

The method of data collection for potential beneficiary identification and beneficiary selection can further depend on several factors that include the type of membership (compulsory, voluntary or automatic), or the public or private nature of the scheme.

#### **The basic data required by all institutions responsible for the administration and follow-up of the activities of social security schemes on a regular basis**

This must be sufficient to enable the administration to:

- Have access to up-to-date information concerning the identity and number of beneficiaries (sex, age and if appropriate, family status and employment situation) at all times. In terms of policy evaluation and design (particularly as regards extension of coverage), it is also important to have information on the identity, characteristics and needs of potential beneficiaries who should or could be covered but are excluded.
- Monitor beneficiaries' rights whenever necessary: which benefits should be paid, how much and when; how much has already been paid.
- Calculate the expenditure involved in the payment of benefits including the type and amount of other administrative costs.
- Pay benefits to claimants and, in the case of health insurance, pay service providers.

In the case of **contributory schemes** (including micro-insurance) the data must also enable the administration to:

- Access information concerning the number of members and active contributors at all times, as well as the amount of outstanding contributions;
- Collect outstanding contributions.

## b) Main collection techniques

There are two main types of social security data and techniques for collecting them (see also Note 2 on this subject):

- **Administrative data** collected in the course of the day-to-day operations of a scheme, either on paper or computerized (particularly for the registration of beneficiaries), or through the transfer of data between several sectors of a computer-based system or from external data bases (e.g. between the *Benefits* and *Payment of benefits* sectors). These transfers may or may not be automatised.
- **Survey (or census) data** collected via a questionnaire or a guided interview. This primary data is collected directly from households/individuals. The completion of a survey or census involves a certain number of steps and activities, including:
  - **The statement of objectives:** clearly defined objectives; identification of the users of the results and their needs; inventory of existing information; inventory of the human and financial resources required and available; available budgetary resources and costs; time limits)
  - **Technical characteristics:**
    - Sampling method: type of survey, target and observed population, census base, size of the sample, etc.
    - Questionnaire: type of questionnaire (open-ended and/or closed questions, subjects covered, etc.)
  - **Implementation; field work and analysis:**
    - Collection: testing the questionnaire, survey timetable, staff and their responsibilities, training of interviewers (researchers?), design of survey manuals, etc.
    - Monitoring, codification, data entry and correction if appropriate, prior to analysis.
  - **Dissemination and utilization of the results**

Usually, the typical collection techniques used in the follow-up and evaluation of schemes can be schematised as follows:

Data required for:	Typical collection technique used	
	Surveys	Administrative data
Identification of potential beneficiaries and their characteristics	x	
Information on the identity and number of beneficiaries		x
Essential monitoring of beneficiaries' rights to benefits		x
Information on expenditure involved in the payment of benefits as well as the nature and amount of other administrative costs.		x
Evaluation of the programme, impact analysis, cost analysis	x	

## c) Main collection and storage techniques within schemes

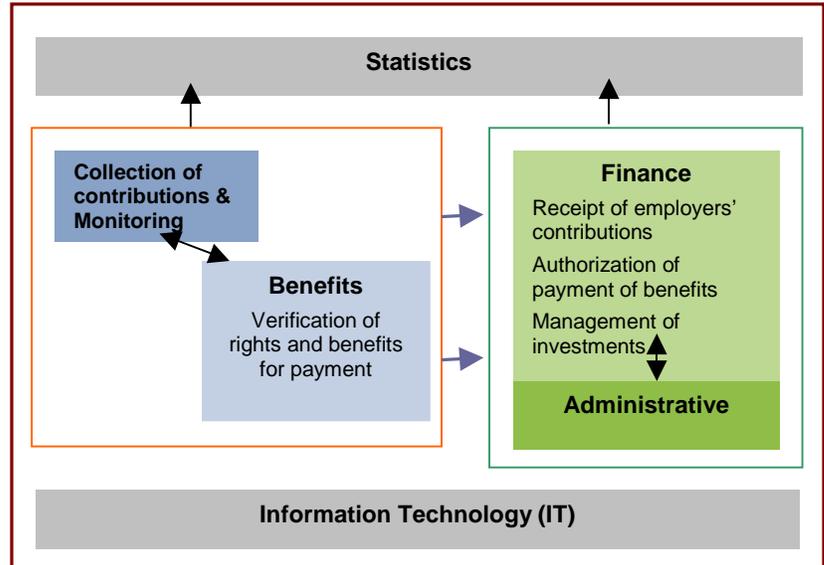
The following diagrams provide a simplified picture of the various elements of a computerized system for the storage and processing of data within contributory and non-contributory systems.

**In the case of contributory systems**, beneficiaries are identified when members register and on collection of contributions. This consists of administrative data.

The main collection tool is the register listing membership, the payment of contributions and membership fees (depending on the system). This register may be supplemented by other supports, particularly membership cards; membership and contribution forms and in the case of health insurance, certification of services provided, bills submitted by service providers and the list of services which are reimbursed.

## Contributory Systems

- **Collection of contributions and monitoring:** registration of employers, administration of the collection of contributions.
- **Benefits:** registration of workers, verification of their rights and the provision of benefits.
- **Finance r/payment of benefits** management of cash flow, capital expenditure and investments
- **Administration :** management of staff, salaries, purchasing
- **IT :** collection and processing of data in connection with the management of the computer system
- **Statistics:** creation of scorecards, calculation of indicators, consolidation of statistics for actuarial reviews, statistical compilations, etc.

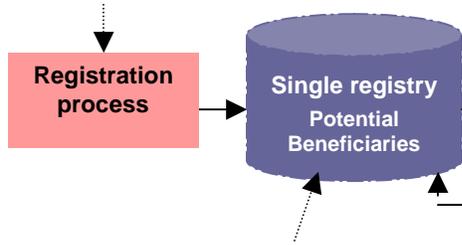


## Non-contributory Systems (and targeting)

**Collection and verification of information** required for the selection of beneficiaries. Collection of socio-demographic information and standard of living indicators.

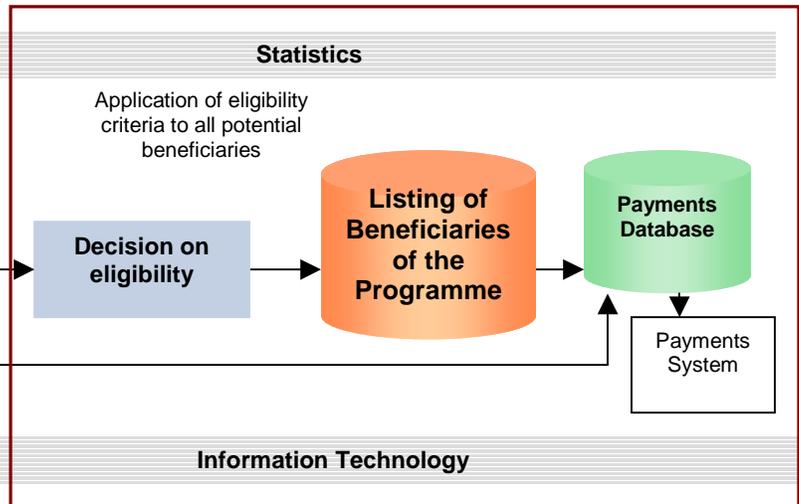
**Technique:** questionnaire

**Method:** survey (home visits) or interviews arranged in a given location (on demand)



Maintenance and regular up-dating of the list of potential beneficiaries:

- Identification of new potential beneficiaries (survey)
- changes of status affecting eligibility (inquiry and automatic updating using the payments database)
- The "single registry" is a database of potential beneficiaries, already used notably in certain Latin American countries.



Administrative Data

**In the case of non-contributory systems**, the main element involved is the right to benefits; there is no “contribution collection”. The first step is the identification of potential beneficiaries (possibly through survey methods) followed by the listing of eligible beneficiaries. The situation is more complex if eligibility for the programme and the payment of benefits are means-tested or involve other conditions.

- Method of identification of potential beneficiaries: identification by community, census of all households in a given geographical area for instance through the mapping of vulnerable populations.
- Collection and verification of data: Surveys (home visits) or interviews in a specified location (on demand).
- Collection tools: Questionnaires to obtain all the information required to decide on the eligibility of the claimant.

## 2) At the national or international levels (see Note 3 on this subject)

Two main sources of data are available at both national and international levels:

- administrative data collected within the schemes via special questionnaires in order to enable the consolidation (often problematic) of data at the national level. This presupposes a computerized system that is up and running within each scheme for on-going processing of data concerning beneficiaries, expenditure and receipts.
- information from household surveys to estimate coverage, identify the type of benefits provided and their amount
  - Analysis of data from existing surveys (see Note 2 for additional information)
  - Collection of primary data through surveys
    - ✓ Module of questions included in existing regular surveys and comprising a limited number of questions concerning social security: exposure to risks; coverage provided by various formal structures in existence at the national level, by community systems, etc. This implies adaptation to each country.
      - provides regular national estimates of certain elements which may indicate a need for a special independent and more detailed survey
      - helps to increase awareness of the uses and necessity for statistics on social protection and particularly for consolidated statistics at the national level
    - ✓ Independent survey

Whatever the techniques chosen, they will involve prior definition of the tools (questionnaire) and in the case of an independent enquiry, of the method of collection.

### An example of data collection at the international level

The main reason for any country to show interest in data collected at the international level is to be able to compare its situation with that of other countries, particularly within the same region.

The example which follows is intended to illustrate one method of collection, storing and processing data prior to dissemination at the international level.

### Example of the Collection of social security data at an international level – the Social Security Inquiry

**Aim:** collect data in as many countries as possible on social security expenditure, receipts, beneficiaries, the type and amount of benefits provided.

**Collection:** The inquiry collects information at two levels: nationally and at the level of the schemes

**Collection tools:** a **Questionnaire** comprising a defined set of questions on paper or in electronic form, with on-line records for direct integration of data in a database:

National Level	Ministry in charge of social protection National institute of statistics	Ministry of Finances National institute of statistics
	Background information Population data & Employment <b>Inventory of social security schemes</b>	Economic & financial background information Social Security expenditure Social Security revenue

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Scheme Level	Scheme 1	Scheme 2	Scheme 3
	<ul style="list-style-type: none"> <li>▪ expenditure</li> <li>▪ revenue</li> <li>▪ beneficiaries</li> <li>▪ benefit levels</li> </ul>	<ul style="list-style-type: none"> <li>▪ expenditure</li> <li>▪ revenue</li> <li>▪ beneficiaries</li> <li>▪ benefit levels</li> </ul>	<ul style="list-style-type: none"> <li>▪ expenditure</li> <li>▪ revenue</li> <li>▪ beneficiaries</li> <li>▪ benefit levels</li> </ul>

#### Collection techniques :

- **Option 1:** Data collection at the country level:
  - Direct online data entry by the national institutions:
    - **Social security schemes** for information at the scheme level
    - Ministry of Finance: expenditure and financing on the national level, economic background information
    - Ministry of Labour, Health: Scheme inventory, socio-economic background information
  - Hard work of identifying schemes and looking for information
- **Option 2:** Insertion of data from other sources and promotion of the use of the social security inquiry tool by other organisations
- **Option 3:** Import of existing data at international level: ESSPROS, SOCX

This data is stored in a computerized system which enables data to be recorded online, permits the automatic calculation of indicators within the various schemes and consolidation at the national level, and enables data to be transmitted and exported for analysis via internet.

### 3) Useful References

- [Health Micro-Insurance Schemes: Feasibility Study Guide, Volume 1 and 2](#) (pdf 2406 KB)  
ILO/STEP, 309 pages, ISBN : 92-2117471-9, ILO 2005
- Designing and implementing social cash transfer programmes (Economic Policy Research Institute, 2006)
- 8<sup>th</sup> International Conference on data processing in social security – Innovations in information technology: a decisive factor in the further development of social security systems (Berlin 22-24 October 1996)

- Bonnet, F. and Butare, Th. 2007. « ILO & ISSA experience with social protection statistics and perspective”, report presented at the Conference on the Social Protection Index for Committed Poverty Reduction, 11-12 December 2007, Seoul.
- Module comprising a set of minimum questions on social protection for insertion in surveys on existing households (F. Bonnet)
- IMF Data Quality Assessment Framework (DQAF. For summaries see:
  - French: [http://dsbb.imf.org/vgn/images/pdfs/dqrsdqaf/DQAF\\_FactSheet\\_French.pdf](http://dsbb.imf.org/vgn/images/pdfs/dqrsdqaf/DQAF_FactSheet_French.pdf)
  - English: [http://dsbb.imf.org/vgn/images/pdfs/dqrsdqaf/DQAF\\_FactSheet\\_English.pdf](http://dsbb.imf.org/vgn/images/pdfs/dqrsdqaf/DQAF_FactSheet_English.pdf)