

HUMAN RESOURCES MANAGEMENT AND DEVELOPMENT

Human Resources Management and Development

Chapter **13**





13.1 Introduction

This chapter looks more closely at the strategic issues and provides information, including current practices, on HRMD policies and practices relevant to NSOs. Of course, many of these are also highly pertinent to other major producers of official statistics in a national statistical system.

For other major producers, a statistical unit within a ministry or government agency is typically responsible for collecting data and producing statistics. The way statistical functions are carried out varies. In some countries, the statistical unit in these agencies is fully staffed—for example, the central bank or, ministries of agriculture or labour/employment. Some health and education ministries have developed management information systems from which health and education statistics are produced. In others, the statistical functions are embedded in the planning and monitoring unit of the ministry or government agency. Customs, the data source for international trade statistics, may or may not produce the statistics itself but may prepare the data files further processed by the NSO.

As producers of statistics, the staff of these statistical units need the core skills and competencies discussed in this chapter, as well as knowledge of the concepts, standards and classifications pertaining to their sectors. The skills and competencies required at the technical level—the sectoral statistics, data collection and processing, analysis, etc. are quite relevant to these other data producers. Of particular importance is the capability for producing statistics from administrative records and registers.

In discussing human resources (HR) and development for organizations in general and national statistical offices (NSOs) in particular, the following key strategic questions need to be addressed:

- What skills are needed now and in the future?
- What can statistical offices offer for staff?
- How to attract staff with those skills?
- How to communicate about job opportunities in statistics?
- How to train staff to maintain and develop their skills?
- How to provide the best possible working environment?
- An earlier version of the Handbook makes some timeless observations that are still relevant today. A decisive factor in the internal capability of a national statistical office (NSO) is the calibre of its staff. An agency can only function well if good people are available to make it work. Organizational arrangements may enable people to do their best, but it is essential to give utmost attention to building up the right skills for a statistical organization.
- To acquire the kind of skills needed, an NSO needs a well-planned HRM and Development (HRMD) policy and active recruitment programme, career development, education and training.
- Capacity development is an ongoing process for current staff. For example, they may be assigned to handle new statistical methodologies, learn and apply new technologies or prepare implementation plans for new statistical

frameworks. And, they are often progressively given increasing managerial responsibilities among many other possible progressions of career development.

- Capacity development is also an ongoing need for recruits who start at the “beginner level” and as opportunities for training and career development are important parts of the staff retention programme.
- Opportunities for higher education and short-term training (including on-the-job training) should be part of the staff learning and career development programme. The design of such a programme should be anchored to a capacity development framework or capability framework or a core skills framework.
- The statistical system may consider establishing a statistical training institute to provide core training and training in new areas. Some national statistical offices have a statistics degree-granting institution attached to it.
- The physical environment of the workplace—working space, computer-related facilities and spaces to facilitate communication between teams as well as cross-teams contributes not only to efficiency but also to the well-being and satisfaction of the staff. Moreover, the environment must be conducive to integrating statistics because, in a real sense, the “successful integration of statistical end-products is contingent upon the ‘integration of the statisticians’”.
- NSOs who have not yet done so may consider adopting policies on flexible working arrangements (FWAs). FWAs are adjustments to the normal working hours and locations, such as: telecommuting, remote working and condensed workweeks. FWAs are globally recognised and adopted by organizations; for example, see the FWAs adopted by the [UN Secretariat](#) including a tool to increase productivity and to better balance the professional and personal lives of their staff.

13.2 Workforce (Staff composition) of an NSO

The statistical system’s human resources—the people working for all entities and organizations producing official statistics, their skills and expertise - are the most valuable and often the scarcest resource. The workforce of a modern NSO needs a wide range of skills and competencies to effectively carry out its functions. The requirements for human resources of an NSO are determined by its legislated and programmatic mandates and functions.

A strategic plan and a multi-annual work plan set out what the NSO needs to do. The determination of planned activities and expected outputs is guided by its vision, mission, and strategic goals identified and renewed over time.

13.2.1 NSO functions

The core functions of an NSO (refer to [Chapter 4.3.4 — National statistical office](#) layout the core knowledge, skills and competencies that its workforce would need to have:

- Ensuring continuity of production and dissemination of all statistics under its responsibility.
- Providing an effective performance of the system-wide functions such as setting standards, planning, coordination of the national statistical system, and statistical registers, which includes the responsibility of the NSO to provide services for other producers (e.g., sampling).
- Ensuring quality and efficiency of the production and dissemination processes, based on using the best-suited methods and technology, carrying out research to enhance quality and effectiveness, applying standards-based modernisation and innovation models such as GSPBM, GAMSO or and CSPA.
- Developing and maintaining networks with the various user groups to assess the relevance and respond to changing and emerging information needs.
- Ensuring trust of users, respondents and data providers in its institutional quality, and in the integrity of the whole national statistical system, through regular monitoring of adherence to the United Nations Fundamental Principles of Official Statistics (UNFPOS) or equivalent lists of principles across the whole national statistical system.

- Contributing substantively to discussions in international forums (expert groups, standards-setting, framework development, technical conferences, etc.) of official statistics.

The core, current and planned activities, targets and schemes of service determine the number of people, the workforce plans and how the work is to be organized. In this Chapter, the workforce composition is described, assuming that the NSO organizational structure is a vertically centralized one—with a central office and geographically dispersed sub-national offices. And the ability to meet new demands for NSO products and services may require the ability to change how it conducts its business.

13.2.2 Workforce Composition

The organizational charts for Bhutan, shown in Figure 13, suggest that workforce needs of a national statistical office—whether large or small, developed or developing—are largely functionally similar. The differences would be in the number of staff and their skills and competencies.

Using the UNECE Classification of Statistical Activities (CSA), the functional composition of an NSO workforce as highlighted in the charts are:

- Strategic and managerial issues of official statistics: Statistical programmes; coordination within the statistical system; management and development of human resources; management and development of technological resources.
- Subject matter expertise: Demographic and social statistics; economic statistics; environment and multi-domain statistics.
- Methodology of data collection, processing, dissemination and analyses: Data sources (Census, registers and surveys); data processing; dissemination; data analysis.

It is to be noted that the illustrative organizational charts do not explicitly reflect the functions of coordination of international statistical work and technical cooperation. Typically, the function is carried out by a unit of the office of the chief statistician.

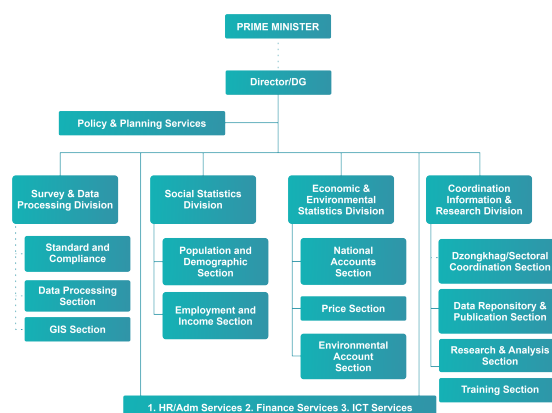


Fig. 13.1: Illustrative NSO organization chart - National Statistics Bureau of Bhutan Source: Adapted from <https://www.nsb.gov.bt/about/organogram/>

Owing to the evolving range of subjects covered by a modern NSO, the staff tends to possess various skills and varying backgrounds. Even agencies that conduct only moderately complex and specific statistical undertakings find themselves in need of a wide range of skills. Statistical operations require a mix of talent apart from statisticians and data scientists, including economists, sociologists, psychologists, demographers, econometricians, model builders, geographers, information technology experts, accountants, etc.

It is important to build and maintain a multi-talented staff with a broad range of academic, technical and managerial skills and work experience. Professional staff can often be divided into two categories:

- General personnel performing at various levels of sophistication in informatics; statistical design and analysis; national, public sector or enterprise accounting; and economic, social or demographic analysis.
- Specialized personnel capable of performing at a substantially high level in an area such as non-response analysis; applications of geospatial information; access and use of Big Data; data integration.

In addition to the technical know-how, staff also take on managerial responsibilities (heads of organizational units; e.g., as shown in the organizational charts).

13.3 Human resources (HR) policies

13.3.1 Defining human resources (HR) strategy and policy

HR policies are ‘a written source of guidance on how a wide range of issues should be handled within an employing organization, incorporating a description of principles, rights and responsibilities for managers and employees. HR policies define the philosophies and values of an organization on how people should be treated; these are the foundations upon which managers are expected to act when dealing with HR matters. Therefore, HR policies serve as reference points when employment practices are being developed and when decisions are being made about people. They help to define ‘the way things are done around here’. Examples of HR policies are criteria for selection, performance, incentives and rewards, and learning and development.

HR policies should flow from HR strategies. An HR strategy is a “statement or framework determining how HR can support business or organizational objectives, focusing on longer-term people issues and macro-concerns about structure, values, commitment and matching resources to future need.”

Examples of HR strategies are incentive and reward strategy and learning and development strategy.

An organization’s human resource management (HRM) framework ties up strategy and policy and supports its implementation.

13.3.2 The need for HR policies

HR policies play an important role in fostering and supporting cultures of trust, fairness and inclusion. They outline the responsibilities of both employer and employee in the employment relationship. They can impact employee motivation, organization reputation and the ability to attract and retain talent. These policies can support the attitudes and behaviours needed for sustainable performance, creating mutual benefits for employees and organizations.

HR policies provide frameworks within which consistent decisions are made—based on the organizations’ core values—and promote equity in how people are treated.

The policies ensure that employees understand their roles and how their work contributes to achieving the goals of the NSO. Because they provide guidance on what managers should do in particular circumstances, they facilitate empowerment, devolution and delegation.

13.3.3 The scope of HR policies included in this Handbook

Types of HR policies organized according to the employee life cycle would include:

- **Beginning employment**
 - Recruitment and criteria for selection;
 - Induction/On-boarding;
 - Beginning training.
- **During employment**
 - Compensation, benefits, performance and rewards;
 - Health, safety and well-being;
 - Employee relations and general HR issues (job rotation, secondment, communication);
 - Retention;
 - Learning and development (training, coaching and mentoring, talent development).
- **Ending employment**
 - Exit interview;
 - End of employment (Retirement, resignation, separation, change jobs, etc.).




An example of a set of coherent objectives that HR policies are designed to help attain are:

- Workforce planning - Increase the proportions of professional staff by expanding the annual intake of young professional qualified staff.
- Ensure that once recruited, qualified people are assigned suitable jobs, and everyone is treated fairly.
- Devise a proper mixture of deterrents and incentives, to be made explicit to the staff.
- Learning and development - Administer sufficient training to staff members at key points in their careers, to maximize versatility and motivation.
- Succession planning - Ensure that key jobs are staffed and have a possible successor ready to step into an incumbent's shoes should the need arise.

In this handbook, discussion on HR policies covers recruitment, workforce planning, learning and development, retention, job rotation and exit interviews at the end of employment.

13.3.4 Competency Framework

A competency framework is a tool that guides the formulation and implementation of HR policies starting with the recruitment and aiming at building professional capability and staff well-being and ensuring that the organization stays on course in achieving the expected objectives.

- *The Government Statistician Group (GSG) Competency Framework (UK)* (
- *Australian Bureau of Statistics Statistical Language* (
- *Australian Bureau of Statistics Statistical Capability Framework* (

Excerpts from the Government Statistician Group (GSG) Competency Framework (UK) shown in Box 7 highlight the purpose, uses and key contents of a competency framework. It shows how a competency framework is linked to the mission of the government statistical service and the strategy for UK statistics.

Box 7: UK Competency Framework

The Government Statistician Group (GSG) Competency Framework of the UK sets out what members of the statistical profession are expected to achieve in addition to the competencies set out in the Civil Service Competency Framework (CSCF).

This framework will support us in meeting these aims [referring to the mission of the Government Statistical Service (GSS)]. It will help us recruit and retain a strong cadre of Statisticians and Statistical Data Scientists and build the professional capability of all GSS members, keeping statistical evidence and advice at the heart of decision-making across society.

In alignment with the Civil Service Competency Framework (CSCF) and the Better Statistics, Better Decisions Strategy, it places the values of honesty, integrity, impartiality and objectivity at the heart of everything that statisticians do.

The framework is structured into the five pillars, which describe how we will deliver our strategic objectives (e.g., we will be innovative in our approach to presenting and disseminating results that meet our customers' needs). Within each of the five pillars, competencies are grouped into four statistical strands (Acquiring data/Understanding customer needs, Data analysis, presenting and disseminating data effectively, working with credibility) that outline what we will do to deliver our strategic objectives (e.g., we will apply the latest data visualisation method to our statistical product to boost user engagement).

Through aligning with the five pillars (Helpful, Innovative, Capable, Efficient and Professional), it describes the way that we want statisticians and statistical data scientists to work with others to provide a professional and high-quality service, be innovative, deliver cost-effectively and ensure we continue to grow the capability of the statistical community.

Statisticians and statistical data scientists work in a huge range of roles across government, and this framework has been designed with that flexibility in mind. No individual will be expected to satisfy the full suite of competencies within a given pillar/level – the competencies that you are required to demonstrate will depend on your post, and these will have been initially established at the recruitment stage, or where they have changed, at the start of the performance year. However, you will be expected to be aware of the wider competencies/skills in play across both the GSG Competency Framework and the CSCF.

This framework will be used for recruitment, performance management and development discussions from April 2016.

13.3.5 Communication of HR Policies

Turning HR policy into practice requires working across the organization to ensure that leaders, line managers and employees fully understand the policies and expectations. How these are communicated depends on the organizational culture and nature of the policies.

Line managers are pivotal in bringing HR policies to life; thus, training is crucial to ensure that managers have a clear understanding of the policies and have the capability to implement policies sensitively and fairly.

Induction (the process where employees adjust or acclimatise to their jobs and working environment) plays a key role in making sure new employees are aware of all the policies and procedures within an organization.

- Statistics New Zealand ()

13.4 Recruitment

From: *Chapter on Managing staff vacancies, UNECE Guidelines for Managers* (🔗)

Good recruitment and selection process are based on a clear definition of specific capabilities and classification requirements to meet business needs. Any vacancy management process must be executed in consideration of the efficient and effective use of available budget. It is considered prudent policy and good practice that managers should consider internal options, such as re-allocation of responsibilities, before proceeding to external recruitment. To obtain the best pool of capable applicants, external recruitment advertising must offer a reasonable opportunity for all eligible community members to apply.

The principle of merit, which requires assessing the aptitude of applicants to perform the functions identified through a competitive selection procedure, should apply in external and internal recruitment and selection procedures. This principle should be implemented even if, a priori, the skills of an internal candidate seem to match the requirements of a vacant post.

Since NSOs are part of the government administration, their respective HR policies, including recruitment, follow the government recruitment policies. For example, the UK's GSG Competency Framework speaks of it as set out "what members of the statistical profession are expected to achieve in addition to the competencies set out in the Civil Service Competency Framework". In some cases, the recruitment and selection procedure for NSO staff is limited to a roster of candidates resulting from a general competition for jobs in the administration.

Specific examples of recruitment practices in NSOs are provided hereunder:

- **Mongolia.** *Global Assessment Report for Mongolia (2014)* (🔗)

According to Mongolia's Law on Statistics, the Chairperson of NSOM is appointed by the Parliament on the basis of nomination by the Speaker of Parliament. The Chairperson, in turn, appoints the heads of statistics at aimag, district and municipality (Capital-City) levels. The Treasury Officer who comprises the statistics capacity at soum level is appointed by the sitting government, as are the Governors at bag and khoroo levels.

According to Mongolia's LS, Article 15, the Chairperson of NSOM has the right to appoint the Statistics Department heads and divisions of the Capital-City and districts, and the aimags. Furthermore (Article 15bis, paragraph 1), the General Manager of NSOM has the right to recruit, promote and dismiss staff.

However, in practice, recruitment in NSOM is managed according to Mongolia's Law on Civil Service, which stipulates that the Civil Service Central Authority manages the recruitment of all civil servants, thus including staff of NSOM.

Accordingly, candidates that meet the requirements of each job position at NSOM are sourced from a labour pool by the Civil Service Committee and recommended for the position. The pool comprises candidates who have passed a general civil service exam. Although vacancies can include requirements specific to the functions at NSOM, the Civil Service Committee decides whether any of the pooled candidates meet the requirements. If no qualified candidates are found, the post is advertised, and applicants must pass the standard civil servant exam to be considered for the post. The Civil Service Committee makes the final selection decision and the decision is sent to NSOM.

Recruitments at the territorial level are managed by a sub-committee of the Civil Service Committee. Like the Civil Service Committee itself, this sub-committee does not have a particular mandate related to statistics posts but oversees recruitments in all professions at the territorial offices.

- **Philippines**

In the Philippines, civil service eligibility is a basic requirement in applying for government positions. Aside from the civil service eligibility, the applicant for a statistical position must also satisfy the minimum qualification standard for the position set by the Civil Service Commission (CSC), e.g., education, training and work experience. In the screening stage, the NSO evaluates the applicants based on the core competency skills, e.g., communication skills and data management, for entry positions. For higher positions below Division Chief level, Trade test is also given to applicants while Division Chief applicants have to undergo management/leadership skills test. In some instances,


the CSC reviews the credentials of the newly hired employee before their appointment in the government takes effect, especially if the government organization/NSO is not yet accredited to approve the appointment of the newly recruited staff.

13.4.1 Recruitment-related issues and processes

From: *Chapter on Managing staff vacancies, UNECE Guidelines for Managers* (🔗)

Guidance to managers on managing recruitment issues and processes:

- **Choosing the right person using the right selection process**
 - At the initial identification stage, it is valuable to re-assess role capability requirements, by referring to Work Level Standards, the work program, and updating the role description if required. From this point of view, continuous maintenance of a skills register (better if integrated into a database system) is required, considering both the evolution of professional profiles and emerging new skills.
 - Then, critically assess work needs and the team structure, to manage through internal options such as work distribution and a selection process not required.
 - Consider the available salary and consider flexible working arrangements such as part-time options to meet requirements.
 - Upon identifying the need for a new employee, consider which staff engagement strategy is most reasonable to pursue.
 - Finally, determine what level of support and coordination the Human Resources Division (or if applicable the Recruitment Unit) can provide to help you scope out what resources are needed to manage a recruitment and selection process.
- **External recruitment**
 - When exploring the external market, the process selected depends on capability needs, the number of vacancies, time frames and budget.
 - Work with the Recruitment Unit from the beginning to establish what administrative assistance will be provided. They can help coordinate advertising and promotion, and for the time commitment from selection and placement panel members.
 - Maybe it is possible to use an existing order of merit from a similar selection exercise that is no more than 12 months old, use a secondment, or transfer at level from another agency. Filling a vacancy at level (ongoing or non-ongoing) means it is unnecessary to conduct a competitive selection; however, it must still be based on merit.
- **Managing a selection process**
 - Ensure that administration and coordination roles are clarified at the beginning of a selection process within the Human Resources Division (HRD), including forming a selection panel that will define appropriate selection method and provide recommendations after the completion of the selection process.
 - The choice of the selection method should meet the needs of the position that will select the most appropriate applicant(s). Examples include work samples, role plays, assessment, or based on application only.
 - The selection panel will conduct a systematic process to assess the relative merit of applicant's, document decisions, report to the delegate and provide feedback to applicants.
 - Contacting referees is not a mandatory selection process requirement, however, it is essential when obtaining a fair and accurate evaluation of an applicant relative suitability to the role, team environment and organizational culture.
- **Internal flexibility and inter-agency transfers**

- It is good practice to look at the internal options and opportunities within the organization and the Public Service.
 - For example, there may be a short term need to finish a project because a key project staff has left. Internal options may help fill the vacancy quickly and achieve project time frames. However, even if the vacancy is filled internally, it is still required to evaluate the work-related qualities of the person against what is required in the position.
- *Chapter on Managing staff vacancies, Guidelines for Managers, UNECE* ()

13.4.2 Managing integration of newly recruited staff (Induction/Onboarding)

Integration of newly recruited staff into the NSO involves a process (induction) where employees adjust or acclimatize to their jobs and working environment. The term ‘onboarding’ refers to the whole process from an individual’s contact with the organization before they formally join, through to understanding the ways of working and getting up to speed in their job.

From: *Chapter on Managing staff vacancies, UNECE Guidelines for Managers* ()

Newly recruited staff must be provided with all information and tools required to become fully operational in due time, including orientation training and seminars.

However, managers themselves must take care of the integration of newly recruited staff within their organization. They could appoint more experienced people within the organization – or even the one the newcomer is going to replace – as mentors for newcomers, using mentoring as an informal tool for the newcomer to learn what he/she will have to know in his/her new position.

Managers could also support newly recruited staff integration by organizing knowledge-sharing events within their structures, during which information and documentation about working activities are circulated and shared. Documentation for newcomers could also be made available on an electronic form and made accessible on the web, in the form of digital storytelling, where the retiring person tells about meaningful experiences of his/her working life and share his/her lessons learned.

The first day (or the first few days or the first week) of a new staff can have a pronounced effect on the recruit’s attachment, respect, and dedication to the organization. An effective NSO will ensure that the following take place on the first day:

- The recruit finds a suitable place in which to sit and something definable to do.
- An accessible person is identified who will address questions and resolve doubts for the recruit.
- The organization conveys its willingness to consider the individual’s career in addition to the immediate job.
- An explanation is given of what the individual’s activities will be in the immediate and the near future, how they fit in with the organization of the office and what specific objectives they are designed to serve.
- A training plan is presented.
- Orientation is provided. Some offices, usually larger ones, have developed a tradition of organizing, at regular intervals (e.g., every month or every second month) an orientation day that is meant to give recruits a quick overview of how the organization is structured and operates.

Beyond the first day or first few weeks, a decision has to be made to deploy recruits to undertake a specific function and to the corresponding organizational unit. A few NSOs (e.g., Statistics Netherlands) have a system in place whereby for the first two years new staff are rotated across the organizational units for 4-6 months before a final deployment is made. Box 8 illustrates the concept of coaching.

Box 8: Coaching at Statistics Finland

An example from Statistics Finland. The changing role of statistical institutes requires a new type of management - a coaching leadership style.

Developing a coaching leadership style is essential for the productivity of a modern statistical institute. Coaching leaders motivate and support their team to develop their skills and expertise and work together more successfully. This type of management involves giving experts room for independent problem solving and developing new solutions, for example, through experimenting. It is important to encourage people to grow and develop their capabilities. Continuous change calls for joint discussions on the direction of work and how to reach common goals; it is important to encourage interaction between various teams within the institute. To this end, managers with their teams prepare a development map to describe the current status and the desired future vision for the team. This will help the team to focus their activities and skills development.

13.4.3 Workforce planning (or Strategic personnel planning)

Workforce planning is a process of analysing the current workforce, determining future workforce needs, identifying the gap between the present and the future, and implementing solutions so that an organization can accomplish its mission, goals, and strategic plan. It is about getting the right number of people with the right skills employed in the right place at the right time, at the right cost and on the right contract to deliver an organization's short and long-term objectives.

Workforce planning processes can:

- reduce labour costs in favour of workforce deployment and flexibility;
- identify and respond to changing customer needs;
- identify relevant strategies for focused people development;
- target inefficiencies; improve employee retention;
- improve productivity and quality outputs; improve employees' work-life balance; and
- make recommendations to deliver strategic value through talent.

The outcomes of this process inform:

- HR policies and practices, such as organizational design and development;
- succession planning;
- work-life balance initiatives such as flexible working arrangements and well-being;
- recruitment and selection;
- retention planning;
- talent management;
- job design;
- career planning;
- learning and development focus; and
- reward and recognition.

The main steps in the workforce planning process can be summarized by the diagram shown in Figure 14.

An application of workforce planning, also referred to as strategic personnel planning, from Statistics Netherlands, is provided in *Chapter 2 of the HRMT: Compilation of good practices in statistical offices, UNECE (2013)*. In this example, the aim of Strategic Personnel Planning is to gain insight in the number and type of personnel needed in the short and long term, taking into account developments in the labour market. Strategic Personnel Planning helps to translate policy developments into HR-policy issues concerning the in- through- and outflow of personnel.



Fig. 13.2: Diagram of workforce planning process

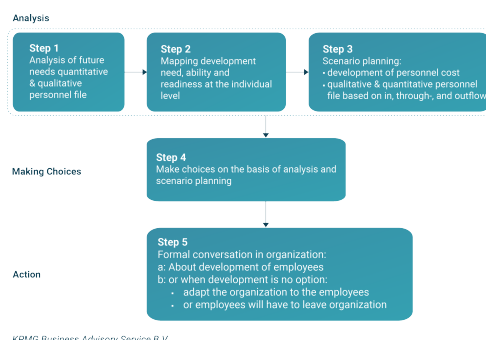


Fig. 13.3: Five steps to conduct strategic personnel planning

Drafting a Strategic Personnel Planning requires comprehensive data about the workforce. To that end, a computerized personnel information system should be filled with up-to-date data. Secondly, it requires a strategic vision of the organization, so the organization goals and ambitions can be translated into HRM and training policy (and HR-instruments).

A general approach in five steps to conduct a Strategic Personnel Planning (developed by KPMG consultancy) is illustrated in Figure 15.

Strategic personnel planning, as described above, is, unfortunately, not always possible for NSOs. Public sector hiring is often a tedious process involving multiple authorisations, which political considerations may influence. In Croatia, for example, each public body at the beginning of the year proposes its hiring plan. The plan has to be well-argued and documented. Typically, it takes at least six months until the government approves the plan—usually in reduced numbers. Thus, the strategy taken is to overstate to receive the needed number.

- *CIPD workforce planning factsheet* (🔗);
- *Human Resources Management and Training: Compilation of good practices in statistical offices, UNECE (2013)* (🔗).

13.4.4 Other recruitment practices

To get the right number of people with the right skills, NSOs can look into:

- Investing in an internship programme to attract future statistical staff;
- Inbound/outbound staff mobility and staff exchanges;
- Part-time staff sharing between NSOs and other research organizations.

For example, in some United Nations organizations, interns (typically those who are yet to complete their post-graduate degrees) are recruited to provide targeted skills needed. The fields of social media and communication, data analytics and IT are areas that would be useful for NSOs and attractive to potential interns.

Examples include: NSO experts having a part-time academic position at university, NSO staff spending a medium-term research visit at a foreign research institute; a senior academic researcher spending a sabbatical with the NSO.

Considering the increasing difficulties that NSO encounter in recruiting and retaining experts in highly demanded fields, all such alternative channels are likely to play an increasing role in building and maintaining qualified human capital within the organization.

Recruitment need not be limited to the market of new graduates or young professionals; NSOs should also be bringing in experienced professionals and/or scientists working in research organizations or the private sector.

The challenge in attracting these high calibre experts is that NSO traditional posts are typically not attractive enough to them. NSOs should deploy more agile forms of engagement other than permanent full-time recruitment.

13.5 Learning and development (training)

Organizations should support learning, innovation, and high performance to build an organization that, through individual learning, drives itself to become a “learning organization” to meet the future challenges.

Organizations that invest in their employees’ ongoing learning and development are rewarded with a more dedicated, professional and capable workforce. Organizations should encourage staff to take personal responsibility for their development, including career-enhancing opportunities across the organization. There is an expectation that managers will support and encourage employee development. The employer recognises that manager support is critical to engaging and retaining high performing staff and maintaining specialist knowledge to the advantage of the organization.

Learning and development is a mix of structured and informal activities designed to enhance knowledge acquisition and competency development in NSOs. In addition to the structured learning of online and classroom training, a range of resources and tools to support employees’ learning and development informally should also be available.

- *Chapter on Capability and Development, UNECE Guidelines for Managers* (🔗).

13.5.1 Learning and development strategy

Fundamental to helping people learn is an organizational culture that is supportive of learning. This requires an awareness of not only which methods are most effective, but also a robust understanding of the behavioural science of learning. The wider culture and environment of an organization impact learning, including permission to learn and support from managers and peers to implement learning.

A learning and development (L&D) strategy is an organizational strategy that articulates the workforce capabilities, skills or competencies required, and how these can be developed, to ensure a sustainable and successful organization.

A key element of an organization’s learning strategy will target all employees’ long-term development, but they may actually focus on those identified as exceptionally high-performing or high-potential individuals (sometimes defined as ‘talent’) who are critical to long-term business success. This typically includes techniques such as mentoring programmes with senior leaders, in-house development courses and project-based learning. Other organizations run a broader range of interventions to suit a broader strategy, adopting a more inclusive approach to employee development.

- *Learning and development strategy and policy, CIPD (2020)* (🔗).

Talent management

Talent management seeks to attract, identify, develop, engage, retain and deploy individuals who are considered particularly valuable to an organization. By managing talent strategically, organizations can build a high-performance workplace, encourage a learning organization, add value to their branding agenda, and contribute to diversity management.



Wide variations exist in how the term “talent” is defined across different sectors, and organizations may prefer to adopt their own interpretations rather than accepting universal or prescribed definitions. That said, it’s helpful to start with a broad definition and, from our research, we’ve developed a working definition for both “talent” and “talent management”:

- Talent consists of those individuals who can make a difference to organizational performance either through their immediate contribution or, in the longer-term, by demonstrating the highest levels of potential.
- Talent management is the systematic attraction, identification, development, engagement, retention and deployment of individuals of particular value to an organization, either in view of their “high potential” for the future or because they are fulfilling business/operation-critical roles.

These interpretations underpin the importance of recognizing that it’s not sufficient simply to focus on attracting talented individuals. Developing, managing and retaining them as part of a planned strategy for talent is equally important, as well as adopting systems to measure the return on this investment.

Many organizations have recently broadened the concept, looking at “talents” among all their staff and working on ways to develop their strengths (see “inclusive versus exclusive approaches” below). At its broadest, then, the term “talent” may be used to encompass the entire workforce of an organization.

Talent management programmes can include a range of activities such as formal and informal leadership coaching and or mentoring, secondment, networking events and board-level and client experience.

- *Talent management, CIPD (2020)* ();
- *Developing Talent Management Plans, Statistics Canada* (.

Performance management and training

Learning and development opportunities aim to improve the performance of employees. Related to this, organizations engage in performance management – the activity and set of processes that aim to maintain and improve employee performance in line with an organization’s objectives. Broadly, performance management is an activity that¹:

- establishes objectives through which individuals and teams can see their part in the organization’s mission and strategy;
- improves performance among employees, teams and, ultimately, organizations;
- holds people to account for their performance by linking it to reward, career progression, and contracts termination.

NSOs stand to gain from a well-integrated performance management system in its HR strategy and learning and development strategy. Some country examples are provided in Box 9.

Box 9: Linking training to performance assessments - Statistics Mongolia

To encourage professional development among staff, an innovative evaluation system was introduced with assistance from the National University of Mongolia. All staff members regional and central took theoretical and practical knowledge tests in 2010. The results were kept confidential and not utilized for formal performance assessments. Again in 2011, a test was conducted, and this time the results were shared internally in NSOM. In 2012, NSOM used the following grades and points: A grade or 90-100 for high distinction; B grade or 80-89 points for distinction; C grade or 70-79 points for satisfactory; D grade or 60-69 points for poor; and F grade or 50-59 points for failure. Staff who scored less than 60, or F, did not receive bonuses in the particular year and were given time to improve their skills during working hours. In 2017, the NSOM provided opportunities to upgrade their educational level or gain a master’s degree. With the accredited University of Economics, this training is being carried out, resulting in higher academic degrees, as well as increased academic performance with NSOs and other academic institutions and improving quality.

¹ For further information: <https://www.cipd.co.uk/knowledge/fundamentals/people/performance/factsheet#6292>

13.5.2 Capacity development frameworks as the basis for training

As mentioned in *Chapter 13.3.4 — Competency Framework*, a competency framework is a tool that guides the formulation and implementation of HR policies starting with the recruitment and aiming at building professional capability and staff well-being and ensuring that the organization stays on course in achieving the expected objectives. It is thus the framework that can guide career development and the requisite capacity development. This can be further elaborated into training skills frameworks that define the expected skills and competencies of staff in accordance with their responsibility levels and subject matter specialization. Apart from technical skills, soft skills, supervisory and management competencies also need to be addressed.

- *Core skills framework for Statisticians of NSOs in developing countries*, SIAP (2010) (🔗);
- *European Statistical Training Programme (ESTP)*, Eurostat (2021) (🔗);
- *Statistical Skills for Official Statisticians*, Australian Bureau of Statistics (ABS) (🔗).

In addition to individual-level capacity development, the concept of a more holistic capacity development framework that covers system, institutional and individual capacity development (termed *Capacity Development 4.0*, PARIS21 (🔗)) is currently being explored and applied.

13.5.3 Training topics

General areas of training

Based on the discussions in the various chapters of this handbook, ongoing skills development is encouraged in the following general areas:

- Core business of the NSO
 - Statistics and methodology, such as basic and advanced training on topics such as survey design and development, questionnaire design, sampling, data analysis, time series methods, non-response, imputation, quality assurance, longitudinal surveys, use of administrative records and registers and the interpretation and presentation of data.
 - Subject matter, such as agriculture statistics, gender statistics, System of National Accounts (SNA), business surveys, household surveys, population and housing censuses, etc.
 - Data, information and knowledge management (Refer to *Chapter 14 - Data, Information and Knowledge Management*).
- People management (managing and leading others);
- Project management (See *Chapter 6.5.7 — Project management approaches*);
- General management and leadership;
- Effective communication, professional relationship development and client management;
- Technical expertise including IT systems and infrastructure, programming (see *Chapter 15.7 — Specialist statistical processing/analytical software*);
- Corporate management (strategic planning and programming, people, budget, legal, financial);
- Second language training (e.g., English language training);
- Client service (website and data dissemination, client interactions) (see *Chapter 11 - Dissemination of Official Statistics*).

Skills and competencies

This section discusses the core skills and competencies needed by NSOs.

- **Required skills** Thinking about NSOs and NSSs of the future, it is very hard to anticipate what specific skills will be required. However, three essential skills will always be required: numerical skills; statistical skills; and increasingly, technological skills.
- **Mathematical and numerical skills.** A statistician should be able to spot patterns, understand differences between stocks and flows and be comfortable reading and writing in scientific notation.
- **Statistical skills** Being able to work with real, often messy or incomplete data. Understanding bias; both the likely sources and what remedial actions can be taken. Statisticians should understand the subtle but important differences between accuracy and precision. They should also develop a good understanding of concepts like uncertainty and risk. A competent statistician should be able to select and use appropriate statistical techniques and models. Future technological skills are the area hardest to predict.
- **Technological skills** Technology is changing rapidly, with consequences not only for the applications to be used but also the types of data. It will be a challenge for statistical offices to say with any certainty what will be required. If current trends have anything useful to say, then it suggests greater use of ‘freeware’ and combining packages. It also suggests a commitment to lifelong learning will be essential.

In addition, statisticians must understand the underlying **logic of theory**, so that having acquired skills, they can apply them and put theory into practice in a variety of real-life situations (all invariably more complex and messier than the scenarios presented in textbooks). The ability to **communicate** well and to present statistics in its proper context is now recognized as an essential skill for statisticians. This includes skilled application of data visualization.

• Required competencies

Statisticians will need to continually update their skills over the lifetime of their career. What is less likely to change over time are the basic characteristics or competencies necessary to be a good statistician. Specifically, a statistician must be creative, curious, critical, sceptical and resourceful.

A statistician should also be aware of the cultural and civic or political environment in which they operate. A statistician must understand not only the context in which previous indicators and statistics were compiled but also the environment in which they operate. For example, when contemplating the use of Big Data, NSOs may be forced to confront issues before the law is clear or cultural norms have been established. Given the importance of public trust for an NSO, statisticians must be sensitive to these issues and understand what is acceptable by the public they serve.

Figure 16 provides a visualization of a skills and competencies framework for statisticians.

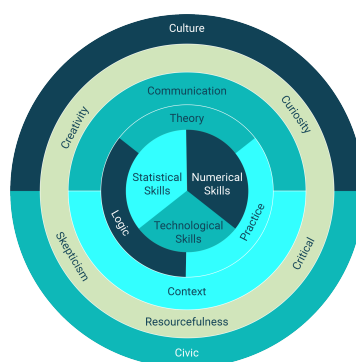


Fig. 13.4: Skills and competencies of a statistician Source: Adapted from MacFeely, 2019

- *Preparation for a career as an official statistician, Steve MacFeely (2019) (🔗).*

“Traditional” skills and competencies: Survey data process

The survey data process requires staff with specific skills and competencies (see [Chapter 9.2.9 — Survey staff training and expertise](#)) as follows:

- Survey managers;
- Subject matter specialists;
- Methodologists;
- Data collection and follow-up specialists;
- Data capture, verification and editing process;
- Interviewers;
- Data entry and editing clerks.

“New” skills and competencies: Accessing and use of Big Data

Accessing and using Big Data is an area where NSOs have developed new skill sets and competencies in recent years. A discussion on what this entails in terms of training and development of NSO staff can be found in New data sources for official statistics – access, use and new skills, UNECE (2019) (🔗).

A multifaceted transformation of national statistical systems is needed to meet the new data innovation challenges and to reap benefits from using Big Data. Existing capacity building programmes should be broadened and possibly be focused on transforming the technology architecture and the workforce, exploiting more Big Data sources and redirecting products and services. The transformation of the technology architecture should facilitate the shift from physical information technology equipment on-site towards introducing a cloud-computing environment along with the adoption of common services and application architecture for data collection, registers, metadata and data management, analysis and dissemination.

This approach should be accompanied by capacity-building programmes that support the progressive diversification of the new skill sets of the national statistical systems’ staff. These programmes should range from data scientists and data engineers using new multisource data and modern technology, through lawyers strengthening the legal environment, to managers leading the change in corporate culture with a continuously improving quality standard. Those new capabilities should allow for adopting a standardized corporate business architecture that is flexible and adaptable to emerging demands. They should also be process-based rather than product-based, with increasing use of administrative and Big Data sources for multiple statistical outputs. In addition, our dissemination and communication strategy should be upgraded and made adaptable to target different segments of users by applying a diverse set of data dissemination techniques, including mobile device applications and data visualization of key findings.

- Related: Big data team level competency, UNECE (2016) (🔗).

13.5.4 Training modalities, including learning in the workplace

Training may be in the classroom or self-paced through online courses, allowing managers and staff to organize learning in line with work priorities and ensuring that all staff members have training opportunities.

There has been much discussion on the merits of utilising information technology for delivery of training through online or web-based e-learning courses. E-Learning courses are cost-efficient and can reach a larger number of participants. Webinars are useful for short seminars on specific topics. NSOs should develop a strategy for online learning activities that takes into account the IT infrastructure needs. Inadequate IT infrastructure is one of the main reasons the uptake of web-based learning activities is difficult for many NSOs. The statistical community could work together to make available online learning resources such as through wikis and common shared platforms for e-learning.

Managers can be effective coaches in the workplace to support training with:

- one-to-one guidance;
- sharing workplace experience;
- sharing technical expertise;
- effective performance feedback to sharpen staff skills and improve their performance.

Managers can also invest in having their most experienced employees take part in coaching and mentoring programs. It may also be useful to have a team of coaches and mentors who can support newly recruited and less experienced employees. Mentoring encourages sharing knowledge, providing guidance and advice about work and the workplace and discussing career development.

Box 10: Examples from Statistics Poland

Knowledge sharing. In Statistics Poland, there is a practice that after a foreign training (e.g., within the European Statistical Training Programme), participants are obliged to share their knowledge by conducting internal training. The course is held in Statistics Poland or in the Regional Statistical Office. The rest of Polish Official statistics units can participate in the training via videoconference.

Internal coach programme. The Internal Coach Programme aims to improve knowledge transfer between employees, which is a key element of the organization's development. It also allows incorporating in Statistics Poland and Regional Statistical Offices the concept of a learning organization adapted to rapidly changing conditions. Trainers from the same organization know the needs of training participants perfectly. Thanks to the Programme, it is possible to educate professional trainers inside the organization who effectively contribute to raising the staff's professional competence. Internal trainers conduct mainly specialist training, including statistical research and statistical analysis, as well as support the professional development of employees, e.g., a group of interviewers.

Managers can provide on-the-job training and development as part of the regular working environment. For example, holding information sessions when a person returns from training to share what they learned ("re-echoing") can be beneficial. It is also useful to 'buddy up' team members to share knowledge and skills. This is also effective in maintaining work program continuity if an employee is absent from the workplace for a period of time, leaves the workgroup, or the organization. A "brown bag" seminar - an informal meeting that occurs in the workplace generally around lunchtime - is also informal a good way of sharing knowledge. Some examples from Statistics Poland are articulated in Box 10.

- *Developing Talent Management Plans* () , the example from Statistics Canada.

13.5.5 General purpose training cycle

While there are different ways to provide career-long training, one way that has proved to work in many countries is to consider general-purpose training as having three distinct cycles:

- **Introductory cycle**

This is primarily designed for newly recruited staff. Its purpose is to ensure their speedy integration into the organization, which implies both becoming familiar with the traditions of the statistical organization and being able to contribute in any of the domains or functions within its scope. Virtually all agencies administer such training, even if they do so in the most informal manner.

- **Intermediate cycle**

This training cycle is designed primarily for those who have worked in a statistical organization for a period of five to ten years and who have not had an opportunity to refresh their skills.

- **Administrative cycle**

Throughout a staff member's career, its direction eventually becomes foreseeable. Those who can fill policy-making positions within their respective agencies should be trained in the subjects that will demand their energies once they reach management levels. These subjects include financial administration and control, large project management, marketing, the institutional set-up of the Government, and other external features to the statistical organization.

Moreover, one should make the corresponding cost part of the organization's regular budget and administer training to all targeted staff members as a matter of course. It would be especially critical to pay attention to staff development during times of budget cuts applied to the NSO, as often, maintenance of premises and training (whether in-country or overseas) are the first budget line items to suffer during times of reduced allocations to the NSO.

13.5.6 Specific situations

Training of employees with no university education

There are several NSOs where a large number of staff lack university education. In this situation, training programmes for them are particularly important to enable them to better carry out their tasks. In addition to the introductory courses for new employees, more extensive courses may be useful when they have acquired enough statistical work experience. The topics may focus on more advanced aspects of statistical production. Such systematic training in important day-to-day operations cannot be over-emphasized.

In addition, voluntary and more advanced courses may be arranged for employees who have demonstrated high learning capacity and are motivated to improve their qualifications. Courses may be given in basic theory on sampling, demography, economics, coupled with exercises designed to build bridges between theory and application. Experience has shown that after attending such courses, employees have been able to carry out work that previously would have been assigned to professionals with higher education. Thus, the latter personnel, who play a very significant role in a statistical agency and often are scarce— particularly in developing countries— can be released for jobs requiring higher qualifications.

Training on leadership and management

Leadership and management capabilities are integral to meeting NSO goals, encouraging innovation and high performance, and building a sustainable future. Individuals with leadership aspirations need to build this capability and be responsible for their own learning. In many cases, staff with primarily technical backgrounds are placed in positions of management and administration.

As part of succession planning, NSOs need to offer project management and leadership training to interested staff. Many future managers can be selected from trained staff members. This also supports career development. Leadership training should be a requirement for all supervisors; either before or during their assignment.

- *Leadership and Management Charter, ABS* (🔗);
- *Chapter 14, HRMT: Compilation of Best Practices, UNECE (2013)* (🔗);
- *Section XII-H-2, Leadership Training Programme, PARIS21* (🔗);
- *Statistical Leadership Training, SIAP* (🔗);
- *Statistical Leadership Training Programme for Africa, UNECA (2019)* (🔗).

13.5.7 Beyond general-purpose training- Where to obtain training

General-purpose or basic and introductory training for NSO staff is not sufficient. It needs to be complemented by more specialised defined courses to meet specific needs. Many offices are not in a position to provide courses at all or at any of these levels. Therefore, alternatives and special arrangements are so important.

In-house and national public administration training centres

Many NSOs will have at least general-purpose training for statistics as a function of its human resource department. Training on administration, management, and leadership is also available (and in some countries required for certain high-level positions) from a national public administration training centre. Some NSOs have an academic institute (e.g., Indonesia-STIS, India-ISI and France-ENSAE) that confer formal diploma or bachelors-level degrees in statistics. Increasingly, NSOs or NSSs are establishing a statistical (research) and training institute. The institute provides specialised training on statistics not just for the statistical agencies but also for other government agencies' needs. In some cases, the statistical training institute also offers courses to countries in the region (e.g., Statistics Korea, India Statistical Institute). In some cases, the Government may take over the NSO Training Institute and incorporate it into the formal educational system (e.g., Suriname).


Regional training institutes

Some regions have established intergovernmental regional training institutes that provide both general-purpose training and specialised training courses. The offerings use mixed modalities - regional face-to-face/online courses and country-focused courses. Some institutes offer “scholarships” to participants (e.g., the JICA-funded 4-month and 6 to 8-week courses at the Chiba premises of the Statistical Institute for Asia and the Pacific).

The list of regional and global training institutes members of Global Network of Institutions for Statistical Training (GIST) is available [here](#).

Role of regional training networks

In recent years, training institutes of NSOs and other training providers in a region have created a regional network to facilitate the sharing of resources and information on training developments and design common curricula for selected areas.

- Network for the Coordination of Statistical Training in Asia and the Pacific, SIAP .

Global Network of Institutions for Statistical Training


The Global Network of Institutions for Statistical Training (GIST) is a network of international and regional training institutions that build sustainable statistical capacities through efficient, effective, and harmonized delivery of training established by the UN Statistical Commission. The overarching goal of GIST is to build sustainable statistical capacities through efficient, effective, and harmonized delivery of training at global and regional levels. GIST aims to achieve this goal by facilitating collaboration, coordination, and outreach among key providers of statistical training at the regional and international levels.

13.6 Job rotation

13.6.1 Definition and objectives of job rotation (Source)

Job rotation is a management approach where employees are shifted between two or more assignments or jobs ideally at regular pre-planned intervals of time to serve several objectives, including:

- **Reducing Monotony of the Job:** The first and foremost objective of job rotation is to reduce the monotony and repetitiveness of a job. It allows employees to experience different type of jobs and motivates them to perform well at each stage of job replacement.
- **Creating Right-Employee Job Fit:** The success of an organization depends on the on-job productivity of its employees. If they're rightly placed, they will be able to give the maximum output. In case, they are not assigned the job that they are good at, it creates a problem for both employees as well as organization. Therefore, fitting the right person in the right vacancy is one of the main objectives of job rotation.
- **Testing Employee Skills and Competencies:** Testing and analysing employee skills and competencies and then assigning them the work they excel at is one of the major functions of the job rotation process. It is done by moving them to different jobs and assignments and determining their proficiency and aptitude. Placing them what they are best at increases their on-job productivity.
- **Exposing Staff to All Operations of the Organization:** Another main function of job rotation is to expose employees to all operations of the organization to make them aware of how the company operates and how tasks are performed. It gives them a chance to understand the organization's working and different issues that crop up while working.
- **Developing a Wider Range of Work Experience:** Employees may not want to change their area of operations. Once they start performing a specific task, they may be reluctant to leave their “comfort zone”. Through job rotation, managers prepare them to have a wider range of work experience and develop different skills and competencies. It is necessary for the overall development of an individual. Along with this, they understand the problems of various departments and try to adjust or adapt accordingly.

- **Succession Planning:** The concept of succession planning is ‘Who will replace whom’. Its main function of job rotation is to develop a pool of employees who can be placed at a senior level when someone gets retired or leaves the organization. The idea is to create an immediate replacement of a high-worth employee from within the organization. See [here](#) for more information.
- Job Rotation - Meaning and its Objectives, Management Study Guide (MSG) (.

13.6.2 Models of job rotation

An agency’s “staff model” may fall anywhere in a wide range of configurations in relation to job rotation or mobility.

At one end of the spectrum is the “no one moves” model. Its objective is to maximize specialized human capital by allowing staff members to learn more about their respective areas of responsibility (e.g., industry; health; education; retailing; balance of payments). Staff members would be expected to have a purely vertical career and leave their areas only when called upon to discharge agency-wide responsibilities.

At the other extreme, the driving principle is versatility. Staff members are encouraged (or required) to acquire the widest possible experience by moving from one job to another. When the office of personnel directs this movement, it is likely to be in keeping with an optimal pattern so that the acquired experience would provide the most versatility. However, there is an obvious downside to rotating staff with highly specialised skills in national accounts or sampling or data scientists working on Big Data.

It is difficult to quantify the many factors that affect how an agency will balance the needs of both specialized knowledge and versatility. For example, staff morale is an important consideration, and if the idea of permanent rotation goes against habits and expectations, its introduction in an extreme form may create negative reactions that outweigh its benefits.

Conversely, in a culture where the staff are used to and expect to change jobs every so many years, the absence of opportunities to try different assignments might lead to frustration and atrophy.

Somewhere in between is a point of equilibrium that capitalizes on the inherent strengths of the two extremes. For example, an institution may require that at a certain level no one is allowed to remain on the same job for more than five years; if one opts to keep the same job for an indefinite period of time, it would be with the knowledge that one’s chances of advancement are correspondingly reduced, even if job performance is entirely satisfactory. Using a voluntary rather than mandatory scheme would imply having rotation as an incentive for staff who aspire to a more senior position.

13.6.3 Examples of job rotation schemes in NSOs

- **French Statistical System**

An important feature of the French Statistical System (FSS) is the existence of a common culture and very similar views on statistics shared between the National Institute for Statistics and Economic Studies (INSEE) statisticians and most of the hierarchy of the Ministerial Statistical Departments (MSDs). A large share of staff of the MSDs has either worked for INSEE or come from one of the two High French National Economics and Statistics Schools. This common culture is created through a feature of the French civil service called “corps” (like the concept in English of “Army corps” or “diplomatic corps”). The two corps of statisticians are trained after recruitment in INSEE schools, one being focussed on statistics, econometrics, economy and finance, and the other mainly on statistical production. These staff are rotated regularly in their career, with the rotation coordinated and synchronised between INSEE and the MSDs. INSEE coordinates promotions and transfers, and statisticians can easily move between INSEE and the ministries. This process of regular movement has created a common statistical culture across the FSS.


Source: *Rotation across the NSS (France)*, *Peer Review Report (France)* (.

- **Statistics Finland**

How often should such moves happen? rule of thumb of 3-5 years in one task...

The first year for learning, the second year for becoming efficient and bringing earlier learning fully in, the third-year employees start to contribute to the development of the area. During the fourth and fifth year, the work has become easy for the employee; beyond this point, the task may have become monotonous and boring.

13.7 Staff retention and exit

Success in recruiting the right staff for the job in an NSO is partly due to clearly and attractively making known what the statistical office can offer. For example, the Office for National Statistics (ONS) “Career” page () starts with the message:

If you want your contribution to count and to work where you'll be really valued, come and join us.

We know that excellent results can only be achieved by investing in and retaining the people who work for us. Therefore, our people count in more ways than one.

Apart from crunching the numbers that shape big decisions, we look after the interests of our staff. We invest in training and development to enhance skills and also offer a good work-life balance to improve well-being and staff retention.

As well as a competitive salary, you'll enjoy ...

Retaining staff is one of the major challenges for statistical office, whether large or small, well or poorly endowed. The smaller and lower capacity the office, the greater the loss sustained when a talented individual leaves the office. The loss is even greater if the organization has invested much in the training and development of talents. Several methods of retaining staff are worth exploring, but none is fool proof. Ultimately, losses of employees to other offices and the private sector must be included as part of the expected cost of running a statistical organization.

A talent management strategy based on performance, learning and development assessments would help the NSO identify, develop, and retain high calibre staff (see [Chapter 13.5.1 — Learning and development strategy](#)). An example of a forward-looking strategy for staff retention is to have special programmes that involve recruiting qualified persons (such as the “cadet” programme of the Australian Bureau of Statistics) in which the statistical office pays for the education and training of talented future statisticians. Some NSOs provide educational scholarships to staff who in turn have contractual obligations to serve for a pre-specified number of years after obtaining the degrees or diplomas.

However, it is evident that an NSO, as it happens for all employers in the public and private sector, cannot keep all its most talented people forever. One strategy would be to convince government departments to attract talented professionals with quantitative analysis abilities and place such people in the statistical organization for a while on a secondment basis or any other staff arrangements. Moreover, such sharing of staff will help the statistical organization sort out its priorities, connect the agencies and create a better basis for ongoing dialogue. Since these features are always valuable, the initial stationing of people in the NSO as well as an ongoing exchange policy could become permanent features of a government-wide personnel management programme. Another way to reduce staff turnover is to provide positions of increased responsibility to young and talented people as soon as they have demonstrated their capability. While this strategy implies some risk, it is preferable to retaining talented staff members than mediocre employees. Another option is to form a contractual relationship with recruits that will deter them from leaving the statistical organization for frivolous reasons. In Suriname, recruits would spend their first year on a particular assignment, after which they would have the possibility to participate in a specific training programme, provided they have signed up for a stay of at least three to five years in the statistical organization.

Traditionally the problem of staff retention has been the sharpest for experts in information technology (IT). The rapid developments in IT and data science applications have created a huge demand for skilled individuals in these areas, particularly in the private sector.

However, the supply of qualified people did not increase as quickly, and thus it became virtually impossible for a government institution to compete with the private sector, the banking sector, or international companies. Government institutions could not offer competitive salaries, and what they could offer - job security - was not an overriding concern for the young and mobile professional with the desired skills. The standard response to this situation, which has shown no great variation in the recent past, was to recruit ever younger, less- experienced technicians and provide them with

training. However, this policy, in addition to consuming resources, converted statistical agencies into an unrecognized training centre for the private sector. As soon as recruits were trained, some other enterprise stepped in, offering to double or triple their salaries.

It is considered a good practice when an employee leaves to conduct an exit interview which could provide insights on reasons for leaving. The interview would also provide an opportunity to identify staff who the NSO could encourage and support to be advocates for official statistics in the agencies or companies they move to. Maintaining this relationship could also be a means for attracting them back to work with the NSO—this time with additional experience and competencies.

13.8 Options available for a new chief statistician

13.8.1 The role of the chief statistician

The chief statistician is the leader of the entire NSS, with responsibilities (ideally) defined and assigned in the Statistics Law, including specific provisions related to his/her appointment and dismissal in relation to the principles of objectivity and professional independence (see *Chapter 4.3.3 — Chief statistician*). In most cases, the function of chief statistician is assigned to the head of the NSO, but in a few rather large countries, the chief statistician is the head of a statistical authority or a coordinating body outside the NSO and overseeing the entire NSS. This section refers to the most common scenario where the chief Statistician is heading the NSO but could also apply, with some adaptations, to other organization structure of the NSS.

The expected qualifications and skills of the chief statistician are the following (see also *Chapter 6.4.1 — Chief statistician* and *Chapter 4.3 — Organization of national statistical systems*):

- should be proficient in statistics or have a profound understanding of statistics;
- should have a proven track record and relevant professional experience as an economist, statistician, demographer, data scientist, IT expert, government specialist, sociologist;
- should be capable of running a large professional organization and understand and be sensitive to the wishes of users;
- have communication skills that are required for public communication and user relations
- ability to understand complex processes which is essential for day-to-day decision-making.

The job of a chief statistician is not only about professional statistics-related competencies. With the rapidly changing landscape of official statistics where NSOs operate in new environments, and expectations have developed (data stewardship, data custodian, open data, etc.) the chief statistician must be able to:

- Provide expert opinion on many different subjects. Perceived gaps in their expertise may diminish the perception of professionalism that is expected from an NSO.
- Be a master strategist who can recognise threats and opportunities, a psychologist who can understand and address the problems of people working in the NSO and a political scientist who understand interests of the environment in which the NSO is functioning.
- Demonstrate an enormous capacity of dialogue, listening, understanding, appreciation, discernment and other soft-skills required for such a position.
- Appointment of US chief statistician (🔗);
- Appointment of India chief statistician (🔗);
- Appointment of PSA chief statistician (🔗).

Choosing a chief statistician can be a difficult task for the nominating authority, as the post requires a combination of skills that is not easy to find in one person. An illustration of the difficulty in filling the post of chief statistician:

- UK fails to fill the national statistician role (April 2019) (🔗); but eventually, UK national statistician was appointed (August 2019) (🔗).

13.8.2 Challenges facing a new chief statistician

Given the complex and multi-faceted responsibilities and expectations, a new chief statistician would need staff with specialist knowledge, institutional memories and the relationships they have established with NSS members and stakeholders to provide recommendations and consult them as much as possible. One main challenge is that a new chief statistician inherits the current staff and can only operate minor staff changes. Annual recruitment represents only a small share of the total number of employees and is unlikely to make a profound difference in the short term. Sometimes, and this is bad practice, the new chief will inherit a completely new middle-management team after a change in government. This practice might create a change in direction as often as once every four or five years, or even less; corresponding to the election cycle. Moreover, the management being called up to tender its resignation may have just mastered the mechanisms of the system, whereas their successors are unfamiliar with them. The result is that the second level of the staff, or perhaps an even lower level, must take charge of day-to-day operations.

Whether or not the existing team is ideal, it is prudent to keep it intact (to do so may also be the only option under the law) and make improvements through gradual additions, taking advantage of voluntary departures and retirements. However, a newly appointed chief statistician may worry about being overly dependent on the existing staff and be concerned that they may take advantage of the situation. This would be less of a concern if the new chief is an internal appointee (e.g., former deputy chief statistician). In either case, new chief statisticians may wish to bring in someone they have worked with, whose judgement they trust and with whom they can discuss options. While this practice may provide a certain cushioning, it may well have the unintended effect of widening the gap between the head of the NSO and the regular staff; particularly, if the chief statistician's adviser is hired at a high-hierarchical level.

One of the first actions of a new chief statistician should be to organize and meet with the internal management committee (see [Chapter 6.4.2 — Internal advisory and decision-making bodies](#)). The new chief statisticians should also communicate their leadership vision and strategies to the entire organization early on when they take on the position. One of four key functions of **leadership and coordination** is to ensure that the appropriate foundations (for planning, management and control) are in place to support the production, management, availability and use of high-quality statistical information.

To provide the appropriate foundations for a national statistical organization, planning, management and control mechanisms must be in place, along with the infrastructure needed to achieve the desired results:

- **Sound human-resource management:** leadership does not mean running the system single-handedly; rather, it means that the leader implements and builds an organization and a team that will mobilize to achieve the organization's objectives.
- **Effective communication networks within the organization:** to promoting the leader's vision, one must ensure that employees follow a shared vision and values, as well as keep information and communication channels open and transparent. Employees must be consulted and mobilized around the organization's activities and priorities.
- **Implementation and development of a transparent and effective planning process:** this process should also be flexible enough to remain open to new initiatives and innovation.
- **Budget management:** in general, the chief statistician has full authority to establish the organization's priorities within an overall budgetary envelope. By implementing a control system with the appropriate checks and balances, the leader can delegate his or her powers, while ensuring that the system is managed appropriately.

13.8.3 Practices of Onboarding New chief statisticians

One option for a new chief statistician is to participate in customised leadership training programmes. In 2016, PARIS21 launched a Leadership Training Programme for Director-Generals (DGs) of NSOs (🔗) — targeting chief statisticians who have recently been appointed to the position. The programme helps chief statisticians actively lead the “strengthening of the NSO’s co-ordination role in the new data ecosystem and develop partnerships with new actors from the private sector, civil society, media and academia to integrate new data sources into statistical production and work for the greater and better use of data and improved statistical literacy”. The training’s main objective is to improve and strengthen the leadership, management, governance, and coordination capabilities of chief statisticians within statistical offices. The training provides them with a forum to discuss operational matters, share experiences, network, and elaborate on personal-development action plans. Finally, the training workshops equip heads of statistical offices with the skills needed to become successful national statistical system leaders.

CARICOM Statistics, recognizing the need for Training in Leadership and Management, provided a Training to Heads of Statistical Offices in the CARICOM Region in 2011, as an activity under the 9th European Development Fund and recommended that this be continued. Since then, the Inter-American Development Bank (IDB), in collaboration with other partners, has provided support in the region by providing similar training to Heads of Statistical Offices, Deputy Heads and other Senior Managers.

- *Compendium of Management Practices for Statistical Organizations*, Statistics Canada, *International Fellowship Program* (🔗).

13.9 Human resources management: a policy package

13.9.1 HRM defined

HRM (HRM) is a strategic, integrated and coherent approach to the employment, development and well-being of the people working in organizations. A strategic approach focuses on long-term people issues within the context of the NSO’s goals and the evolving nature of its work.

HRM (HRM) is the practice of recruiting, hiring, deploying and managing an organization’s employees. An organization’s human resource department (HRD) is usually responsible for creating, putting into effect and overseeing policies governing workers and the organization’s relationship with its employees.

Box 11: HRD as an enabler for innovation - Statistics Mongolia

The Human Resources Development Policy of NSOM focuses on outreach, training and retention of staff. NSOM developed a training programme for staff members working at central and territorial statistical offices, including various modules at different levels, from basic to advance. The personnel of NSOM included a large number of relatively experienced staff: 33% having 0-5 years of service, 28% having 6-10 years of experience, 19% having 11-15 years of experience, 8% having 16-20 years of experience, 12 % above 21 years of experiences. However, most employees (66%) have a bachelor’s degree, 31% have a master’s degree and 2% a PhD.

An estimated 90-100 students with majors in statistics, economics or demography graduate every year from three universities. A database of qualified individuals has been created to support outreach efforts when vacancies arise. Outreach efforts also include making available internships for statistics majors.

13.9.2 The objectives of HRM

The objectives of HRM can be broken down into four categories:



Societal objectives Measures put into place that respond to the ethical and social needs or challenges of the organization and its employees. This includes legal issues such as equal opportunity, and equal pay for equal work, sexual harassment in the workplace.



Organizational objectives Actions taken to help ensure the organization's efficiency, including increasing its effectiveness and capability and ability to change and manage change. This includes providing training, hiring the right number of employees for a given task or maintaining high employee retention rates.



Functional objectives Guidelines used to keep the HR functioning properly within the organization as a whole. This includes making sure that all of HR's resources are being allocated to its full potential.

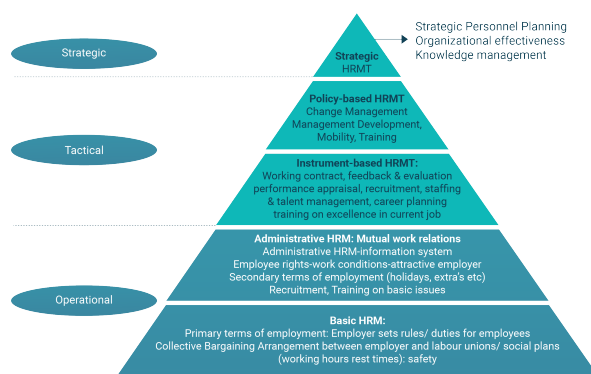


Personal objectives Resources used to support the personal goals of each employee. This includes offering the opportunity for education or career development as well as maintaining employee satisfaction.

13.9.3 Elements of an HRM system

A Human Resources Management System (HRMS) brings together HR philosophies that describe the overarching values and guiding principles adopted in managing people. HR strategies define the direction in which HRM intends to go. HR policies provide guidelines defining how these values, principles and strategies should be applied and implemented in specific areas of HRM. HR processes comprise the formal procedures and methods used to put HR strategies and policies into effect. HR practices consist of the approaches used in managing people, and HR programmes that enable HR strategies, policies, and practices to be implemented according to plan.

A generic representation (🌀) of an HRM system is shown in Figure 18. Some of these elements have been discussed in the previous sections of this Chapter. An application to a national statistical organization presented in Chapter 1 of the HRMT Compilation of good practices from UNECE (2013) is shown in Figure 17.



Source: Adapted from W.J. van Muiswinkel

Fig. 13.5: HRMS in a national statistical organization

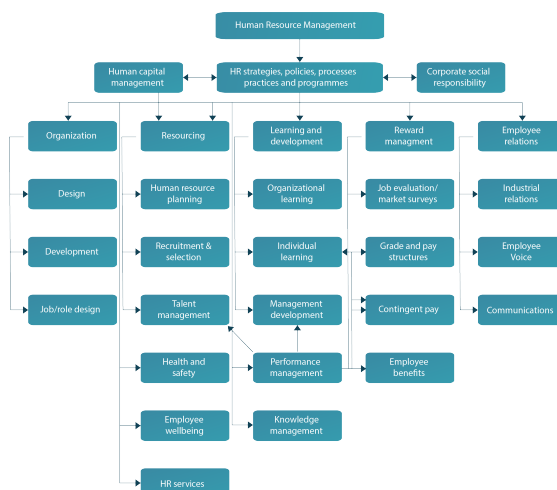


Fig. 13.6: Generic representation of an HRM system

- *Office for National Statistics people and staff, ONS* (🔗);
- *Management of Human Resources, Annual Report 2017-18, ABS* (🔗);
- *Moving from introduction towards integration of new employees – objectives and methods at Statistics Norway, Chapter 11, HRM – Compilation and Good Practices in Statistical Offices, UNECE (2013)* (🔗).