

The evolution of Hungary's statistical system



“Future rooted in the past”

Country paper prepared for the United Nations
Statistics Division (UNSD)

*Seminar on
„Evolution of National Statistical Systems”
23rd February 2007, New York*

Budapest, 2007



Introduction by the President.....	3
I. Historical overview – the beginnings	4
II. Historical overview – the post WW II. period.....	7
III. Latest efforts in the area of our legal framework.....	10
IV. Changes in the institutional setup of the last decades – and the new plans for the future	11
V. Latest challenges – new approaches in management.....	17
V.1. HCSO Strategy	17
V.2. Program planning system	21
V.3. Internal training – the HCSO School.....	24
V.4. Use of administrative data sources for statistical purposes	25
V.5. Dissemination	26
VI. Latest development in statistical areas	27
VI.1. Evolution of classifications	28
VI.2. Business register.....	28
VI.3. Results in the field of Short Term Statistics (STS)	28
VI.4. Structural Business Statistics	30
VI.5. Macroeconomic statistics.....	31
VI.6. Business statistics - results in the field of distributive trade and business services	32
VI.7. Statistics on information society	33
VI.8. Tourism.....	33
VI.9. Statistics on public deficit and debt (EDP), trade and balance of payments statistics.....	34
VI.10. Foreign trade statistics	35
VI.11. Agricultural statistics.....	35
VI.12. Population and Demographic Statistics.....	35
VI.13. Social protection statistics	35
VI.14. Education Statistics	35
VI.15. Culture Statistics	35
VI.16. Labour Market.....	35
VI.17. Household Budget Survey	35
VI.18. R&D and innovation statistics.....	35
VI. 19. Distribution of income and living conditions	35
VI.20. Population and housing census	35

Written and compiled by dr. József KÁRPÁTI,
Head of Department for Planning, HCSO, Hungary



Introduction by the President

Modern statistics have a history of two centuries in Hungary. If we look back in time, we discover that the institution, the methods and the culture of statistics were highly influenced by historical moments, war and consolidation. The first part of this country paper is trying to summarize some important events of these centuries, focusing on some interesting and still valid questions and examples, which are raised by the statisticians again and again.

The second large topic of the paper is introducing the challenges and ideas, which inspired the top management of the *Hungarian Central Statistical Office (HCSO)* to re-think the way of managing the institution. How can we operate the office more effectively? How can we use our resources in an optimal way? How and why did we change so many things in our office in the last couple of years? What have we done to modernize our institution to comply with the changing environment in public administration and what did we learn from the competitive sector? We try to give some answers to these stunning questions.

The third large part of the paper is focusing on statistics as the profession itself. We introduced several new methods and processes, which influenced our production. In this chapter of the paper the reader can get an insight into the work performed in different statistical areas.

Hereby we take the opportunity on the occasion of the 60th anniversary of the UN Statistical Commission , to wish our colleagues at the United Nations and all national statistical institutions the best.

Péter PUKLI

President of the Hungarian Central Statistical Office



I. Historical overview – the beginnings

Modern statistical activities have a long history in Hungary, leading back into the 18th century.

Though there were some previous attempts to measure with statistical methods labor force and army size opportunities etc. already in the middle age, the first population census, as a modern statistical task in the territory of Hungary is related to **Joseph II** (Holy Roman Emperor and ruler of the Habsburg lands of Hungary and Czech), who ordered to hold the *first general population census in Hungary*, that was carried out from **1784** to **1787**.

There was an attempt at establishing a statistical service of nation-wide authority as far back as **1848**, the time of the revolution and struggle for independence. The National Statistical Office was established for the first time within the Ministry of the Interior and **Elek FÉNYES (1807-1876)**, one of the most outstanding statisticians of that period was entrusted with the direction of the office. However, a year later it ceased to exist due to the failure of the

independence war from Austria in 1849. It was not until 1867 - following the compromise with the Austrian Monarchy and establishing the agencies of an independent Hungarian administration - that the reorganization of the statistical service started.





The government invited **Károly KELETI (1833-1892)**, one of the most prominent economists of that age to lay down the conditions of founding a statistical office taking into account the international practices as well. Under his leadership the **Statistical Department** was set up within

the frame of the Ministry of Agriculture, Trade and Industry and on **25th May, 1867** Károly Keleti was appointed by the king to head that office. The **Statistical Council** was also set up at this time. This event is regarded as the birth of the official statistical service in our country. The separate Statistical Office itself – still under the supervision of the ministry – was formed in 1871. The staff of the office consisted of 17 permanent officers.

From the very beginning , Keleti's endeavor was to *operate with professional independence and to formulate scientific opinions without any influence*. During the first years of official statistics, the conduct of regular population and housing censuses started (1869) and to strengthen public confidence in statistics, **Act 25 of 1874**. entered into force, assuring the standards and fundamental rules for the statistical operations in the country at the highest legal level for the first time.

Hungary's participation in international statistical events was the proof of high professional quality, as our leading statisticians were active



participants in such historical events as the international congresses held in The Hague in 1869, in St.Petersburg in 1872, deciding about the minimum requirements and harmonized regular timing of population censuses, or the 1876 congress held in Budapest.

Keleti took also part with *János Hunfalvy* and *József Kőrösy* in the establishment of the **International Statistical Institute**.

During the next decades, **Act 35 of 1897** constituted the next step in the creation of an even sounder legal framework for statistics, regulating among others important topics as data protection and the special cases of the data supplying obligations of citizens. The act also contained important regulation on the institutional setup of the office and statistical procurement procedures. As the staff of the office was still quite small, the act also regulated the conditions of temporary employment for the case of large surveys or other tasks. This act was the legal basis of statistics in Hungary until 1950, but in **1929** several important changes were introduced in the new statistical act. From this year on, the Hungarian Central Statistical Office was assigned **under the supervision of the prime minister**.

It's important to point out, that similarly to the present conditions, the most frequently discussed questions in the late 1920's were the measurement of respondent burden, and a study was also made about parallel data collections performed by ministries and the statistical office, emphasizing the importance of the use of administrative data sources for statistical purposes.

Meanwhile the **Hungarian Statistical Society** was formed in 1922. The primary goal of the society was to develop and popularize statistics, and build national and international relations. This independent body existed until the change in the political system in 1946. The Society was reformed again in 1990. Since then it's the rally point for statisticians



again, operating through its numerous divisions, and organizing several conferences a year.

II. Historical overview – the post WW II. period

In World War II the buildings of HCSO suffered from several air strikes and attacks. Unfortunately, serious damage was discovered in the library of the statistical office as well. The years between 1945 and 1948 were the years of reconstruction, while the statistical activities were also started immediately. By 1948, the number of regular surveys was around 160 (for comparison: in 1938 it was 180). 1948 resulted in huge changes in the political system of Hungary. The coalition government was replaced by the single party political system. Due to the changes socialist economy planning was introduced.

Statistics were facing new challenges among such circumstances, as the statistical surveys of the economy had to take into account new facts and forms of operation. The tasks of the statistical office were increased, the staff and the institutional organization still had to expand. The stability of the HCSO those years was a pioneering example in the history of Hungarian public administration organizations. From 1948 the new president of the HCSO, **György PÉTER** was trying to maintain the institutional and professional independence of the office. Even though the opinions about his unique, 20 years long career as the president of the office are heterogeneous, his personality was a fundament of continued stability and neutral behavior in the hardest years of the communist era. The expected output of HCSO was rather datasets, confirming the results of the economy plans in those years. **Act 6 of 1952** stated as one of the predominant goals of the Central Statistical Office to check economic activities at central and local administrative agencies and other data



providers. The mission of official statistics was considered “to serve as a controlling and dictating tool of the economical, social and cultural development of the country”. But the efforts in statistics went further than that. Regular household surveys were introduced in 1949 for example, or the demographic and economic research institutes were established in those years, and the journal “Demográfia” (Demography) started to be published in 1958. Even high ranked party leaders started to get convinced by 1956 that the statistical office should highly concentrate on deep analysis as well.

While the system of national income calculations and the survey of state enterprises were under construction, the local institutional structure was also mirroring the post war changes in administration. As an entirely new public administration system was set up in Act 1 of **1950**, the Soviet example became the frame of the administration in Hungary: the so called council-system, as the cities, settlements, townships, counties and the capital were controlled by these bodies. The institutional setup of public administration organizations was adjusted to this system. The HCSO had township and city inspectorships and county directorates throughout the country. The post WW II evolution of the institutional setup will be discussed in the next chapter.

The next 25 years of statistics were promising new opportunities in the field of social statistics and IT. As HCSO was assigned to co-ordinate the information technology management and development policy of the country, a set of IT institutions was created around HCSO by the late 60's. This laid down the basis for a continuous development of IT infrastructure and computerized methods in statistics.

From 1989, the beginning of the change in the political and public administration system, HCSO was also more and more involved in new international activities, where **the preparation for the EU membership had a major role.**



The 1990's were rising new challenges in statistics, like introducing SNA, ESA and EUROSTAT requirements in our daily work. The candidate countries for the European Union were involved in a more and more direct cooperation with the statistical office of the EU. The European Union was interested in information on the quality and comparability of statistical data, as it was clear, that they played a major role in the preparation for the membership of these countries, the assessment of the expected effects of the process and the support of the process of accession itself. The need for high quality statistical data was obviously a common interest for the candidate countries and the European Union. The development of statistics in the candidate countries, the harmonization of their statistical production with the requirements of the European Union were highly supported by multi-country and national PHARE programmes. The development of the market economy was a new challenge for statistics as well. New demands, new stakeholders and new practices were emerging. The know-how related to the statistical *Acquis*, the methods, standards and best practices were transferred to the candidate countries during these years. Due to the traditionally high quality of statistical activities and the effective and fast development efforts in the nineties, the harmonization of statistics was executed in Hungary without problems. The Global Assessment of the Hungarian Statistical System (mentioned later) in 2002 confirmed that Hungary was able to fulfill the EU requirements in the field of statistics. At the time of the accession of Hungary to the European Union, in May 2004, Hungarian statistics were fully compliant with European and international requirements.



III. Latest efforts in the area of our legal framework

Statistical activity is regulated in Hungary by the current Act on Statistics from 1993. The main elements of the legislative framework are the following:

- The Hungarian legislation is modern and provides a sound basis for the Hungarian Statistical System. Censuses are provided for by separate Legal Acts.
- The need of the whole society to have a true and objective picture of the economic and social condition of the country is recognized.
- According to the law, the President of the HCSO draws up each year based on the proposals of the organs of the statistical service the annual statistical data collection programme which after consultation with the National Statistical Council must be approved by the Government. In practice this programme focuses on the annual data collections rather than taking a more comprehensive view of the statistical programme that would include data collections, new educational programmes of analysis, methodological developments and other quality improvements.
- The Law binds HCSO, all ministries and subordinate agencies and is drawn quite widely to limit access to confidential data and statistical results before release to those involved in the statistical processes.
- In some respects the Law inhibits data linkage that could be of significant statistical benefit.



The amendment of the Act on statistics is planned as a long term project aiming at creating a controlling and audit function for the HCSO and modernizing the work of the National Statistical Council.

IV. Changes in the institutional setup of the last decades – and the new plans for the future

The Hungarian Central Statistical Office had a sound local organization network since the middle of the 20th century. The territory of Hungary is 93.000 km², divided into 19 counties and the capital city Budapest, as public administration units (today this is equal to NUTS 3 level). The local institutions of the central public administration offices were organized on this level. Until the late seventies most of them, including the HCSO had several small local offices, operating in township or city councils (this could be described as NUTS 5 level), but later the structure started to become more centralized again. During the 50's the largest problem was that local statisticians worked under a double authority. As they were responsible for the HCSO itself, they were also under the direct control of the local councils.

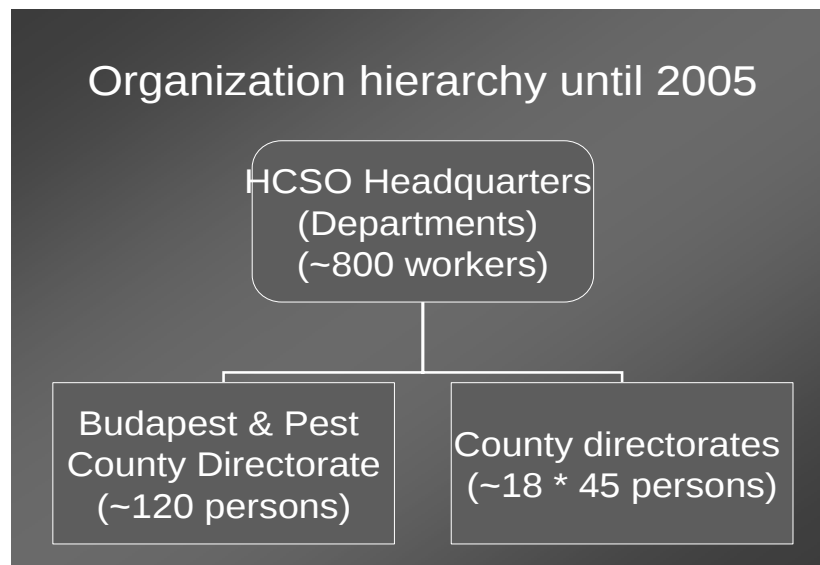
In the seventies and eighties the staff of the HCSO was increased up to more than 2200 regular workers. A quite complicated, slowly moving organizational setup was valid until 1992, as the new act on civil servants and other legal acts excluded the field workers from public service, moving them back to temporary employment again. Since that time the staff and budget of the HCSO – with rare exceptions – was usually exposed to cuts. This had strengthened the need to work in a more efficient manner and work out a strategy that could answer the challenges.



The organizational setup in the 1990's consisted of 18 county directorates, the directorate for Pest county (the 19th county) and the capital city, and the headquarters of the HCSO. This is indicated on the next map.



The local office structure was reflecting the administrative areas (counties). It was valid until February 2005. Every county directorate was responsible for the execution of the full range of surveys on their own administrative area, just like all other public administration offices. The next picture indicates the share of staff among the units of the HCSO. The total staff of HCSO was around 1700 at the end of 2004.



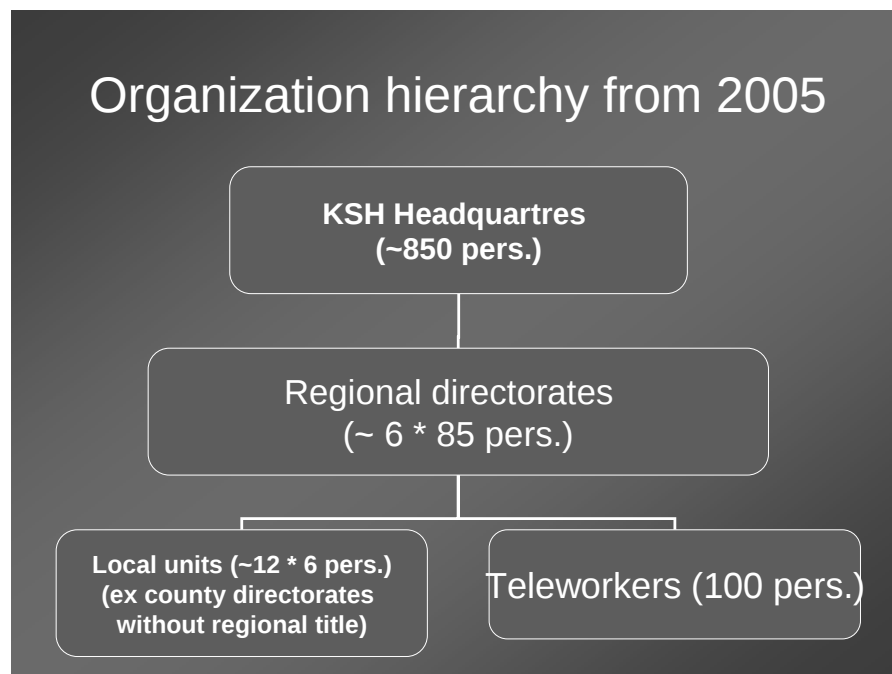
Since 2005 a regional setup was introduced following a government decision on territorial reorganisation, moving a first group of institutions to NUTS 2 level, instead of NUTS 3. This resulted in 6 regional offices instead of 18 county offices, leaving a minor amount of staff in the county centers without regional role. These small local offices employ an average of 6 persons instead of the approximately 45 persons who worked in the previous county offices and their major role is to satisfy local information needs and participate in survey coordination activities. The reform of HCSO's local structure had as a consequence a staff cut of approximately 10 percent (~170 persons).

Parallel with the new structure, a new way of working was also introduced: From among the staff of the HCSO 100 persons started to work as **teleworkers**. These people are civil servants of the office who previously worked in the county directorates that have been maintained as local offices with reduced staff and tasks. They work from home on a secure computer network. They usually perform tasks in the field of data capture, data editing and some of them are IT specialists with a software



developer role. The teleworkers' workstations are also equipped with **IP telephones**, to contact anyone at anytime in the office. Their performance is supervised with the use of a software application that was designed by the HCSO.

This reform led to a concentration of activities, less coordination requirements from the centre and due to the very persistent cooperation of the statisticians of the local units – an increased data quality! The next picture indicates the new hierarchy of HCSO.



The 2005 reform was still about the **geographical share of the same work at local level**, although the use of teleworkers already gave us a more flexible way of thinking about the burden on our staff throughout the whole country. After the completion of the reform pursuant to a governmental decision, the management of the HCSO took the decision to create **centres of excellence from the regional directorates in 2007**.

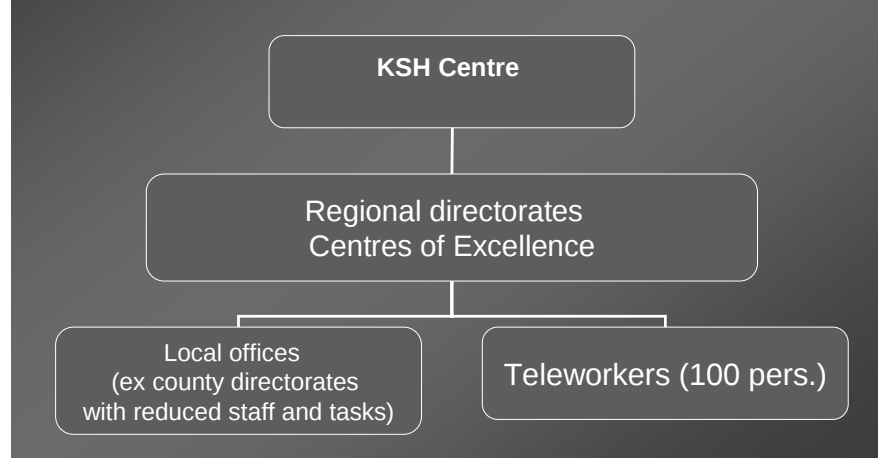


This means that each directorate would be responsible for a certain statistical topic, like agricultural statistics or tourism statistics for example, but for the entire territory of Hungary. Instead of the geographical division of the tasks based on public administration districts the concentration of the tasks in the competence centres is driven by professional considerations.

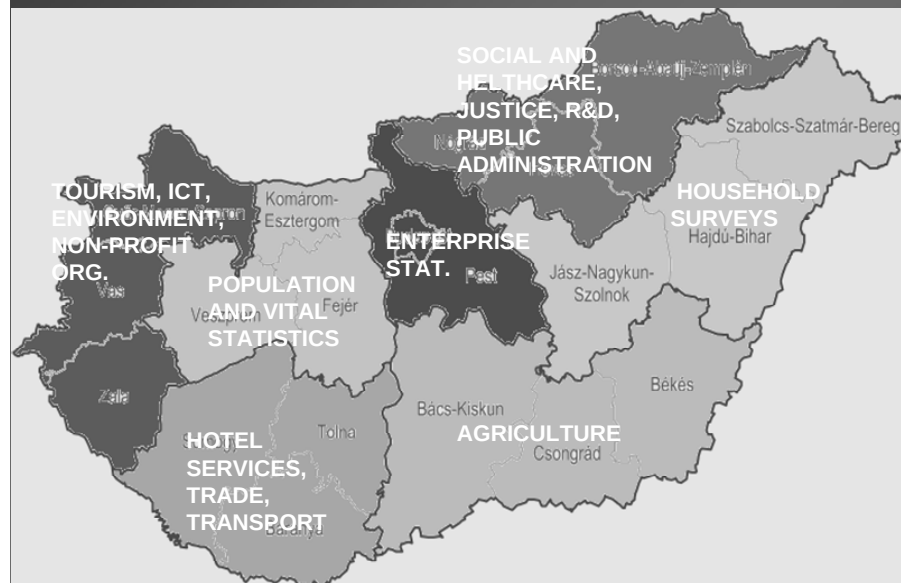
The share of work between the centre of HCSO and the directorates is moving to the direction where more and more tasks related to determined survey groups will be completely carried out in the regional offices. Methodology, survey planning, dissemination would continue to be the role of the centre, but a growing number of duties would be assigned to the regions, in addition to survey implementation. **These latest decisions on organization and work culture are expected to be highly influent for the future of HCSO, as they completely re-establish and reset the basic relations between the centre and the regions.** The negotiation on certain topics will be easier, as there are only two **partner** departments involved– one in the centre and one in the regional office being a centre of excellence with nationwide competence. This new distribution of the tasks will make possible the modernization of the data collection methods of certain statistics, like the use of electronic data collection and will contribute to the further improvement of data quality. The following pictures indicate the share of staff and work between the units in the new institutional setup.



Organization hierarchy from 2007



Centres of excellence for 2007



The reform did not only restructure the territorial units of HCSO. The **central structure was also considerably modified** as several



departments were reorganized. These measures resulted in less mid-post managers and the concentration of formerly separated statistical topics. The staff of corporate accounting and financial matters, the staff of central dissemination and internal administration was also rationalized – that means fundamental changes for the future in the central organization of HCSO, too. We also have pilot studies on outsourcing some of our IT functions.

V. Latest challenges – new approaches in management

V.1. HCSO Strategy

The Hungarian system of official statistics and the Hungarian Central Statistical Office, as an institution itself were assessed on several occasions in the past couple of years. This was mainly the result of the preparation of the country for EU accession and the strengthening of international attention.

The highly appreciated report “A peer review of the Hungarian Statistical System (Summer, 2001)” by **Ivan P. FELLEGI** and **Jacob RYTEN** was made public in a wide circle, it served as a fundamental starting point for defining our future directions. The also highly appreciated “Hungarian Statistical System: Global Assessment (April, 2002)” to EUROSTAT, written by **Tim HOLT** and **Jan BYFUGLIEN** in the framework of the PHARE Multi-Beneficiary Statistical Co-operation Programme was another milestone in assessing our work by external institutional stakeholders.

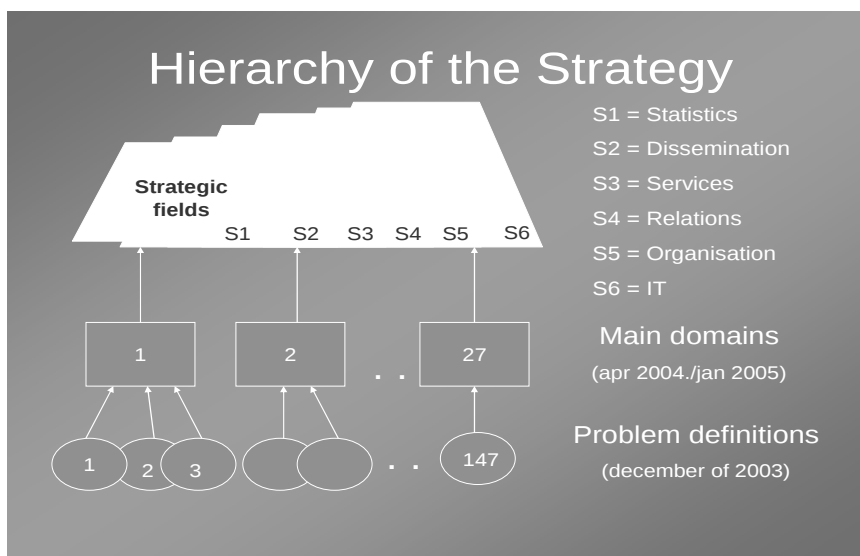


These reviews, assessments are very helpful to improve certain parts of our activity or organization. They catalyzed a new approach on management, development and helped us to **create new goals for a mid-term strategy in the past years.**

In 2004 a new unit was created to introduce strategic thinking, project methodology and co-ordination in the office (Modernization Programme Office, by now a part of the Planning Department). The top management of the HCSO started to review our operation by means of a wide range of reforms.

Besides the Modernization Programme Office, the **Strategic Development Council** (SDC) was formed in 2004. It prepares decisions and monitors progress related to strategic activities. The SDC consists of the president and deputy presidents of HCSO, plus three permanent and three temporary members invited for six months. Decisions are brought by the President of the HCSO. Corporate activities and the implementation of individual projects are coordinated by the Planning Department of HCSO.

The earlier strategic development plans for professional and methodological tasks in statistics were prepared within the framework of the statistics chapter of the National Programme for the Adoption of the Acquis Communautaire. As the next step, it was in 2004 that the Hungarian Central Statistical Office worked out and published for the first time an **overall strategic development plan**, covering the period 2005 to 2008. As a result of the development efforts to meet the needs of harmonization, HCSO widened significantly its professional programme and the organization has been facing difficulties in meeting the ensuing escalating requirements. In the following chapters we introduce the present, referring to the future as well, as we underline our main goals and achievements in the specific areas. **The next picture represents the structure of our Strategy 2005-2008.**



We expect to have by the end of this strategic planning period a more transparent HCSO, capable of measuring staff performance better and managing its resources more flexibly. Essential changes need to be implemented to facilitate renewal whilst maintaining the on-going operability of the HCSO, bearing in mind that the resources needed for the reform must be made available through well-planned adjustments. For creating the basis of sustainable development of the HCSO in the long run it is highly important to assure balanced implementation of processes based on the proposed strategic changes.

During the first two years of the strategic period strategic documents were elaborated in key areas such as:

- utilization of data of administrative registers;
- establishment of integrated data processing systems;
- establishment of centrally managed systems for organizing data collection;
- introduction of electronic devices for survey activities;
- development of the system and procedures of dissemination activity;
- quality assurance of statistical products and work processes;



- assuring conditions for quality statistical services;
- development of the meta-information system of the HCSO;
- improvement of respondent relations, measurement of respondent burden;
- strengthening of the professional role of the HCSO in the official statistical service;
- human resources development.

The **modernization of our institutional operation** led to the following results:

- Organizational centralization (as presented above)
- Introduction of the integrated financial and budget management system
- Introduction of the programme planning system and procedure, to plan all activities for a certain year from a mostly budgetary point of view
- Important results in statistical production process
- HCSO School as the forum of internal training (see later)

The progress of the implementation of „HCSO Strategy 2005-2008” was reflected in the first Annual Report on the Strategy (2005), as an assessment tool of the first year, and resulted in positive changes in our work, like the significant improvement of the quality of feasibility studies in the office, more definite theoretical and practical decisions taken at SDC meetings, and the involvement of more young and talented colleagues in the innovation processes. The results of 2006 are currently under assessment.



Our Strategy in English can be reached on the web by following this link:

http://portal.ksh.hu/pls/portal/docs/PAGE/KSHPORTALENG/INTRODUCTION/HCSO_INTRODUCTION/STRATEGY.PDF

Our annual report of 2005 and the upcoming documents are also available in English on the following site:

http://portal.ksh.hu/portal/page?_pageid=38,119963&_dad=portal&_schema=PORTAL

In 2007, EUROSTAT will conduct the **European Statistics Code of Practice** peer review at HCSO as well and we also plan to introduce our new **user satisfaction survey**, and further internal examinations on **respondent burden**. These actions will also influence our future activities in several ways.

V.2. Program planning system

We recognized that public administration faced a challenge: the performance-based approach of the private sector. That means that re-allocation of non-sufficient resources, cost orientation, goal-oriented working behavior, strategic thinking and product and process quality approach are all issues that should be integrated in the operation of the statistical organization as well!

To achieve this, the management of the office decided to design internally a system of programme and resource planning that allows us to identify and plan our annual programmes (projects) and the related tasks. There was an emerging demand for a change in professional leadership involving new ways and methods, new technical background and considerably improved competencies, to create a flexible, creative and committed staff, sharing a positive vision of opportunities in the office.

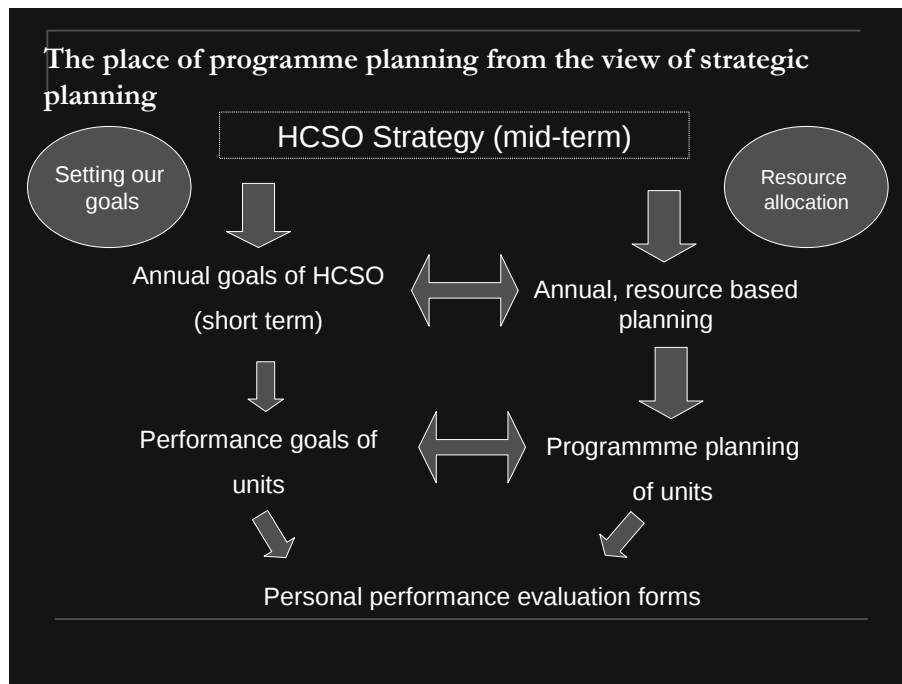


The fundamental idea was that a large organization like ours needs quantitative and qualitative indicators to measure our performance, and the organization has to be controlled by the use of these indicators. Personal responsibilities must be set to all of our specific programs to have a clear picture about the resources allocated and used to their implementation.

The experience of the first two annual planning periods has shown proof that through the resource planning procedure we can try to remedy the deficiencies identified, including lack of quick and relevant information, adequate resource allocation, and measuring and evaluating processes.

We also designed and implemented a management information system, a portal and a database to give adequate and equal information for the different levels of management. This tool is being finalized right now. We are also introducing a system of indicators and a technology, to watch key performance variables of the office's macro level (bsc).

If we try to link strategic periods and annual terms in a single idea, we get the following picture of our own target in planning:



The planning system uses two basic nomenclatures, which were designed for internal use. The surveys, development projects, infrastructural operations, etc. of the office shall be classified by a programme nomenclature. The other is the list of tasks, or activities. This nomenclature serves to identify the workflow within a programme. Each unit has to **plan** next years' resource allocation needs (human and financial resources) for the programmes and tasks using these nomenclatures on a monthly basis. We recover **actual data** from several sources, like an electronic register of working time for human resource allocation, the centralized accounting system, project monitoring etc. The main results are clear goals, identified work processes (workflow), revealed and documented problems and their solutions, planned allocation of resources, concrete personal responsibilities, assessable and analyzable results.



The planning system is trying to fulfill several requirements and it shall cover all programmes and activities with resources allocated. **Adding performance indicators, the design of their assessment method** and the creation of solid coherence between resource plans, our stakeholders' interests, our internal processes (among others **quality management**) and the internal development of our organization are the upcoming tasks for the responsible department and all other departments in 2007.

V.3. Internal training – the HCSO School

The HCSO School is the form of internal training in the office. The annual training programme is scheduled after consultation between departments, possible tutors (usually senior managers of HCSO) and the top management. Due to the time and room limits of possible courses, a very strict agenda is worked out, which considers the main demands or requirements for training. In 2006 we organized more than 30 course programmes within the framework of the HCSO School. The topics were selected from around one hundred possible areas. The most important topics were the area of national accounts, several other statistical areas, general information course for new employees, development of tabling, graphical and written analysis and development courses for young managers.

The HCSO School used about 3000 man-days of human resources (tutors' time, preparation, organizational matters and participation time of the staff). That is approximately one percent of our annual human capacity. This one percent is a well used percent of our time, as we consider internal HR development as a key task. We shall continue organising these courses to ensure the quality of the knowledge of our staff.



V.4. Use of administrative data sources for statistical purposes

There was considerable advance in the field of using administrative information for statistical purposes. **Between 2004 and 2007** the proportion of **data receptions increased from 22 percent to 36 percent** in the annual data collection programme. **The number of the direct data collections decreased by 12 percent.** A new project and a group of experts were set up to investigate further possibilities to use administrative sources. One of the mainstreams in the strategic plan for 2005-2008 applies to the development of institutional framework of the use of administrative data. A study was carried out in early 2005 in order to define future development activities. For the purpose of the study a survey was carried out on the used administrative data sources and their possible extension. The survey had a special regard to the quality of administrative data, and to the fact whether their content fully satisfies the statistical data requirements.

It was decided that an independent project should be devoted to the modernization of the censuses to be based on registers. A technical advisory board (The Technical Advisory Board of Administrative Data Sources and Data Takeovers) was established with the representatives of the statistical fields in April 2006 in order to make proposals on the basis of the planned development activities to achieve the necessary inner coordination and communication with the concerned Ministries.

The Board reviewed the needs and experiences at the HCSO by statistical fields, proposed plans for the institutionalized settlement of data takeovers, for a register and information system and for creating the necessary legal background. These will be presented soon to the presidency of the HCSO. The Board also deals with relevant plans of other



Ministries and looks for possible ways of cooperation for having a governmental data basis of administrative data sources, registers.

The president of the HCSO signed a cooperation agreement with the Tax Office (May 2005) and with the Customs and Finance Guard (July 2006). These documents cover a description of the data sources delivered by the administrative organs to the HCSO and set the conditions of the cooperation in order to use administrative data sources for statistical purposes.

V.5. Dissemination

The basic principle for dissemination is to provide **equal access to information** for all our users in conformity with European and national legal requirements. The HCSO made efforts to have information on users' opinions and needs. In the past few years the Dissemination Department has conducted several **short surveys in connection with some of the major publications of the HCSO**:

A new service, the European Statistical Data Support also offers an opportunity to systematically consult users. HCSO has introduced a **new dissemination policy**, which is strongly based on **electronic dissemination**. With the strong improvement of the access to internet and PCs in Hungary, HCSO can now rely on this pillar more efficiently than earlier. The implementation of this new policy required a considerable improvement of the HCSO website, which is now compliant with the ever growing user needs.

A good share of our publications is freely accessible via our portal. (<http://portal.ksh.hu>) . All the press releases are accessible on the website of the office assuring an equal access to new data for everyone.



Another block is that of downloadable publications, with complete text and datasets of many HCSO publications.

Since 2002 preparations were made to build up a dynamic data warehouse, which has been working now since September 2002. It's a very useful tool for more professional users making possible a flexible selection and reporting solutions from a wide set of data. A static data warehouse called STADAT has also been built. It includes the most important data of HCSO, broken down by usual datasets. Several changes have been made since its introduction to make it even easier to understand and navigate.

Efforts are made to make methodological notes easier to understand and more unified among different on-line and paper publications.

VI. Latest development in statistical areas

While we reviewed our organization, our working and planning methods and management practices, we also continued to develop our work in different statistical areas. **As the Hungarian Statistical System is part of the European Statistical System**, an important task of the previous decade was to comply with more than 300 EU regulations in order to produce harmonized, comparable data at EU level. The HCSO is regularly transmitting the required data to Eurostat. We also put a great emphasis on following the quality guidelines of the European Union. The next chapters are focusing on the development of important statistical activities during the last couple of years, which are partly the results of following international development directions, and partly deriving from new approaches on national level.



VI.1. Evolution of classifications

In the field of classifications we have followed the changes of the NACE Rev 1.1 and the CPA 2002. We are participating in the revision work of the ISIC/CPC and the NACE/CPA, in which not only ministries and the highest authorities, but professional organizations and even important users are also involved. To prepare the new version of NACE, a project team was formed in the office. As a result of the work of the development project the national version of NACE Rev.2. has been finalized, which had been sent out to external experts for harmonization during autumn 2006. The revision of the national classifications corresponding to the CPA is closely following Eurostat's work. We are going to apply the complete CPA concerning goods.

VI.2. Business register

In 2006 the business register contained more than 1.2 million legal units. The number of new entries and exits is around 100.000 each year. Data for more than 50.000 local units are collected and reviewed every year. From 2005 the register includes information on the **500 most influential enterprise groups** as well, the source of their variables is profiling. We carry on the main activity verification since 2001. Around 50,000 units are examined every year. Since 2002 the HCSO produces **business demography** statistics from the Business Register..

VI.3. Results in the field of Short Term Statistics (STS)

We regularly publish the 32 STS variables in good quality and in a timely manner. Among the data 28 variables are supplied monthly, 4 quarterly. We introduced the Main Industrial Groupings (MIG) structure according to the STS Regulation. All indices are transmitted in unadjusted form, as well as adjusted by working days and seasonally.



In 2003 we changed weights rebasing the time series to the base year of 2000. For the rebasing we used data coming from the Structural Business Statistics (SBS).

We regularly take part in the work organized by the STS Section of Eurostat. For example:

- in 2004 we compiled a detailed meta-description in English language of all the 32 STS variables, which are available on the electronic CIRCA website,
- in 2005 and 2006 we compiled the required table-sets concerning data quality of the production index of the industry and the retail trade index (the next step will be the quality of the producer price index of the industry, presumably in the first quarter of 2007),
- in the early 2006 in the frame of the STS Cost and burden project the needed data were supplied to Eurostat.

In summer of 2005 the amended STS Regulation was adopted by the Council and the Parliament. This requires new tasks for the Member States, as new STS variables are to be introduced:

- The import price index, as well as the distinction of the non domestic data by Euro/non-Euro zone is required only from countries having Euro as national currency.
- The output price index of services is an important challenge of the amended STS Regulation for HCSO as well. We started to elaborate the methodology and to prepare the necessary steps to introduce this indicator. Since the beginning of 2007 we collect these data.

EUROSTAT makes evaluations concerning the situation, quality and transmission deadlines of the STS data, twice a year, generally on the base of 1st of April and October. The Hungarian STS is regularly evaluated as



“very good level of compliance (VG)” and classified into the first group of countries.

VI.4. Structural Business Statistics

The data processing system has been developed continuously. The main steps of the development were the followings:

- An integrated questionnaire of labor, income and expense and investment variables was sent out for the reference year 2001 in 2002.
- The data of this integrated questionnaire were recorded into a common system of business statistics data recording, named ADÉL in 2001.
- ADÉL enables us to perform micro editing tasks, so the main errors of the questionnaires can be corrected in the early stage of data procession. Editing rules are revised every year.
- Computer programmes were developed to help macro validation. In the first years we used a fully separate computer programme, now reports are integrated into a common business statistics report system.
- We began to use administrative data to fulfill SBS requirements for enterprises with 1-4 employees. The first variables on these enterprises were sent in 2003 together with the methodological paper of the variables of the inclusion of these enterprises. We have also used administrative data for data processing, editing and imputation. The software used in this phase is enhanced regularly.

Besides the analysis of the economic structure, an important goal of SBS is to give fundamental help for national accounts calculations. Therefore, the current task of our development efforts will be the design of



the **SBS – National Accounts common database**. There is a strategic development project working on this topic. This database allows us to assure complete consistency of the structural business statistics data and national accounts data, making macro validation tasks much easier. The new database is under construction, and the project is expected to finish the development tasks in 2007.

VI.5. Macroeconomic statistics

All of our steps in the improvements were led by the necessity of harmonization with international standards, especially with the ESA95. There are few topics where further improvements were necessary in the Hungarian **National Accounts**. These elements met with the plans of the HCSO. That is why we can say that during the last years most of the problems were solved; moreover other developments were also realised and introduced in the Hungarian National Accounts. The main most recent achievements in this area are the following.

- The publication of working day correction and seasonal adjusted indices.
- **Quarterly accounts: flash GDP** estimation – in cooperation with ECOSTAT Research Institute – was introduced as an experimental calculation in 2005 and from the beginning of this year as a permanent publication at t+45 days. The deadline of the “final” version of quarterly accounts has been shortened to t+70 days, as well.
- Estimation of fixed assets, using new survey data and PIM method.
- The problem of **imputed rent** was solved because the cost method is allowed in the new EU regulation on dwellings. (Modification of 95/309 Commission Decision on specifying the principles for estimating dwelling services for the purpose of



implementing Article 1 of Council Directive 89/130/EEC, Euratom on the harmonization of the compilation of gross national product at market prices.)

- Introduction of FISIM allocation in 2005
- **Direct volume measure** in Health and Education from this year
- Fix based indices were changed by **chain indices** this year
- **Hidden economy/exhaustiveness**: only one experimental calculation was made using the Portuguese method, further application was postponed because of lack of human resources. The work will probably continue in 2007. Two elements – prostitution and drugs - of **illegal activity** were included into the GDP estimation since last year.

Future plans in National Accounts: the **SUT-NA integration** using the Norwegian method and software, and the establishment of a common SBS-NA database

VI.6. Business statistics - results in the field of distributive trade and business services

We regularly produce all annual and – among the minority of the Member States – all multi-annual variables. In order to harmonize retail trade statistics with EU STS Regulation we introduced a monthly data collection on repair services from the reference period of January 2002. The first series of volume indexes were published in January 2003.

A survey on detailed turnover of selected business services by products and clients for the reference year 2007 is under development.



VI.7. Statistics on information society

The intensive development of this statistical field started in 1998. On **ICT supply side** there are data collections on telecommunication, postal services, cable TV services, broadcasting services, internet provider services and IT activities.

On **demand side** the HCSO fulfills the data supply requirements with two surveys: the ICT usage of enterprises and ICT usage of households surveys. Beyond that the stocks and usage of information and communication technologies of the public administration is also surveyed (Branch L).

VI.8. Tourism

As a result of our traditionally wide range tourism surveys, we have rich information sources on tourist traffic and accommodations. To measure the **income and expenditure related to tourism** -after preparation, study of international methodologies and consultations with foreign experts- the pilot surveys of the national and inbound tourism demand were carried out in 2003 and 2004 and the complete system – inbound, outbound and domestic tourism surveys – with regular surveys have been carried out from July 2004 on. After considering the needs of other data users, the questionnaires have been finalized in close co-operation with other departments of the HCSO and interested government bodies, e.g. National Bank, Ministry of Economy and Transport – at that time responsible for tourism. **From August 2006 the answers of respondents are recorded by PDA (Personal Digital Assistance)**, unifying the survey with electronic data capture and primary data checking in one step and one person.

According to our work plan, the development of the methodological framework of the Hungarian **Tourism Satellite Accounts** started in 2003 and the first set of tables, first estimates based mainly on the results and estimations of national and inbound tourism demand but taking into



account National Accounts data were compiled in 2005 for 2004 and published in May 2006. Our objectives for 2007 are to improve the quality and consistency of tourism statistics, inter alia with enhanced co-operation with our neighboring countries.

VI.9. Statistics on public deficit and debt (EDP), trade and balance of payments statistics

The compliance with the EU rules concerning the Excessive Deficit Procedure (EDP) was an important task. The EDP report is an annual report on the public deficit and debt conditions of the EU Member States. These data play a major role in the judgment of the fiscal position of the Member States, as the result of a high deficit or / and debt may lead to EU level sanctions. Now statistics on public deficit and debt are **fully complying with ESA95 and EDP Manual**.

- **Non-financial accounts** are compiled from 1997 onwards by HCSO and submitted to Eurostat.
- **Financial accounts** are compiled from 1995 onwards by the National Bank of Hungary and submitted to Eurostat. Accounting of General Government is either accrual or time adjusted cash.
- **A joint working group** of HCSO, National Bank of Hungary and Ministry of Finance was set up in 2004 and has meetings on a regular basis since then to discuss methodological issues of government accounts and EDP questions. The working group also discusses sector classification of institutional units into General Government. Intense communication is taking place with Eurostat also on methodological issues, like classification of PPP projects.
- The same **classification** is applied by the EDP Notification and non-financial and financial national accounts.



- **ESA and EDP tables are fully integrated.** HCSO has the main responsibility concerning EDP report, mainly for the past years data, while the role of the Ministry is mainly the estimation of current year data in the report. EDP tables and Inventory on methods and data sources will be published on the HCSO website this autumn.
- The estimation of **fixed assets** was solved by the PIM method as mentioned previously.

VI.10. Foreign trade statistics

Hungary made important steps to **harmonize foreign trade, national accounts and BOP data**. The calculation, data collection system of foreign trade data were changed completely when Hungary joined the European Union. The Intrastat system was introduced instead of custom statistics for the trading of goods between Member States. Further small methodological developments were also introduced during the last 2 years in the Extrastat system, too. Besides Intrastat and Extrastat systems we are developing our international trade in services statistics.

VI.11. Agricultural statistics

Due to the importance of the Common Agricultural Policy in the European Union, one of the key development areas was the harmonization of agricultural statistics. During the last couple of years numerous big surveys were implemented in Hungary. We conducted the General Agricultural Census (2000), the Census of Vineyards and Orchards (2002), the Farm Structure Survey (2003 and 2005) and the Census of Orchards is under preparation for 2007. Besides the implementation of big surveys, we participated in several new experimental projects for the use of modern technology for agricultural statistics. Our statisticians had decisive participation in the LUCAS-project, and HCSO introduced the integrated agricultural data processing system.



VI.12. Population and Demographic Statistics

In the field of **cause of death** statistics an overall improvement was performed in order to fulfill the Eurostat recommendations and to ensure a better data quality. In 2005 a new form of the Death Certificate was introduced and a training manual and leaflets were published to help the certifiers. The **automated coding** of causes of deaths was implemented, the coders were re-trained and a comprehensive quality control system was introduced.

The importance of **migration statistics** improved considerably after Hungary joined the European Union. There's a government resolution for the further development of migration statistics and the creation of an integrated migration database. The reason of the integration is to improve data quality and to satisfy national and international statistical demands. According to the plans, from 2007 on migration statistics will be based on six different registers. The HCSO-questionnaires introduced earlier serve the purpose of meeting international requirements. One relates to foreigners naturalized in Hungary (from 2002) and the other to foreigners requesting settlement permit (from 2003). Both questionnaires include data (occupation, economic activity, education, etc.) which are required by Eurostat, OECD and ILO.

A new draft European Parliament and Commission regulation of international migration statistics was adopted by the Commission in in 2005 and is now in the legislative process. It will facilitate the comparability of migration statistics of the member states. On the whole our level of compliance with EU requirements in migration statistics is considered to be high.

We are taking part in drafting the European **Core Health Interview Survey Module**. We are preparing the Hungarian National Health Interview Survey in cooperation with national professional health-organizations. In case of accident at work information on duration and



severity of diseases is available. In case of **occupational diseases** a new 2005 Grant Project started to create a new notification form including information on duration and severity of diseases.

VI.13. Social protection statistics

ESSPROSS (European System of Integrated Social Protection Statistics) was implemented in Hungary. The Hungarian social protection data from the core system, the qualitative information and pension beneficiaries' module for 2003 and 2004 were produced by the agreed deadline.

VI.14. Education Statistics

The annual institutional data collection is **carried out via electronic questionnaires since the year 2000**. New developments include pupil, student and teaching staff registers and the observation of student mobility.

The establishment of statistics on lifelong learning is one of the most important new developments in education statistics. This includes the development and adaptation of new methodologies, the introduction of new data collections, such as the "Adult Education Survey" and the participation in surveys like the "Continuing Vocational Training Survey" compulsory from now on.

VI.15. Culture Statistics

The organization of data collections in relation to arts, entertainment, cultural and leisure activities and the pertaining institutions (e.g. theatres, cinemas, museums, libraries, publishers, television and radio broadcast companies, etc.) is now being accompanied by efforts towards the further harmonization of these data collections with international methodological standards.



VI.16. Labour Market

There have been some methodological improvements in the past years in this field (for example: the survey became continuous). We keep improving our methodology taking account user needs, and the best practices in the Community Labour Force Survey. We have participated in the work of different task forces, and **we are giving technical assistance as ‘donor’ country for other countries** (Macedonia, Bosnia and Herzegovina). A new survey has been introduced since 2005 for fulfilling the European requirements on **job vacancies**. The new short term indicator has high priority, and we are able to produce this indicator in a fully harmonized way. Some steps have been done for the harmonization of Structure of Earnings Statistics, which is conducted by the background institute of the ministry. **Labour cost index** is regularly transmitted. Nowadays the biggest challenge for us is involving micro enterprises (enterprises employing less than 5 persons) in the harmonization of statistics on labour costs, structure of earnings and labour cost index.

The **Labour Market Policy** database has been set up in 2005 and further developed according to the LMP Methodology Revision of June 2006. Data are collected in cooperation with the National Employment Office and the Ministry of Social and Labour Affairs.

VI.17. Household Budget Survey

This is one of the most traditional surveys of the Hungarian statistical system. We have put great emphasis in our work on fulfilling the EU requirements in this field. We fully harmonized the Household Budget Survey with the corresponding EU regulation. We also worked out the calculation method for the imputed rent, we developed our **user-cost method in collaboration with Statistics Norway**, which has been validated by Eurostat.



VI.18. R&D and innovation statistics

The ongoing modernization – meaning the adaptation of all international standards – of the R&D data collection is now completed: the Hungarian R&D data collection is now fully in line with the specifications of Commission Regulation 753/2004 on R&D statistics. The international methodological manual of R&D statistics, the Frascati Manual following continued reviews and discussions has been modified in 2001. We have incorporated the new modifications on an ongoing basis over the years (e.g. fields of science classification, new educational attainment classification based on ISCED, etc.).

In the area of innovation statistics the HCSO has to provide data to the EU and satisfy the ever growing demand of domestic data users. Therefore the internationally harmonized questionnaire was reviewed and expanded upon consultation of a wide circle of experts and taking into account national specificities. In regard to quality, **the survey's accuracy and better response ratio the HCSO has included the survey on innovation activity as a compulsory survey in the National Statistical Data Collection Programme.** As a result the response rate in 2005 increased to above 75% as opposed to the average response rate of 30-40% of previous years.

VI. 19. Distribution of income and living conditions

An independent survey has been introduced to fulfill **EU-SILC requirements**. A pilot survey was carried out in 2004 to test the questionnaire and some data collection methods. In the first year (2005) the survey was a sub-sample of the 2005 microcensus, which made it possible to exclude overlapping topics. In 2006 and 2007 the survey is harmonized with other household surveys.



The greatest strategic challenge of the current period is to create **a modular survey system of living conditions, income, social exhaustiveness, household and labour force surveys.**

VI.20. Population and housing census

While from the data collection point of view the 2001 Hungarian census was basically a traditional one (door-to-door interview with questionnaires), it contained several novelties in the preparation phase, its content, privacy features, data entry (i.e. OCR) and dissemination. Tabulations and other information equivalent to many thousand pages have been published – besides the traditional paper form – on the Internet (www.nepszamlalas.hu), most of them are also translated into English. In 2003, the 42 required tabulations were sent to Eurostat, and many other tailor-made, specific national and international data requests dealt and complied with.

In April 2005 a 2-percent sample based microcensus was carried out, of which the main findings have already been published, while a couple of thematic publications are being prepared (see also in both languages at www.mikrocensus.hu).

Having participated in several working groups and in the Steering group, **the Hungarian census staff has been deeply involved – as from 2003 – in the preparation of the joint UNECE – Eurostat recommendations for the 2010 round of population and housing censuses.** Besides, in June 2006 (CES, Paris) a short paper presented the main results of a comparative study based on the **matching of the data of the 2000 agricultural census and the 2001 population census of Hungary.**

In the end it is worth mentioning the plans of the Hungarian Central Statistical Office to study and work out the possibilities of a more advanced use of administrative sources and registers for forthcoming/later



census purposes and also to offer internet option to the census questionnaire.

- - -

We hope that our country paper was able to show the different stages of the evolution of statistics in Hungary, mostly focusing on the near past and present issues, plans and targets. Through these examples we gave a brief description of statistics in Hungary. The events presented herein build on the mutually strengthening synergy of our honorable traditions and reform intentions, and pave the road of HCSO into the future. We are committed to go along this way to produce high quality statistics based on a rational organizational background.

Budapest, HUNGARY, 12th January, 2007