



Agency of Republic of Kazakhstan on Statistics
Statistical Master Plan 2008-2015

June 2008

Table of Contents

Table of Contents	2
Preface.....	4
Revision June 2008.....	5
Executive Summary	6
Introduction.....	6
Relevant National Strategies and Partnership Activities	7
Assessment.....	8
Guiding Principles for Development	9
Strategic Directions.....	10
Implementation Considerations	12
Monitoring Progress and Evaluating Results.....	13
1 Introduction.....	15
1.1 Opening Remarks.....	15
1.2 Relevant National Strategies and Their Links to Statistics.....	15
1.3 Recent and Ongoing Donor/Partnership Activities.....	16
1.4 Purpose, Content, Users and Uses of SMP	17
1.5 Terminology.....	18
1.6 Description of SMP Preparation Process	19
2 Assessment of Kazakh National Statistical System.....	21
2.1 Institutional and Legal Infrastructure.....	21
2.2 Organizational Infrastructure: ARKS and Territorial Offices	22
2.3 Organisational Infrastructure: ICC	27
2.4 Statistical Infrastructure: ARKS and Affiliates	28
2.5 Information and Communication Technology Infrastructure: ARKS and Affiliates	31
2.6 Statistical Organization and Infrastructure: Other Statistical Agencies	32
2.7 Statistical Program and Operations.....	35
2.8 Summary.....	37
3 Strategic Directions for Statistical Development.....	39
3.1 Overall Objective	39
3.2 Fundamental Principles of State Statistics	39
3.3 Target Strategic Outcomes.....	40
3.4 Strategic Directions.....	41
4 Proposed Projects.....	44

A. Improve Legal and Organizational Infrastructure.....	44
B. Improve Human Resources	48
C. Improve Statistical Infrastructure.....	51
D. Improve User and Provider Relations	56
E. Improve Information Processing Infrastructure	59
F. Improve Physical Infrastructure	60
G. Conduct Population Census	62
H. Improve Individual Subject Matter Programs and Methodologies.....	62
5 Implementation Outline	66
5.1 General Principles.....	66
5.2 Shortage of Human Resources.....	66
5.3 Assumptions/Risks.....	66
5.4 Sustainability Issues.....	67
5.5 Implementation Schedule and Resources	67
6 Investment and Financing Plan.....	68
6.1 Resource Requirements	68
6.2 Financing Plan	68
7 Monitoring and Evaluation	69
7.1 Measurable Results	69
7.2 Assessment of Strategic Outcomes.....	71
ANNEXES.....	73
Annex 1: Abbreviations	74
Annex 2: Reference Documents	76
Annex 3: Kazak National Statistical System	77
Annex 4: ARKS Central Office Structure	78
Annex 5: ARKS Staff (as of October 2007)	79
Annex 6: Schedule and Resource Estimates.....	80

Preface

The mission of the Agency of the Republic of Kazakhstan on Statistics (ARKS) and the other government statistical agencies is to provide the Kazakh government, businesses and individuals with reliable and accurate statistics collected and produced in line with the international methodology and best practice. The overall objective of the developments defined in the Statistical Master Plan (SMP) is to help achieve this mission.

A SMP is an internationally accepted starting point for development of a comprehensive long term development program. It provides the basis and justification for investments by the ARKS and other government statistical agencies in improvements to the statistical infrastructure and programme.

The SMP was developed by the ARKS with the assistance of a team of experts comprising Michael Colledge, Aleksei Ponomarenko, Jiro Tominaga and Olga Shabalina, guided by Mustafa Dinc and funded by the World Bank. It also benefited from the Global Assessment being conducted concurrently by a team headed by Petteri Baer and funded by the UN Economic Commission for Europe.

January 31, 2008

Anar Meshimbaeva
Chairman,
Agency of the Republic of Kazakhstan on Statistics

Revision June 2008

This document was subject to a minor revision in June 2008 in order to take account of material that was not available when the draft was finalized in January, in particular resource estimates for the proposed projects. In addition, some corrections and improvements in the flow of the document were made, but without any major change in content.

The additions and changes have been checked and approved by Dr Birlik Mendibaev, Deputy Chairman, Agency of the Republic of Kazakhstan on Statistics

Executive Summary

Introduction

Paralleling the achievements of the country as a whole, the Kazakh National Statistical System (KNSS) has made significant progress in the past several years towards meeting the needs of a market based economy and is now considered the best developed national system in Central Asian region. Nevertheless, to achieve a place amongst the most advanced agencies in the world, further improvements are required. In this context, as coordinator and main producer of statistics, the Agency of the Republic of Kazakhstan on Statistics (ARKS), will play the key role.

Components of Kazakh National Statistical System

The KNSS comprises a number of component agencies. The ARKS is the core agency. It is an independent government institution operating under Decision No. 325 of the Kazakh Government of March 30, 1999. Under the law, its functions include approving statistical questionnaires, conducting surveys, processing and disseminating data, and preparing statistical regulations and controlling their execution. It is also responsible for statistical classifications and for coordination of government statistical agencies.

Strictly speaking, the name “ARKS” refers to the legal/organisational unit located in Astana. However, in common parlance, the term is taken to include not only the legal/organisational unit located in Astana but also the regional and district offices that are affiliated to and controlled by it. This is the convention adopted in this document. Thus the ARKS comprises the Central Office located in Astana, 16 regional offices located in the oblasts and in the cities of Almaty or Astana and 187 district offices located in the rayons.

The Information Calculating Centre (ICC) is the separate legal entity that is wholly controlled and funded by the ARKS to provide data processing and ICT services. The ICC comprises a central office, which is currently divided between Astana and Almaty, and 16 regional offices. The ARKS and the ICC together, including their territorial offices, are collectively referred to in this document as the Kazak National Statistics Office (KNSO).

In addition to the KNSO there are some 16 other government agencies producing official statistics. Collectively, the KNSO and these other government statistical agencies comprise the KNSS.

Purpose of SMP

In essence, the SMP has two objectives. The primary objective is to present a strategy for KNSS development over the period to 2008-2015 and to outline how it can be implemented. The secondary objective is to provide a baseline assessment of the KNSS as the basis for strategy formulation.

The SMP provides the basis and justification for investments by the ARKS and other government statistical agencies in improvements to the statistical infrastructure and programme. It includes information that is vital to senior managers in preparing budget

requests. It helps the ARKS and the other government statistical agencies to target and program their development activities within a coherent framework. It informs the ARKS' partners abroad about the KNSS and the areas in which cooperative activities could most readily and usefully be conducted.

SMP Preparation Process

The SMP was prepared by the ARKS with the assistance of a team of international experts funded by the World Bank who worked in conjunction with ARKS' senior management and other stakeholders. The preparation process involved intensive consultation and input from the full range of stakeholders. In addition it benefited from close cooperation from a concurrent KNSS Global Assessment by a UNECE Study Group.

Relevant National Strategies and Partnership Activities

Administrative Reform

Several aspects of the ongoing Administrative Reform are relevant to SMP formulation, including the working conditions of public servants, especially, their salary scales. Government agency heads will be free to redistribute available resources within accepted limits. This will certainly enhance the image of public service as a service provider and employer. However, the results of the reform may not begin to flow through until 2009.

Relocation to Astana

The ARKS was relocated in 2006 and 2007. This has resulted in an attractive new building, better technical facilities, and high motivation for the relocated staff who are the recipients of new apartments are bought by government. However it also caused some disruption of operations, and the need for massive recruitment and training.

E-government

The ARKS' contribution to the E-government program has two aspects: first, electronic reporting services will be developed; second, a statistical web-portal will be established for better dissemination of statistical results and user feedback.

Single Window Service Provision

A "Single Window" service is being implemented in the territorial offices for enterprises having to collect and deliver questionnaires. This in line with general government policy on improving the government services. It will simplify the reporting procedure significantly given that, depending on its size, an enterprise may be liable to collect, complete and deliver anywhere from 6 to 43 statistical questionnaires per annum. Further improvements by way of offering alternative methods of data submission are under consideration.

Social and Economic Reform

The President's address in March 2008 will likely stress the importance of continued social and economic reform and, by implication, of the statistics required monitor the reform process. This presents an opportunity for the ARKS to demonstrate its relevance

by presenting a SMP that acknowledges current deficiencies in key areas and provides a roadmap for enhancement of its capacity.

Recent and Ongoing Donor/Partnership Activities

ARKS cooperates with all the international agencies involved in statistics. In 2006, a total of 38 ARKS and ICC staff participated in 51 international meetings abroad and there were 37 meetings with international experts in Kazakhstan.

Kazakhstan subscribed to the IMF's Special Data Dissemination Standard (SDDS) in 2003 and meets all the SDDS requirements.

ARKS has received the massive technical assistance from the EU within the TACIS program. During last two years, eleven projects have been completed as part of Statistics 8 and Statistics 9 in addition to projects founded by Swedish Agency on International Cooperation, the Turkish International Cooperation and Development Agency (TIKA), and Statistics Norway.

Assessment

The KNSS comprises quite an impressive and comprehensive statistical programme resulting in over 300 publications per annum. The main statistical agencies, in particular the ARKS, have sufficient budget to maintain the program and to make investments in further development. Furthermore, they have made very good progress over last decade in adopting international principles standards and practices. The current weaknesses, and thus the priority areas for improvement, are mainly in the infrastructure that supports the programme.

- The current statistical legislation good but there are areas for further improvement. For example, the separation between *statistical* and *administrative* data needs to be more clearly specified, the provisions for confidentiality of individual data need to be reinforced, and ARKS' right of access to administrative data guaranteed.
- There is substantial inefficiency inherent in the current territorial office structure and thus scope for improved performance through office consolidation. In addition efficiency could be improved through introduction of performance management and effort recording schemes as well as by transferring core business functions from the ICC.
- The absence of a quality management framework suggests that effectiveness could be further enhanced by promoting quality awareness and continuous improvement.
- The ARKS' Central Office is seriously short of skilled staff. The ICT, methodology and analytical research areas need strengthening and, given the difficulties in recruitment, this will require significant expansion in training.
- As regards statistical infrastructure, classifications are updated in accordance with international standards but with a noticeable time lag, and there is a critical need for better metadata management, questionnaire design standards, application of sampling procedures, and improvements in analysis methods.
- Efforts to focus the data collection programme around three registers - population register, dwelling register and business register – are still in their infancy.

- Whilst high level committees have been established to deal with provider and user concerns, they have been ineffective to date. There are no measures of respondent burden nor targets for its reduction. Users are not aware of the wealth of data available.
- Maintenance of the current suite of separate software applications for each survey is resource intensive and the resulting databases are extremely difficult, if not impossible, to integrate. ARKS has started conceptualizing an integrated system comprising a data warehouse, data collection and entry, a metadata repository, registers of persons and dwellings, and a portal for data collection and dissemination.
- Plans are in place to renew and expand the hardware infrastructure - servers, network, and desktops – over the next two years. This process will have to continue in subsequent years.
- The territorial office accommodation and facilities are in need of renovation.

In summary, although probably the best national statistical system in region, there is considerable room for improvement if the KNSS is to be world class and to serve Kazakhstan effectively and efficiently by reflecting the realities of the fast developing Kazakh economy and society.

Guiding Principles for Development

The ultimate goal of KNSS development is to provide the government, business and individuals with reliable and accurate statistics collected and produced in line with the international methodology and best practice, Kazakh legislation and Fundamental Principles of Official Statistics promulgated by the United Nations Statistical Commission. Adapted to the Kazakh context, these principles are as follows

Principle 1. Official statistics provide an indispensable element in the information system of a society, serving the government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by the KNSS to honour citizens' entitlement to public information.

Principle 2. To retain trust in official statistics, the ARKS and other statistical agencies comprising the KNSS need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data.

Principle 3. To facilitate a correct interpretation of the data, the ARKS and other statistical agencies are to present information according to scientific standards on the sources, methods and procedures of the statistics.

Principle 4. The ARKS and other statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.

Principle 5. Data for statistical purposes may be drawn from all types of sources, be they statistical surveys or administrative records. The ARKS and other statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents.

Principle 6. Individual data collected by the ARKS and other statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.

Principle 7. The laws, regulations and measures under which the statistical systems operate are to be made public.

Principle 8. Coordination among the ARKS and other statistical agencies is essential to achieve consistency and efficiency in the statistical system.

Principle 9. The use by the ARKS and other statistical agencies of international concepts, classifications and methods promotes the consistency and efficiency of statistical systems at all official levels.

Principle 10. Bilateral and multilateral cooperation in statistics contributes to the improvement of systems of official statistics in all countries.

Strategic Directions

Eight broad strategic directions are envisaged for developments over the period 2008-2015, as outlined in the following paragraphs. The general focus is on building infrastructure rather than on individual programme enhancements. This will position ARKS to respond quickly and effectively to the new needs and priorities that will undoubtedly arise in the future but cannot be foreseen at present. This focus does not preclude further development of individual statistical programmes and, indeed, the final direction (H) specifically embraces such improvements.

A. Improve Legal and Organisational Infrastructure

In broad terms the aim is to modify the legal and organisational infrastructure in order to improve efficiency and effectiveness of operations. More specifically, the gaps in the current statistical law, in particular regarding access to administrative data and support for the population census, will be filled. Coordination of the Kazak National Statistical System will be enhanced and outputs better marketed. As the ARKS and the ICC have more than 5000 staff distributed over more than 200 locations, consolidation of the offices, coupled with the introduction of an integrated processing system, will make available staff reductions of up to 50%. The current Central Office structure and the distribution of responsibilities between the ARKS and the ICC will be rationalized to streamline operations and to secure core business in the ARKS. A quality management programme will be introduced and a quality culture promoted throughout the ARKS. Staff effort will be monitored at survey/project level to assist management in making informed decisions regarding allocating resources,

B. Improve Human Resources

In broad terms, the aim is to improve all aspects of human resource management. More specifically, performance management, career development and staff assignment programmes will be developed and implemented. More proactive and coordinated recruitment procedures will be put in place. Training activities within ARKS will be strengthened and coordinated. Training needs will be identified and a training strategy designed and introduced. To provide courses not readily available on the market, a National Statistical Training Centre will be established.

C. Improve Statistical Infrastructure

In broad terms, the aim is to enhance key elements of the statistical infrastructure – registers, classifications, standards and methods. More specifically, the Business Register will be enhanced through better identification of inactive enterprises and improved coverage of large complex enterprises. Registers of Populations and Dwellings will be designed and implemented. Key national classifications will be brought into alignment with the international versions and a data element dictionary and a glossary will be created. Questionnaire design expertise will be expanded and design standards will be formulated and applied. Sampling skills will be enhanced and selected full coverage enterprise surveys will become sample surveys. Seasonal adjustment and time series analysis methods will be introduced. Analytical capacity will be increased through the introduction of a Research Institute and more analyses will be conducted and published.

D. Improve User and Provider Relations

In broad terms, the aim is to improve communications with users and providers and coordination of the statistical agencies. More specifically, user consultation will be enhanced through the establishment of topic specific advisory groups and more active engagement of the Advisory Council on State Statistics. A programme of user satisfaction surveys will be established. Dissemination practices will be enhanced, with more regular press releases and media conferences. Provider policies and procedures will be defined and publicized, respondent burden will be measured and target reductions defined and met.

E. Improve Information Processing Infrastructure

In broad terms, the aim is to design, develop and introduce an integrated processing system covering the complete survey cycle. More specifically, an integrated suite of software will be developed for designing questionnaires, creating survey frames, selecting samples, capturing data by optical character recognition, editing, imputing, aggregating and disseminating data, all driven from common metadata repository.

F. Improve Physical Infrastructure

In broad terms the aim is to bring the physical infrastructure in the territorial offices (after consolidation) up to modern standards. More specifically the intra and inter office network facilities will be enhanced, and outdated servers and desktop equipment will be replaced. Over the first three years of the SMP, roughly 1000 new personal computers will be installed each year. Office accommodation and furniture will be upgraded.

G. Plan and Conduct a Population Census

In broad terms the aim is to plan and conduct the 2009 Population Census and to publish the results. More specifically, the objectives are to obtain and disseminate comprehensive data on the size, composition and distribution of the population, their ethnic origin, their location, their migration and fertility patterns, and their occupations and industries of work, also on the stock of housing units, their geographic location, their structural characteristics, and the facilities available.

H. Improve Individual Subject Matter Programmes

In broad terms the aim is to enhance all individual surveys and administrative data collections through re-engineering and/or continual improvement, taking advantage of new infrastructure and further incorporating international standards and best practices. More specifically, potential improvements for each survey programme in terms of content, coverage, coherence, accuracy, timeliness, accessibility, interpretability will be formulated. The proposals will be reviewed, prioritized and implemented either in the form of a re-engineering activity requiring the allocation of additional resources or an improvement that can be managed with the current survey resources.

Implementation Considerations

Assumptions

Development and implementation of the SMP are based on the following assumptions.

- The ongoing drive for economic and social reform continues.
- The ARKS has period of stability in terms of governance.
- The required reductions in number of government employers are not draconian.
- The funding of ARKS' regular programme by Government stays at roughly the same level throughout period.
- The Government continues to support ICT development for the next five years at roughly the same level as for 2008-2009.

Development Principles

International standards and best practices will be used wherever feasible.

Development projects will be coordinated with international and national partners wherever appropriate. Their needs, suggestions and support will be taken into account.

A new approach, standard, or best practice will be introduced only if it is possible to cite a practical example from another country and/or after conducting a thorough feasibility exercise.

All new procedures and systems will be tested prior to use in production. In particular, every new or substantially redesigned questionnaire will be tested prior to use, every redeveloped system will run in parallel with the existing one and/or be phased in, for example on a questionnaire by questionnaire, or survey by survey, basis.

Resources and Financing

The resources required for implementation have been roughly estimated. Factors being taken into account include the following.

- Major investments will be required for ICT hardware and software development. Funding for the first two years has already been allocated.
- Recurrent costs for service and maintenance of hardware, software and auxiliary facilities will be fully budgeted to ensure sustainable operations.

- The shortage of skilled professional resources in ARKS Central Office will be a significant resource problem.
- There will be requirements for consulting skills not presently available in Kazakhstan.
- General operating costs including salaries and other expenses will be impacted by the ongoing discussion on public administration reform.

The ARKS plans to rely primarily on budgetary allocations from the Government for financing. However, depending on supply and demand, ARKS may seek financial support from external sources, particularly with regard to acquisition of international expertise in statistical operations, IT services and IT investments.

Sustainability

Most strategic objectives refer to infrastructure creation and enhancement. Once the corresponding new procedures have been introduced they are unlikely to require more resources than the procedures they replace. On the contrary, coupled with new systems and office consolidation, they should produce substantial efficiencies and release resources well in excess of the staff reduction targets set by the Government.

The new application programs, with a reasonable degree of maintenance, including a modest level of incremental improvement, can be expected to have a ten year life span, or more, before needing substantial replacement. Maintenance costs will be significant, but this is a totally normal and expected situation that has to be recognised and dealt with at Government level. There is no purchase of proprietary software envisaged for which license maintenance will be problematic. The new hardware will have a relative short effective life span. Again this is expected and must be allowed for in general government budgeting.

In summary, there are no substantial sustainability issues.

Monitoring Progress and Evaluating Results

Progress will be measured in terms of achievement of the outputs specified for each activity and their quality. The overall success of implementation will be measured in terms of indicators for each of the five strategic outcomes as follows.

Users are more satisfied – as evidenced by:

- increased number of users of ARKS services;
- improved results in user opinion surveys;
- improved results in independent reviews of data output and quality;
- increases in ARKS website accesses and down loads;
- increases in the frequency with which subject matter specialists meet with users to discuss data outputs and priorities;
- the number and tone of references to the ARKS in the media.

Data providers are more motivated – as evidenced by:

- higher, or at least not declining, response rates;

- fewer outright refusals;
- fewer complaints regarding burden received by the ARKS
- fewer adverse comments in the media;
- increase in proportion of electronic reporting.

Staff are more motivated and skilled – as evidenced by:

- employee satisfaction surveys conducted and results indicate improvement;
- improved retention rates amongst younger, more mobile staff;
- reduction in the number of job vacancies;
- reduction in sick leave;
- increase in the amount of training received overall and by job type and level;
- operational performance measures improve
- more development projects are completed satisfactorily, on time, within budget.

National statistical system is better coordinated – as evidenced by:

- increase in the frequency and regularity of meetings between ARKS and each of the other statistical agencies;
- more current and pertinent memoranda of understanding between ARKS and each of the other statistical agencies.

1 Introduction

1.1 Opening Remarks

Since the independence, Kazakhstan has made major changes to its social programmes and significant improvements to its economy through administrative, financial and economic reforms. Despite major achievements, there are many challenges ahead and the Government of Kazakhstan is committed to continuing and comprehensive reform in the coming years.

The Government is well aware that the quality and monitoring of its reform programs depend vitally on the capacity of the Kazak national statistical system (KNSS) to collect, process, analyze and disseminate relevant, reliable and accurate economic, social and demographic data.

Paralleling the achievements of the country as a whole, the KNSS has made significant progress in the past several years towards meeting the needs of a market based economy. Nevertheless, further improvements in the data collected and produced, the methods and standards used and the organisational and statistical infrastructure are essential. In this context, the Agency of the Republic of Kazakhstan on Statistics (ARKS), as coordinator and main producer of statistics, is the key player.

A statistical master plan (SMP) is the internationally accepted, standard starting point for comprehensive improvement activities. With the participation of data providers, users, other national stakeholders and international donors, the ARKS have produced this SMP for the period up to 2015. The SMP builds upon existing national strategies and capabilities. It establishes and prioritizes data needs and sources. Although assistance from international and national partner organizations has been used in SMP formulation and presentation, the ARKS is the SMP author and owner.

1.2 Relevant National Strategies and Their Links to Statistics

Administrative Reform

Several aspects of the ongoing Administrative Reform are relevant to SMP formulation, in particular working conditions of civil servants and their salary scales. When the Reform is implemented heads of government administrative bodies will be free to redistribute available resources within accepted limits. The Reform will certainly enhance the image of public service as a service provider and employer. The reform program will be tested in three departments including the Ministry of the Economy and the Ministry of Finance in 2008. The results of the reform may not begin to flow through until 1009 or 2010.

Relocation to Astana

In recent years, the Kazakh Government has relocated from Almaty to the new capital, Astana. ARKS moved in two stages, in 2006 and 2007. The relocation has had both positive and negative effects. On the positive side, there is a nice new building with better technical facilities, and the ARKS staff who moved from Almaty are highly motivated thanks to the stimulus provided by the Government, including new apartments

for relocated public servants. On the negative side, operations have been disrupted and there is a large number of new staff in Astana who require training.

E-government

The ARKS' participation in E-government program has two aspects. First, e-reporting services will be implemented to reduce reporting times and simplify procedures. Second, a statistical web-portal will be established for better dissemination of statistical results and user feedback.

Single Window Service Provision

To streamline the data collection procedures, a "Single Window" for enterprise respondents is being implemented by ARKS, in line with general government policy on improving the government services. It is expected that the new arrangements will reduce the time taken for respondents to collect and deliver their questionnaires because queues of respondents in district statistical offices are still common. In 2006 each enterprise was required, depending on its size, to submit anywhere from 6 to 43 statistical questionnaires per annum to a number of different statisticians in the district office.

Social and Economic Reform

President's address in March 2008 will likely stress the importance of continued social and economic reform and, by implication, of the statistics required monitor the reform process. This is an opportunity for ARKS to demonstrate its relevance by presenting a SMP that acknowledges current deficiencies in key areas and provides a roadmap for enhancement of its capacity.

Main Features of Current Statistical Planning

In the KNSS there are medium term plans, termed *State Programs of Statistical Development (SPSD)* and annual plans, termed *Programs of Statistical Works (PSW)*.

Since Kazakh independence there have been three SPSDs. Currently the SPSD for 2006-2008 is being executed. It covers all the government statistical agencies. Its key objectives are improving the quality of statistics and ensuring international consistency by implementation of international standards. It includes 14 big scientific research projects related to statistics, about 100 analytical works, and several IT projects.

ARKS annual activity is regulated by a PSW. The usual PSW preparation procedure involves discussing the key features with the main users in the Public Council on Statistics and with data providers in the Expert Council on Statistics. Each PSW must be approved by the Kazakh Government.

1.3 Recent and Ongoing Donor/Partnership Activities

ARKS and other Kazakh government bodies cooperate with main international agencies involved in statistics (UNSD, UNECE, UNESCAP, OECD, IMF, WB, WLO, UNICEF, etc.) through both direct contact and by participation in international programs such as the IMF's Special Data Dissemination System (SDDS), the purchasing power parity (PPP) comparisons, and the Millennium Development Goals. In 2006, 38 staff from the ARKS and its affiliates participated in 51 international meetings abroad, whilst 37 meetings with international experts took place in Kazakhstan.

Kazakhstan subscribed to the SDDS on March 24, 2003. The Summary of Observance table on the IMF's Data Standards Bulletin Board (DSBB) shows Kazakhstan's dissemination performance with respect to periodicity and timeliness for the SDDS prescribed data categories, and their components, as well as the "flexibility options" that Kazakhstan has exercised. According to this table, Kazakhstan has been in observance of the SDDS since the time of subscription.

The IMF provides technical support to the three Kazakh agencies (ARKS, the National Bank, and the Ministry of Finance) that produce and disseminate the required statistics.

ARKS has received massive technical assistance from the European Union (EU) via the TACIS program. During the last two years, eleven projects within Statistics 8 and Statistics 9 of the TACIS program have been completed:

- Business climate survey;
- Statistical metadata;
- Quality of micro-data;
- Social statistics;
- Energy statistics;
- Communication statistics;
- Services statistics;
- Statistical activity on implementation of EU and IMF quality standards;
- Data dissemination through the Internet;
- Quarterly estimates of regional GDP;
- Improvement of short-term statistics of trade enterprises.

There were also projects funded by Swedish Agency on International Cooperation, the Turkish International Cooperation and Development Agency (TIKA), and Statistics Norway.

1.4 Purpose, Content, Users and Uses of SMP

Purpose and Content

In essence, the SMP has two objectives. The primary objective is to present a strategy for KNSS developments over the period to 2015 and an outline of how they might be implemented. The secondary objective is to provide a baseline assessment of the current situation of the KNSS to underpin the vision of goals and formulation of the required actions.

More specifically, the assessment in Chapter 2 provides a clear picture of the state of development of official statistics in Kazakhstan. It includes identification and analysis of:

- the content and coverage of the statistical programme;
- the quality of the statistical processes and products, in particular their compliance of with international standards and best practices;
- the administrative capacity of KNSS in terms of human resources, management and financing.

Such an assessment pinpoints the problems and deficiencies of the current system and provides the background for developing the long term development strategy described in Chapters 3 and 4. The strategy incorporates proposals for organisational strengthening through human and technological resources development, adoption of advanced management practices, and use of international statistical standards and best practices. It identifies strategic objectives and specific projects designed to improve the effectiveness, efficiency and image of the KNSS in general and of the ARKS in particular.

Chapter 5 contains notes on implementation; Chapter 6 deals with budget and financing; and Chapter 7 focuses on monitoring and evaluation, listing the results that should be achieved and the outcomes expected.

Potential Users and Uses

The SMP provides a comprehensive review of the current KNSS and a clear indication of the strategic objectives and the specific projects aimed at their achievement. It justifies investments by the ARKS and other agencies producing official statistics in improvements to statistical programme and infrastructure. It provides essential information for senior management in preparing budget requests, and it helps the organisations to target and program their statistical activities within a coherent framework. It is also useful in informing the ARKS' partners abroad about the KNSS and the areas in which to cooperative activities can most readily and usefully be defined.

In summary, the SMP is intended for use by:

- the ARKS and other agencies producing statistics in defining and implementing their annual and 3 year programmes;
- the Kazakh Government in understanding the KNSS, its current strengths and weaknesses and the developments envisaged to improve it, and in assessing the effectiveness and efficiency of KNSS management;
- international and other partner organisations abroad in targeting their contributions, in conjunction with the ARKS.

1.5 Terminology

To ensure clarity a number of terms have to be well defined.

There are at least 4 different versions of the English name for the Kazak central statistical office in use on staff business cards, on the web site and in correspondence. They include: the Agency of the Republic of Kazakhstan on Statistics (ARKS), the Agency of Statistics of the Republic of Kazakhstan (ASRK), the Agency on Statistics of the Republic of Kazakhstan (ASRK), and the Statistical Agency of the Republic of Kazakhstan (SARK) The first of these, i.e., *Agency of the Republic of Kazakhstan on Statistics (ARKS)* is now the term preferred by senior management and is, thus, the one used throughout this report.

Strictly speaking, the term *ARKS* identifies the legal/organisational unit located in Astana. However, in common parlance, ARKS is used to include not only the organisational unit located in Astana but also the regional and district offices that are affiliated to and controlled by it. This is the convention adopted in SMP.

The term *Central Office* is used to identify the organisational unit located in Astana.

A *regional office* is one that is located in an oblast (14 regional offices) or in the cities of Almaty or Astana (2 regional offices).

A *district office* is one that is located in a rayon.

Territorial office is the general term used to refer to a regional or district office.

The *Information Calculating Centre (ICC)* is the separate legal entity that is wholly controlled and funded by the ARKS to provide data processing and ICT services. The ICC comprises an *ICC Central Office*, which is currently located in both Astana and Almaty, *ICC regional offices* located in each of the regions.

ARKS and the ICC together, including their territorial offices are collectively referred to as the *Kazakh National Statistics Office (KNSO)*.

Other government statistical agency is the term used for any other government department and agency that is acknowledged to produce official statistics. The term is also used to refer to the particular units within these department and agencies that are actually responsible for the collection, processing and dissemination of statistics.

The Kazakh National Statistical System (KNSS) comprises the KNSO and all other government statistical agencies.

Administrative data are data collected by other government departments and agencies during the course of execution of their functions. In the context of the KNSS, the administrative data of interest are those that are used to produce official statistics.

Statistics are aggregate data produced by the ARKS or other government statistical agency. *Official statistics* are those that are recognised as products of the KNSS.

Statistical data are data collected from providers, or from administrative sources, or by direct observation (in the case of certain prices) for the purpose of producing statistics.

Respondents are individuals, enterprises or other organisations that provide statistical data about themselves in response to statistical enquiries. Statistical enquiries can be conducted using paper or electronic self completed questionnaires or by telephone or personal interview

Providers are respondents or administrative sources providing data for statistical purposes.

1.6 Description of SMP Preparation Process

The SMP was prepared with the assistance of a Development Team of international experts funded by the World Bank who worked in conjunction with ARKS senior management and other stakeholders. The SMP preparation process involved seven steps as follows.

- *Assessment of the current situation, and identification of problems, issues, development opportunities and constraints.* This started from the strategy documents prepared by ARKS unit heads and involved a two week period of intensive consultation in October 2007 by the Development Team with ARKS senior managers and representatives of other government statistical agencies.
- *Preparation of the first draft SMP and distribution for detailed comments.* This was undertaken by the Development Team offsite. The draft was distributed in mid December to ARKS and ICC senior managers, to government statistical agencies, to

major users and to government bodies to whom the ARKS reports, and to international and other national partners. The draft was accompanied by an invitation to provide written comments on its content.

- *Discussion at Statistical Working Group (SWG) meeting.* A meeting of the SWG comprising participants from the ARKS, ICC and other government statistical agencies groups was held in late December. The first draft was discussed in detail with the focus on the strategic themes and objectives.
- *Preparation of the second draft SMP and distribution for final comments.* Taking into account feedback received in writing from the SWG meeting, and from a concurrent KNSS Global Assessment by the UNECE Study Group, the second draft was prepared by the Development Team offsite. A summary was distributed in mid January to all the stakeholder groups with an invitation to attend a presentation seminar.
- *Presentation Seminar.* The second draft SMP and the national strategy were presented and discussed at a seminar held on January 23, with participants from all stakeholder groups and the media.
- *Finalization of the SMP.* Taking into account additional feedback received in writing, at the seminar, and from the UNECE Global Assessment the Team will finalize the SMP during the last week of January.

In summary, although the document was prepared in less than four months, it involved intensive consultation and opportunity for input from the full range of stakeholders. In particular, a UNECE study team undertook a KNSO Global Assessment and the findings were taken into account in SMP preparation, especially in Chapter 2.

2 Assessment of Kazakh National Statistical System

2.1 Institutional and Legal Infrastructure

Structure of National Statistical System

ARKS is an independent government institution operating under decision no. 325 of the Kazakh Government of March 30, 1999. It is the central element of the statistical system responsible for producing real sector statistics, national accounts, price statistics, social statistics, and demographic statistics. According to the Law on Statistics, ARKS functions are to:

- Approve statistical reporting forms, including accompanying instructions;
- Conduct surveys;
- Process and disseminate data;
- Prepare documentation and regulations on state statistics;
- Control the execution of statistical regulations.

Besides the ARKS, the KNSS includes 16 government bodies, involved in statistics. Among these agencies, the National Bank (NBK) is responsible for financial sector statistics, monetary statistics and balance of payments (BoP) and the Ministry of Finance (MoF) is responsible for government statistics and foreign trade statistics. Other agencies collect and process data in the conduct of their work, using the administrative tools.

Articles 3, 8, and 10 of the Law on Statistics stipulate that all government agencies are required to cooperate with the ARKS while carrying out their statistical activities—in data collection and dissemination, in implementation of statistical standards, and in sharing of data sources. There are written agreements between the ARKS, MoF, NBK and other agencies covering the sharing of economic and social data.

Legal and Regulatory Infrastructure

The Law on Statistics is the key element of the legal infrastructure for Kazakh statistics. It regulates the collection, compilation, and dissemination of official statistics in the country. It was adopted on May 7, 1997 and has subsequently been supplemented by several amendments. It is published and presented on the ARKS website.

The Law is in line with the international practice and supports the fundamental principles of official statistics, in particular, preserving the confidentiality of individual data. Articles 11–13 of the Law contain the confidentiality provisions aimed at preventing disclosure of data from individual respondents. Article 11 states that the ARKS is not allowed to disclose individual statistical data, and that ARKS staff have a personal legal obligation to keep such data confidential. Article 12 extends the same legal obligation to all other government statistical agencies.

Article 3 of the Law regulates the provision of information by legal entities and households to government statistical agencies. According to Article 10, the ARKS is authorized to request the information it deems necessary from all public and private institutions, as well as from individuals. All respondents must furnish the requested

information accurately, and in the format and time period determined by the ARKS. The Law does not prescribe how noncompliance is treated. However, the Code of the Republic of Kazakhstan on Administrative Legal Violations provides for penalties for noncompliance with reporting requirements, including misreporting.

Thus, the current Law on Statistics provides a good general basis for the KNSS operations. At the same time, international experts have noted some weak points, which are listed below:

- There is no clear separation between statistical and non-statistical purposes in the context of data collection, confidentiality, data processing and dissemination. This creates some problems in ensuring confidentiality of collected data.
- The principles of impartiality and professional independence are mentioned in the law (Article 4), but without being translated into institutional safeguards.
- There are no provisions addressing the interaction between the data producers within KNSS. The Law does not guarantee the ARKS access to administrative data nor methodological consistency of statistical data from different sources.

Statistical Coordination and Guidance Mechanisms

Under the Law on Statistics, ARKS is responsible for coordination of the government statistical agencies. At the same time, Law does not contain the concrete provisions for a coordination mechanism within KNSS. This is partially compensated for by the set of agreements on cooperation and data sharing between statistical agencies.

Some time ago, the Inter-Agency Council for Improving Government Statistics, approved by the government and chaired by the First Vice Prime Minister, was operational. Currently, it is inactive. Regular meetings have been stopped due to their low efficiency. Inter-agency working groups have been created at the expert and middle manager level to solve specific statistical problems but do not have the authority to make the decisions.

In summary, whilst there is some coordination and guidance for government statistical agencies, the mechanisms are far from optimal.

2.2 Organizational Infrastructure: ARKS and Territorial Offices

Institutional Structure

Currently ARKS consists of the Central Office currently located in Astana, 16 regional offices (14 in the Kazakh regions or “oblasts” and 2 in the biggest cities – Astana and Almaty), and district offices in each municipality or “rayon”. The ARKS has a three tier hierarchical geographical structure inherited from the Soviet era. The main problem with this structure is duplication of functions. Experts note its inefficiency. By way of illustration, the ARKS employs (or controls through the ICC) more staff than the Australian Bureau of Statistics but the latter produces more and better quality statistics for a larger population. Centralization of statistical processing could provide the significant staff reductions.

There are not only the historical reasons for the current geographical structure. The ARKS has an incentive to maintain offices in each oblast’ and rayon for the following reasons:

- Currently, ARKS is obligated to meet the demand of local authorities for detailed statistics because they intend to control the situation in their regions using the administrative tools;
- The quality of individual data collected from respondents is poor and a system of logical control at the regional and district levels and aids communication with respondents.

However, these factors are of reducing importance because: (1) development of the market economy is reducing the administrative burden on local authorities; (2) sample surveys will be used in place of full coverage reporting systems; and (3) IT developments will enable the direct transfer of raw data to Astana.

In summary, the ARKS geographical structure should be changed to reduce share of regional staff in favor of Central Office. World practice provides many examples of successful transformation in this direction not only in countries with developed market economy but also in some former USSR countries.

Management Structure

The ARKS Central Office includes the Management Board or Collegium (comprising the Chairman, two Deputies, the Principal Secretary, the Chief of Apparatus, and the heads of departments), six Departments and two separate Units. Each Department consists of several Sub-Departments and Units¹. However, the Central Office structure is not stable. It has changed several times in last two or three years. The most recent significant changes took place following the Central Office relocation to Astana when the number of staff available dropped substantially. Further restructuring is required to strengthen units responsible for human resources, ICT, data dissemination, and strategic planning. Given the focus on increased use of ICT, the ICT unit will certainly grow in size and status, likely becoming a separate department in its own right. It must provide the bridge between the survey staff who need ICT tools for their work, but are not familiar with ICT, and the computer analysts and programmers who build the ICT tools, but are not familiar with the survey processes.

Human Resource Management

As of October 2007 ARKS had some 4222 staff positions in total, including 186 staff positions in Central Office².

The ARKS staff are public servants with all the related privileges and obligations. The terms of employment of public servants is established by Kazakh Legislation. The total number of ARKS staff and their general composition are approved by the Government. The government policy includes regular annual reductions in the number of public servants, including the ARKS staff. This exacerbates the problem that the allocation of staff to the Central Office is, in any case, too low. For instance, there are over 1500 staff at the Australian Bureau of Statistics Head Office.

¹ See Annex 5 for more details.

² See Annex 4 for more details.

Thus, as things presently stand, ARKS development capacity is severely limited by the number of skilled staff at Central Office. With administrative reform, ARKS management will have more freedom in human resources redistribution, and the number of staff in Central Office should be increased at the expense of regional offices. Such a change in distribution would be in line with international best practice.

The basic ARKS salaries are regulated by the Government. They are not competitive relative to the private sector, especially in Astana. As public servants, ARKS staff can not have any additional paid or non-paid work – this avoids possible conflicts of interest. Although the ARKS workers, especially in Central Office, are motivated by fast career prospects and possible travel abroad, there are serious problems in recruiting well qualified staff. Furthermore the problem became more severe with the relocation of the Central Office to Astana as only 80 core experts were retained. As of October 2007, there were 47 vacancies in the ARKS Central Office – a vacancy rate of about 40%. Although the overall average vacancy rate in regional offices is about 7% there are some offices in wealthy provinces where rates are higher and recruitment is difficult.

Recruitment problems can only be effectively addressed through the ongoing administrative reform, the results of which may not flow though until 2009 or even 2010. In the meantime, there is room for improvement in recruitment policies and practices, including more active efforts to increase the supply of potential recruits from universities.

Training Needs, Strategy and Facilities

Professional skills are also a problem. Top ARKS managers and experts are generally well educated and experienced. Some leading managers and experts were educated abroad, most of them participate in international meetings, travel abroad to visit top quality European statistical offices, and communicate with international experts. However, as of October 2007, one third of the Central Office were new and most of new staff do not yet have the skills to undertake difficult statistical work. Thus, training of staff will be the one of most important tasks for ARKS in the coming years. However, the ARKS does not currently have a section dedicated to training and thus the only coordination of training that takes place is by the Human Resources Section.

Whilst training in ICT, language, sampling, and management can readily be purchased, training that deals with ARKS core business (i.e., survey standards, methods, and processing procedures) cannot be readily obtained from external sources. Thus, such training is conducted by the ARKS itself, albeit with considerable assistance from international organisations and other partner national statistical offices. ARKS' senior managers and experts provide training at the Central Office and regional offices. This arrangement is not optimal, first, because it does not meet the full demand and, second, because it occupies scarce senior staff time.

Performance Management and Effort Recording

Currently ARKS does not have a performance management programme and there are no recorded measures of staff performance. Bonus payments are presently evenly spread across all ARKS' employees. This does not provide an incentive to work really hard, nor a penalty for unsatisfactory work.

Advanced national statistical offices have systems enabling staff members to record their weekly work efforts with respect to a well defined set of operational and developmental

activities. Such systems are vital in monitoring work effort across the agency and in estimating the likely impact of additions, changes or deletions of program activities. Currently ARKS does not have an effort recording system.

Quality Management

The ARKS does not currently have a quality management program and thus, by and large, ARKS staff are unaware of the internationally endorsed concepts of total quality management (TQM). TQM principles are embedded in international quality standards, the best known of which are the ISO 9000 series.

Funding

The expenditures of the ARKS have been steadily increasing over past years in nominal and actual terms and budget allocations appear to be adequate to finance its activities. The revised estimate for the expenditure in 2007 is 6.2 billion Tenge, approximately a 300% increase from the level in 2002, which was at 1.6 billion Tenge (Table 2.1). The average GNP deflator during 2003-06 periods was 15.4 percent which makes an average increase after deflation of about 11.3 percent annually.

While the rate of increase appears to be quite large, one should note that some cost items are either allocations for specific short term needs or additions associated with changes in institutional framework. In the 2008 budget, for example, the estimated cost for the 2009 national census is included. This accounts for 34 percent of the total budget. For 2005, the cost of agricultural census was included in the ARKS' expenditure, reflecting the new affiliation of the agricultural statisticians to the ARKS.

Additionally, there were several cost items associated with the move from Almaty to Astana. The largest among them was for the housing benefits to be received by those staff moving to Astana. Following general government policies, the ARKS was required to purchase housing facilities in 2006 and 2007. The associated costs were approximately 900 million Tenge. A considerable portion of the increase in operational activity expenditures in 2007 can be explained by this need. Table 2.2 presents a breakdown of operational activity expenditures with housing costs shown as part of "Logistical Support".

Table 2.1: ARKS Expenditure 2002-2008 (budget) in Million Tenge

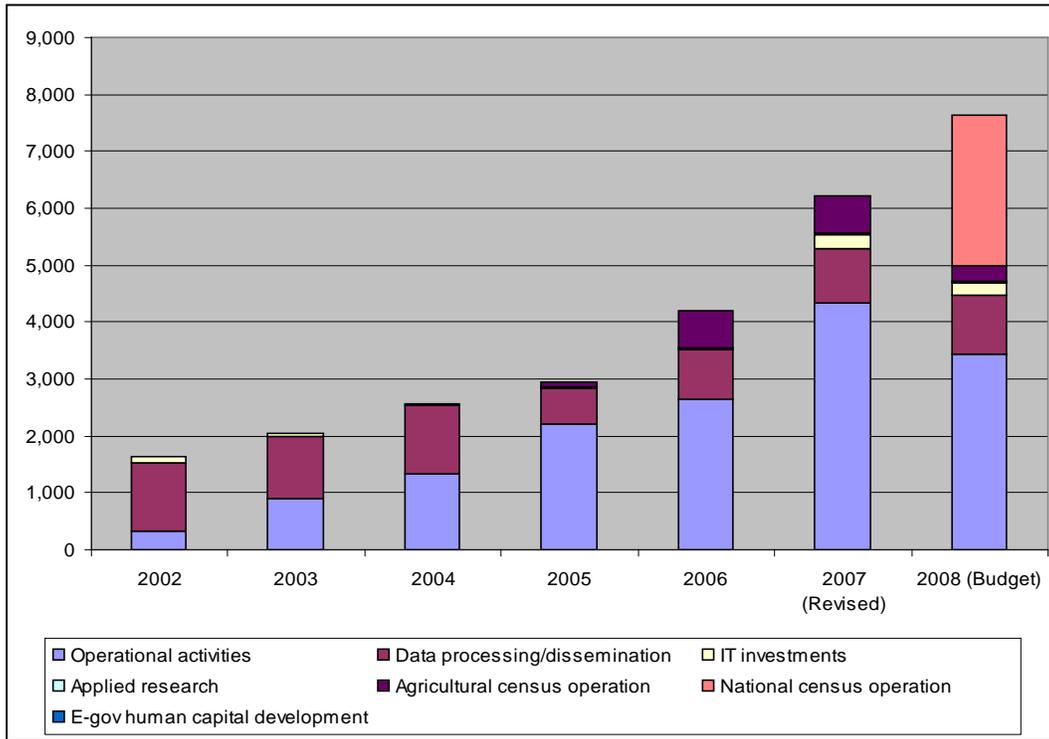
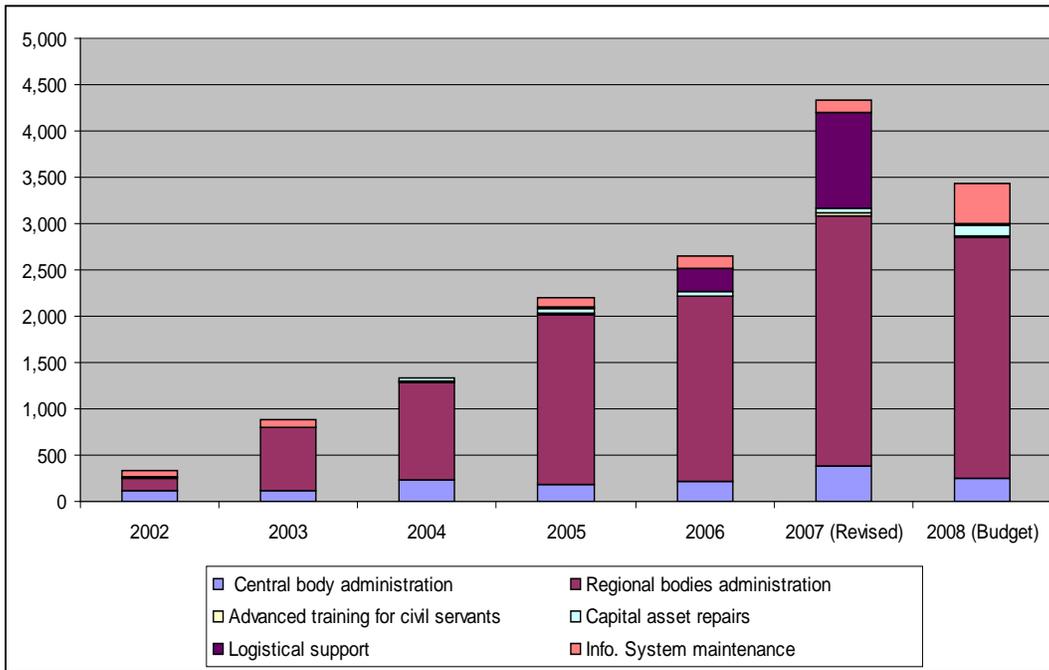


Table 2.2: ARKS Operational Expenditures 2002-2008 (budget) in Million Tenge



2.3 Organisational Infrastructure: ICC

The ICC is a separate legal entity that is wholly controlled and funded by ARKS to provide data processing and ICT services. It is currently a state owned entity but is expected to become a joint stock company before the end of 2008, owned by the ARKS.

The ICC comprises an ICC Central Office, which is currently located in both Astana and Almaty, with ICC regional offices located in each of the regions. It is operated by about 1,100 staff, who are located in the Central Office (Almaty and Astana), 14 oblasts and all rayons. Out of 216 staff assigned to the Central Office, 52 are currently working in Astana. The remaining 164 are located in Almaty, where the existing databases and software applications are managed. The staff are not public servants.

Some of the normal functions of a national statistical office are carried out by the ICC. However, this poses no particular problem as the ARKS controls the ICC and provides all its funding other than the income that is earned by sales of services, in particular provision of statistics.

The benefits of having the ICC as a separate legal entity are in the flexibility this arrangement provides:

- to offer a wider range of salaries, thus giving scope to recruit highly paid professionals, particularly in ICT, at attractive salaries that the public service cannot match;
- to have employees who are not bound by public service rules or restrictions on numbers, thus giving the ARKS the ability to open or close regional ICC offices without seeking permission from government;
- to sell data services, thus providing revenues that the ARKS can use to increase its effective operational and developmental capacity.

It is evident that, given these benefits, the ARKS has an irresistible incentive to retain the ICC as separate legal entity that it fully controls. However, in doing so there are some concerns that must be addressed:

- the boundary between the ARKS functions and ICC functions is not consistent from one regional office to another;
- it is not good management practice to have ARKS and ICC employees doing similar work in the same office but with significantly different terms of employment;
- the division of core statistical functions into two groups is inefficient from the perspective of the duplicate administrative structure required to separately recruit, organise, manage, control and pay the ICC staff.

At the very minimum, a clear line of separation should be drawn between ARKS functions and ICC functions so that there can be no comparisons revealing differences in conditions between the two organisations for the same work

In the more distant future, it is highly unlikely the device of circumventing government regulations on public service employment through creation of separate, wholly controlled legal entities will be allowed to continue indefinitely. Thus, in the not too distant future it is probable that the ARKS will lose its control of the ICC. At the point in time when this happens it will be vital to ensure that the ICC is not providing services that are ARKS

core business, in particular data processing, as outsourcing core business is well known to be a very poor strategy.

The functions currently performed by the ICC may be divided into four general groups:

- data processing – data collection, capture, editing, imputation, aggregation, estimation, tabulation;
- data dissemination – printing and distribution of paper publications, loading data to the web site;
- ICT infrastructure provision – servers, network, desktop hardware, etc;
- ICT applications – design, development and maintenance.

Of these functions, all with the possible exception of ICT application development would be considered as core business by advanced national statistical offices and carried out in-house. In the case of Statistics Canada and the Australian Bureau of Statistics, ICT development is also entirely in-house, though of course this does not preclude use of contractors or purchase of software for specific needs.

Given this background, the future strategy for ICC functions should be based on the following principles:

- transfer of core functions to the ARKS to the fullest extent possible;
- use of the ICC only as a device for paying competitive salaries and providing special data services on a fee basis;
- make every effort to retain full control of the ICC;
- in the event of loss of control, ensure that all core functions are transferred to the ARKS beforehand and that the ARKS has an ICT research capacity.

2.4 Statistical Infrastructure: ARKS and Affiliates

Classifications and Other Standards

Classification systems used by the ARKS are broadly consistent with international standards. Institutional units, transactions, and other flows follow broadly the 1993 System of National Accounts (SNA93). Activities are classified according to the National Classification of Economic Activities (NCEA), which is equivalent to the Standard Classification of Economic Activities of the European Communities (NACE) Rev. 2, extended by one additional digit for national purposes. Products are classified by an equivalent to the Classification of Products by Activities (CPA) extended by three additional digits for national purposes. The Classification of Individual Consumption by Purpose (COICOP) is used to classify household consumption and the Classification of the Functions of the Government (COFOG) is used for government functions.

There is also the set of internal classifications used by ARKS departments for special tasks and all these classifications are generally consistent with the international versions.

The main classifications are revised regularly in line with international revisions. The time lag between an European and a Kazakh classification revision is about two years, which is quite a good result for a country in the Central Asia region.

Business Register

The ARKS uses its Statistical Register of Enterprises as the framework for its basic economic statistics surveys. The register was established and is updated on the basis of administrative data from the Tax Administration. The register covers all registered enterprises and individual entrepreneurs and contains data on their main characteristics (legal status, type of unit, economic activity, ownership, economic sector, and economic data, including number of employees).

Although no economic census has ever been conducted in Kazakhstan, the register's coverage of enterprises is considered exhaustive because of the full coverage annual reporting system. However, there are some problems related to register updating with respect to individual entrepreneur's data. The updating system is based on administrative data provided by the tax authorities but there are limitations due to the confidentiality of the data under tax legislation. The poor updating system makes register's data less useful and creates problems when sampling.

The set of economic data items contained in the register should be enlarged. To improve sampling, it would be useful to include turnover. There is no problem in adding turnover for large and medium size enterprises, but to do so for small businesses requires tax data. Thus, whilst the register should be improved, this can be achieved only if cooperation between ARKS and Tax Administration is also improved.

Currently, the ARKS is working on implementation of additional registers, including in particular the Social Register (Register of Dwellings) and the Population Register.

Statistical Methods

To collect raw data the ARKS uses a combination of all possible statistical methods including censuses, full coverage reports, regular sample surveys, ad-hoc surveys, and administrative sources. There is a full coverage reporting system for the large and medium size enterprises, and a system of sample surveys for small enterprises and individual entrepreneurs. The coverage of the registered enterprises is satisfactory, comprising exhaustive and sample data collection based on the Statistical Register. However, the coverage of individual entrepreneurs is less satisfactory because there are problems in updating the register, as described above. Also, non-observed economic activities still play a significant role in Kazakhstan and this creates coverage problems for statistical surveys.

The target populations for the different surveys are specified in terms of type of unit, form of organization, form of property, main and secondary economic activity and size. The specification of a representative sample by size is the difficult task as the size indicator (number of employees) available tends to be unreliable for estimation of turnover. Thus, whilst the sampling procedures are adequate they could be improved by using of two indicators of enterprise size – turnover and number of employees - rather than just one. However, the statistical register would have to be improved first.

Currently there are no questionnaire design standards in the ARKS. In conjunction with shortage of funds for good quality paper, the result is that most questionnaires are poorly designed. Problems include inadequate indication of the purposes for which data are being collected and the confidentiality provisions, poor instructions for completion, and very small answer boxes that are too close together. Furthermore, future data capture by

optical character recognition will imply new and stringent constraints on layout, colour and paper quality and the planned introduction of electronic questionnaires will involve yet another need for design standards.

The ARKS conducts a household budget survey to collect data on households, a labor survey and price observations.

In summary, the statistical methods used by ARKS are adequate but could be improved. In particular, the proportion of sample surveys to full coverage reports collecting economic statistics should be increased to reduce the respondent burden and questionnaire design standards should be developed and implemented. Work has already begun in both these areas.

Communications with Providers

In 2006, the Expert Council was established to discuss the ARKS programs with business, because enterprises are the main data providers. The Expert Council members are from small business associations in various areas, from non-profit organizations and from the ARKS. The focal point for the Expert Council is the reduction of respondent burden on enterprises. However, the Council has not proved very effective to date

Direct feedback from respondents is vital, thus, in 2007 the ARKS conducted a survey of the respondents in all regions asking about the quality of statistical services.

Communications with Users

In 2005, the Public Council on Development of State Statistics was created. The head of the Council is the ARKS Chairman and the members are representatives from scientific institutions, universities, business associates, and the mass media. The main focus of the Council is discussion of ARKS plans and programs, taking into account public opinion. Other topics are quality standards for statistical services and data dissemination problems. Both Public Council and Expert Council are the new institutions in the KNSS and in society. Meetings are not regular and too formal. There is no long term tradition for determining user requirements for statistics because, unfortunately, user demand for modern statistics in Kazakhstan is still weak. Currently, up to 80% statistical data are used only by government agencies. With civil society development, the demand for statistics by other users will become stronger.

Dissemination Practices

Kazakhstan subscribed to the SDDS in March, 2003, which means that a significant number of statistical results, including national accounts, government finance statistics, BoP, employment statistics and price statistics, are disseminated in line with basic international standards. In other words, Kazakhstan's dissemination policy as regards the periodicity and timeliness of SDDS prescribed data are in accordance with SDDS rules and the flexibility options they allow. Users are aware of the sets of data available and publication schedule as well as of the metadata and phone numbers of contact persons for queries. SDDS data are disseminated through the internet for free.

Regarding the dissemination of other data the situation is not so good. Although the ARKS publishes a lot of data, much of which is disseminated free, users are not aware of the wealth of data available. Dissemination policies are not presently well articulated or procedures well organised.

Institutionally, there is no the single administrative unit responsible for dissemination policy. Presently, dissemination functions are shared by (at least) three different organisational units (Statistical Coordination, Strategic Planning and Research and ICC). This does help in trying to develop an integrated approach and is an issue to be addressed when considering restructuring Central Office functions.

Introduction of an output database and web portal (described in later paragraphs) will greatly facilitate dissemination. It will put survey areas in a position to prepare statistics for publication themselves and to satisfy requests for additional data directly.

The strategy for dissemination by language has to be reviewed, confirmed or updated and implemented.

Revision Policy

There is currently no well defined policy for revision of data already published. A general revision policy has to be articulated and then interpreted for each survey output in accordance with user needs. Too many large revisions suggest that more attention should be paid to accuracy of the initial values, possibly indicating that the target publication dates are unrealistically tight. No revisions suggest timeliness could be improved.

2.5 Information and Communication Technology Infrastructure: ARKS and Affiliates

Institutional Arrangements

The recently established IT Unit in ARKS has primary responsibility for overall planning and coordination of IT development. The operation and management of existing IT assets are undertaken by the Information Calculating Centre (ICC).

Hardware

The availability of hardware equipment appears to be generally adequate in the Central Office but not in the regional offices. The Global Assessment of the Statistical System of Kazakhstan completed in February 2004 reported one PC per 1.92 staff members, with variations in availability in the Centre and regions. A substantial part of hardware equipment is, however, beginning to become outdated.

Data Processing Software

The ARKS uses diverse software applications to help undertake its operations. Currently, the following key information systems are being managed by the ICC:

- Data processing systems to process data from statistical surveys;
- “Dynamic” - a data warehouse of statistical aggregates from which to produce analyses;
- Website;
- Statistical Register of Enterprises;
- Register of Individual Entrepreneurs;
- Register of Dwelling (Social Register);

- Results of Population Census in 1999.

There is a special software application for each survey, which is periodically modified, as needed, to adapt to changes in surveys/questionnaires. These applications assist data collection, processing, and presentation. They are developed using FoxPro and the data are exchanged and maintained in DBF files. ARKS conducts surveys involving about 240 questionnaires per year, which implies that the ICC maintains many separate applications for ARKS' routine operations. The ARKS realizes the inefficiency involved in maintaining these separate systems. The summary of ARKS' existing systems is as below.

Table 2.3: IT Systems Maintained by the ICC

System	Type	Data Size
Statistical data processing – surveys	Custom developed using Visual FoxPro, MS Access 97	184 different systems
Dynamic	Oracle Database 8.1.7 EE, Oracle iAS 9i	40GB
Website	MySQL	No data
Statistical register of enterprises	Oracle, MS Access 97	600MB
Register of individual entrepreneurs	Custom developed using MS Access 97	600MB
Registration of Dwelling (Social Register)	Custom developed using MS Access 97	1GB
Data of 1999 census	Custom developed using MS SQL 6.5	15GB

2.6 Statistical Organization and Infrastructure: Other Statistical Agencies

Besides ARKS, there are 16 other government statistical agencies in Kazakhstan, the three most significant of which are the Ministry of Finance (MoF) including the Customs Committee and Tax Administration, the Ministry of Internal Affairs and the National Bank of Kazakhstan (NBK). In these three agencies the staff, financial, and computing resources are adequate to carry out the agencies' current statistical plans and programs. There are no problems in recruiting and retaining the qualified staff to be directly responsible for statistical work. Various measures are in place for fostering efficiency in the use of resources, including a mid-term review of resources and work programs in the context of budgetary planning. Training for staff and technical assistance in implementation of international standards are provided on an ongoing basis by international agencies, mostly the IMF.

In the past years, both the MoF and the NBK have made significant progress in implementing work programs that are supportive of data compilation in accordance with international statistical standards. Quality awareness is indicated by statistical priorities, work programs, and aspects of data quality discussed within the Inter-Agency Council for Improving Government Statistics, as well as by the Methodological Council within the MoF and statistical working groups at the NBK. Both agencies make efforts to foster greater statistical awareness among data users.

Ministry of Finance

The MoF has responsibility for the compilation and dissemination of the government finance statistics. The concepts and definitions it uses to compile *government finance statistics* are consistent with *the Manual of Government Finance Statistics 1986 (GFSM 1986)*. It has taken initial steps to migrate to the *GFSM 2001*. Classification and sectorization largely follow the *GFSM 1986*. As regards the basis for recording, flows and stocks are recorded on a cash basis, except for expenditures of some investment projects incurred during the “complementary period” which are included in the final data for the previous year.

The analytical framework used for compiling *monetary statistics* reflects concepts and definitions that are in general conformity with guidelines outlined in the *Monetary and Financial Statistics Manual (MFSM)*. The scope of the monetary statistics is also in general accordance with *MFSM* guidelines. Following recent enhancements to the classification of instruments and the sectorization of institutional units, the monetary statistics largely conform to *MFSM* guidelines. The basis for recording flows and stocks is largely consistent with the *MFSM*. The general valuation principle for financial assets and liabilities is based on current market prices.

The Tax Administration provides users with tax statistics and cooperates with the ARKS in maintaining the statistical register, as previously noted.

National Bank of Kazakhstan

The NBK has responsibility for balance of payments (BOP) and monetary statistics. The concepts and definitions used in compiling BOP statistics conform to the fifth edition of the IMF's *Balance of Payments Manual (BPM5)*. While in principle the scope of the data covers all resident-nonresident transactions, commercial banks by statute define nonresident accounts according to a legal rather than an economic criterion, which affects bank reporting. Further, local branches of foreign construction and drilling enterprises are considered nonresidents. The classification and sectorization of transactions are in accordance with *BPM5*. The basis for recording transactions is on an accrual basis. Transactions are valued at market prices; adjustments associated with transfer prices are made based on results of large taxpayer monitoring provided by the Ministry of State Revenue. Grossing and netting procedures are consistent with *BPM5*.

Ministry of Internal Affairs

The Ministry of Internal Affairs has about 1000 staff in its statistical service, which provides data on criminal and administrative delinquencies, court and penalty systems, etc.

Other Government Statistical Agencies

Amongst the other statistical agencies, the Ministry of Healthcare also has a strong statistical system including statisticians in all big hospitals, clinics, etc.

Most government bodies cooperate with the corresponding international agencies to keep their statistical activities in line with international standards.

The number of surveys conducted by different government agencies is presented in Table 2.4 below.

Table 2.4 Number of Reports by Government Agency

State bodies	Number of reports			Responsibilities
	1.01.2000r.	1.01.2000r.	1.01.2000r.	
Ministry of Internal Affairs	71	23	12	Administrative reporting in the sphere of responsibility
Ministry of Industry and Trade	1	1	1	Administrative reporting in the sphere of responsibility
Ministry of Culture, Information and Sports	18	14	4	Administrative reporting in the sphere of responsibility
Ministry of Education and Science	18	11	5	Administrative reporting in the sphere of responsibility
Ministry of Environment	2	1	1	Administrative reporting in the sphere of responsibility
Ministry of Agriculture	48	50	37	Administrative reporting in the sphere of responsibility
Ministry of Transportation and Communication	97	33	4	Administrative reporting in the sphere of responsibility
Ministry of Labor and Social Security	30	19	14	Administrative reporting in the sphere of responsibility
Ministry of Finance	11	4	2	Government statistics
Ministry of Economy	49	17	13	Administrative reporting in the sphere of responsibility
Ministry of Justice	5	18	6	Administrative reporting in the sphere of responsibility
Ministry of Healthcare	51	58	1	Administrative reporting in the sphere of responsibility
Ministry of Emergency Situations	2	2	0	Administrative reporting in the sphere of responsibility
Agency on Land Tenure	22	17	4	Administrative reporting in the sphere of responsibility
Agency on Informatics	2	2	2	Administrative reporting in the sphere of responsibility
National Bank	72	26	24	Financial sector statistics,

				Monetary statistics, BoP
TOTAL	499	296	130	

2.7 Statistical Program and Operations

National Accounts

The national accounts (NA) are compiled by the ARKS in line with SNA93 methodology, using initial data collected by various ARKS departments and administrative data submitted by other government agencies, including NBK and MoF. The ARKS produces all main current accounts, some accounts for institutional sectors, quarterly GDP estimates, regional GDP (also known as gross regional product, GRP) and, periodically, input-output tables. Key NA indicators are adjusted for non-observed economic activity. The main problems are poor input-output tables and supply-and-use tables. As a result, there is some internal inconsistency. Unfortunately, there is a lack of staff sufficiently experienced staff to implement complicated statistical techniques for resolving inconsistencies.

In the field of the NA, the ARKS cooperates with the IMF and some European national statistical offices including Statistics Sweden, also the Turkish Statistical Office.

External Trade Statistics

Raw data on external trade are collected by the Customs Committee, and then used by both the NBK and the ARKS to produce more advanced statistics. NBK uses data on external trade adjusted for informal trade, etc., to produce the balance of payments. ARKS also adjusts the Custom Committee's data on external trade in compiling the NA. Methodologically speaking, indicators of external trade in BoP and NA should have the same values, but, in fact they are different, mostly because of different interpretations of the construction activity of establishments of foreign corporations in Kazakhstan. In summary, there is some duplication in functions between the NBK and the ARKS and inconsistency in results.

Price Statistics

The ARKS has made a good progress in price statistics especially in the Consumer Price Index. There are still some problems with Producer Price Indices in some difficult activities like construction and agriculture but these are in line with IMF and other international agencies reports. In general, price statistics in Kazakhstan meet the international requirements.

Business Statistics

ARKS has a strong data collection system including full coverage reporting for all large and medium size enterprises in all economic activities. Raw data from small enterprises and individual entrepreneurs are collected through sample surveys. There has never been a full-scale economic census in Kazakhstan, and nor is one planned.

There is a special system of data collection in agriculture which includes the so called "village statisticians" in rural territories. Although ARKS is currently trying to change this system to cut the number of staff in territories, the Ministry of Agriculture strongly

supports village statisticians as a means of getting very detailed data about agricultural production.

Data from the Agricultural Census are currently being processed.

In summary, ARKS publishes a reasonably broad range of business statistics with adequate timeliness. Directions for possible improvement are:

- Reducing respondent burden by replacing full coverage reporting systems by use of sample surveys and administrative data;
- Improving data collection from small businesses by improving of the business register updating system.

Demographic Statistics

There are two huge activities in demographic statistics taking place in the upcoming years, namely the design and conduct of the Population Census and the creation of the Population Register.

In accordance with the Resolution of the Kazakh Government, the Population Census will be conducted in Kazakhstan in 2009. All preparatory work for the census will be done during 2008. The preparatory steps comprise: preparation of cartographic materials (detailed maps of the cities and villages above 5,000 people, and district maps), compilation of lists of housing units, which is to be done by enumerators specially selected and approved by the heads of the city and district administrations; and compilation of lists of rural settlements, which is to be done by rural administrations. The lists will be used by district (city) statistical offices to prepare work plans for the census areas, supervisors' districts, and enumeration districts.

The Census will be conducted from February 25 to March 6, 2009 by enumerators who will visit dwellings, interview people and record data on the lists of residents and the individual questionnaires. The enumeration will be conducted as of midnight between February 24 and 25, 2009.

Census results will be used to obtain a wide range of indicators characterizing the size of population, its distribution by urban and rural areas, by sex and age, marital status, nationality, command of languages, level of education, accessibility of education, number and size of households, sources of income, employment, and housing conditions.

Preliminary results giving population counts with a breakdown by sex and territory of residence will be published in the second half of 2009. In 2010 a full analytical report will be published.

The other major activity is organization of the Register of Population (physical persons). Initial work has been done with the central civil registration office (ZAGS), which is a data provider for the State Database "Sole Proprietors", on registration of civil events, including births, deaths, marriages, and divorces. Work will continue on the development and introduction of a methodology and a system of demographic indicators based on the international recommendations from the Conference of European Statisticians, UNFPA, UNICEF, UNFPA, UNDP, WHO, and the UN Statistics Division).

Social Statistics

Social statistics are being developed by the ARKS in line with a request from the Kazakh government for more data to support social planning and international programs such as

the Millennium Development Goals. The main source of data is the Household Budget Survey (HBS). The HBS program could be improved to collect more data on cost of living, education, health and other social problems.

Kazakh participation in international projects on social statistics is supported by international agencies, with reasonable results.

Labor Statistics

Wage and salary statistics and labor cost statistics are produced in compliance with the recommendations and standards of the International Labor Organization and the UN Economic Commission for Europe. At present three main indicators are produced: real wage index, wage index by occupations (professions, jobs), and labor cost. In the field of wage and salary statistics, along with traditional measurement of the level and dynamics of wages and salaries of all employees, a survey of wages and salaries by selected trades for workmen and by selected jobs for office workers has been introduced in compliance with the State Classification of Occupations, which is based on the International Standard Classification of Occupations (ISCO-88).

At present, 14 key indicators of labor market are defined and used in labor statistics. The concepts and definitions (containing descriptions of data sources and calculation techniques) are based on ILO and Eurostat recommendations and standards. As regards the main quality aspects, they are in accordance with the IMF SDDS.

These key indicators of labor market have been obtained since 2001 from the quarterly Labor Force Survey (LFS). The sample size is 21,000 households (0.5% of the total number) and thus the sample is representative at regional but not district level. The survey is conducted by the statistical offices in all regions of the country. The observation units in the sample are households and persons over 15 years old who reside in these households. The sample plan, questionnaire design, and data tabulation methods were recommended by the experts from the Federal Statistical Office of Germany.

In summary the labor statistics program is developing well enough but there are some technical issues should be addressed, in particular sample problems in LFS, and methodological problems in the Labor Cost Index, migration survey and others.

2.8 Summary

The KNSS comprises quite an impressive and comprehensive statistical programme resulting in over 300 publications per annum. The main statistical agencies, in particular the ARKS, have sufficient budget to maintain the program and to make investments in further development. Furthermore, they have made very good progress over last decade in adopting international principles standards and practices. The current weaknesses, and thus priority areas for improvement, are mainly in the infrastructure that supports the programme.

- The current statistical legislation is good but there are areas for further improvement. For example, the separation between *statistical* and *administrative* data needs to be more clearly specified, the provisions for confidentiality of individual data need to be reinforced, and ARKS' right of access to administrative data guaranteed.
- There is substantial inefficiency inherent in the current territorial office structure and thus scope for improved performance through office consolidation. In addition

efficiency could be improved through introduction of performance management and effort recording schemes as well as by transferring core business functions from the ICC.

- The absence of a quality management framework suggests that effectiveness could be further enhanced by promoting quality awareness and continuous improvement.
- The CO is seriously short of skilled staff. The ICT, methodology and analytical research areas need strengthening and, given the difficulties in recruitment, this will require significant expansion in training.
- As regards statistical infrastructure, classifications are updated in accordance with international standards but with a noticeable time lag, and there is a critical need for better metadata management, questionnaire design standards, application of sampling procedures, and improvements in analysis methods.
- Efforts to focus the data collection programme around three registers - population register, dwelling register and business register – are still in their infancy.
- Whilst high level committees have been established to deal with provider and user concerns, they have been ineffective to date. There are no measures of respondent burden nor targets for its reduction. Users are not aware of the wealth of data available.
- Maintenance of the current suite of separate software applications for each survey is resource intensive and the resulting databases are extremely difficult, if not impossible, to integrate. ARKS has started conceptualizing an integrated system comprising a data warehouse, data collection and entry, a metadata repository, registers of persons and dwellings, and a portal for data collection and dissemination.
- Plans are in place to renew and expand the hardware infrastructure - servers, network, and desktops – over the next two years. This process will have to continue in subsequent years.
- The territorial office accommodation is in need of renovation.

In summary, although probably the best national statistical system in region, there is considerable room for improvement if the KNSS is to be world class and to serve Kazakhstan effectively and efficiently by reflecting the realities of the fast developing Kazakh economy and society.

3 Strategic Directions for Statistical Development

3.1 Overall Objective

The KNSS mission is to provide the Kazakh government, business and individuals with reliable and accurate statistics collected and produced in line with the international methodology and best practice. The overall objective of the statistical development defined in the SMP is to help achieve this mission.

3.2 Fundamental Principles of State Statistics

The overall objective will be pursued following the Kazakh legislation and the *Fundamental Principles of Official Statistics* promulgated by the United Nations Statistical Commission. These principles are listed below:

Principle 1. Official statistics provide an indispensable element in the information system of society, serving the government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by the KNSS to honour citizens' entitlement to public information.

Principle 2. To retain trust in official statistics, the ARKS and other statistical agencies comprising the KNSS need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data.

Principle 3. To facilitate a correct interpretation of the data, the ARKS and other statistical agencies are to present information according to scientific standards on the sources, methods and procedures of the statistics.

Principle 4. The ARKS and other statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.

Principle 5. Data for statistical purposes may be drawn from all types of sources, be they statistical surveys or administrative records. The ARKS and other statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents.

Principle 6. Individual data collected by the ARKS and other statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.

Principle 7. The laws, regulations and measures under which the statistical systems operate are to be made public.

Principle 8. Coordination among the ARKS and other statistical agencies is essential to achieve consistency and efficiency in the statistical system.

Principle 9. The use by the ARKS and other statistical agencies of international concepts, classifications and methods promotes the consistency and efficiency of statistical systems at all official levels.

Principle 10. Bilateral and multilateral cooperation in statistics contributes to the improvement of systems of official statistics in all countries.

3.3 Target Strategic Outcomes

The first step in developing strategic directions is to identify the *target situation* in which the KNSS would like to find itself in 2015. This target situation is expressed in terms of the *five measurable strategic outcomes* described in the following paragraphs. (In this context the term *outcome* is used in the sense of being change of state of the overall situation, in contrast to *output* which means specific product or service delivered.) The set of outcomes is comprehensive in sense that it aims to include all the major stakeholders.

Users Are More Satisfied

Users are likely to be more satisfied if the KNSS produces better quality outputs. In other words, the data outputs are more relevant to user needs, more accurate, more timely, more easily accessible, more readily understandable, and collectively coherent, and the accompanying data services are more comprehensive and better delivered.

In addition, although quality is vital in underpinning user satisfaction, user perceptions are also a matter of image. As head of the KNSS, the ARKS has to be viewed trustworthy and its data as credible.

Data Providers Are More Motivated

Survey respondents are individually more likely to provide data, if they know their obligations and rights, in particular the confidentiality provision, if they fully understand needs for data, if they can respond in the medium of their choice (paper, interview, telephone, Internet, etc), if the questionnaires are well designed and ask for data in line with what can reasonably be provided, and if overall the total respondent burden is reduced. Again, the image of ARKS has a significant impact.

Likewise, the custodians of administrative data sources are more likely to be cooperative if they are in regular contact with ARKS so that they, too, fully understand the data needs, and if they can respond in the medium of their choice, likely electronically.

The outcome indicator sources are in essence the survey operational areas within the ARKS and the ICC, as they are in constant contact with the providers, also the media.

Sponsors Are More Supportive

The Prime Minister and government officials responsible for funding the ARKS and other statistical bodies are more likely to be supportive if they believe the organisations produce excellent and well coordinated statistical output, are operating effectively and efficiently, and have put development funds to good use. The same applies to international organisation and other foreign donor organisations. Again, the image of ARKS has a significant impact.

Staff Are More Motivated and Skilled

Staff are likely to be more motivated and more skilled in their work if they understand the roles they play and where they fit into work of whole organisation, if their career

development options are known and are good, if they are well managed, if they receive good and frequent training, and if they are well compensated.

National Statistical System Is Better Coordinated

The KNSS is likely to be better coordinated if the ARKS plays a more active leadership role, ensuring that other statistical agencies understand perfectly the overall data requirements and their roles in satisfying them, that national standards and best practices are promulgated, and that data dissemination is harmonized.

3.4 Strategic Directions

The SMP is aimed at achieving all the target outcomes - they are all important - while recognizing that some may require or merit more effort than others. It comprises eight strategic directions.

The general focus is on building general infrastructure rather than on individual programme enhancements. This will position the ARKS to respond quickly and effectively to the new needs and priorities that will undoubtedly arise in the future but cannot be foreseen at present. This focus does not preclude further development of individual survey programmes - indeed Direction H specifically embraces such improvements.

Because of its size and impact on other developments through competition for resources, the Population Census is given the status of a strategic direction (Direction G) in its own right. It absorbs the human resources that could otherwise be assigned to other developments, thereby limiting their scale and timing. Thus, treating it separately is vital for planning, accounting and management purposes.

A. Improve Legal and Organisational Infrastructure

In broad terms the aim is to modify the legal and organisational infrastructure in order to improve efficiency and effectiveness of operations. More specifically, the gaps in the current statistical law, in particular regarding access to administrative data and support for the population census, will be filled. Coordination of the Kazak National Statistical System will be enhanced and outputs better marketed. As the ARKS and the ICC have more than 7000 staff distributed over more than 200 locations, consolidation of the offices, coupled with the introduction of an integrated processing system, will make available staff reductions of up to 50%. The current Central Office structure and the distribution of responsibilities between the ARKS and the ICC will be rationalized to streamline operations and to secure core business in the ARKS. A quality management programme will be introduced and a quality culture promoted throughout the ARKS. Staff effort will be monitored at survey/project level to assist management in making informed decisions regarding allocating resources,

B. Improve Human Resources

In broad terms, the aim is to improve all aspects of human resource management. More specifically, performance management, career development and staff assignment programmes will be developed and implemented. More proactive and coordinated recruitment procedures will be put in place. Training activities within ARKS will be strengthened and coordinated. Training needs will be identified and a training strategy

designed and introduced. To provide courses not readily available on the market, a Training Centre will be established.

C. Improve Statistical Infrastructure

In broad terms, the aim is to enhance key elements of the statistical infrastructure – registers, classifications, standards and methods. More specifically, the Business Register will be enhanced through better identification of inactive enterprises and improved coverage of large complex enterprises. Registers of Populations and Dwellings will be designed and implemented. Key national classifications will be brought into alignment with the international versions and a data element dictionary and a glossary will be created. Questionnaire design expertise will be expanded and design standards will be formulated and applied. Sampling skills will be enhanced and selected full coverage enterprise surveys will become sample surveys. Seasonal adjustment and time series analysis methods will be introduced. Analytical capacity will be increased through the introduction of a Research Institute and more analyses will be conducted and published.

D. Improve User and Provider Relations

In broad terms, the aim is to improve communications with users and providers. More specifically, user consultation will be enhanced through the establishment of topic specific advisory groups and more active engagement of the Statistical Council. A programme of user satisfaction surveys will be established. Dissemination practices will be enhanced, with more regular press releases and media conferences. Provider policies and procedures will be defined and publicized, respondent burden will be measured and target reductions defined and met.

E. Improve Information Processing Infrastructure

In broad terms, the aim is to design, develop and introduce an integrated processing system covering the complete survey cycle. More specifically, an integrated suite of software will be developed for designing questionnaires, creating survey frames, selecting samples, capturing data by optical character recognition, editing, imputing, aggregating and disseminating data, all driven from common metadata repository.

F. Improve Physical Infrastructure

In broad terms the aim is to bring the physical infrastructure in the territorial offices (after consolidation) up to modern standards. More specifically the intra and inter office network facilities will be enhanced, and outdated servers and desktop equipment will be replaced. Over the first three years roughly 1000 new personal computers will be installed per year. Office accommodation and furniture will be upgraded.

G. Plan and Conduct a Population Census

In broad terms the aim is to plan and conduct the 2009 Population Census and to publish the results. More specifically, the objectives are to obtain and disseminate comprehensive data on the size, composition and distribution of the population, their ethnic origin, their location, their migration and fertility patterns, and their occupations and industries of work, also on the stock of housing units, their geographic location, their structural characteristics, and the facilities available.

H. Improve Individual Subject Matter Programmes

In broad terms the aim is to enhance all individual surveys and administrative data collections through re-engineering and/or continual improvement, taking advantage of new infrastructure and further incorporating international standards and best practices. More specifically, potential improvements for each survey program in terms of content, coverage, coherence, accuracy, timeliness, accessibility, interpretability will be formulated. The proposals will be reviewed, prioritized and implemented either in the form of a re-engineering activity requiring the allocation of additional resources or an improvement that can be managed with the current survey resources.

4 Proposed Projects

A. Improve Legal and Organizational Infrastructure

A1. Introduce More Comprehensive Statistical Legislation

Whilst Kazakhstan was amongst the first CIS countries to introduce, in 1998, a comprehensive statistical law in line with international norms, there is room for further modernized in line with the best international practice. The Law on Statistics will be improved in following directions.

Separation between statistical and non-statistical purposes concerning data collection, confidentiality, data processing and dissemination

The clear borderline between data collection, processing and dissemination for statistical purposes and for administrative purposes will be established. Since this separation is new for Kazakhstan, this improvement has high importance.

Confidentiality

To support clear rules on where individual data can be released and where they must be kept confidential the boundary defining what is inside and what is outside the statistical system will be established. A clear indication of the boundaries of the statistical system is missing in the current Law. Some sentences of the current Law do not unequivocally exclude transfer of individual data between government units without consent whether the receiver is within or outside the statistical system. Also, it is not clear, if the data from the statistical register be used outside statistical system. The Law will be amended to avoid these problems.

Impartiality and professional independence

The principle of professional independence will be translated into institutional safeguards concerning the status of the ARKS and its Chairperson. ARKS status regarding other government bodies and founding procedure will be clearly indicated. As regards the chairperson, there are a number of safeguards that will be included in the Law, including:

- fixed term of office, independent of changes in government;
- strict limits on reasons for which the chairperson can be obliged to leave during the term;
- an open competition for this post based on merit and with professional background and experience as prerequisites for being appointed.

The Law will include a provision ensuring that statistics are disseminated to all users at the same time regardless their administrative status. As a rule, government should have the same access to statistical data as other users and any exceptions should be notified in Law.

Ensuring access to administrative data

The current Law does not make clear provision for ARKS' right of access to government administrative sources for statistical purposes. Each piece of legislation that protects an administrative source should explicitly recognize ARKS' right of access as an exception.

Other changes in Law

Several other articles of the Law will be changed in accordance with the Fundamental Principles of Official Statistics to support:

- use of official statistics for evidence-based decision making and as a means of accountability and transparency in a democratic society;
- transparency of sources and methods;
- ARKS entitlement to react on erroneous interpretation and misuse of statistics;
- consideration of the response burden of individuals, enterprises and organisations;
- potential for researchers to access confidential data for their own statistical purposes linked to research under strict confidentiality protection provisions
- cooperation between government statistical agencies (as further discussed in connection with Project A2 below).

Introduction of more comprehensive statistical legislation will include the following activities.

- Formulate draft amendments.
- Review draft amendments with all stakeholders.
- Submit amendments and monitor their passage.

A2. Improve the Coordination between Government Statistical Agencies

The Law on Statistics identifies the ARKS as the body responsible for the development of KNSS. In addition, there is a set of written agreements between government statistical agencies on data sharing, etc. To improve the current situation, the following activities will be conducted.

Improve the legislation on cooperation between government statistical agencies.

The amendments required to guarantee cooperation between government statistical agencies will be formulated and submitted to Parliament. Simultaneously, the Law on Statistics will be supplemented to identify concrete mechanisms for cooperation between the statistical agencies and for access to data bases, as well as a single dissemination policy, and unification of metadata and other aspects of statistical activity.

Establish the inter-agency Council on coordination of statistical activities

An Inter-agency Council is necessary to improve coordination between government statistical agencies and prepare the agreements on statistical activity noted in the previous paragraph. To be capable of resolving problems, Council should be sufficiently (1) powerful and representative to oblige all agencies to respect the agreements and (2) technically competent to be capable of making technical decisions. In practice, the Council will consist of management board headed by a top level government leader and will establish technical working groups on important statistical topics.

Improving the coordination between government statistical agencies will include the following actions.

- Formulate draft amendments to the Law and submit to Parliament.
- Prepare the regulation for an Inter-agency Council on Statistics.
- Organize the activities of the Inter-agency Council.
- Revise the current agreements between statistical agencies in accordance with the new regulation where necessary.

A3. Adopt a More Efficient and Effective Territorial Structure

To adopt a more efficient and effective territorial structure and realize the resources necessary for the Central Office development, the oblast and rayon offices will be consolidated into fewer offices. This is expected take some time to achieve. It will be coupled with the introduction of an integrated processing system and more training of regional staff. The volume and quality of data collected will be maintained throughout the reorganization. Significant resources will be required for the initial investment in technical infrastructure and staff training.

The project will include the following activities.

- Propose and analyse geographical structures with many fewer offices but without change of regional office functions.
- Select the most appropriate geographical and functional structure.
- Implement this structure.

A4. Adopt a More Efficient and Effective Organizational Structure

Improve the Central Office structure

Although the Central Office was restructured in 2007, its structure needs the further rationalisation. The previous reorganisation was limited by the lack of staff following the relocation to Astana. After new staff have been engaged and trained, the organisational units, responsible for key aspects of development will be strengthened. Specifically this will include enhancing the units responsible for human resources, ICT, data dissemination, and strategic planning).

Separate functions between the ARKS and the ICC

The separation of functions between the ARKS and the ICC is far from optimal. In countries with advanced NSOs, all the functions carried out in Kazakhstan by the ICC, are considered as core business and carried out by NSO.

The Kazakh practice of dividing functions between the ARKS and the ICC is not optimal for the following reasons.

- The boundaries between the ARKS functions and ICC functions are not consistent from one regional office to another. Within a single office, staff from each organisational entity may be doing the same work but with differing conditions of employment.
- The division of core statistical functions into two groups is inefficient from the perspective of the duplicate administrative structures required.

- Is vital to assure that, when the ICC becomes a joint stock/ limited liability company, the ARKS does not lose its control of any of its core functions in particular data processing and data dissemination. For any organisation, outsourcing core business is well known to be a very poor strategy.

The project on adaptation of a more efficient and effective organizational structure will include the following activities.

- Secure permission to establish additional Central Office positions.
- Further rationalise the present Central Office organisational structure.
- Rationalize and clarify roles of the ICC and its relationship to the ARKS.
- Move ICC data processing functions into the ARKS.
- Consider the options for moving ICT infrastructure provision and ICT applications design, development and maintenance to the ARKS if and when the ARKS is able to offer competitive salaries.

A5. Design and Introduce an Effort Recording System

For programme management purposes, it will become increasingly important to monitor individual work effort. The aim of this project is to build a system enabling all staff members to record their weekly work effort in terms of a set of operations/projects. Such a system is vital in estimating the likely impact of additions, changes or deletions of programme components and also enables monitoring of vacation leave, sick leave, training, etc.

The project will include the following activities.

- Develop a set of mutually exclusive and exhaustive operations/projects covering all ARKS activities.
- Build and introduce system to record staff effort by operation/project.
- Train staff in recording their work effort.
- Utilize the results to analyse human resource usage and to make comparisons across operations and projects.

A6. Design and Introduce a Quality Management Program

The ARKS currently has no quality management program. By and large ARKS' staff are unaware of internationally endorsed concepts of *total quality management (TQM)*. The aim of the project is to introduce a quality culture into the organisation.

TQM principles are embedded in international quality standards, of which the most widely used is the ISO 9000 series, comprising three standards:

- ISO 9000: 2005 Quality Management Systems - Fundamentals and Vocabulary
- ISO 9001: 2000 Quality Management Systems – Requirements
- ISO 9004: 2000 Quality Management Systems – Guidelines

Of these, the best known is ISO 9001, being the quality standard with respect to which organisations seek to be certified. The requirements for quality certification are presented under five headings, namely quality management system (QMS), management responsibility, resource management, product realization, and measurement analysis and

improvement. However, they are expressed in very general terms as they are intended to cover all organizations whatever their organizational structure, processes and products. In other words, ISO 9001 defines the *attributes* a QMS must have, not the *actual* QMS, which has to be devised depending upon the organizational context.

The project will include the following activities.

- Develop a quality model – comprising quality concepts and definitions, including the so-called *output quality characteristics*, relevance, accuracy, timeliness, accessibility, interpretability, and coherence.
- Develop a quality policy - providing leadership, a framework for definition of quality objectives, a commitment to satisfying user needs, continual improvement, and reengineering where major changes to existing processes are required.
- Develop a quality manual – documenting concepts, policies, procedures and responsibilities.
- Develop quality tools - quality and performance indicators and measurement systems, quality control systems, self administered quality checklists, and a program of quality reviews.
- Train staff in quality awareness, principles and procedures.
- Implement the quality policy – including continual quality improvement and a quality evaluation program.

B. Improve Human Resources

B1. Introduce Performance Management, Career Development and Staff Assignment Programs

Design and introduce career development and staff assignment programs

Currently ARKS does not have a performance management programme. There are no recorded measures of staff performance. Bonus payments are presently evenly spread across all ARKS' employees. This does not provide an incentive to work really hard, nor a penalty for poor work.

A performance management system will be designed and introduced. In the first instance this will comprise simply a bonus recording and management system. The Berlin Statistical Office in Germany provides a practical example of how this might be done. Subsequently it may be elaborated to include:

- annual establishment of objectives and training needs by each staff member in conjunction with their supervisor;
- followed by periodic informal reviews of progress made towards their achievement during the subsequent year;
- an end of the year final review undertaken by staff member and supervisor on the basis of which the supervisor will assign a performance rating;
- ratings moderated by a performance review board; and
- used as the basis for assigning annual bonus payments.

The second objective of this project is to introduce a career development program and a replacement plan for the key staff.

Staff rotation

Rotation of staff is a common practice in advanced NSOs. It is an excellent way of gaining experience and enhancing skills. It also has the virtue of increasing workforce flexibility. This practice will be researched and recommendations on its introduction will be formulated.

The project will include the following activities.

- Design and build a bonus recording and management system.
- Design and introduce a staff rotation program.
- Train staff and supervisors in the use of the bonus recording and management system.
- Implement performance management using the system.

B2. Design and Implement a Training Strategy

Improvement of staff skills is absolutely vital, particularly in the context of the current KNSS reformation, involving rapid changes in both methodology and technology.

The project will include the following activities.

- Create a classification of training by type, for example: management, personal communications, statistical methodology, ICT, language, etc.
- Create an inventory of generic training needs. For each type and level of position define the set of courses that incumbents are expected to take.
- Create an inventory of training facilities and sources, and the courses available, also of other types of training, for example conference participation, on the job training.
- Introduce an annual training review procedure for each staff member and supervisor, preferably in conjunction with annual performance review as described in Project B2.
- Set annual targets for each office expressed in terms of average training days per staff member
- Monitoring implementation.

B3. Create the Institutional Infrastructure for Training

Establish an administrative unit responsible for training

Currently the ARKS does not have a section dedicated to training. Such coordination of training as takes place is by the Human Resources Section and is minimal. This is not satisfactory in an environment where there is a heavy emphasis on training. An administrative unit responsible for training will be established within ARKS. This unit will be responsible for ensuring there is an assessment of training needs within the ARKS and the ICC, and for organising training to meet these needs.

Establish the National Statistical Training Centre

Whilst training in ICT, language, sampling, management skills can readily be purchased, training that deals with the core business of an NSO - survey standards, methods, processing procedures - is not readily obtained from external sources. The main source of such training is the ARKS itself, albeit with considerable assistance from international

organisations and other partner NSOs. ARKS' senior managers and experts provide training at the Central Office and regional offices. This arrangement is not satisfactory, first, because it does not meet the full demand and, second, because it occupies scarce senior staff time. Thus, the second objective of the project is establishment of a National Statistical Training Centre (NSTC). Both local and international experts will be invited to teach there.

From the perspective of maintaining expertise on ARKS' core business in house, it would be preferable for the NSTC to be a unit within the ARKS itself, as, for example, is the case for Statistics Canada and for the Australian Bureau of Statistics. However, provision of training on a fee basis is envisaged, in particular for users of NSS statistics and for statisticians from other organisations in Kazakhstan or abroad. Thus, the NSTC will be a separate legal entity, or part of such an entity. However, it will limit itself to developing and giving courses only where they cannot be readily obtained from other government sources or purchased on the market.

Develop possibilities for self-education

ARKS employees could learn foreign languages, about computers, etc., on their own. ARKS will introduce motivation for self-education, including bonuses and fast career growth. The required training materials will be published via the ARKS web-portal, and will include published recommendations from international experts who have visited the ARKS.

In summary, the project will include the following activities.

- Establish a Training Unit within ARKS.
- Based on an assessment of training needs (see Project B2) determine the courses to be given by the Training Centre and the expertise required to give those courses.
- Establish Training Centre as a separate legal entity or make provision for training within the ICC or Research Institute (see Project C7).
- Develop and give training courses that cannot be purchased from elsewhere.
- Develop the program to support self-education

B4. Support International Workshops and Education Abroad

Education abroad has several important advantages. First, it guarantees high standards of education because there is a real choice between education centres and courses while the choice inside Kazakhstan is strictly limited. Second, the appropriate level and form of education can be chosen (basic education, secondary education, short-term courses, internship, etc). Third, education abroad is available right now while comprehensive education facilities still have yet to be established in Kazakhstan. Fourth, it is not possible to organize the on-the-job training with international experts in Kazakhstan.

There are two severe limitations – high cost and language - both of which can be readily addressed.

Fluent English will be the standard requirement for all leading experts in ARKS Central Office. All employees will be informed that language skills are required for successful career. Preliminary language courses will be organized in the ARKS Training Center (activity B3). Also, there are some good training courses in Moscow and other Russian speaking cities where staff can be trained in Russian.

The problem of high cost will be solved through the participation in donors programs, technical assistance programs, target Kazakh programs on education abroad (such as *Bolashak*) and use of loans (for example from the World Bank). A standard contract will be introduced for staff who want be educated abroad that obliges them to work at least five years in the ARKS after course completion.

In addition to formal training courses, ARKS experts should participate in international conferences and meetings. The costs of participation in such meetings will be included within the ARKS budget.

In summary, the project will include the following activities.

- Develop a program of education abroad, which includes identifying the main foreign partners and sources of founding.
- Develop the cooperation with partners in Kazakhstan and abroad.
- Introduce a standard requirement for leading ARKS experts to have the necessary language skills to participate in international meetings

B5. Introduce More Proactive and Coordinated Recruitment Procedures

As annual staff turnover is about 10%, recruitment is a significant challenge. Recruitment is difficult not only in Astana but in some of the other wealthy regional cities. The main problem is low public servant salaries. Even with bonus payments of up to 70% of basic salary, ARKS salaries are not competitive. This problem can only be addressed through the ongoing administrative reform, the results of which may not flow though until 2009 or even 2010. In the meantime, there is room for improvement in recruitment policies and practices, including more active efforts to increase the supply of potential recruits from universities.

ARKS will participate in research projects, motivating the researchers to future cooperation with the statistical service.

The project will include the following activities.

- Review and revise recruitment policies and procedures.
- Liaise with universities to influence course content and to contact potential employees.

C. Improve Statistical Infrastructure

C1. Enhance and Make Better Use of the Business Register

Improvement of updating procedure for Statistical Register

Updating procedure for the small business portion of the statistical register will be significantly improved. The problem is in distinguishing the small enterprises and entrepreneurs that are active from those that are inactive (either dormant, or out of business, or no longer exist). These units are covered by sample surveys so the ARKS does not obtain information from them all which would allow annual updating of their economic characteristics in the register. This is why a significant proportion of inactive small businesses are recorded as active in Register. This problem will be solved by improving the updating procedure using taxation data. It will require better coordination

with tax authorities and may depend upon improvements in legislation giving the ARKS right of access.

Profiling

This concern is that, as the economy grows, handling data collection from large and complex private enterprises will become a significant problem. This can best be addressed through personal interviews with the enterprises to establish their legal and operating structures and hence how they are best able to report their data. The process, known as profiling, is an important function in advanced NSOs and their procedures can readily be obtained and adapted to Kazak circumstances.

Enlarge the economic information in register

Currently samples are designed using number of employees as the indicator of enterprise size. This does not produce very efficient samples for surveys where turnover is a key variable. For more efficient sampling a second indicator - turnover – will be introduced in the register and used in sample design.

The project will include the following activities.

- Develop and implement more efficient procedures for register updating through better and closer cooperation with the Tax Administration.
- Improve the register by including turnover as an additional characteristic.
- Investigate profiling procedures used by advanced NSO for determination of appropriate reporting procedures for big and complex enterprises.
- Conduct profiling of big and complex enterprises using these procedures.

C2. Design and Introduce the Population Register

The Population Register will become the source of current demographic statistics in place of current estimates that are based on aggregate census results updated with statistics on births, deaths and migrations. Ultimately the census of population may be replaced by this register supplemented by a suite of surveys to fill data gaps.

The project will include the following activities.

- Define the Population Register creation and maintenance procedures and prepare the system specifications.
- Negotiate arrangements for securing data from the identified administrative sources.
- Build and test the Population Register procedures and system.
- Load and commission the Population Register.
- Modify demographic programmes to take advantage of data from the Population Register.

C3. Enhance and Introduce Dwelling Register

The aim of this project is to create and maintain a statistical Dwelling Register. In addition to being a source of statistics about dwellings, a fully up to date dwelling register will provide the information required to construct frames for household surveys in place

of the present area-based frame. This will save the cost of list and re-listing the dwellings in the area frame.

As in the case of the Population Register, there are examples of dwelling registers in the Nordic countries.

The project will include the following activities.

- Define the Dwelling Register creation and maintenance procedures and prepare the system specifications.
- Negotiate arrangements for securing data from the identified administrative sources.
- Build and test the Dwelling Register procedures and system.
- Load and commission the Dwelling Register.
- Modify the household survey programs to take to use the Dwelling Register as a source of frame data.

C4. Further Develop Classifications and Other Standards

Classifications

The use of standard classifications is vital for interpretation and integration of data. There are two aspects to classifications work: support; and development. Support for a classification itself has two aspects: first, training users (the relevant survey areas and government departments, and respondents) in the meaning and use of the classification; second, building a suite of resolutions to ambiguities in the classification in response to requests from users. Development also has two aspects; first, creation and introduction of new classifications; second, revision of existing classifications to ensure that they remain in step with the corresponding international classifications when the latter are revised. Newly developed or revised classifications have to be accompanied by support for the survey areas in switching from the previous versions.

Given the broad range of national classifications currently available, the major development effort over the next few years will be in their revision. In particular, it will include work on the national versions of the Classification of Economic Activities (NACE) and the corresponding Classification of Products by Activity (CPA).

Data Element Definitions

Keeping track of the definitions of the data elements used in the various data sets collected and disseminated is important for integration purposes but has been essentially neglected at the ARKS until now. The result is the use of different terms for the same data element and the same term for different data elements, which is a source of confusion for users and a barrier to integration. The project envisages the development of a data element dictionary as a key component of the metadata repository.

Glossary

As there is presently no comprehensive glossary of statistical terminology for use within the KNSS there is potential for confusion. To ensure clarity of ideas and to assist in translation between Kazak, Russian and English a multilingual glossary will be developed as a component of the metadata repository.

The project will include the following activities.

- Revise classifications to be in line with the latest versions of international standards and support survey areas in implementing the revised versions.
- Develop procedures for identifying, storing and accessing data element definitions.
- Develop procedures for identifying, storing and accessing statistical terms in a multi-lingual glossary.
- Train subject matter areas and other users in the use of the resulting data element dictionary and glossary.

C5. Improve Questionnaire Design Procedures

Questionnaire design has a significant impact on response rates, probability of misreporting, ease of data capture and incidence of capture errors. It involves knowing how respondents keep their records (accounting practices), how they interpret questions (cognitive research), and how the data are to be captured.

Currently there are no questionnaire design standards in the ARKS. In conjunction with shortage of funds for good quality paper, the result is that most questionnaires are poorly designed. Typical problems include little indication of the purposes for which the data are being collected and the confidentiality provisions, inadequate instructions for completion, and answer boxes too close together. Furthermore, the planned introduction of data capture by optical character recognition (Project E1) implies additional constraints on layout, colour and paper quality. The planned introduction of electronic questionnaires involves yet another need for design standards.

The project will include the following activities.

- Create a questionnaire design unit, dedicated to the development and promulgation of questionnaire design standards.
- Develop questionnaire design guidelines for paper questionnaires, electronic questionnaires, face to face interviews and computer assisted telephone interviews.
- Provide training in the use of questionnaire design standards to survey areas;
- Develop and implement procedures for review for all new or recently redesigned questionnaires for conformance to the standards prior to their use;
- Develop and oversee a program for review and revision of all existing questionnaires.

C6. Further Develop and Improve Sampling Methods

Currently ARKS has relatively few sample surveys, especially of enterprises. In contrast, most surveys in advanced NSOs are sample surveys. The advantages of a sample survey over a full coverage survey are the reduced costs and respondent burden and, given the smaller sample size, the increased potential for intensive follow up of non-respondents and for editing of anomalous or missing values. The main disadvantage of sampling is that it reduces the amount of detail available, in particular statistics for small areas. Thus, primary aim of this Project will be to introduce sampling in place of full coverage surveys wherever feasible.

There are four problems that have to be addressed in introducing sampling in enterprise surveys.

- The main problem is the demand from local government authorities for detailed, district level statistics. Sometimes, local governments attempt to control the economic activity of enterprises in their districts. This problem has the historical origin and will gradually disappear with development of the market economy. Besides, the demand from local authorities for individual data is in contradiction to the principle of confidentiality of individual data. The ARKS will explain its position to government users.
- The second reason is that there is little experience in sampling among statisticians, especially at the regional level. The ARKS will address this through recruitment and training programs (see projects B1-B5).
- The third reason is that the only size indicator presently from the statistical register is turnover, and samples based on this size measure are inefficient. This problem is also being addressed (see Project C1).
- The fourth problem is the number of inactive units on the statistical register. This is a problem whether the survey is full coverage or sample and is also being addressed (see Project C1).

The quality of household sample surveys will be improved with development of the Dwelling Register. Besides, the methodology of household surveys will be improved taking into consideration not very high level of cooperativeness of some part of Kazakh population with state statistics. Sample results will be revised with imputation technique.

The project will include the following activities.

- Review the opportunities for sampling taking into account planned improvements in the Statistical Register;
- Train the staff (especially at the regional level) in sampling methods;
- Review the current suite of economic surveys to determine which can be conducted on a sample basis without serious data loss to users;
- On a survey by survey basis, redevelop each of these surveys as a sample survey;
- Improve the sampling in household survey taking into consideration the development of Dwelling Register and the specific traditions of the population.

C7. Introduce Time Series and Seasonal Adjustment Methods

In the international practice, statistical results are usually presented to public as a time series because this sort of presentation is the best for forecasting and other types of analysis. Time series of statistical results should be as long as possible. But to produce the long time series, it is necessary (i) to provide methodological consistency of results over the time period; (ii) to estimate the discrete indicators rather than cumulative data which are traditionally estimated in most of post-Soviet countries; (iii) to provide the seasonal adjustment for the sub-annual statistics; (iv) to implement the regular revision of previous results when/if more accurate results are estimated; (v) to use adequate deflation technique and indexes.

There is not a significant demand for time series from the main users of statistical data because this practice is still not common in Kazakhstan. Nevertheless, the ARKS will start to form *time series of all basic statistical indicators* and to explain to users the

advantages of this approach (also see Project D2). Where necessary, retrospective estimates will be produced.

This project will include the following activities:

- Create time series of discrete indicators and revise past results, if necessary;
- Change questionnaires to collect discrete rather than cumulative data;
- Implement a seasonal adjustment technique (such as X-12 ARIMA) for the sub-annual discrete estimates in all key sectors and activities (GDP, output by activity, etc);
- Improve current deflation technique and indexes;
- Present the new time series to the public and explain their advantages.

C8. Enhance Research and Analysis Function

By comparison with advanced NSOs, ARKS currently does relatively little analytical work. Typical subjects of analyses are, or could be, Kazak data in conjunction with Euro zone data, or with data from CIS countries, or of the effects of different seasonal adjustment methods, or of changes in productivity in the manufactory sector based on production and employment data. The benefits of such analyses are threefold. First, the results are of intrinsic interest in their own right to users. Second, they stimulate interest in the statistics on which they are based. Third, they put the ARKS in the position of a user, and hence better able to see the strengths and weaknesses of the statistics produced. Comparisons with data from other sources are invaluable in checking the quality and coherence of the data and identifying possible problems.

Thus, although the analysis is not and will never be a core function, ARKS will develop its capacity in this area. The ARKS will not become the leading centre on economic analysis and forecasting but will work to enhance the analysis function and to make its presentations of statistics more informative. The results will include better visibility, more graphs, more trend estimates, and comments on correlations between different time series.

The project will include the following activities.

- Determine the user needs for analyses.
- Develop analytical capacity within the ARKS.
- Develop analytical methods and conduct analyses to meet needs.
- Establish a standard set of analytical tools to be used in statistical presentations.

D. Improve User and Provider Relations

D1. Improve User Consultation

The Public Council on Development of State Statistics was created in ARKS as a forum for consultation with data users but its meetings are not regular and too formal. There is no a long time tradition in determining of user requirements for statistics, especially the requirements of non-government users. Currently, some 80% statistical outputs are used only by government agencies as non-government users do not know what is available and

their demands are thus weak. With the development of civil society, the non-government demand for statistics will become stronger.

The ARKS conduct a thorough analysis of requirements. It will begin with segmentation and analysis of users according to their functions and data requirements, for example segmentation into government, industry, academia, media, international organisations, and the community at large. It will establish the demand for statistics working with users. It will inform users and potential users about the statistical programs and the data available. User surveys of needs and levels of satisfaction will be conducted. Media conferences will be held more frequently. The Statistical Council will become more active.

In summary, the project will include the following activities.

- Conduct a general user requirements analysis and feedback the conclusions to the relevant subject matter areas for consideration in their programme improvements (see Direction H Projects).
- Hold Statistical Council meetings every six months with key topics on the agendas supported by ARKS' position papers distributed well in advance.
- Design and conduct a user satisfaction survey regularly every three years or so, to get an impression of changes in user opinions.

D2. Enhance Dissemination and Marketing Procedures

Improve the data dissemination function and procedures

Currently, users are not aware of the wealth of data available. Dissemination policies are not presently well articulated or procedures well organised. There is no marketing policy and a very limited marketing function. This is at least partly the result of the poor organisation of dissemination. There are currently three different administrative units in ARKS and ICC responsible for data dissemination. One of the objectives of changes to the organisational structure (see Project A4) will to ensure the dissemination function is less fragmented. This will facilitate a more coherent and comprehensive approach to data dissemination.

Design and implement the single marketing policy

Marketing policy includes adhering strictly to a published release policy, providing press releases with all statistics, conducting frequent and regular media conferences, monitoring use of various data outputs (for example web page accesses and data downloads) and increased use of geographical information systems. The key elements of marketing policy, including a calendar of publications and schedule for data base revisions will be published and ARKS will follow it strictly.

Implement the data dissemination standards

The ARKS has subscribed to the IMF SDDS and thus disseminates the corresponding data on national accounts, prices, and labor in line with international standards. Users are provided with SDDS prescribed data categories (datasets) in line with published periodicity and timing, metadata required for data interpretation and phone numbers of contact persons who can answer questions about the data. The ARKS and other

government agencies involved in statistics will enlarge the set of data disseminated in line with international standards.

The ARKS will design and implement the user friendly standards for statistical publications, including analyses.

Improve time series output

Currently, the ARKS publishes a significant proportion of its statistics, in both electronic and paper versions, without showing time series. Users have to spend time creating their own time series. Thus, in conjunction with better presentation and more analysis (see Project C7) ARKS will publish more time series in user friendly form.

In summary, the project will include the following activities.

- Improve the data dissemination function.
- Prepare and implement a dissemination strategy.
- Prepare and implement a marketing strategy.
- Implement the international standards for data dissemination.
- Increase publication of time series.
- Monitor and summarise data access.

D3. Introduce Provider Policies and Practices

Introduce provider policy

For enterprises, the costs incurred in responding to surveys are every bit as real as the costs to the ARKS of collecting data. While households might not calculate the costs, a high response burden due to long and complicated questionnaires will negatively affect response rates. Thus, the ARKS will develop and implement a respondent policy that minimizes respondent burden through efficient sample design, clarity of questionnaires, more flexibility regarding the timing of interviews or due dates for receipt of completed questionnaires, and choices in how respondents may supply information.

More specifically, the policy will:

- require an initial contact in which the purpose of the survey and the reporting arrangements are explained.
- present enterprise respondents with a variety of response options, for example mail back, fax, telephone, electronic reporting, from which they can choose the whichever suits them best.
- present household respondents with a choice of types and times of interview.
- require better designed questionnaires (Project C5) with easy to read instructions and a nice layout and no questions that do not result in published statistics;
- require a reduction in the numbers of questionnaires, especially by sampling in place of full coverage surveys (Project C6).

Implement respondent burden targets in line with international practice

ARKS will set and monitor respondent burden targets, borrowing concepts and procedures from advanced NSOs.

Inform respondents

ARKS will prepare and distribute a pamphlet informing users of their rights and responsibilities. Whilst this does not in itself reduce burden it helps users to understand it.

In summary, the project will include the following activities.

- Define and implement a respondent policy.
- Define, build and implement respondent burden measurement system for economic surveys.
- Set and monitor respondent burden reduction targets.
- Define and promulgate respondent rights and responsibilities.

E. Improve Information Processing Infrastructure

E1. Develop Integrated Processing System

The ARKS' primary strategic objective in improving information processing infrastructure is to establish an integrated information system to replace existing disparate applications and databases. Currently, mutually independent, individual solutions are developed and managed for each survey. They do not have links with other surveys during data processing phase. It is extremely difficult, if not impossible, to integrate the resulting databases for more sophisticated analyses.

ARKS has started conceptualization of an integrated system. Based on the needs thus identified, this project includes the development of the following key subsystems as constituent parts of the envisaged integrated system:

- data warehouse with online analytical processing (OLAP);
- data collection and entry application;
- metadata/data classification repository;
- registers of persons and of dwellings; and
- web portal for electronic data collection and for data dissemination.

The key objectives of the portal are: (i) to disseminate statistics and information about other available statistics; (ii) to disseminate national statistical standards; (iii) to collect data electronically; (iv) to provide statistical services to the public; and (v) to host data and services for regional offices.

Another new feature of the processing infrastructure will be computer assisted telephone interviewing (CATI) for household surveys.

In summary, to develop the integrated processing system, the following activities will be conducted.

- Build the warehouse with online analytical processing.
- Build data collection and entry application.
- Build metadata/data classification repository;
- Build and integrate registers of persons and of dwellings;
- Acquire and introduce computer assisted telephone interviewing (CATI) facilities; and

- Develop the ARKS web portal for data collection and for data dissemination.

E2. Build Institutional ICT Capacity

An ICT Unit has been created in the Central Office to be responsible for overall planning and coordination of ICT development (see project A4). Both the number and expertise of staff need will be substantially strengthened. The new unit has to be the bridge between ICT specialists who understand ICT but not survey taking and survey statisticians, who understand survey taking but not ICT.

More specifically, the project will involve the following activities

- Upgrade the current ICT Unit into an ICT Department with 15 staff members having the required expertise and skills.
- Develop appropriate incentive mechanisms to retain skilled technical staff, possibly taking advantage of joint-stock company status of ICC.
- Conduct a sustained training effort to ensure ICT staff skills are maintained and improved;
- Exploring possibilities for technical assistance and advisory services from external sources to fill the gap in short term skill shortage and to develop medium term capacity in the ICT Department.
- Redefine the roles and responsibilities of ICC in managing the statistical information system in accordance with the enhanced ARKS ICT capacity.

F. Improve Physical Infrastructure

F1. Upgrade Hardware and Software

ARKS will replace obsolete equipment with new equipment to improve efficiency and accelerate the data processing. The process of identifying the need for, purchasing and installing new hardware has already started. Acquisition of about 3,000 computers and other equipment such as servers and scanners is needed. In addition, additional hardware requirements will emerge when the ongoing efforts in developing an integrated processing system provide clearer picture.

More specifically, the project will involve the following activities.

- Purchase and installation of computers, servers and other equipment for use in the Central Office, territorial offices and ICC, as already identified (Table 5.1).
- Purchase and installation of additional hardware based on requirements yet to be identified that will result from the ongoing and proposed improvements to the information processing infrastructure.

Table 5.1: Hardware Purchasing Plan

	2007	2008	2009	2010
Center	120 PC, 10 server	9 servers, 2 scanners		
Rayon		937 PCs	760 PC	760 PCs
Oblast	65 PCs transfer from the Center	90 PCs, 32 servers, 16 scanners	270 PC, 20 servers	270 PCs
ICC		50 PC, 3 servers	50 PCs, 3 servers	50 PCs, 3 servers

F2. Improve Communications Network

The ARKS corporative network connects Central, regional and district offices using Virtual Private Network (VPN) and VPDN technologies. The service is being provided by Kazakhtelecom. In a longer term, options other than services from Kazakhtelecom may become available.

Over a medium term, the demand for data communication will increase, particularly after operationalization of integrated data processing system and the current capacity will be inadequate. There will also be increasing demand for ensuring better communications with regional offices, for example by videoconferencing, for training and internal managerial purposes.

Thus, the project will include the following activities.

- Assess medium and long term data transmission needs.
- Liaise with Kazakhtelecom and other providers (if any) to identify options.

F3. Improve Territorial Office Accommodation and Facilities

The Central Office building is new and well equipped and, although there are some minor problems, it can reasonably be expected that they will be resolved in the near future. On the other hand, the situation in the regional offices, particularly in the district offices, is far from satisfactory. Building facilities and maintenance have been neglected for a decade or more with the result that many of the offices are in a state of disrepair. This has an effect not only upon efficiency of operations but also upon staff morale. Furthermore it militates against recruitment of staff. Thus the general aim of this project is to improve accommodation and facilities in the territorial offices.

There are two substantive issues to be considered. First, the improvement plan must take into account planned or potential closures and expansions of offices in accordance with changes in territorial structure (Project A2). Second, the difficulty of obtaining funding for office improvements has to be addressed. The justification for expenditures will have to be creatively prepared and presented. In this context it could very well be that a blend of office restructuring and modernisation go very well together. The capital costs of improvements to the offices remaining after consolidation being seen to be offset by reductions in future operating costs.

In summary, the project will include the following activities.

- Conduct an assessment of the accommodation provided in each office including the costs of bringing this accommodation to an acceptable level.
- Prioritize the improvements taking into account planned or potential office consolidation, and develop an accommodation restructuring and improvement plan.
- Acquire funding for the plan, modifying it if necessary to reflect the funding received.
- Undertake the accommodation improvements.

G. Conduct Population Census

Funding for the 2009 Population Census has been obtained. The plan has long been developed and is now in being implemented. A pilot test will take place in February 2008.

Major activities include:

- Build, test and commission the data capture, processing, tabulation and management control systems;
- Test and commission the purchased scanning hardware and software;
- Develop the training program for enumerators, supervisors and managers;
- Recruit the enumerators and supervisors;
- Print the questionnaires;
- Rent premises for storage;
- Conduct the Census data collection and follow-up;
- Capture, edit, impute the data;
- Aggregate, tabulate and verify the data;
- Produce and disseminate the first estimates;
- Produce and disseminate the full set of estimates;
- Conduct an evaluation survey and analyze the results;
- Evaluate and report on the entire operation.

H. Improve Individual Subject Matter Programs and Methodologies

H1. Improve Macro-economic Statistics

Develop methods of macro-economic balancing

ARKS will develop techniques for macro-economic balancing, such as input-output tables, supply and use tables and commodity flow, to improve internal consistency of statistical indicators. This is a common practice in advanced NSOs. Due to lack of resources, these methods are not very developed in Kazakhstan.

Introduce the double deflation method

Currently, the ARKS uses indicators of production growth in physical terms to evaluate GDP growth. This technique was used in the most of post-Soviet countries during the period of high inflation because of poor reliability of price indexes. Now that inflation

rates are reducing from year to year, the ARKS will introduce the double deflation technique as recommended by international standards.

Review and update methodology in line with revised SNA93

The SNA93 is currently going through a revision process. When this has been completed ARKS will review and update the methodology in accordance with the SNA93 revisions.

Improve Measurement of Non-Observed Economic Activity

Non-observed economic activity (NOE) is still a significant factor in Kazakh economy. No macro-economic indicator is adequate without an appropriate adjustment for the NOE. The NOE is a problem for most of economies (and statistical services) in the world, but for Kazakhstan it has particular significance. In Europe, many countries use the LFS data for NOE measurement. In Kazakhstan, in the past this method did not yield acceptable results. With better LFS results, NOE estimates will improve as well. In summary, the ARKS has invested significant effort over the last decade in measuring the NOE and this effort will be continued.

Thus, this project will include the following activities:

- Develop supply-and-use technique for more accurate national accounts balancing;
- Improve input-output tables;
- Implement double deflation technique and changes to estimates of volume indexes;
- Revise and implement national SNA methodology in line with revised version of SNA93;
- Produce NOE estimates at the national accounts level using different techniques and approaches, including use of LFS data;
- Produce NOE estimates at the activity level for informal services, trade, etc.

H2. Improve Micro-economic Statistics

Improve the sets of indicators

The fast development of Kazakh economy is a reason for further development of new statistical indicators to reflect institutional and quality changes in the economy. Special attention will be paid to enterprise demographics, small businesses, innovation, competitiveness, the environment and energy.

Introduce new data collection system.

Data collection systems and procedures will change with wider use of sampling (Project C6) and the new integrated data collection and processing facilities including electronic reporting and input data warehouse (Project E1). Statistical questionnaires will be revised in line with new standards (Project C5).

Rationalize structural surveys

Currently, the ARKS collects raw data on structure of output and intermediate consumption for national accounts, using a full coverage survey of large and medium size enterprises. This is not rational. In line with international practice, the most data on total value of output will be collected using administrative sources (taxation data) whilst data on structure of output and intermediate consumption will be obtained from sample surveys. Thus, respondent burden will be reduced.

Further develop business statistics

All areas of business statistics will be reviewed and revised, taking advantage of new infrastructure and incorporating international standards and best practices.

Further develop price statistics

The consumer and producer price index programmes will be enhanced in accordance with international standards and best practices. The numbers of observations of consumer goods will be increased and new indicators will be developed.

In summary, the following activities will be undertaken:

- Develop new indicators, in particular for innovation, competitiveness, environment, energy, small businesses and enterprise demographics.
- Design the new questionnaires and data collection procedures taking into account the new technology for data collection and processing and improved questionnaire design;
- Rationalize the structural surveys and further develop business and price statistics.

H3. Improve Agricultural Statistics

The ARKS collects data on agricultural production using several sources, including the agriculture census, reports from large and medium size enterprises and a system of registration of informal production through so called “village statisticians”.

The last form of data collection is inefficient because village statisticians are dependent on their local administrations. Besides, more agriculture data are collected than are necessary for analysis of the economy. ARKS will replace the system of village statisticians by sample surveys. The basis for the representative sampling will be an agricultural register built using agricultural census data.

The project includes the following activities:

- Complete the agriculture census.
- Create the agriculture register using the census data.
- Liquidate the system of village statisticians.
- Conduct sample surveys on agriculture production in the informal sector.

H4 Improve Demographic Statistics

In addition to designing and conducting the Population Census, the ARKS will be enhancing its capacity and production of demographic statistics. It will be developing and implementing a module for demographic calculations and forecasting population size. It will be studying the natural movement of the population over the period 1999-2008 and conducting surveys to determine the causes of migration. It will be collecting, processing and disseminating additional demographic statistics, including migration statistics.

H5. Improve Social Statistics

There is a constant demand for social statistics from the government, public, non-profit organizations, and international agencies. The demand includes data on living costs, education, education, environment, etc. To meet this demand, the ARKS will expand the production of social statistics using additional sources of information.

This project will include the following activities.

- Implement additional Living Conditions Survey modules on education, health, acceptability of drinking water, cost of living.
- Improve the statistical questionnaires on environment.
- Conduct ad-hoc surveys on current social problems.

H6. Improve Labor Statistics

To be more in line with definitions, concepts, and methodology at the international level, the ARKS will improve existing indicators and introduce new ones to characterize labor costs. There is presently no labor cost index (LCI) as current methodology is not consistent with European approaches. A comprehensive system of working time indicators based on the ILO standards and criteria, would allow production of working time data for employees and self-employed consistent with the international data.

To obtain a more comprehensive assessment of working time, the ARKS will consider and estimate variable components, to ensure harmonization with the international standards of the key indicators and to determine necessary data and their collection method. ARKS prepare methodological recommendations for constructing indicators of working time in the country.

The ARKS will improve the Labour Force Survey sample design to obtain better estimates at regional level (project C6).

To improve indicators for the Millennium Development Goals, two developments are planned. First, measurements of the labor force potential in the country will be introduced, in particular, employment in the informal sector of the economy. Indicators of labor quality will be based on international recommendations and standards. Second, external labor migration will be measured so as to be able to estimate the employment of foreign labor in the country and the employment of Kazakh citizens abroad.

In summary, amongst many others, the project will include the following activities:

- Improve the LFS including sample design and questionnaires.
- Implement a labor cost index.
- Conduct a survey on migration.
- Undertake research on labor potential.

5 Implementation Outline

5.1 General Principles

International standards and best practices will be used wherever feasible.

Development projects will be coordinated with international and national partners wherever appropriate. Their needs, suggestions and support will be taken into account.

A new approach, standard, or best practice will be introduced only if it is possible to cite a practical example from another country and/or after conducting a thorough feasibility exercise.

All new procedures and systems will be tested prior to use in production. In particular, every new or substantially redesigned questionnaire will be tested prior to use, every redeveloped system will run in parallel with the existing one and/or be phased in, for example on a questionnaire by questionnaire, or survey by survey, basis.

5.2 Shortage of Human Resources

The set of projects undertaken during the SMP period and the timing of their implementation are more likely to be constrained by shortage of skilled human resources – especially experienced Central Office staff – than by financial considerations.

Training will help expand the human resource base in the medium term. However, particularly in the short term it will actually reduce the human resources available for developmental activities as staff involved in developments may very well also be candidates for training.

Developmental resources available in the regions will be identified and utilised. Whilst in the short term there may be few, in the longer term, after office consolidation, recruitment and training there should be a pool to draw on.

5.3 Assumptions/Risks

Given that an assumption is the mirror image of a risk, risks to successful execution of the SMP may be expressed in terms of the assumptions of which they are a reflection. The assumptions are as follows.

- The ongoing drive for economic and social reform continues.
- The ARKS has period of stability in terms of governance.
- The required reductions in number of government employers are not too severe.
- The funding of ARKS' regular programme by Government stays at roughly the same level throughout the period.
- The Government continues to support ICT development for the five years from 2010 onwards at roughly the same level as for 2008-2009.

5.4 Sustainability Issues

Most strategic objectives refer to infrastructure creation and enhancement.

Once the new procedures have been introduced they are unlikely to require more resources than the procedures they replace. On the contrary, coupled with new systems and office consolidation, they should produce substantial efficiencies and release resources well in excess of the staff reduction targets set by the Government. The surplus resources will be more than sufficient to support training activities and the relatively modest proposals for expansions in statistical program through new surveys and survey modules.

Some portion of the efficiency gains will be spent in ensuring that salaries are sufficiently competitive to attract and retain skilled professionals. Coupled with a substantial training programme, the stock of skilled professional staff can be expected to increase

The new application programs, with a reasonable degree of maintenance, including a modest level of incremental improvement, can be expected to have a ten year life span, or more, before needing substantial replacement. Maintenance costs will be significant, but this is a totally normal and expected situation that has to be recognised and dealt with at Government level.

There is no purchase of proprietary software envisaged for which license maintenance will be problematic.

The new hardware will have a relative short effective life span. Again this is expected and must be allowed for in general government budgeting.

5.5 Implementation Schedule and Resources

A table indicating the proposed implementation schedule and the financial resources required is provided in Annex 6.

6 Investment and Financing Plan

6.1 Resource Requirements

Implementation of the strategic directions outlined in the SMP requires investment in physical facilities and technical services. Major investments are expected with regard to IT and communications infrastructure needs. Recurrent costs for service and maintenance of hardware, software and auxiliary facilities must be fully budgeted to ensure sustainable operation.

Improvement of organizational and analytical capacity of the ARKS envisaged in this Plan could involve acquisition of consulting and other services, possibly from outside Kazakhstan depending on the skills required and expertise available in Kazakhstan. In addition, general operating costs, including salaries and other expenses, will be impacted by the results of the ongoing discussion on public administration reform.

6.2 Financing Plan

The ARKS plans to rely primarily on budgetary allocations from the Government in financing the envisaged activities. However, depending on demand, ARKS may seek financial resources from external sources, particularly with regard to acquisition of international expertise in statistical operations or IT services and investments. The provisional sources of funding for the various activities are indicated in the table in Annex 6.

7 Monitoring and Evaluation

7.1 Measurable Results

During the execution of SMP, the following measurable results will be achieved.

A. Improve Legal and Organizational Infrastructure

To introduce more comprehensive statistical legislation, the amendments in Law on Statistics will be prepared and submitted to Parliament. Accepting these amendments will modify the Kazakh statistical legislation in line with the best world practice.

To improve the coordination between governments bodies involved in statistics, the current set of agreements between agencies will be revised, new agreements signed and Inter-Agency Council established.

To adopt a more efficient and effective territorial structure (1) the new geographical structures with many fewer offices is implemented and (2) the total number of civil servants is reduced.

To adopt a more efficient and effective organizational structure (1) the ARKS Central Office will be re-organized, (2) the ARKS core functions will be strengthened, and (3) the relationship between ARKS and ICC will be optimized.

To introduce an effort recording system a set of mutually exclusive and exhaustive operations/projects covering all ARKS activities will be developed.

To introduce a quality management program, a quality policy – including continual quality improvement - and a quality evaluation program - will be developed.

B. Improve Human Resources

To introduce performance management, career development and staff assignment programs a bonus recording and management system as well as a rotation program will be designed and implemented, staff is trained.

To implement a training strategy, the generic training needs and training facilities and sources will be inventoried, an annual training review procedure for each staff member will be implemented, and annual training targets for each office will be set.

To create the institutional infrastructure for training, the administrative unit in ARKS Central Office, responsible for training will be organized and Training Center will be established.

To support education abroad, the program of education abroad which includes main foreign partners and sources of founding will be developed.

To introduce more proactive and coordinated recruitment procedures, the best international experience will be investigated and implemented and relations with universities will be created.

C. Improve Statistical Infrastructure

To improve the Statistical Register, the updating procedure will be improved, extra economic variables will be included within Register and profiling surveys will be conducted.

To introduce the Population Register, creation and maintenance procedures will be defined, arrangements for securing data from the identified administrative sources will be secured, and Register will be built and tested.

To introduce the Dwelling Register, creation and maintenance procedures will be defined, arrangements for securing data from the identified administrative sources will be secured, and Register will be built and tested.

To develop metadata the set of data element definitions and multi-lingual glossary will be introduced.

To improve questionnaire design procedures, guidelines for all types of questionnaires will be prepared, all existing questionnaires will be reviewed and new questionnaires will be designed in line with new standards.

To develop sampling methods, the current suite of economic surveys will be reviewed to determine which can be conducted on a sample basis without serious data loss to users and each of these surveys will be redeveloped as a sample survey.

To enhance analysis function, the analytical needs of users will be determined, new analysis methods will be developed and standard set of analytical tools for statistical presentations will be established.

D. Improve User, Provider and Statistical Agency Relations

To improve user consultation, the Statistical Council will meet every six months, and a user satisfaction survey will be conducted regularly every three years.

To enhance dissemination and marketing procedures, the dissemination and marketing strategies will be developed, international standards of data dissemination will be implemented, output data warehouse will be improved, and data access will be monitored and summarized.

To improve provider policies, respondent rights and responsibilities will be defined and promulgated, respondent burden measurement system will be implemented and respondent burden reduction targets will be defined and monitored.

E. Improve Information Processing Infrastructure

To develop integrated processing system, the warehouse and online analytical processing and web-portal for data collection and for data dissemination will be developed.

To build institutional ICT capacity, the current IT Unit will be upgraded into an IT Department.

F. Improve Physical Infrastructure

To upgrade hardware and software, computers, servers and other equipment for use in the Central Office, territorial offices and ICC will be purchased and installed.

To improve communications network, the medium and long term data transmission needs will be assessed.

To improve territorial office accommodation, assessment of the accommodation provided in each office will be conducted, an accommodation restructuring and improvement plan will be developed and the accommodation improvements will be undertaken.

G. Conduct Population Census

To conduct the population census, preparations will be made, the census will be conducted, data will be collected and processed, and results will be published.

H. Improve Individual Subject Matter Programs and Methodologies

To improve consistency of macro-economic statistics, supply and use tables and input-output tables will be developed, and double deflation technique implemented.

To revise current methods in line with revised international standards, the key classifications, SNA methodology and price statistics methodology will be revised.

To develop the micro-economic statistics, enterprise demographics, energy, innovations and business statistics will be developed, and structural surveys will be rationalized.

To develop agriculture statistics, the agriculture census will be completed and its results will be published and used to create the agricultural register, the system of village statisticians will be liquidated, and sample surveys to evaluate the agriculture production in informal sector will be conducted.

To create time series, discrete data will be collected, deflation technique will be improved, seasonal adjustment will be implemented, and time series will be formed and published.

To improve measurement of non-observed economic activity, the estimates in line with best international practice will be prepared.

To improve social statistics, modules on education, health, acceptability of drinking water, cost of living, and environment statistics will be developed.

To improve labor statistics, estimates of labor cost index, trade migration and “labor potential” will be produced.

7.2 Assessment of Strategic Outcomes

As stated in Section 3.3, the target situation in which the KNSS would like to find itself on completion of the SMP may be expressed in terms of the five measurable strategic outcomes. They are listed below together with the indicators by which their achievement may be measured. The intention is that, collectively, the outcome measures and indicators constitute a *balanced score card* covering all important aspects of the KNSS. In this regard it is worth noting that international and donor agencies are covered as both users and sponsors.

Users Are More Satisfied

- improved results in user opinion surveys;
- improved results in independent reviews of data output and quality, for example IMF ROSC;
- increases in ARKS website accesses and down loads;
- increases in the frequency with which subject matter specialists meet with users to discuss data outputs and priorities;
- the number and tone of references to the ARKS in the media.

Data Providers Are More Motivated

- higher, or at least not declining, response rates;
- fewer outright refusals;
- fewer complaints regarding burden received by the ARKS
- fewer adverse comments in the media;
- increase in proportion of electronic reporting.

Sponsors Are More Supportive

- the operating budget received from the government remains same or increases relative to the budgets of other government agencies;
- the funds received for special developments remain at a high level
- the support received from foreign donor organisation remains same or increases;
- changes are made in legislation so that the ARKS reports to President directly

Staff Are More Motivated and Skilled

- employee satisfaction surveys conducted and results indicate improvement;
- improved retention rates amongst younger, more mobile staff;
- reduction in the number of job vacancies;
- reduction in sick leave;
- increase in the amount of training received overall and by job type and level;
- operational performance measures improve
- more development projects are completed satisfactorily, on time and within budget.

National Statistical System Is Better Coordinated

- increase in the frequency and regularity of meetings between ARKS and each of the other statistical agencies;
- more current and pertinent memoranda of understanding between ARKS and each of the other statistical agencies ,

ANNEXES

Annex 1: Abbreviations

Annex 2: Reference Documents

Annex 3: Kazakh National Statistical System

Annex 4: ARKS Staff (as of October 2007)

Annex 5: ARKS Central Office Structure

Annex 6: Schedule and Resource Estimates

Annex 1: Abbreviations

ARKS	Agency of the Republic of Kazakhstan on Statistics
BoP	Balance of Payments
BPM5	Balance of Payments Manual Revision 5
CO	Central Office
COFOG	Classification of the Functions of the Government
COICOP	Classification of Individual Consumption by Purpose
CPA	Classification of Products by Activities
DSBB	Data Standards Bulletin Board (IMF)
EU	European Union
GDP	Gross Domestic Product
GFSM	Government Financial Statistics Manual
GRP	Gross Regional Product
HBS	Household Budget Survey
ICC	Information Calculating Centre
ICT	Information and Communications Technology
ILO	International Labor Organization
IMF	International Monetary Fund
ISO	International Standards Organisation
KNSO	Kazakh National Statistical Office
KNSS	Kazakh National Statistical System
LCI	Labour Cost Index
MFSM	Monetary and Financial Statistics Manual
MoF	Ministry of Finance
NA	National Accounts
NACE	Standard Classification of Economic Activities of the European Communities
NBK	National Bank of Kazakhstan
NOE	Non-Observed Economy
OECD	Organisation for Economic Cooperation and Development

OLAP	Online analytical processing
PPP	Purchasing power parity
PSW	Program of Statistical Works
QMS	Quality Management System
SDDS	Special Data Dissemination Standard
SMP	Statistical Master Plan
SNA	System of National Accounts
SPSD	State Program of Statistical Development
SWG	Statistical Working Group
TACIS	Technical Aid to the Commonwealth of Independent States (European Commission)
TIKA	Turkish International Cooperation and Development Agency
TQM	Total Quality Management
UNDP	United Nations Development Program
UNECE	United Nations Economic Commission for Europe
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNSC	United Nations Statistical Commission
UNSD	United Nations Statistical Division
VPND	Virtual Private Network Daemon
VPN	Virtual Private Network
WB	World Bank
WHO	World Health Organization

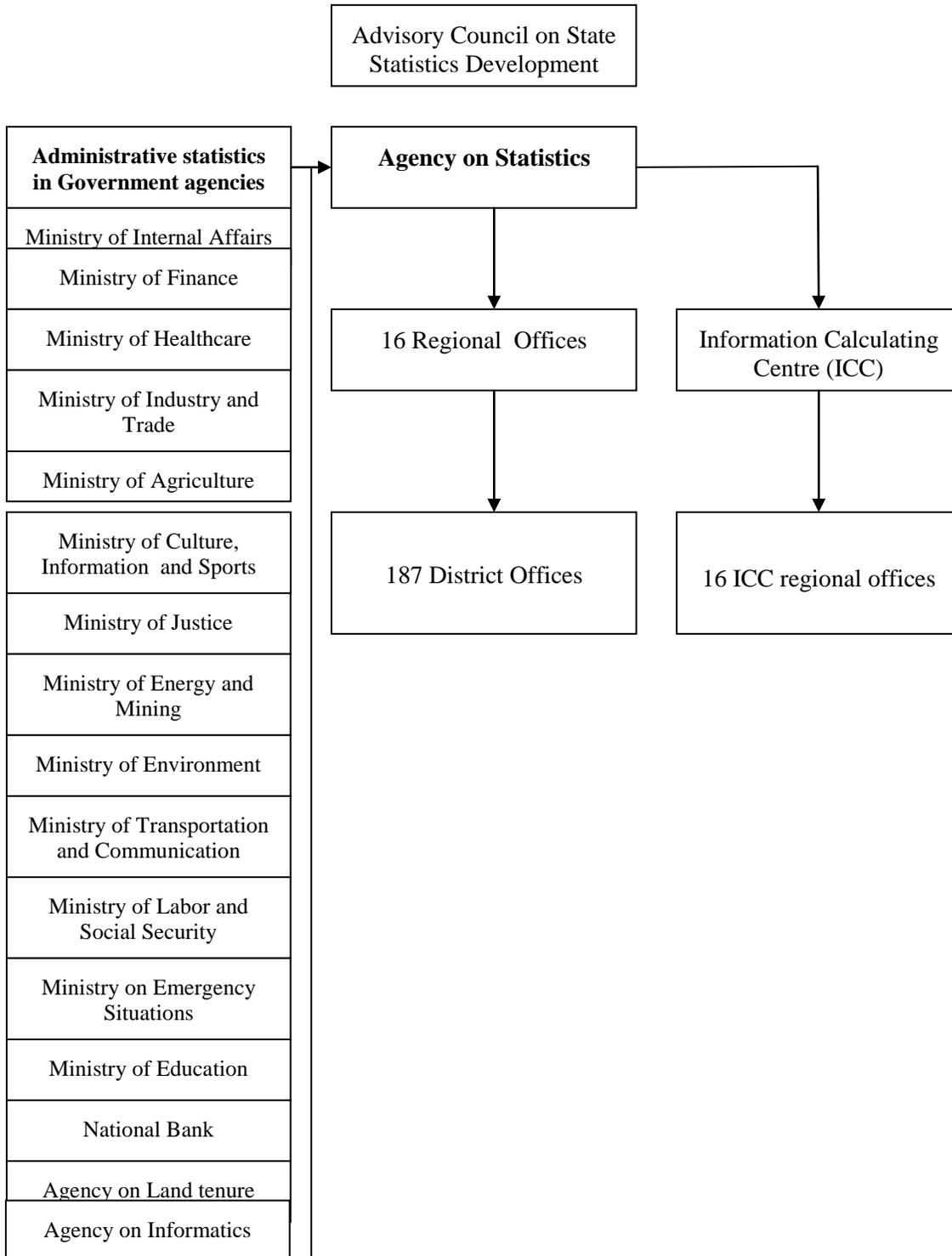
Annex 2: Reference Documents

United Nations Statistics Division: *Fundamental Principles of Official Statistics*

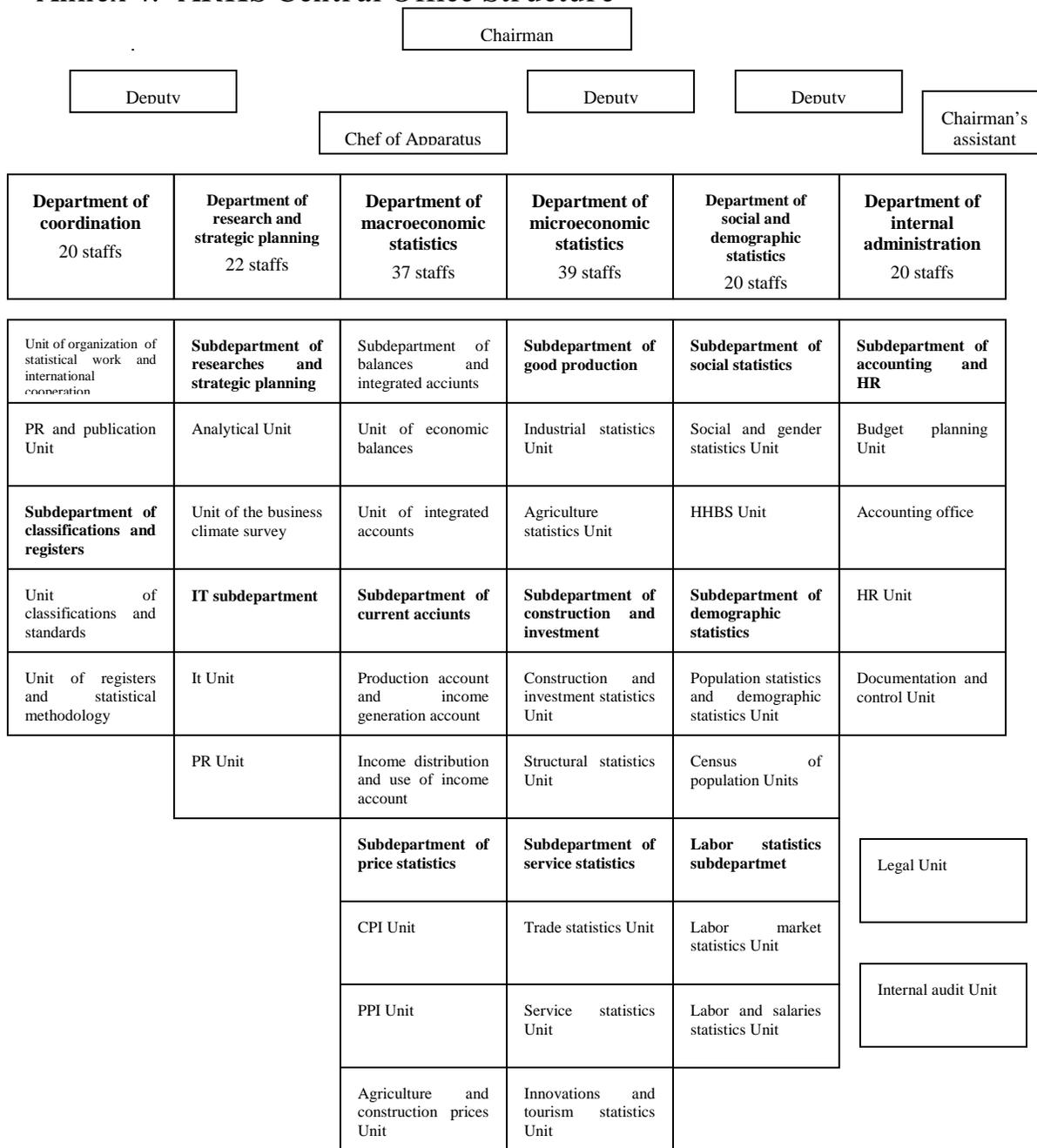
United Nations Statistics Division: *Handbook on the Operation and Organization of a Statistical Agency*, December 2001

World Bank: Guidelines for Preparing a Statistical Master Plan,

Annex 3: Kazak National Statistical System



Annex 4: ARKS Central Office Structure



Annex 5: ARKS Staff (as of October 2007)

Category of staff	Central Office				Regional Offices			
	Actual number	Vacancies	New staffs	Promoted staffs	Actual number	Vacancies	New staffs	Promoted staffs
Management	16	0	0	2	49	0	0	1
Specialists	103	32	41	6	1137	104	136	5
Technical staff	16	15	16	0	2536*	214	359	0
Total	135	47	57	8	3722	318	495	6
*Including 2319 village statisticians								

Annex 6: Schedule and Resource Estimates

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
A	Improve Legal and Organisational Infrastructure									
A1	1.1.	Establishing a work group to draft amendments to the Law of the RK "On State Statistics"	0.0					Q1 2008		Does not need financing
A1	1.2.	Drafting amendments to the Law of the RK "On State Statistics"	0.0					Q3 2008		Does not need financing
A1	1.3.	Coordination of the draft with the interested parties		1.0				Q1 2009	1.0	Republican budget
A1 Total			0.0	1.0	0.0	0.0	0.0		1.0	
A2	3.1.	Establishing a permanent Interagency Council on Statistics (ICS)	0.0					First half 2008		Does not need financing
A2	3.2.	Reorganization of interagency interaction/cooperation on statistical observations	0.0	0.0				2008-2009		Does not need financing
A2	3.3.	Developing rules for sharing administrative data and other documents on data usage for statistical purposes						2008		Does not need financing
A2 Total			0.0	0.0	0.0	0.0	0.0		0.0	

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
A3	2.1.	Introducing changes into the organizational structure of the central office of ARKS and its territorial offices	0.0					2008		Does not need financing
A3 Total			0.0	0.0	0.0	0.0	0.0		0.0	
A4	2.2.	Redistribution of functions between the authorized body (central office) and dependent entity (Data Processing Center)	0.0					2008		Does not need financing
A4 Total			0.0	0.0	0.0	0.0	0.0		0.0	
B	Improve Human Resources									
B2	12.1.	Equipping classes to train personnel		19.2				2009	19.2	Republican budget
B2	12.2.	Training civil servants in various fields of statistics		30.0	30.0	30.0	120.0	Annually from 2009	210.0	Republican budget
B2	12.3.	Developing and implementation of the system “Young statistician” and educational programs in statistics for schools and pre-school children			10.0			2010	10.0	Republican budget
B2	12.4.	Developing education modules on national statistics, adaptation of foreign education modules in various fields of statistics		10.0				2009	10.0	Republican budget
B2	12.5.	Returning “Statistics” to the curricula of the universities in the country	0.0					2008		Does not need financing

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
B2	12.6.	Preparing educational modules on mathematics, geography and other subject matters for universities and colleges		5.0	5.0	5.0	20.0	Annually from 2009	35.0	Republican budget
B2	12.7.	Introducing distant learning system and corporate training of the personnel			15.0			2010	15.0	Republican budget
B2	12.8.	Organizing training of the staff in foreign universities and statistical institutions	15.0	15.0	15.0	15.0	60.0	Annually	120.0	Republican budget
B2	12.9.	Conducting annual conferences on statistical issues	1.0	1.0	1.0	1.0	4.0	Annually	8.0	Republican budget
B2	12.10.	Preparing a course on statistics for the “Educational TV” project	0.5					2008	0.5	Republican budget
B2	12.11.	Conducting workshops and “open days”	6.0	6.0	6.0	6.0	24.0	Annually	48.0	Republican budget
B2 Total			22.5	86.2	82.0	57.0	228.0		475.7	
B3	13.1.	To establish “Training and Research Center for Statistics” on the basis of the Information and Computing Center of the ARKS and to train personnel of the statistical services.		93.8	54.6	54.6		2009-2011	203.0	Republican budget
B3 Total			0.0	93.8	54.6	54.6	0.0		203.0	
B4	9.1.	International workshop on climate change and environmental statistic	2.0	2.0	2.0	2.0	8.0	Annually	16.0	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
B4	9.2.	International workshop on national accounts	2.0	2.0	2.0	2.0	8.0	Annually	16.0	Republican budget
B4	9.3.	International workshop on demographic statistics	2.0	2.0	2.0	2.0	8.0	Annually	16.0	Republican budget
B4	9.4.	International workshop on social statistics	2.0	2.0	2.0	2.0	8.0	Annually	16.0	Republican budget
B4	9.5.	International workshop on macroeconomic statistics	2.0	2.0	2.0	2.0	8.0	Annually	16.0	Republican budget
B4	9.6.	International workshop on statistics of the non-observed economy	2.0	2.0	2.0	2.0	8.0	Annually	16.0	Republican budget
B4	9.7.	International workshop on competitiveness statistics	2.0	2.0	2.0	2.0	8.0	Annually	16.0	Republican budget
B4	9.8.	International workshop on classifications	2.0	2.0	2.0	2.0	8.0	Annually	16.0	Republican budget
B4	9.9.	International workshop on statistical registers	2.0	2.0	2.0	2.0	8.0	Annually	16.0	Republican budget
B4	9.10.	International workshop on service sector statistics	2.0	2.0	2.0	2.0	8.0	Annually	16.0	Republican budget
B4	9.11.	International workshop on metadata and information technologies	2.0	2.0	2.0	2.0	8.0	Annually	16.0	Republican budget
B4	9.12.	International workshop on data dissemination	2.0	2.0	2.0	2.0	8.0	Annually	16.0	Republican budget
B4	9.13.	Workshop of Oslo Group on Energy Statistics	2.0	2.0	2.0	2.0	8.0	Annually	16.0	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
B4	10.1.	Statistical institutions of the Central Asian countries	3.0	3.0	3.0	3.0	12.0	Annually	24.0	Republican budget
B4	10.2.	Statistical institutions of the Economic Cooperation Organization (ECO) countries	3.0	3.0	3.0	3.0	12.0	Annually	24.0	Republican budget
B4	10.3.	Statistical institutions of the EU countries	3.0	3.0	3.0	3.0	12.0	Annually	24.0	Republican budget
B4	10.4.	Other countries and organizations	4.0	4.0	4.0	4.0	16.0	Annually	32.0	Republican budget
B4	10.5.	UN Economic Commission for Europe	3.0	3.0	3.0	3.0	12.0	Annually	24.0	Republican budget
B4	10.6.	Eurostat	3.0	3.0	3.0	3.0	12.0	Annually	24.0	Republican budget
B4	11.1.	Session of the UN Statistical Commission	1.0	1.0	1.0	1.0	4.0	Annually	8.0	Republican budget
B4	11.2.	Session of the Conference of European Statisticians	1.0	1.0	1.0	1.0	4.0	Annually	8.0	Republican budget
B4	11.3.	Meeting of the heads of the CIS Statistical Services	1.0	1.0	1.0	1.0	4.0	Annually	8.0	Republican budget
B4	11.4.	Meeting of the heads of the statistical services of the ECO countries	1.0	1.0	1.0	1.0	4.0	Annually	8.0	Republican budget
B4	11.5.	Conducting the second meeting of the heads of statistical services of the ECO countries in Astana	18.0	18.0	18.0	18.0	72.0	Jun-09	144.0	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
B4	11.6.	Conducting the fourth meeting of the heads of statistical services of the ECO countries in Astana (Statistical Forum of the region)	18.0	18.0	18.0	18.0	72.0	Jun-11	144.0	Republican budget
B4 Total			85.0	85.0	85.0	85.0	340.0		680.0	
C	Improve Statistical Infrastructure									
C1	6.1.	Improving attributes and developing the information subsystem to maintain the State statistical register		35.0				2009	35.0	Republican budget
C1 Total			0.0	35.0	0.0	0.0	0.0		35.0	
C2	6.3.	Developing the State register of the population		96.0	6.0			2009-2010	102.0	Republican budget
C2	8.45.	Updating population register; implementing statistical register of the population on the basis of State Data Bade "Physical persons"				90.0		2011	90.0	Republican budget
C2 Total			0.0	96.0	6.0	90.0	0.0		192.0	
C3	6.4.	Developing the Register for social statistics	17.5					2008	17.5	Republican budget
C3 Total			17.5	0.0	0.0	0.0	0.0		17.5	
C5	7.5.	Developing unified statistical tools to be used for state statistical forms and data reporting by line ministries			0.0			2010		Republican budget
C5 Total			0.0	0.0	0.0	0.0	0.0		0.0	

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
C6	6.6.	Developing enterprise sample surveys by industries		5.0				2009	5.0	Republican budget
C6	6.7.	Developing survey tools and guidelines to conduct sample surveys in the industries of the economy			10.0			2010	10.0	Republican budget
C6 Total			0.0	5.0	10.0	0.0	0.0		15.0	
D	Improve User and Provider Relations									
D1	14.5.	Dissemination of advertising products and press-releases for target groups of users	8.5	8.5	8.5	8.5	34.0	Annually	68.0	Republican budget
D1Total			8.5	8.5	8.5	8.5	34.0		68.0	
D2	14.1.	Adaptation of the UN recommendations for statistical organizations on interaction with mass media	0.0					2008		Does not need financing
D2	14.2.	Developing and introducing data presentation standards for various groups of users		5.0				2009	5.0	Republican budget
D2	14.3.	Developing and introducing user oriented data dissemination standards			5.0			2010	5.0	Republican budget
D2	14.7.	Producing and broadcasting TV programs on conducting statistical observation in the field of	24.0	24.0	24.0	24.0	96.0	Annually	192.0	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
		demography and social statistics								
D2	14.8.	Data dissemination through mass media (newspapers, radio)	5.0	5.0	5.0	5.0	20.0	Annually	40.0	Republican budget
D2 Total			29.0	34.0	34.0	29.0	116.0		242.0	
D3	14.4.	Improvement interaction with data suppliers using single window approach in the regional bodies		72.0	158.4			2009	230.4	Republican budget
D3	14.6.	Introducing the program of interaction with respondents (by groups)	5.0	5.0	5.0	5.0	20.0	Annually	40.0	Republican budget
D3 Total			5.0	77.0	163.4	5.0	20.0		270.4	
E	Improve Information Processing Infrastructure									
E1	5.2.	Development and implementation of the components of the integrated statistical system, electronic data collection, primary data storage, metadata system, multidimensional data processing and analytical systems, spatial statistics, network and web-solutions (e-statistics)		305.0	396.5	61.5		2009-2011	763.0	Republican budget
E1	6.5.	Integration of the register information systems			1.5	70.0		2010	71.5	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
E1	6.12.	Introducing new technologies in household surveys 1) acquisition of the CATI system (computer assisted telephone interview) 2) training to use CATI		17.0	225.0	225.0		2009	467.0	Republican budget
E1Total			0.0	322.0	623.0	356.5	0.0		1301.5	
F	Improve Physical Infrastructure									
F1	4.1.	Equipping staff with computers, servers, and licensed software		140.0	80.0	80.0		2009-2011	300.0	Republican budget
F1 Total			0.0	140.0	80.0	80.0	0.0		300.0	
F3	5.1.	(Re)equipment of 3490 work places of the ARKS staff		409.5	280.0	288.0		2009-2011	977.5	Republican budget
F3	5.3.	Procurement of vehicles to conduct statistical observations at the regional and district levels		66.0				2009	66.0	Republican budget
F3	5.4.	Servicing and maintenance of the vehicles		132.0	132.0	132.0		2009-2011	396.0	Republican budget
F3 Total			0.0	607.5	412.0	420.0	0.0		1439.5	
G	Plan and Conduct Population Census (Note: this list is incomplete)									
G	5.5.	Renting premises for storing the materials of the 2009 Population census				5.3		2011	5.3	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
G	7.31.	Publication of the 2009 Population Census results (electronic map, data dissemination)				28.7		2011	28.7	Republican budget
G Total			0.0	0.0	0.0	34.0	0.0		34.0	
H	Improve Individual Subject Matter Programmes									
H1	7.1.	Developing methodology and tools for balancing the Input-Output tables and Supply and Use tables calculations		15.0				2009	15.0	Republican budget
H1	7.2.	Automatic calculation of macroeconomic estimates			20.0			2010	20.0	Republican budget
H1	7.3.	Developing methodology to obtain estimates of the non-observed economy		5.0				2009	5.0	Republican budget
H1 Total			0.0	20.0	20.0	0.0	0.0		40.0	
H2	6.9.	Expanding and maintaining the network of consumer goods price data collection		114.5	125.9	138.5		2009	378.9	Republican budget
H2	6.10.	Developing indicators of the price statistics			3.3	3.6		2010	6.9	Republican budget
H2	7.4.	Developing statistical tools to observe small businesses		5.0				2009	5.0	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
H2	7.26.	Atmospheric air quality. Revealing social and economic factors and conditions affecting air pollution. Conclusions and recommendations.			2.0			2010	2.0	Republican budget
H2	8.1.	Data collection and processing, calculations and publication of statistical reports by kinds of transport activities		5.0				2009	5.0	Republican budget
H2	8.2.	Improvement of key indicators of investment statistics for small businesses		5.0				2009	5.0	Republican budget
H2	8.3.	Introducing new indicators to estimate competitiveness			5.0			2010	5.0	Republican budget
H2	8.4.	Data collection and processing, calculations and publication of survey results on competitiveness		20.0				2009	20.0	Republican budget
H2	8.5.	Developing new statistical forms and survey programs in view of modern data collection and processing technologies		0.0	0.0			2009-2010		Does not need financing
H2	8.6.	Improvement of the enterprise demography statistics		5.0				2009	5.0	Republican budget
H2	8.7.	Data collection and processing, calculations and publication of statistical data in the field of innovations		5.0				2009	5.0	In the framework of PSW

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
H2	8.8.	Data collection and processing, calculations and publication of statistical data in the field of energy statistics		5.0				2009	5.0	In the framework of PSW
H2	8.9.	Developing calculation techniques in structural statistics		5.0				2009	5.0	In the framework of PSW
H2	8.10.	Developing statistical reporting in trade		10.9				2009	10.9	Republican budget
H2	8.13.	Improvement of the enterprise demography statistics. Developing of module questionnaires	0.0					Ежегодно		In the framework of PSW
H2	8.14.	Development of process of reviewing and checking/verification of interchangeable indicators in various industries			0.0			2010		Does not need financing
H2	8.16.	Data collection and processing, calculations and publications on alternative energy sources		0.0				2009		In the framework of PSW
H2	8.17.	Data collection and processing, calculations and publications in the field of enterprise structural statistics		5.0				Q4 2009	5.0	Republican budget
H2	8.18.	Data collection and processing, calculations and publications in the field of telecommunications statistics		5.0				Q2 2009	5.0	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
H2	8.19.	Data collection and processing, calculations and publications in the field of transport statistics		6.3				Q2 2009	6.3	Republican budget
H2	8.20.	Data collection and processing, calculations and publications in the field of information/communication technologies			8.0			2010	8.0	Republican budget
H2	8.21.	Data collection and processing, calculations and publications in the field of tourism statistics						Q2 2009		In the framework of PSW
H2	8.22.	Introducing short term statistical indicators in accordance with European standards						Q2 2009		In the framework of PSW
H2	8.26.	Developing questionnaires for the environmental statistics						2009		In the framework of PSW
H2	8.34.	Introducing statistical observations in the field of hazardous waste statistics		10.0				2009	10.0	Republican budget
H2	8.47.	Data collection and processing, calculations, publications and survey methodology in the field of short-term enterprise statistics		50.0	50.0			2009-2010	100.0	Republican budget
H2	8.48.	Data collection and processing, calculations, publications and survey methodology in the energy sector		5.0				2009	5.0	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
H2	8.49.	Data collection and processing, calculations, publications and survey methodology in the field of housing construction		8.0	8.0	8.0		2009-2011	24.0	Republican budget
H2	8.50.	Data collection and processing, calculations, publications and methodology to conduct a survey of NPISH		965.0				2009	965.0	Republican budget
H2	8.51.	Data collection and processing, calculations, publications and survey methodology for medium size and small businesses		30.0				2009	30.0	Republican budget
H2	8.52.	Data collection and processing, calculations, publications and methodology to survey manufactured goods markets		35.0				2009	35.0	Republican budget
H2	8.53.	Data collection and processing, calculations, publications and survey methodology in the field of self-organized tourism		10.0				2009	10.0	Republican budget
H2	8.54.	Data collection and processing, calculations, publications and survey methodology for short-term enterprise statistics		35.0	35.0	35.0		2009-2011	105.0	Republican budget
H2	8.55.	Data collection and processing, calculations, publications and methodology to survey wholesale and retail market of construction materials		3.0				2009	3.0	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
H2	8.59.	Data collection and processing, calculations, publications and methodology to survey electronic trade			10.0			2010	10.0	Republican budget
H2	8.60.	Data collection and processing, calculations, publications and survey methodology in the field of microcrediting			18.0			2010	18.0	Republican budget
H2	8.61.	Data collection and processing, calculations, publications and survey methodology in the field of management innovations			20.0			2010	20.0	Republican budget
H2	8.62.	Data collection and processing, calculations, publications and methodology to survey the national innovation system of the Republic of Kazakhstan			20.0			2010	20.0	Republican budget
H2	8.63.	Data collection and processing, calculations, publications and methodology to survey competitiveness of the business environment of the Republic of Kazakhstan			35.0			2010	35.0	Republican budget
H2	8.64.	Data collection and processing, calculations, publications and methodology to survey the wholesale and retail computer markets			20.0			2010	20.0	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
H2	8.65.	Data collection and processing, calculations, publications and methodology to survey activities in the transport sector (logistical services and transport infrastructure) a				60.0		2011	60.0	Republican budget
H2	8.66.	Data collection and processing, calculations, publications and methodology to survey the real estate market in the Republic of Kazakhstan				20.0		2011	20.0	Republican budget
H2	8.67.	Data collection and processing, calculations, publications and methodology to survey oil and energy markets in the Republic of Kazakhstan				35.0		2011	35.0	Republican budget
H2	8.68.	Data collection and processing, calculations, publications and methodology to assess sustainable development indicators for industrial enterprises				3.6		2011	3.6	Republican budget
H2 Total			0.0	1347.7	360.2	303.7	0.0		2011.6	
H3	6.2.	Developing the State agricultural register		80.0	40.0	40.0		2009-2011	160.0	Republican budget
H3	8.11.	Introducing sample surveys in the field of agricultural statistics			40.3			2010	40.3	В рамках ИСР

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
H3	8.12.	Data collection and processing, calculations and publication of survey results in agriculture		5.0				2009	5.0	Republican budget
H3	8.15.	Introducing sample survey of the crop capacity in agriculture		60.0	60.0	60.0		2009	180.0	In the framework of PSW
H3 Total			0.0	145.0	140.3	100.0	0.0		385.3	
H4	7.13.	Developing and implementation of the module “Demographic calculations and forecasting population size”		9.0				2009	9.0	Republican budget
H4	7.22.	Study of natural movement of the population in RK in 1999-2008		2.0				2009	2.0	Republican budget
H4	7.27.	Demographic situation in the RK and demographic forecasting			2.0			2010	2.0	Republican budget
H4	7.30.	Migration in the RK for last 10 years.				2.0		2011	2.0	Republican budget
H4	8.23.	Data collection and processing, calculations and publications on demographic statistics		5.0				2009	5.0	Republican budget
H4	8.25.	Data collection and processing, calculations and publications of statistical reports on migration		5.0				2009	5.0	Republican budget
H4	8.27.	Conducting surveys to study causes of migration						Annually		In the framework of PSW

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
H4	8.29.	Developing and implementation of the module “Demographic calculations and forecasting population size”			15.0			2010	15.0	Republican budget
H4 Total			0.0	21.0	17.0	2.0	0.0		40.0	
H5	6.11.	Adding a module to the living standards survey of 15,000 households (12000 h/h an existing sample + 3000 high income households) to estimate household income with the account for high income group		12.0	12.0			2009	24.0	Republican budget
H5	7.11.	Developing methodology to estimate Gross and Net Enrolment ratios in education		2.0				2009	2.0	Republican budget
H5	7.12.	Developing quality of life indicators in the framework of sustainable development concept for the monitoring purposes				4.0		2011	4.0	Republican budget
H5	7.20.	Study of the gender equality in the RK		2.0				2009	2.0	Republican budget
H5	7.21.	Analysis of the current situation in education for handicapped children. Conclusions and recommendations to introduce new indicators.		2.0				2009	2.0	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
H5	7.28.	Main trends in the health care network and capacity. Recommendation for better accounting in the health care institutions.				2.0		2011	2.0	Republican budget
H5	8.24.	Developing supplementary modules to household surveys on education, health care, access to drinking water, cost of living		5.0				2009	5.0	Republican budget
H5	8.28.	Conducting surveys of reproductive behavior						annually		In the framework of PSW
H5	8.30.	Organizing surveys in the important fields of social statistics						2009		In the framework of PSW
H5	8.35.	Statistical calculations of household income with the account for high income categories			5.0			2010	5.0	Republican budget
H5	8.36.				5.0			2010	5.0	Republican budget
H5	8.37.				5.0			2010	5.0	Republican budget
H5	8.38.				5.0			2010	5.0	Republican budget
H5	8.39.				5.0			2010	5.0	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
H5	8.56.	Data collection and processing, calculations, publications and methodology of the survey of "Living conditions of invalids"		7.5				2009	7.5	Republican budget
H5	8.58.	Data collection and processing, calculations, publications and methodology to conduct a survey "Lifelong training"		7.5				2009	7.5	Republican budget
H5 Total			0.0	38.0	37.0	6.0	0.0		81.0	
H6	6.8.	Expanding the household sample to estimate living standards		34.8	177.0	177.0		2009	388.8	Republican budget
H6	7.6.	Developing approaches to introduce indicators to measure potential labor supply		5.0				2009	5.0	Republican budget
H6	7.7.	Developing approaches to introduce indicators to measure job quality			4.5			2010	4.5	Republican budget
H6	7.8.	Developing approaches to improve methodology of the labor force survey. Upgrading sampling methods and survey questionnaires.		4.2				2009	4.2	Republican budget
H6	7.9.	Developing methodology and approaches to construct sample to survey cost of labor		5.0				2009	5.0	Republican budget
H6	7.10.	Developing methodology and approaches to measure labor migration			5.0			2010	5.0	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
H6	7.14.	Developing program and tools and conducting a pilot survey to implement labor force survey and to calculate cost of labor index (in three regions)		6.4				2009	6.4	Republican budget
H6	7.15.	Developing program and tools and conducting a pilot survey of employment in the informal sector of the economy (in three regions)		2.1				2009	2.1	Republican budget
H6	7.16.	Developing program and tools and conducting a pilot survey to work out indicators to measure potential labor supply (in three regions)			2.1			2010	2.1	Republican budget
H6	7.17.	Introducing indicators to measure potential labor supply in the country's labor market				11.2		2011	11.2	Republican budget
H6	7.18.	Developing program and tools and conducting a pilot survey to introduce indicators to measure job quality (in three regions)				2.1		2011	2.1	Republican budget
H6	7.19.	Developing program and tools and conducting a pilot survey of external and internal labor migration (in three regions)				2.1		2011	2.1	Republican budget
H6	7.23.	Analysis of the situation and estimation of variable labor costs in the RK		2.0				2009	2.0	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
H6	7.24.	Study of informal employment in the labor market of the RK			2.0			2010	2.0	Republican budget
H6	7.25.	Analysis of current labor costs in the RK			2.0			2010	2.0	Republican budget
H6	7.29.	Compensation of employees and its components in the RK				2.0		2011	2.0	Republican budget
H6	8.31.	Developing tools for the labor force survey, including construction of sample and revision of questionnaires		5.0				2009	5.0	Republican budget
H6	8.32.	Developing calculations of the cost of labor						2009		In the framework of PSW
H6	8.33.	Conducting surveys of external and internal labor migration				2.1		2011	2.1	In the framework of PSW
H6	8.40.	Data collection, processing, calculations and publications on the cost of labor index			36.3			2010	36.3	Republican budget
H6	8.41.	Data collection, processing, calculations and publications on the potential labor supply					36.3	2012	36.3	Republican budget
H6	8.42.	Data collection, processing, calculations, publications, and methodology of labor force survey			24.2			2010	24.2	Republican budget

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
H6	8.43.	Data collection, processing, calculations and publications on job quality indicators (worthy work)					24.2	2012	24.2	Republican budget
H6	8.44.	Data collection, processing, calculations and publications of survey results on external and internal labor migration					24.2	2013	24.2	Republican budget
H6	8.46.	Study of the labor capacity in the country	5.0	5.0	5.0	5.0	20.0	annually	40.0	Republican budget
H6	8.57.	Data collection and processing, calculations, publications and methodology to survey cost of labor and construct the cost of labor index		16.5	16.5	16.5		2009	49.5	Republican budget
H6 Total			5.0	86.0	274.6	218.0	104.7		688.3	
NP	Not Part of SMP									
NP	6.13.	Census of the economic agents working in the trade sector			750.0	750.0		2010	1500.0	Republican budget
NP	6.14.	Census of the economic agents working in the services sector			50.0	50.0		2010	100.0	Republican budget
NP Total			0.0	0.0	800.0	800.0	0.0		1600.0	
OP	Operations									
OP	6.15.	Processing enterprise reports on the basis of statistical forms		500.0	500.0	500.0		2009	1500.0	Republican budget
OP Total			0.0	500.0	500.0	500.0	0.0		1500.0	

SMP Project	Action Plan #	Activity	Cost 2008	Cost 2009	Cost 2010	Cost 2011	Cost 2012-15	Time	Total Cost	Source of financing
		TOTAL	172.5	3748.7	3707.6	3149.3	842.7		11620.8	