



USAID  
ՀԱՅԱՍՏԱՆԻ ՍՈՑԻԱԼԱԿԱՆ  
ԲԱՐԵՓՈՒՆՈՒՄՆԵՐԻ ԾՐԱԳԻՐ  
ARMENIA SOCIAL TRANSITION PROGRAM  
14 Սուճրուկյան, Երևան 14 Sundukyan, Yerevan  
Telephone: (3741) 27-31-75/6/9  
E-mail: rvaughan@padco.am  
*PADCO Inc., in collaboration with Abt Associates, AIHA, Counterpart  
International, QED, AMEG*

**REPORT No 24**

**WORKPLAN FOR PROGRAM TO  
CREATE PERSONIFIED REPORT-  
ING AND RECORD KEEPING  
SYSTEM FOR THE SOCIAL IN-  
SURANCE FUND OF ARMENIA**

**Prepared for:**  
**The Social Insurance Fund of Armenia**

**Prepared by:**  
**PADCO Armenia Social Transition Program**

**June 27, 2000**

PLANNING AND DEVELOPMENT COLLABORATIVE INTERNATIONAL

*Development Solutions for the 21<sup>st</sup> Century*

## **PREFACE**

Under USAID Contract No. 111-C-00-00-00114-00, PADCO is providing assistance to the Government of Armenia on social sector reform. Under Task 1C, the AST is helping the GOA to establish information systems required to support the management and implementation of improved social insurance systems. A major part of the reform of these information systems will be the creation of a system of personified reporting by enterprises to the Social Insurance Fund which will allow the Fund to maintain records of the work history, wages and contributions paid for all working Armenians. This will allow more accurate calculation of benefits for those covered under different social insurance programs, will allow the Fund to make more accurate projections of revenues and expenditures and will simplify the receipt of benefits by the Armenian people. The introduction of personified reports will also allow the simplification of reporting to the GOA by enterprises.

This report describes the reasons for introducing personified reporting, how the system will be implemented, and also describes how an integrated reporting and revenue collection mechanism could operate.

## CONTENTS

<b>PREFACE</b> .....	<b>2</b>
<b>CONTENTS</b> .....	<b>3</b>
<b>1. INTRODUCTION</b> .....	<b>4</b>
<b>2. IMPLEMENTATION OF COLLABORATIVE PROJECT OF PERSONIFYING REPORTING TO THE SOCIAL INSURANCE FUND (SIF)</b> .....	<b>4</b>
<b>3. WHY ARMENIA SHOULD IMPLEMENT PERSONIFIED REPORTING</b> .....	<b>5</b>
3.1. WHAT IS PERSONIFIED REPORTING .....	5
3.2. THE BENEFITS FROM PERSONIFYING REPORTING .....	5
3.2.1. <i>For the State Pension System, Personification</i> . . . . .	5
3.2.2. <i>For Other Social Protection Programs, Personification</i> . . . . .	6
3.2.3. <i>For Enterprises and Individuals, Personification</i> . . . . .	6
<b>4. A DESCRIPTION OF THE PERSONIFICATION PROGRAM</b> .....	<b>6</b>
4.1. THE CURRENT SYSTEM OF ENTERPRISE REPORTING .....	6
<b>ATTACHMENT A: EXPERIENCE WITH PERSONIFIED REPORTING AND INDIVIDUAL IDENTIFICATION NUMBERS IN SELECTED COUNTRIES</b> .....	<b>9</b>
A.1. PERSONIFIED REPORTING IN UKRAINE.....	9
A.2. PERSONIFIED REPORTING IN THE FEDERATION OF RUSSIA .....	10
A.3. PERSONAL INSURANCE SYSTEM IN KYRGYZSTAN .....	10
A.4. PERSONALIZED INSURANCE AND NUMBERING IN BELGIUM .....	11
A.5. CIVIL POPULATION REGISTER (CPR) IN DENMARK .....	11
A.6. NETHERLANDS .....	13
<b>ATTACHMENT B: HOW PERSONAL IDENTIFICATION NUMBERS WILL BE ASSIGNED AND USED FOR PERSONIFIED REPORTING SYSTEMS</b> .....	<b>14</b>
<b>ATTACHMENT C: A PROPOSAL TO SIMPLIFY ENTERPRISE REPORTING SYSTEMS</b> .....	<b>16</b>
C.1. HOW A UNIFIED REPORTING SYSTEM MIGHT BE IMPLEMENTED IN ARMENIA .....	16
C.2. OPTIONS FOR IMPLEMENTING THE UNIFIED REPORTING SYSTEM.....	17
C.3. STAGE 1 IN IMPLEMENTING A UNIFIED REPORTING SYSTEM.....	18
C.4. STAGE 2 IN IMPLEMENTING A UNIFIED REPORTING SYSTEM.....	19
<b>ATTACHMENT D: WORKPLAN TO DEVELOPMENT AND IMPLEMENTATION OF PERSONAL ACCOUNTS REGISTRATION, NUMBERING AND ANALYSES SYSTEM (PARNAS) BY PHASES</b> .....	<b>21</b>

## 1. INTRODUCTION

Beginning in 2001, the AST will assist the SIF and MOSS in implementing a program to personify the system by which enterprises report to the Social Insurance Fund on the wages and contributions of each employee on whose behalf the enterprise pays contributions. This personified system will replace the current reporting system under which the enterprises report to the Fund only their total wage bill and total contributions.

Personification of reporting is the first step toward creating a nationwide personified database of all working Armenians. This database will record each person's work history – months worked and other service credits, wages earned, and contributions paid to the Social Insurance Fund – and will be regularly and automatically updated. A database of working people – their work history and payroll contributions paid – is the basis of properly administering social insurance programs.

The following section of this report briefly describes the steps necessary for implementing the personification program. The subsequent section describes the reasons for adopting a personified reporting system. The third section outlines a process for implementing personified reporting. The fourth section describes how the opportunities created by moving toward personified reporting and a single tax collector (as is proposed in a pilot program to be conducted this year in Shirak Marz) could be used to greatly simplify both reporting by enterprises and report processing by the GOA by creating a single information processing center that would serve the needs of multiple ministries.

Attachment A briefly describes the experience with the development of personified reporting in a number of countries. Attachment B describes the procedures for the assignment of Personal Numbers (PN) by the Nemrout Center which will be used as the identification number for maintaining personified reports on the work history of all working people in Armenia. Attachment C describes an alternative reporting system that may be required should Armenia consolidate tax collection and the collection of payroll contributions to a single entity. Attachment D describes the workplan for the implementation of personified reporting.

## 2. IMPLEMENTATION OF COLLABORATIVE PROJECT OF PERSONIFYING REPORTING TO THE SOCIAL INSURANCE FUND (SIF)

The program of personifying the system of reporting and record keeping by enterprises to the Social Insurance Fund will take about three years. The detailed steps for the completion of the work are described in Attachment B. It will require changes in reporting systems for enterprises with related training to enterprise accountants, the development of a new personified database and updating procedures to be maintained by the Social Insurance Fund, the development of new database management systems for local SIF offices, and many other changes.

To ensure the timely and effective management of this process, we propose that the SIF establish a project management working group and that this group meet once each month. This "Management Working Group" should include representatives of the SIF, the Ministry of Social Security, the Yerevan Institute for Computer Research and Development (YIRCD), and PADCO. Each month a report would be received from the SIF specialists and Mergelyan specialists on progress made during the month and plans for the subsequent month. Problems and issues requiring collective solution would be discussed and solutions developed.

In addition to the Management Working Group, the SIF Management Working Group would establish two technical working groups that would report to the Management Working Group. These technical working groups would address the following issues:

1. A Working Group on Personification Policy – including representatives from SIF, MOSS, YIRCD, and PADCO. The focus of the work of this group – which would be convened as necessary during the course of the activities – would be to review all issues related to:
  - The design and implementation of new reporting forms;
  - All new normative acts required for the implementation of the reporting system
  - Interactions between the program of personification and the program of design and development of Personal Numbers that is being implemented by the Nemrout Center of MOSS

2. A Working Group on Software, Computer Equipment, and Training – including representatives from SIF (Computer Department), YIRCD, and PADCO. The focus of this working group—which would also be convened as needed during project activities – would be to review all activities related to:
  - The design and implementation of software programs necessary for the implementation of the program of personification.
  - Training of SIF staff and staff in local SIF offices on new procedures and new software
  - The identification, acquisition, and installation of computers and related equipment necessary to implement the program of personification.

Each of the technical working groups could use the services of specialists for any meeting or monitoring activity related to project implementation – subject to the approval of the Management Working Group.

### **3. WHY ARMENIA SHOULD IMPLEMENT PERSONIFIED REPORTING**

#### **3.1. WHAT IS PERSONIFIED REPORTING**

Personification of Social Insurance Fund reporting is often confused with the creation of individual pension accounts. They are, in fact, quite different issues. Personification is concerned only with how information on people's work experience, wages, and contributions are reported to and stored by the Social Insurance Fund. It involves no changes in eligibility for or the calculation of pensions. A system of individual pension accounts certainly requires personified reporting, but means that pension contributions no longer flow into a shared resource pool, as they do in the solidarity system, but are maintained as the property of the individual. Personified reporting simply means that all enterprises submit to the SIF a report showing the wages, payroll contributions paid, and number of days worked during the reporting period for each of their employees. This would replace the current reports in which the enterprises show only the total wage bill. With personified reports from enterprises, the SIF will be able to maintain a database of the work history of all Armenians. This personified database will eliminate the need for the maintenance of workbooks and will also mean that the process of establishing eligibility for old-age pensions (and other social insurance programs) will be much easier – both for local offices and for individuals applying for benefits.

Personified reporting – and the creation of a central database in the Social Insurance Fund that maintains the work history of all Armenians – is central to the good management of social insurance programs. Old age pensions, unemployment benefits, insurance against work-related injuries and illnesses, permanent invalid benefits, and health insurance all need this central database to determine eligibility for benefits and the level of benefits for which eligible people are entitled.

#### **3.2. THE BENEFITS FROM PERSONIFYING REPORTING**

Personification of pension reporting and records will bring widespread benefits to enterprises, to employees, and to the government:

##### *3.2.1. For the State Pension System, Personification . . .*

- will give the Social Insurance Fund fully computerized records as the basis for calculating pensions at retirement and for ensuring that pension benefits are more closely linked to work history and wages than they are today
- will be a valuable tool for improving the efficiency of the administration of state pension benefits by providing accurate and up-to-date information on what contributions have been paid on behalf of whom;
- will facilitate more rigid control over both internal and external fraud and will eliminate the duplication of claims and payments which is possible under the present system;
- will assist the Social Insurance Fund to ensure compliance in payments of contributions by enterprises and individuals, and will discourage people from working in the gray economy because they will no

longer be able to accumulate service credits unless they are also being paid by the enterprise holding their workbooks;<sup>1</sup> and

- will eventually replace the present system of maintaining records in workbooks.

### 3.2.2. *For Other Social Protection Programs, Personification . . .*

- will provide an accessible record of work and wages against which the Ministry of Social Security will be able to verify information on income submitted by families applying for targeted social assistance;
- will give policy makers and managers improved information which will assist in the management of various social protection programs;
- will provide the foundation for the development of automated, efficient systems for administering other social insurance programs such as benefits for the unemployed, people injured in the workplace, maternity benefits and sickness benefits and
- will provide a database the Ministry of State Revenue can use to verify income information submitted in income tax returns submitted by legal entities and individuals.

### 3.2.3. *For Enterprises and Individuals, Personification . . .*

- will simplify the paperwork and administrative costs of reporting and transferring payments to the pension system;
- will provide the basis for government regulatory systems needed to ensure the safety and security of private pension systems; and
- will facilitate improved customer service through a simpler process of certification of eligibility for pensions and easier applications procedures for pensions.

All developed countries have created and maintain this type of personalized, centralized data. Armenia has lagged behind in the development of such a system because it has been unable to afford the investments in computers and software development that personified record keeping requires. Experience in other countries, such as Kazakhstan, has shown that personifying reporting systems is not a task that can be completed quickly. Employers and entrepreneurs must understand how the required data is to be submitted. There must be clear instructions about the format and method of organizing the data. The software used must make the data submission process as easy as possible, and the system must have effective means of identifying data errors before the data is submitted to the central system.

## 4. A DESCRIPTION OF THE PERSONIFICATION PROGRAM

### 4.1. THE CURRENT SYSTEM OF ENTERPRISE REPORTING

Before describing changes that will be made under the personification project, a brief summary of the current reporting system shows why these changes were needed. By the eighth day following every calendar quarter, employers must report to the local office of the Social Insurance Fund listing aggregate wages and wages equivalents e.g. bonuses, overtime, in kind payments etc. along with the aggregate payments made and total liability to the Fund.<sup>2</sup> Employers do not list the names of their employees (or any personal employee identification number) on any of these quarterly payroll reports. Payments made by the employer to the funds normally occur when the employer withdraws money from the enterprise's bank account. To withdraw money for payroll purposes, employers must submit forms directing the bank to transfer payroll contributions (as computed by the employer) to the various payroll funds. Payroll contributions are transferred directly to each of these funds. According to the Law on Mandatory Social Insurance Contributions employers are responsible for calculating and transferring social insurance contributions each month on the day money is withdrawn from the Bank to pay salaries.

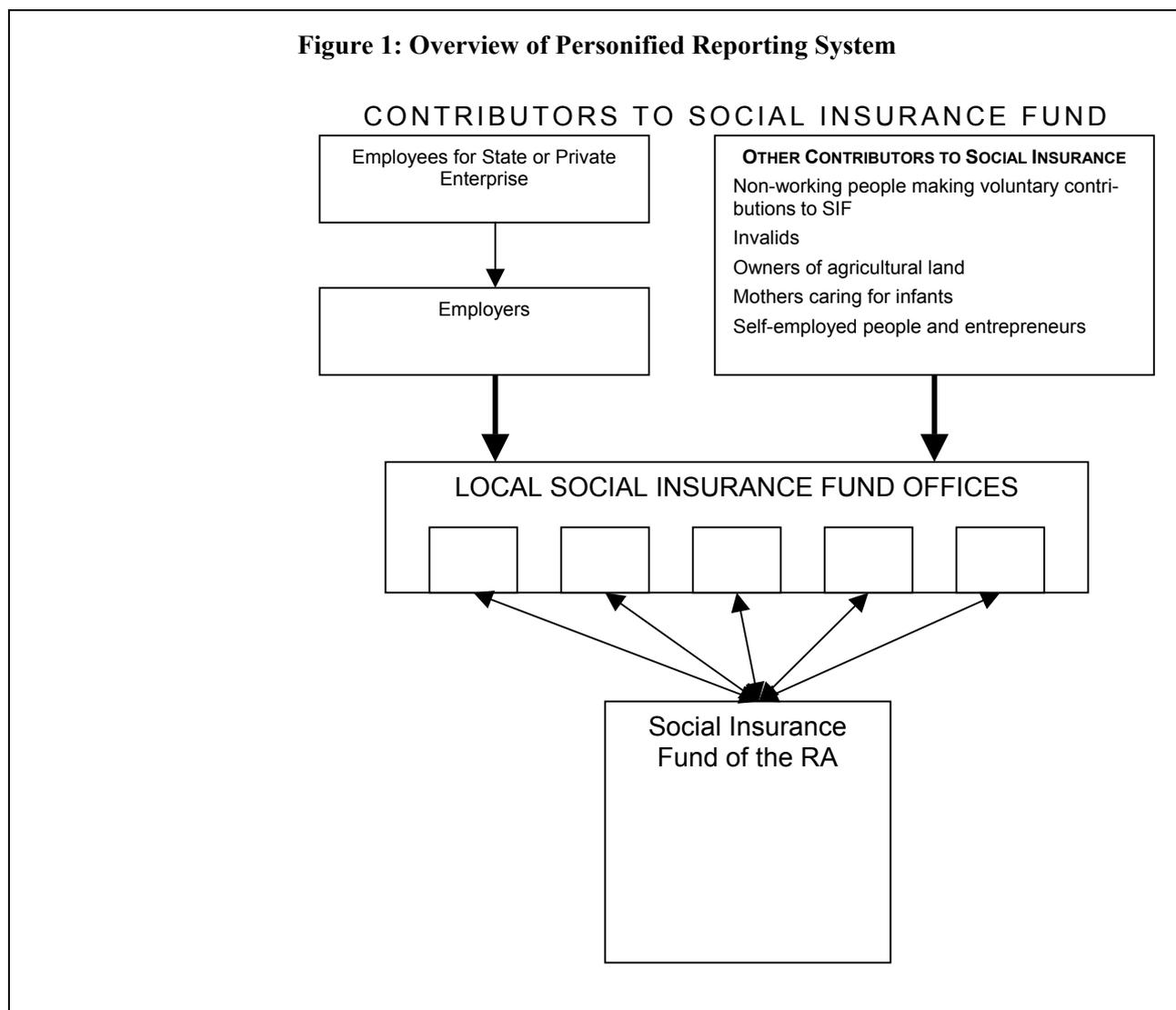
---

<sup>1</sup> Because individuals working in the gray economy can leave their workbooks with former employers and still be registered as employed and accumulate work experience toward pension eligibility, they have little incentive to push employers into the formal economy and the Ministry of State Revenues has less power to audit actual incomes.

<sup>2</sup> For enterprises, payroll contributions allocated to the State Social Security Fund are as follows: 5,000 Drams for wages up to 20,000 Drams per month; 5,000 Drams + 15% of wages for monthly wages in excess of 20,000 Drams; for wages in excess of 100,000 Drams per month, it is 17,000 Drams + 5% of wages in excess of 100,000 Drams.

In addition to submitting the various payroll reports, employers must maintain workbooks for each full time employee listing the period of time the employee has worked for the employer. These workbooks are used to satisfy pension eligibility requirements and to compute the amount of pension to be granted to the pension recipient.

However, workbooks maintained by employers may bear little correlation to the period worked by the employee or to the pension contributions paid, if any, by the employer on behalf of the employee. Indeed, today entities may maintain workbooks for individuals who are effectively not employed by the entity, allowing the individuals to accumulate service credits with no contributions being paid on their behalf. Moreover, employers may artificially increase the amount of wages paid to an employee during the last year of employment, thus allowing the employee to qualify for a higher pension. Under the current system there is much room for fraud, which reduces how much money is available to pay legitimate pensioners based on their real service credits. Personification will cut down on these unfair practices. The overall operation of a personified reporting system is shown schematically in Figure 1, below.

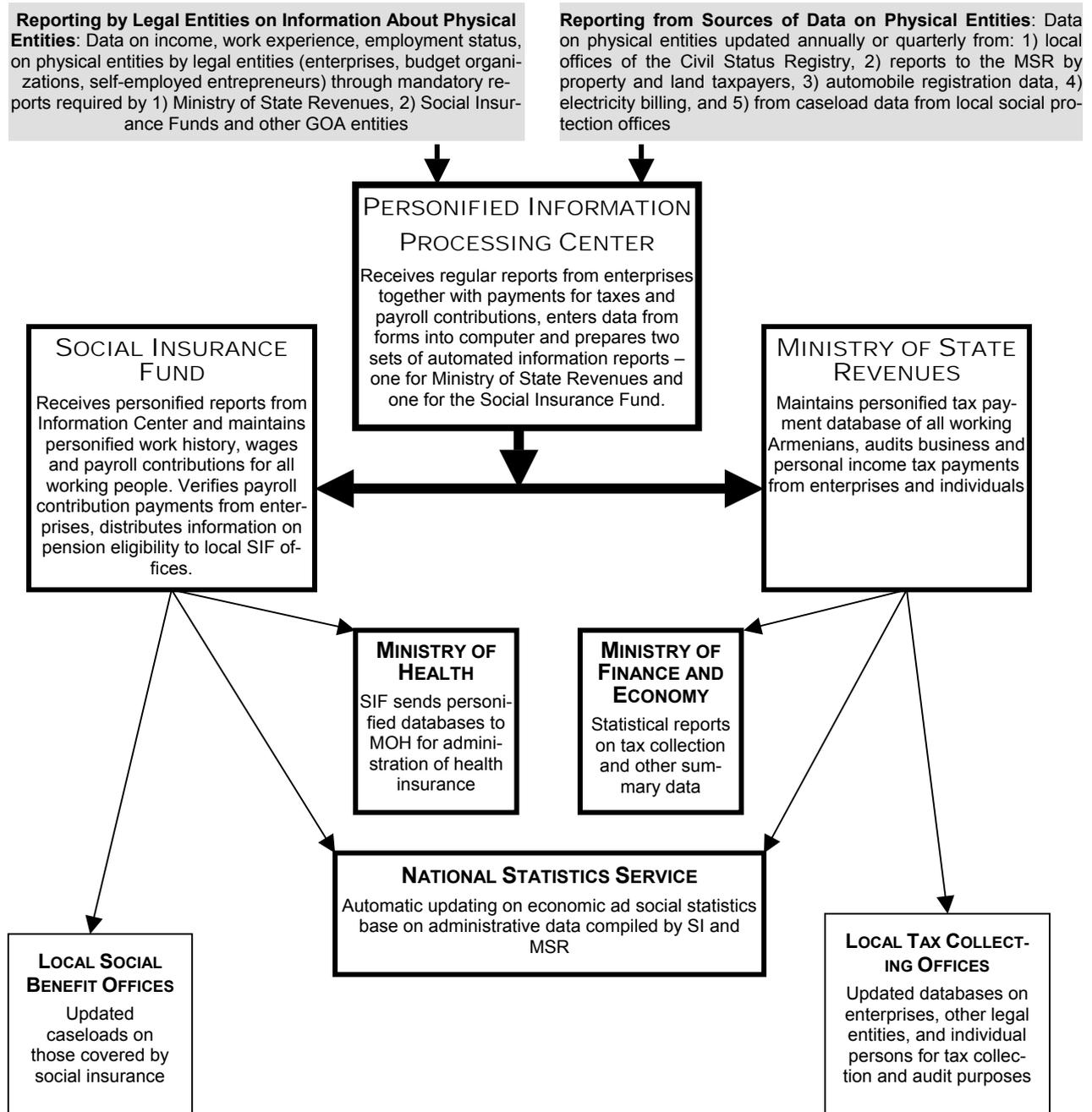


To support the design and implementation of the personified reporting system will require the following programming tasks:

1. The design, testing, and implementation of software to allow enterprises with computers to submit automated reporting forms to the local entity responsible for collecting payroll contributions.
2. The design, testing and implementation of the central database to be maintained by the Social Insurance Fund that will record the work history of all working Armenians.

- The design, testing and implementation of the system through which the Social Insurance Fund shares the central database with local offices responsible for distributing social insurance benefits.

**Figure 2: System for Creating and Maintaining Integrated Personified Information Center**



## **ATTACHMENT A: EXPERIENCE WITH PERSONIFIED REPORTING AND INDIVIDUAL IDENTIFICATION NUMBERS IN SELECTED COUNTRIES**

### **A.1. PERSONIFIED REPORTING IN UKRAINE**

The Pension Fund began its program of personification in 1997. A new software reporting program (ARM-R) was developed by PADCO under its social sector reform program supported by USAID. The new software enabled enterprises to maintain records on payroll contributions paid for each employee, identified individually (using names and the Taxpayer Identification Number issued by the State Tax Administration). The Pension Fund evaluated the results of this pilot program and, based on the recommendations of the Fund, the Cabinet of Ministers of Ukraine developed specifications for a personification system that would be applied nationwide. The Cabinet called for a large-scale pilot program to test not only the software but also the speed and ease with which enterprises could adopt the new reporting system. In November 1998, the President of Ukraine issued a decree authorizing the implementation of a large pilot program in L'viv Oblast. The pilot program was implemented immediately in five raions in L'viv oblast. Within two months, more than 400 enterprises were using the new software and preparing reports to the local pension office electronically. The Pension Fund established a special office within each pilot raion to deal with personification issues. Local training workshops were held to demonstrate the new system to staff of the pension offices and to accountants from private enterprises. Local pension offices, equipped with new computers, entered the reports into a local database established with prototype software created by the Ukrainian software development company, Atlas. The pension offices in the pilot raions reported an increase in contributions as a result either of the personified reports or of the public education campaign that accompanied the pilot program in the communities.

By the summer of 1999, the Pension Fund determined that the pilot program had demonstrated that the reporting system was "user friendly," and could be adopted easily by enterprise accountants. Most accountants had successfully adopted the program without receiving special training. On October 15, 1999, the Cabinet of Ministers reported that "in raions where personified reporting had been experimentally introduced, the proceeds to the Pension Fund increased by 23.2% and the number of payers by 16.2% in the first 9 months of 1999, by comparison with the same period last year". The Fund decided the nationwide rollout of the program should begin.

A nationwide implementation of a new reporting system is not an easy task. There are tens of thousands of enterprises with the computer capacity to use the reporting software. There are also thousands of certified accountants who provide accounting services to smaller enterprises. And there are tens of thousands of enterprises and hundreds of thousands of self-employed entrepreneurs that do not have computerized accounting records and will submit lengthy personified data on paper.

The Pension Fund phased in the system. By the end of 1999, 190 enterprises were submitting automated personified reports. Later, the experience was disseminated across the nation – a process that was completed by the end of 2000. Several different methods of distributing information about the program and several ways of dealing with the inevitable flood of questions that would be raised by the new users of the system.

First, 60 copies of the "Users Guide" and program installation disks were printed and distributed from oblast pension offices to accountants. Material was also distributed at a series of workshops and seminars held in key locations to initiate the implementation of the program.

Second, there was created a special website which carried copies of the software program and the Users Guide as well as displaying frequently asked questions about personified reporting together with model answers. The Pension Fund included the website address in the material distributed to accountants through local pension offices. Between October 1, 1999, and November 18, 1999, more than 1,000 contacts with the website were recorded counter from all regions of Ukraine. Many of the calls were from private accounting firms, some of which served more than one hundred customers each.

Third, the Pension Fund implemented a hierarchical "hotline" system for dealing with user questions. Local offices were to be the initial point of inquiry; those issues that local staff were unable to answer were referred to oblast departments. Those that oblast departments could not answer were referred to the Pension Fund in Kyiv. By mid-November, the Pension Fund was reporting an almost overwhelming number of calls and was considering measures to expand the capacity to provide quick answers. The capacity to respond quickly and

effectively to user questions will be an important factor in the speed and accuracy with which personification is adopted nationwide.

For the many thousands of companies that will continue, at least in the short-term, to submit reports on paper, the Pension Fund is implementing the use of scanners and optical character recognition software. This will allow paper reports to be read into computers without time-consuming data entry by hand. The first scanner centers were introduced at the end of 2000 and more are planned for 2001.

## **A.2. PERSONIFIED REPORTING IN THE FEDERATION OF RUSSIA**

The reform of the administrative system for state social insurance began, in the Russian Federation. A number of regulatory documents, forms and reporting requirements were devised in 1995-1998 and the system partially became operational in 1999. Because of the vast size of the Russian Federation, implementation of the personified reporting system was carried out in phases. The main functions fulfilled by local offices are:

- registration of all covered employees and of all payers of social insurance contributions;
- maintaining files of all payers;
- processing bank transfers and sorting payment documents into personal files;
- checking and correcting data on the payment of insurance contributions and the assignment of contributions to individual accounts.
- checking the timeliness of payments and imposing penalties for late payment and arrears.
- receiving and checking reports from employers.
- preparing analytical and summary reports;
- Preparing numerous administrative reports and maintaining financial accounts.

All these activities are reported to the Pension Fund's central office and checked against budgetary and other goals.

Special attention is paid for the transition period when there are pensioners without personalized insurance and would be pensioners with some personal accounts. During the transition period which may last 30 years until all employees will be enrolled in compulsory insurance system, precautions should be made to ensure the proper bookkeeping of data and archives.

Analysis of Russian experience shows the extreme importance of proper documentation of all possible cases of employer – employee relationships and of their relationship with social insurance local offices.

Because of detailed, nature of all available documents they must be carefully studied and adapted to the existing Armenian Laws and systems. Special group for the purpose must be established and all input-output documents approved by an authorized body.

## **A.3. PERSONAL INSURANCE SYSTEM IN KYRGYZSTAN**

First regulations about the Personal Insurance System were approved in 1995 and implementation began in 1997. The process was accelerated because of the unstable economic and fiscal situation, the difficulty of using workbooks for pension assignment following the decentralization of the pension distribution system, and mounting fraud and errors in benefit allocations. The main achievements during the first year of implementation were:

- Personal pension insurance accounts were opened for all working people;
- A Law on Personal Pension Insurance was adopted.

Every citizen of the Republic is obliged to register in the new system and to provide an annual update on place of employment and wages. All changes in place of employment or loss of employment must be registered.

All documents are processed in regions and sent to the central database for assignment of a personal number. Strict security measures are applied to ensure the protection of personal data within the system – from the protection of application forms to protection of data stored in hard copy and electronically. Archives are kept in four different locations. Special attention is paid to definition of centralized and decentralized data and to the protection of individual privacy.

#### A.4. PERSONALIZED INSURANCE AND NUMBERING IN BELGIUM

Belgium, like Denmark (below), maintains a register of all residents. The database for social protection was created in 1990, based on data exchange between different social protection services departments. Data about employees covered by social insurance programs are collected, together with additional data from the State Register. The database for social insurance was one of the first computerized systems in Belgium. To receive data from this database, permission must be acquired. Each social protection service must apply for data to an independent commission, which decides the necessity and legality of the request.

According to the existing regulations, any employer when including anybody in its payroll as an employee is obliged to check availability of a personal number for the given employee in the social protection office where the given employer is registered. The same obligation pertains to an employer engaged in recruiting new personnel who has not employed them and not verified their numbers. If an employer breaks work relations with its employees he must report to the local social protection office.

The national number of the employer consists of the following data:

Index of payment category	3 digits
Social number (which may be changed depending on the type of company, previous public activities etc.)	7 digits
Checking number	2 digits

The employer is obliged to report quarterly to the social protection office about payments, within 30 days from the end of the reporting quarter, on a special form prepared by the office.<sup>3</sup> The form contains data about payroll, amount of payments, personal accounts, and other statistical data. Each time a payment is made, the employer makes deductions from the employee's salary the amount of the social payment – adding the amount of the employer's contribution. For some categories of workers, payments are fixed. The employer must transfer the amount due to the local social protection office account. If an employer is paying more than 250,000 Franks monthly, the social protection office offers assistance in preparing quarterly reports and organizing monthly payments.<sup>4</sup>

If an employer fails to submit the report or submits it incomplete or with mistakes, the social protection office must define the amount of social protection payments from the employer based on whatever data or after receiving all missing data from the employer. If documents and their attachments are not delivered in due time, the employer is fined correspondingly.

The full State Register for Physical Persons was created by law in 1993. It collects and maintains the following data about physical persons.

1. Name, surname
2. Place and year of birth
3. Nationality
4. Principal residence place
5. Place and year of death
6. Specialty
7. Family status
8. Family members

#### A.5. CIVIL POPULATION REGISTER (CPR) IN DENMARK

Denmark created not simply a personal identification number but a complete Civil Population Registry, whose functions extend far beyond state insurance and social protection programs. The Civil Registration System (CRS) developed by *Datacentralen* (state-owned private company) for the Ministry of the Interior and implemented in 1968. Since then it has been continually improved and is today the most modern CRS in the world.

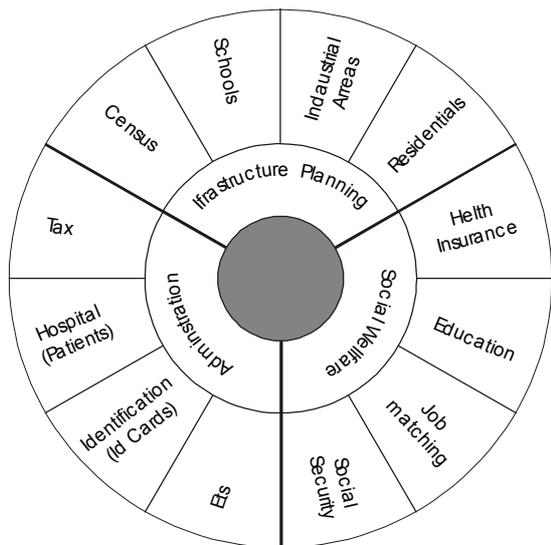
---

<sup>3</sup> Large employers may be granted an additional 20 days after the deadline.

<sup>4</sup> To carry out such activities the local social protection office must have special authorization according to Law, have qualified personnel and a minimal number of big enterprises in its registration.

The reason for developing the CRS system was to meet the demands in the public sector for accurate and up-to-date information on individual citizens or groups of citizens for taxation, social welfare, drafting for National Service, and for old age pensions. The CRS is comprehensive and systematic way of population registration that satisfies the information requirements of the different sectors in the public administration. The system is characterized by:

- An independent information system used by almost all public authorities.
- A computerized central registration of all citizens.
- Automatically and directly available information to other authorities through an integrated information network. It uses a unique and invariant identity number.
- It maintains a population census that is updated daily.



It is an independent system, giving it flexibility in the use of data. Thus the whole public sector and many private institutions may have access to the system -- greatly reducing administration costs to users. It eliminates the enormous amount of redundancy and duplication required to operate and use independent systems. Almost all public authorities are now subscribers to the CRS and they automatically get their files updated e.g. on a daily or weekly basis.

The characteristics of the population can be defined at any time and is based on a large number of different socio-demographic parameters: age, sex, occupation, nationality, family patterns, geographical distribution, housing conditions, etc. This can be done for the nation as a whole, for a region, for a town, or for any other defined district.

The uses of CRS have been increased over time. Today, almost all public authorities receive population register information from CRS register – often as a supplement to the

agency's own databases. Moreover, private companies such as banks and insurance companies have now joined the system. There is no doubt that a great deal of the further expansion during the coming years will be due to the private sector. Data given to the private sector is limited to information about specifically identified persons (e.g. clients of a bank), and only part of the data of the CRS is available such as name, address, and identity number.

Examples of how the CRS is used include:

- identifying the potential population to be served by a health center, or the delivery of a complete list of the residents of the area served by a health center.
- determining the immigration status of expatriates in the work force, or the work status of expatriates, since this system makes it possible to cross-check immigration and labor force.
- assessing taxes and for auditing payment of taxes.

In Denmark, it is the Ministry of the Interior that “sells” the services of the system and makes all the arrangements (data content, criteria for retrieval, terms of operation, etc.) regarding cooperation with users. The actual register is kept at state owned company *Datacentralen*, which performs most of the State's Electronic Data Processing (EDP) operations.

- The local population registers, which supply most of CRS's data, are also included in the system. The civil registration file may be looked upon as an aggregation of the local population registers in the country. The data collected in the overall civil registration file from the local registration offices is done by a specially designed system that validates each transaction formally and logically. So, from the user's point of view, all validation is made through the terminal. In county and municipal matters, the CRS updates municipal registers on the regional EDP centers daily -- on magnetic tapes or by means of telecommunication.

The Danish CRS consists of a number of databases of which the most important ones are:

- the personal register, containing complete personal data for all registered persons including their identity number. Moreover, the register includes the citizen's relationship to his/hers family and the public authorities to which the citizen is attached.
- the address register, containing information on all streets and communities. The register is used for retrieving and printing of addresses by municipality, police district, school district, etc. The address register is therefore an essential part of infrastructure planning.
- the address index contains information about all persons who live or have lived at certain addresses.
- the personal identity number register -- used to assign new personal identity numbers.
- the immigration and emigration register -- containing information about all persons who have immigrated, emigrated or disappeared since start of the CRS in 1968. The register is used, among other things, to assign identity numbers for immigrants.

In the CRS-system, the following persons are registered:

- All persons who were registered in the Danish citizen register.
- Individuals who live outside Denmark but still are included in the mandatory state pension system.

Users may receive the following types of standard output from the CRS on a subscription basis:

- Daily retrieval of changes such as deaths, changes of address, or changes of names for a database from a specific county.
- Key retrievals where the user enters a series of personal identity numbers and the CRS supplies the required personal data corresponding to these numbers.
- Status retrievals where a search is made throughout the entire CRS for persons fulfilling the specified criteria is displayed, e.g. monthly summary statistical information.

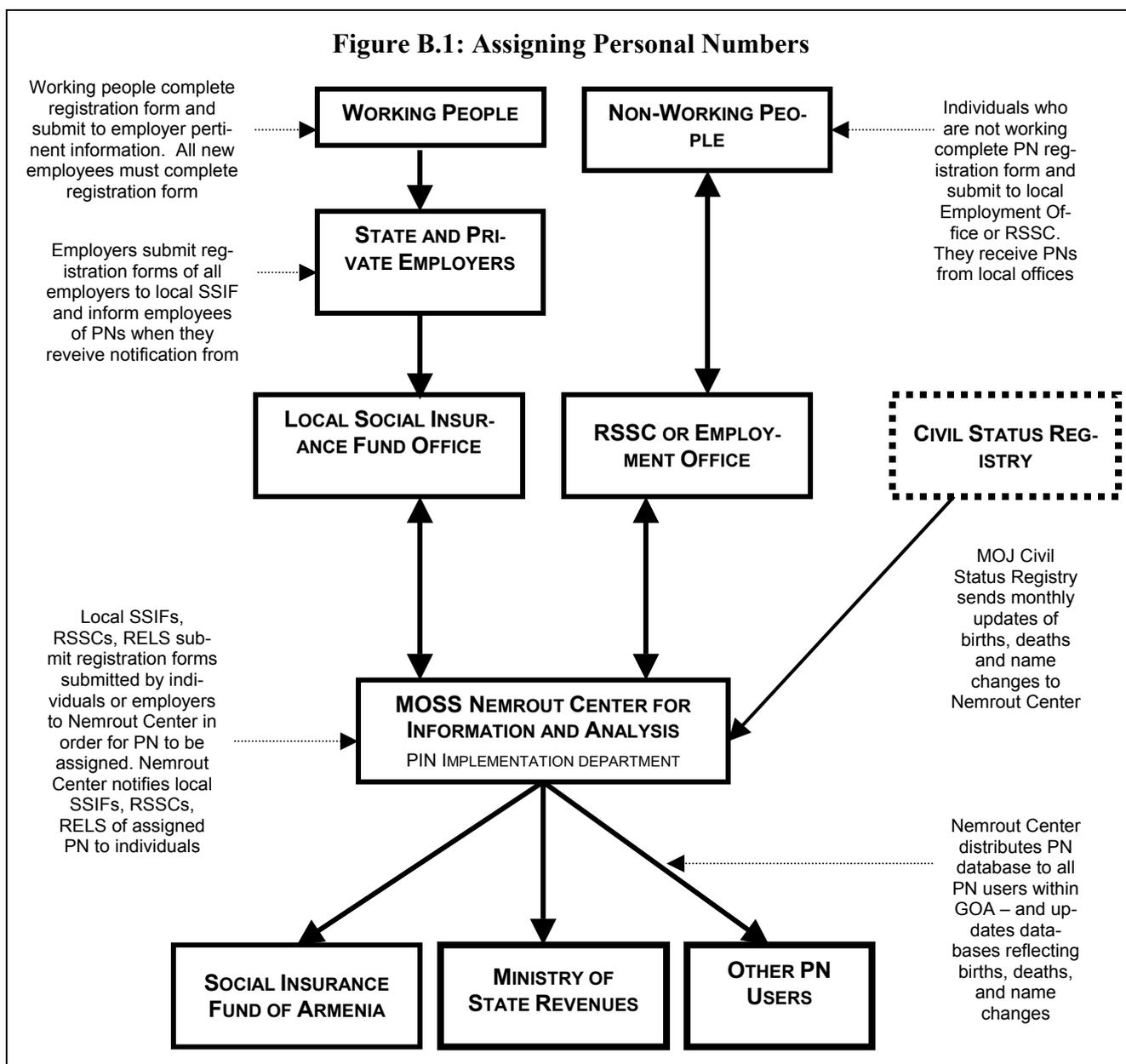
#### **A.6. NETHERLANDS**

In the Netherlands, the Social Fiscal Number (SFN) was introduced in 1980. It is given to a resident after reaching 12 years age in case of employment. No cards are available and the numbers are kept in the tax inspectorate. Special regulations on privacy exist. Only the Tax inspectorate, the Ministry Social Insurance, and the social assistance systems are allowed to give and have access to available information. Banks are obliged to give personal information in special cases on request by Tax inspectorate. Tax inspectorate keeps data for only last 5 years. Data required are: nationality, address, date of birth, gender, name, and family name.

## ATTACHMENT B: HOW PERSONAL IDENTIFICATION NUMBERS WILL BE ASSIGNED AND USED FOR PERSONIFIED REPORTING SYSTEMS

Personal Numbers will be assigned to all Armenians by the Nemrout Center. All Armenians will complete a simple application form that includes their birth date, full name, Passport Number and address. Employed people will submit these forms to their employers who will send them to their local Social Insurance Office. Non-working people will submit the application forms to the local Employment Office (if they are unemployed) or to the Regional Social Services Office if they are receiving social benefits. These local offices will send all registration forms to the Nemrout Center, which will assign a unique PN to each individual. The Nemrout Center will send the PN notification form for an individual back to the local office from where it received the registration forms. Local SSIFs will send the PN notifications to employers who will pass them on to their employees. Local RSSCs or Employment Offices will provide the individuals who had applied with their PN notification forms.

Employers will then use the PN numbers when submitting reports and payroll tax contributions to their local SSIFs. Within a specified period of the passing of the “Law on Personal Numbers,” only people with PNs may be employed and may be eligible to receive social benefits (pensions, invalid benefits unemployment benefits). Employers will be required to use PNs when preparing their quarterly reports and making payroll



contributions to the SIF. The process of registering all working age people, therefore, is an essential precondition to the implementation of personified reporting. The design of the PN system will require design and drafting of normative acts and reporting forms. These include:

1. A normative act requiring all employees to register through their employer, at local social insurance office, RELS or RSSC in order to receive the identification number that will be used as the basis for personified reporting by their employer. This requirement is included within the draft Law on Personal Numbers that has been submitted to the National Assembly by the Government of Armenia.
2. A registration form for those applying for the identification number. A draft of this –developed by XXXXX – is attached.
3. Instructions and revised reporting forms to be issued by the Social Insurance Fund describing how entities required to make payroll contributions will implement personified reports to the Fund. The reporting form must show income and work experience during the reporting period for each employee receiving wages or receiving work credits during the reporting period. Separate forms should be prepared for budget organizations, entrepreneurs, farmers, and other legal entities.

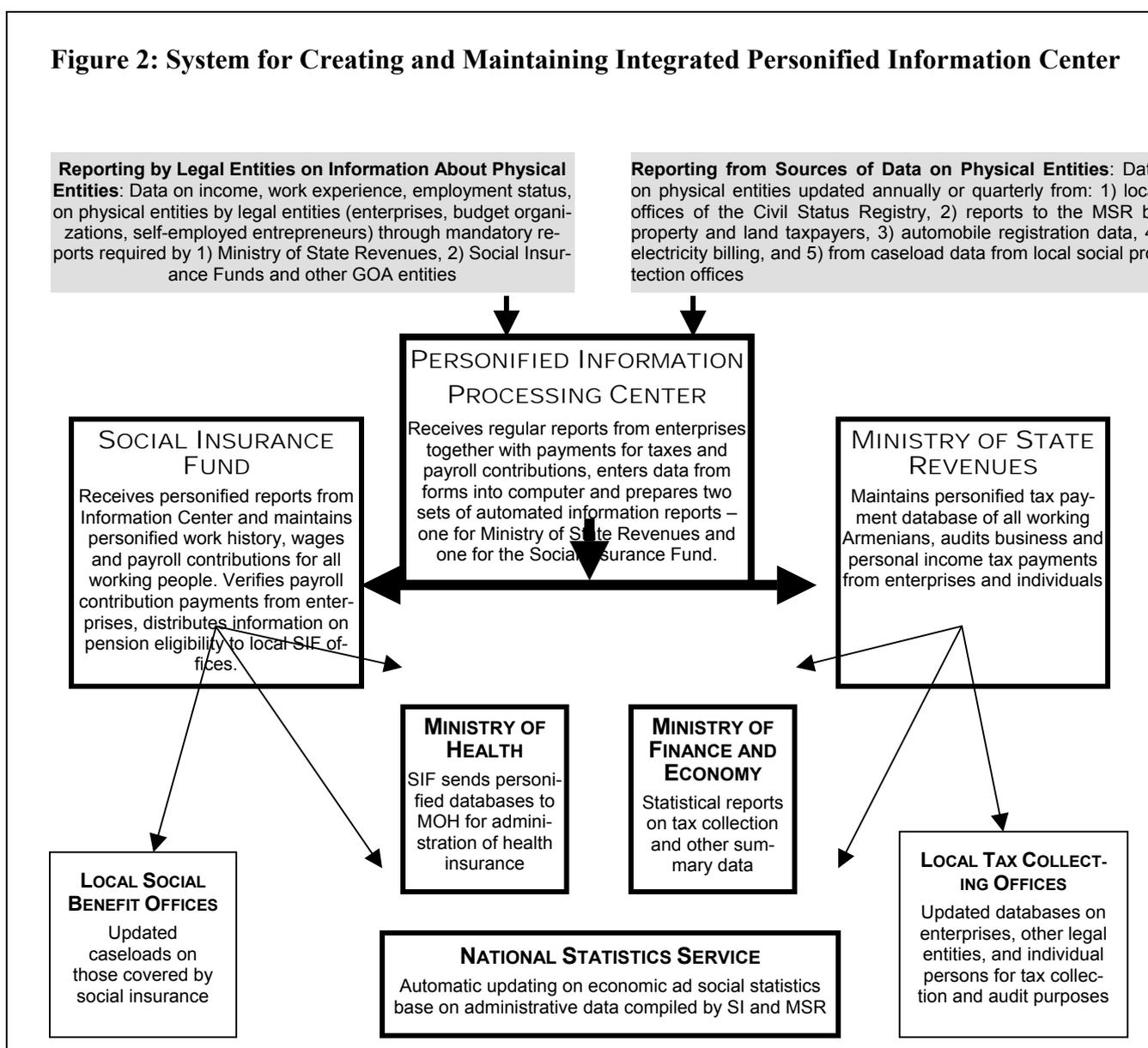
## ATTACHMENT C: A PROPOSAL TO SIMPLIFY ENTERPRISE REPORTING SYSTEMS

### C.1. HOW A UNIFIED REPORTING SYSTEM MIGHT BE IMPLEMENTED IN ARMENIA

Personified reporting requires enterprises to submit a larger volume of data than they presently submit to the GOA. But much of the information required to be reported under a personified reporting system to the SIF duplicates tax reports that must be submitted to the local tax authority (and, from there, to the Ministry of State Revenues). Under the proposed pilot project in Shirak Marz, The local tax collector must then separate the report and send the SIF report to the local SSIF. The data are then entered into computer, separately, by the SSIF and the local tax authority, and also audited separately. These local offices must, the, compile summary reports for submission to the SIF and MSR respectively.

The system, is, therefore, needlessly duplicative and time consuming from he preparation of reports by the enterprises to the filing of summary reports to the central agencies. In addition, maintaining all detailed information at the local level makes for considerable inefficiencies in reporting and auditing. Both legal entities and physical entities that are required to submit regular reports move. An enterprise may relocate across marz boundaries when it acquires new facilities. People will become increasingly mobile as the impacts of

**Figure 2: System for Creating and Maintaining Integrated Personified Information Center**



privatization and economic reforms lead to a redistribution of jobs and a more flexible housing market. If databases are maintained locally, knowing which local office to send quarterly reports will become impossible. Only if reports are centrally processed and shared with centrally maintained databases in ministries – and then updated, local databases transmitted to local administrative offices -- will it be possible to maintain an efficient and effective system. The information processing center that is proposed here does not yet exist in Armenia. It should be established as part of the revenue collection system – that is, within either the Ministry of State Revenues or the Social Insurance Fund.

The proposed program of personification, therefore, presents the GOA with the opportunity to vastly simplify and improve reporting and revenue collection systems. It can achieve this by creating a unified reporting system. Enterprises would report all key economic, financial and employment statistics to a single agency either electronically or on paper. The reporting agency would ensure that all data submitted were processed into accurate, electronic databases and would transmit the required data to all government agencies according to the legal needs of those agencies. This structure would reflect prevailing practice in several western countries of employing a single tax collector. In the United States, for example, the Internal Revenue Service collects all reports and revenues but where the Social Security Administration maintains a separate – and the largest -- database in the US Government, covering all American citizens from birth until several years after their death.

The basis for the creation of a unified reporting system is to create a centralized database using a reporting system that collects the required data with the minimum of complexity. This would be collected by a single agency. This Information Processing Center would compile all reports received and automatically prepare and distribute information needed by each agency in the format required by the agency. Thus, the Social Insurance Fund would receive data on all working Armenians each quarter in the format developed for personified pension reporting. This will require assembling all reporting requirements from different agencies and, where necessary, amending normative acts in order to bring competing requirements into compliance.

## **C.2. OPTIONS FOR IMPLEMENTING THE UNIFIED REPORTING SYSTEM**

There are many issues to be resolved in the implementing of a personified reporting system. From the point of view of the GOA, the greatest problem is organizational. The personified reporting system by its essential character, can provide unified data needs for several ministries and departments. The Social Insurance Fund will be responsible for the design and implementation of the system. Other ministries that need or could use this personified reporting system are the Ministry of Social Security (benefits programs), the Ministry of Health (in its planned introduction of compulsory health insurance), the Ministry of State Revenues – MSR - - (income tax collections), and the Ministry of Finance (budget projections and financial reporting).

The involvement of the Ministry of Finance and the Ministry of state Revenues is especially important in view of the pilot program that is being undertaken in Shirak Marz where the MSR will be responsible for the collection of both income taxes and payroll contributions from enterprises. If this pilot system is adopted nationwide, the local tax collection offices will be receiving

Therefore, the first step in the implementation of the new system should be to create a Task Force within the GOA with the responsibility of implementing a personified reporting system. The Task Force should include members from the Social Insurance Fund, the Ministry of Social Security, the Ministry of Finance, the Ministry of State Revenues, the Ministry of Health, and the Ministry of Justice. The specific issues the task force would be required to solve (within specified periods of time) would include:

1. Determining the legal structure of personified reporting;
2. The physical structure of report processing operations;
3. How government agencies will restructure their reporting requirements and draft amendments to existing normative acts to simplify reporting requirements;
4. Develop a financing plan for the implementation of the new system; and
5. Developing the specifications for the development of the necessary software to implement the personified reporting system

Once the Task Force has developed the overall concept of the unified reporting systems, each ministry will have to be assigned the task of developing appropriate changes in its reporting systems – alone or in collaboration with other ministries. The task is large and complex. It will take at least two or three years to complete the overall simplification and integration of government statistical reporting and processing systems.

The role of the task force will become especially important if Armenia adopts a single tax and payroll contribution collector. A pilot project to test the feasibility of a single tax collector is being implemented in Shirak Marz. The pilot program envisages little change in reporting systems – the single collector would receive all existing reports that enterprises are required to file to the Ministry of State revenues and the State Insurance Fund. This poses an unnecessary burden on enterprises and also slows down the reporting process. Instead, the opportunity for consolidating tax collection should be used to restructure reporting and data processing. This could be done through the creation of a single personified reporting processing center that would serve the immediate needs of both the Ministry of State Revenues and the Social Insurance Fund. An option for the implementation of such a system is discussed the following section.

The unifying of reporting systems within a single processing center should proceed in two stages. During the first stage, the center would process only the unified reports prepared by enterprises and other legal entities concerned with paying income taxes and payroll contributions. During the second stage, the center would expand its capacity for separating individual and summary databases from the collection of reports processed in order to meet the needs of other ministries and government agencies – such as the National Statistics Service (for enterprise statistics concerned with wages, output, revenues etc.), the Ministry of Justice, the Ministry of Health (for the administration of health insurance system), and the Ministry of Finance. These two stages are outlined briefly in the following subsections.

### **C.3. STAGE 1 IN IMPLEMENTING A UNIFIED REPORTING SYSTEM**

During the first stage, the GOA would introduce a single tax reporting form that will include the data necessary to comply with the requirements of both the MSR and the SIF. For enterprises with computerized accounting (or using the services of professional accountants who use computers, the reports would be submitted in “hard copy” and in machine readable form (by disk, initially, by e-mail eventually). This report would be submitted to the local tax-collecting agency quarterly. Its submission would be noted in the local office and sent to the central information-processing center.

The central information-processing center then enters the data into machine-readable form. To the extent that reports are submitted on computer disk or electronically, this task will be greatly simplified. The 200 largest enterprises in Armenia are responsible for paying more than 90 percent of the taxes, and obviously should be the focus of report verification. They could be required, by ministerial instruction, to submit reports electronically.<sup>5</sup> The reports of other enterprises could be submitted in a written format that would allow direct scanning into the center’s database. Both Russia and Ukraine have adopted scanning as a way of rapidly entering data from the reports.<sup>6</sup>

Once the data are entered, the center would then clean and process the data into a single database. A large part of data cleaning could be performed automatically – by identifying outliers in data values (based on a comparison with previous periods’ reports, etc). The calculations of taxes due would also be checked.

The center would then prepare the separate databases that are needed by the SIF (to update its personified database of working Armenians) and the MSR. These database updates would be prepared automatically in the format needed by the respective agencies and transmitted to those agencies. Each would then prepare – again automatically – the necessary databases needed for its local offices and would transmit those databases to the local offices. The SIF, for example, would transmit databases that included lists of all those eligible for different types of social benefits (to allow the automatic calculation of old-age pensions or unemployment benefits). The MSR would transmit databases showing the status of all local legal entities with regard to taxes due.

It may be difficult to make an independent agency accountable to its major customers -- the SIF and the MSR. At the same time, if the responsibility is given to an agency with existing administrative responsibilities, the agency will always be under pressure to serve its own interests first and those of other agencies second. It will therefore be important to ensure that, if an information processing center is created within an existing agency, that the management of the department overseeing the centers include deputy ministers from the major customer agencies to ensure responsiveness to their needs.

---

<sup>5</sup> For example, in the USA, all companies with monthly payrolls in excess of \$500,000 must file reports electronically.

<sup>6</sup> Both use optical character recognition software developed by the Moscow-based software company ABBYY. In both countries, careful cost evaluation of the development and implementation of scanning technology determined that the system would yield considerable savings.

Whatever form is adopted for the new agency, its work should be managed by a board that includes representatives of the “customer” agencies of the quarterly reports. In the USA, for example, each government agency has an information management board which manages local data collection and manages the process of coordinating the transfer of information to information processing centers. It would be possible to mandate certain reporting requirements to enterprises with payrolls in excess of a certain level (numbers of personnel or total payroll) to meet certain reporting standards. The standards can be disseminated to local accountants and bookkeepers could receive software-training packages including descriptions of the exporting standards. The SIF and MSR have both demonstrated that it is possible to implement new reporting systems without creating chaos.

The systems through which these data are collected should be as simple as possible. Today, data collecting systems managed by Armenia’s government agencies are not simple. Much of the information needed by government agencies concerning the incomes and work experience of individuals overlaps - the name and address and place of work as well as the wages earned by each individual is required by several government entities. But each government agency needs databases that include different data and are maintained for different time periods.

#### **C.4. STAGE 2 IN IMPLEMENTING A UNIFIED REPORTING SYSTEM**

All government agencies want numbers – some more than others. Social protection systems are particularly heavy users of data. These databases are needed to ensure that legal and physical entities make appropriate payments – for themselves and on behalf of others if required. They are also required to determine eligibility of individuals for social protection benefits.

The basis for the second stage of the unified reporting system is to use the core reporting system developed in stage 1 to meet the needs of an increasing number of government agencies. This will require some broadening of the reporting form and the expansion of the software system that extracts separate databases from the core database created by entering information from the reporting forms. The Information Processing Center would compile all reports received and automatically prepare and distribute information needed by each agency in the format required by the agency. The necessary precondition for unified reporting and database creation is the implementation of the PIN system.

Of course, not all data collected by government agencies would be collected through the information center. Many agencies have specific needs that could not reasonably be collected by the single agency. The National Statistics Service will continue to collect much information directly from households and enterprises through its regular surveys. But the single report submitted to the Information Processing Center and the electronic reports in customized formats prepared by the Center for each government agency would greatly reduce the time and effort enterprises would spend on reporting and would greatly simplify the work of all government agencies in maintaining and updating their own databases.

The creation of the single Information Processing Center would also reduce the amount the GOA must spend on computer equipment, document scanners, telecommunications systems and staffing necessary to modernize government statistical systems. Instead of ten or more reporting centers in each marz busily entering data into computers and transferring it electronically to marzes and, then, to state ministries, there would be only one such center.<sup>7</sup> In the USA, for example, with a population of 260 million people and with over 30 million registered businesses, all tax forms are sent to one of nine regional processing centers. Creating a single, central information-processing center in Armenia will greatly reduce the costs of establishing the system.<sup>8</sup>

The additional agencies served by the expansion of the Information Processing Center during the second stage of its implementation could include (but not be limited to) the following:

---

<sup>7</sup> For example, today, there are three separate Marz departments concerned with forwarding health related statistics to Yerevan.

<sup>8</sup> In Kazakhstan, employers transmit information directly to the State Center on Pension Payments. Data is along with required contributions by piggybacking on the bank clearing system. This results in a huge amount of data being transmitted to the Center in just a few days of each month. At the current time, the sheer volume of transactions is overwhelming the system. Armenia’s population is smaller than that of Kazakhstan, so there is no logical reason for creating regional processing centers.

- Ministry of Health – which would receive the database of people covered by any national health insurance program that the GOA were to introduce;
- The MOSS – which would receive updated data on incomes and work status of individuals in families that had applied for the Poverty Family Benefit Program;
- The National Statistics Service – which would receive summary data on caseloads of individuals receiving social benefits as well as data on enterprises for its economic and industry statistical reports.
- The Ministry of territorial Affairs – which would receive updated data by municipality, on the numbers of working people.
- The Ministry of Urban Development – which would receive data on the numbers of working people and average wages and income for urban settlements.

It will be necessary for the Information Processing System to operate through a wide network of offices where data from legal entities would be received -- designated offices will be needed in each raion. But this does not mean that the information should be processed and the reports prepared for customer agencies in each marz or large city. In fact, there are strong arguments in favor of a more centralized approach to information processing.

The physical capacity to receive and process data that are handwritten as well as machine readable requires sophisticated equipment -- large computers, high-speed scanners, information auditing and quality control. This will be impossible -- and unnecessary -- to achieve in each raion or within each marz.

Although the task of integrating reporting systems within a single framework is difficult, the sooner the GOA begins the process, the more quickly it can begin to benefit from reduced administrative costs, better data, an improved capacity to administer complex government programs, and the ability to provide better services to the people of Armenia.

## ATTACHMENT D: WORKPLAN TO DEVELOPMENT AND IMPLEMENTATION OF PERSONAL ACCOUNTS REGISTRATION, NUMBERING AND ANALYSES SYSTEM (PARNAS) BY PHASES

Conducted in Collaboration between Social Insurance Fund (SIF), the Ministry of Social Security (MOSS), the Yerevan Institute for Computer Research and Development (YICRD), and PADCO, July 1, 2001 – June 30, 2003

Task No	Definition of Tasks	Period of Implementation	Assignment of Responsibilities
<b>PHASE 1: PREPARING NORMATIVE ACTS FOR IMPLEMENTATION OF PERSONIFIED REPORTING SYSTEM</b> This phase involves the drafting of the laws and other normative acts necessary to implement the system of personified reporting.			
1.1	A normative act requiring all employees to register through their employer, at local social insurance office, RSEL or RSSC in order to receive the identification number that will be used as the basis for personified reporting by their employer. This requirement may be included within the draft PIN law or draft privacy law.	July 1 – 31, 2001	1. SIF to comment on draft 2. YICRD to comment on draft 3. PADCO to prepare draft of normative act 4. MOSS to approve draft and submit to GOA
1.2	Development of a registration form for those applying for the identification number.	July 1 – 15, 2001	1. SIF to comment on draft 2. YICRD to comment on draft 3. PADCO to prepare draft of normative form 4. MOSS to approve draft and submit to GOA
1.3	Instructions and revised reporting forms to be issued by the Social Insurance Fund describing how entities required to make payroll contributions will implement personified reports to the Fund.	July 15 – July 31, 2001	1. SIF to prepare draft and submit to GOA 2. YICRD to comment on draft 3. PADCO to edit draft 4. MOSS to comment on draft
<b>Expected results from completion of Phase 1:</b> The necessary legal and regulatory framework for the introduction of personified reporting will have been introduced, and the necessary administrative documents will be prepared			

Task No	Definition of Tasks	Period of Implementation	Assignment of Responsibilities 1. SIF 2. YICRD 3. PADCO 4. MOSS
<b>PHASE 2: PREPARING TECHNICAL CONCEPT OF PARNAS DEVELOPMENT AND IMPLEMENTATION</b>			
This phase involves the development of Technical project of the system, its approval by all interested parties and taking into consideration recommendations of SIF.			
2.1	Development of framework of PARNAS Technical Project	July 1 – 15, 2001	1. SIF to approve the framework 2. YICRD responsible for preparing the framework 3. PADCO to provide technical support
2.2	Development of PARNAS Technical Project	July 15 – August 30, 2001	2. YICRD responsible for development
2.3	Making necessary changes in the Technical Project based on results of discussions	Sept 1 – 15, 2001	1. SIF responsible for approval of Technical Project 2. YICRD responsible for preparing the final version of Technical Project 3. PADCO responsible for making necessary changes in supplies and workplans
2.4	Establishing PARNAS development and Test site in YICRD	August 1 – 15, 2001	2. YICRD responsible for specifications of equipment and preparing the premises 3. PADCO responsible for delivery of equipment
2.5	Installation of equipment, LAN and off-shelf software (Windows NT, ORACLE)	August 15 – 30, 2001	2. YICRD responsible for getting ready the Development and Test site
<b>Expected results from completion of Phase 2:</b> All major components of PARNAS system defined and approved. Development and Test site ready for carrying out activities of the project.			
<b>PHASE 3: DEVELOPMENT OF DATABASE STRUCTURES AND SOFTWARE FOR FORM PROCESSING</b>			
All software design and testing for the PARNAS system will be implemented – including archiving of work history, reporting and updating systems, equipment installed in SIF personification center and links with local offices established			
3.1	Development of database structure of forms for past experience of employees	August 1 – 15, 2001	1. SIF responsible for development of paper forms 2. YICRD responsible for development of database structure 3. PADCO responsible for technical support and financing
3.2	Development of data entry subsystem using two-hand error checking and data verification procedures for forms delivered on paper	Aug 15 – Sept 15, 2001	2. YICRD responsible for development 3. PADCO responsible for technical support and financing
3.3	Development of data entry subsystem for data delivered electronically (diskettes or via communication lines)	Oct 1 – 15, 2001	2. YICRD responsible for development

Task No	Definition of Tasks	Period of Implementation	Assignment of Responsibilities 1. SIF 2. YICRD 3. PADCO 4. MOSS
	tronically (diskettes or via communication lines)		3. PADCO responsible for technical support and financing
3.4	Preparing installation of equipment for PARNAS central site, LAN establishment and testing of equipment	Sept 1 – 30, 2001	1. SIF responsible for preparing the premises 2. YICRD responsible for specifications of equipment, installation and testing 3. PADCO responsible for technical support, financing, and delivery of equipment
3.5	Development of subsystem for collection of employers' reports and their processing. Development of database structures and corresponding software	Sept 15 – Oct 30, 2001	1. SIF to develop procedures of employers' report delivery 2. YICRD responsible for development of subsystem 3. PADCO responsible for technical support and financing
3.6	Development of a subsystem for cumulative reports by persons, by employers etc.	Sept 15 – Oct 30, 2001	1. SIF to develop procedures 2. YICRD responsible for development of subsystem 3. PADCO responsible for technical support and financing
3.7	Development of a subsystem for keeping archives of documents and processed data	Nov 1 – 15, 2001	2. YICRD responsible for development 3. PADCO responsible for technical support and financing
3.8	Development of archive documentation, instructions and operational rules	Dec 1 – 30, 2001	2. YICRD responsible for development 3. PADCO responsible for technical support and financing
3.9	Development of checking subsystem for checking employer reports and cross checking of reports with bank transfers	Sep 15 – Oct 30, 2001	2. YICRD responsible for development 3. PADCO responsible for technical support and financing
3.10	Development of Personal accounts subsystem including all types of documents and reports for a given person	Nov 15 – Dec 15, 2001	1. SIF to approve the subsystem 2. YICRD responsible for development 3. PADCO responsible for technical support and financing
3.11	Development of subsystem for inserting PIN provided by Nemrout Center, in SIF database, cross - checking and release	Dec 1 – 30, 2001	1. SIF to develop procedures of PIN delivery and numbering of personal accounts 2. YICRD responsible for development 3. PADCO responsible for technical support and financing 4. MOSS to approve procedures of PIN delivery
3.12	Preparing procedures for hierarchical Data base structure of PARNAS (Regional, Marz and Central level). Defining the data exchange and update procedures.	Oct 1 – 30, 2001	2. YICRD responsible for development 3. PADCO responsible for technical support and financing
3.13	Development of a subsystem for changing personal accounts, corrections of personal accounts and their closing	Nov 1 – 30, 2001	2. YICRD responsible for development

Task No	Definition of Tasks	Period of Implementation	Assignment of Responsibilities 1. SIF 2. YICRD 3. PADCO 4. MOSS
			3. PADCO responsible for technical support and financing
3.14	Development of a subsystem for taking off the system employees and employers	Dec 1 – 30, 2001	2. YICRD responsible for development 3. PADCO responsible for technical support and financing
<b>Expected results from completion of Phase 3:</b> All forms of the system developed, database structures and software packages related to form processing ready. Central database and archive sites ready for starting operations			
<b>PHASE 4. DEVELOPMENT OF ALL SUBSYSTEMS OF PARNAS.</b> This phase involves development of all subsystems of PARNAS with corresponding documentation for all levels of implementation: Employer – Regional – Marz and Central level			
4.1	Development of a subsystem for Pension calculation based on cumulative payments, indexing of payments and reverse coefficient of wages	Jan 1 – Feb 30, 2002	1. SIF to develop procedures and methodology 2. YICRD responsible for development of the subsystem 3. PADCO responsible for technical support and financing
4.2	Preparing specialty lists of employers for checking the forms (separate database).	<b>Jan 15 – Feb 15, 2002</b>	1. SIF responsible for providing the lists 2. YICRD responsible for development 3. PADCO responsible for technical support and financing
4.3	Preparing PARNAS – Employer (PARNAS – E) package for Employers willing to send reports in electronic form using data from their accountant and personnel departments	Mar 1 – 30, 2002	2. YICRD responsible for development 3. PADCO responsible for technical support and financing
4.4	Preparing PARNAS regional software package (PARNAS - R) for district and Marz offices of SIF	Apr 1– 30, 2002	2. YICRD responsible for development 3. PADCO responsible for technical support, monitoring and financing
4.5	Preparing PARNAS central software package for SIF (PARNAS - C).	May 1 – 30, 2002	2. YICRD responsible for development 3. PADCO responsible for technical support, monitoring and financing
4.6	Preparing the test site, testing and acceptance trials of PARNAS – E, PARNAS – R and PARNAS – C and PARNAS archive (PARNAS – A) packages	June 1 – 30, 2002	1. SIF responsible for assignment of personnel 2. YICRD responsible for development 3. PADCO responsible for technical support and financing
4.7	Development of first version of PARNAS documentation: User manuals, installation kits for levels E,R,C,A	Apr 15 – June 15, 2002	2. YICRD responsible for development 3. PADCO responsible for technical support and financing
4.8	Integrating the Pension System (Araks) with subsystems of PARNAS forming a unified top-down package of data collection, assignment of pensions and their payment	Jan 15 – Mar 30, 2002	2. YICRD responsible for development 3. PADCO responsible for technical support and financing
4.9	Installation of equipment in Regional & Marz departments of SIF based on IT assessment of needs. Establishing LAN net	June 1 – July 15, 2002	1. SIF responsible for ensuring the correspondence of premises to PC installation specifications

Task No	Definition of Tasks	Period of Implementation	Assignment of Responsibilities 1. SIF 2. YICRD 3. PADCO 4. MOSS
	SIF based on IT assessment of needs. Establishing LAN networks and incorporating existing pension equipment in the PARNAS system.		tion specifications 2. YICRD responsible for specifications and installation 3. PADCO responsible for delivery of equipment based on IT assessment and travel expenses of YICRD personnel
4.10	Development of Back up procedures. Linking central operational and archiving systems.	July 15 – 30, 2002	1. SIF responsible for ensuring the correspondence of premises to PC installation specifications 2. YICRD responsible for installation 3. PADCO responsible for delivery of equipment
4.11	Installation of software packages (levels R, C, A) with full testing in 51 districts and at central level	June 15 – July 30, 2002	2. YICRD responsible for installation 3. PADCO responsible for travel expenses of YICRD personnel
4.12	Development of testing package of PARNAS system. Testing of functions at the test site of YICRD. Preparing protocols of testing with recommendations for improvement.	Aug 1 – 30, 2002	2. YICRD responsible for development 3. PADCO responsible for technical support, monitoring and financing
4.13	Development of methodology of changing current pension numbers to personified numbers	May 15 – 30, 2002	1. SIF responsible for approval and order for change 2. YICRD responsible for development 3. PADCO responsible for technical support, monitoring and financing
4.14	Development of virus-protection procedures for PARNAS	Jan 15 – Feb 15, 2002	2. YICRD responsible for development 3. PADCO responsible for technical support, monitoring and financing
4.15	Defining flow of information among different levels of the system	Feb 1 – 28, 2002	2. YICRD responsible for development 3. PADCO responsible for technical support, monitoring and financing
4.16	Development of security subsystems (passwords, physical level, system level of protection) at all levels	Jan 1 – 30, 2002	2. YICRD responsible for development 3. PADCO responsible for technical support, monitoring and financing
4.17	Full installation of software and hardware means in all districts, SIF and archive. Testing all back-up procedures.	Oct 1 – 30, 2002	1. SIF responsible for assigning personnel 2. YICRD responsible for installation 3. PADCO responsible for delivery of equipment and travel expenses
4.18	Development of automatic checking software for control of forms delivered from employers to find out errors and deviations from the rules	May 1 – June 15, 2002	2. YICRD responsible for development 3. PADCO responsible for financing and technical support
4.19	Development of Pension calculation subsystem based on mixed Araks/PARNAS system data	June 1 – July 30, 2002	1. SIF responsible for development of methodology 2. YICRD responsible for development of the subsystem

Task No	Definition of Tasks	Period of Implementation	Assignment of Responsibilities 1. SIF 2. YICRD 3. PADCO 4. MOSS
			3. PADCO responsible for technical support, monitoring and financing
4.20	Development of procedures for changing personal account as a result of checking employers	June 1 – 30, 2002	2. YICRD responsible for development 3. PADCO responsible for technical support, monitoring and financing
<b>Expected results from completion of phase 4:</b> All software subsystems developed and tested. Equipment delivered and installed in all regional offices and in the Central site. Documentation of the PARNAS fully developed.			
<b>PHASE 5: TRAINING OF PERSONNEL AND ESTABLISHING COMMUNICATION MEANS FOR PARNAS DATA TRANSFER</b> This phase includes training of personnel from all SIF district offices, as well as training of selected employers included in the pilot testing of PARNAS. Communication means will be tested and included into the data chain.			
5.1	Development of a training courses for Districts, Central Site and Employers personnel.	Aug 1– 30, 2002	1. SIF responsible for approval of courses 2. YICRD responsible for development 3. PADCO responsible for technical support, monitoring and financing
5.2	Training personnel from regional and Marz centers (170 persons) in YICRD and issuing certificates upon completion of courses.	Sep 1– Oct 30, 2002	1. SIF responsible for ensuring attendance 2. YICRD responsible for training 3. PADCO responsible for travel expenses, rental of computers for training and cost of materials printing
5.3	Training SIF PARNAS center personnel (10 persons) in YICRD	Oct 15 – 30, 2002	1. SIF responsible for ensuring attendance 2. YICRD responsible for training 3. PADCO responsible for travel expenses
5.4	Training of administrators from district offices of SIF ( 60 persons) in YICRD.	Nov 1– 30, 2002	1. SIF responsible for ensuring attendance 2. YICRD responsible for training 3. PADCO responsible for travel expenses
5.5	Inclusion of all laws and regulations pertaining to PARNAS in the system (separate subsystem with references)	Sept 15 – Oct 15, 2002	1. SIF responsible for ensuring Laws and regulations 2. YICRD responsible for development 3. PADCO responsible for technical support, monitoring and financing
5.6	Development of PARNAS analytical package for: <ul style="list-style-type: none"> <li>• analysis of number of pensioners</li> <li>• potential pensioners for years brackets</li> <li>• Employed by specialities</li> </ul>	Aug 15 – Oct 30, 2002	1. SIF responsible for defining the scope of the package 2. YICRD responsible for development 3. PADCO responsible for technical support, monitoring and financing

Task No	Definition of Tasks	Period of Implementation	Assignment of Responsibilities 1. SIF 2. YICRD 3. PADCO 4. MOSS
	<ul style="list-style-type: none"> <li>• Employed by organizations</li> <li>• Employed by regions</li> <li>• number of employed with privileges</li> </ul>		
5.7	Development of computerized rules of: <ul style="list-style-type: none"> <li>• movement of documents in the system</li> <li>• the way to create files of insured persons</li> <li>• relations among databases and referral rules</li> </ul>	Nov 15 – Dec 30, 2002	2. YICRD responsible for development 3. PADCO responsible for technical support, monitoring and financing
5.8	Establishing communication network among marz offices, YICRD and SIF. Full testing of PARNAS on a test package and signing acceptance trial protocols with the provider	Sept 1– 30, 2002	2. YICRD responsible for testing and acceptance trials 3. PADCO responsible for contracting a provider and monthly payments for communications and travel expenses of YICRD specialists
5.9	Reorganization of district centers because of introduction of PARNAS	July 1– Aug 30, 2002	1. SIF responsible for reorganization 2. YICRD responsible for checking 3. PADCO responsible for travel expenses
5.10	Transfer of training responsibility to SIF	May 1 – June 30, 2003	1. SIF responsible for assignment of personnel 2. YICRD responsible for training SIF trainers and transferring latest version of training material
<b>Expected results from completion of phase 5:</b> Personnel of SIF and district offices trained, training manuals developed. Communication lines selected and tested. The system ready for pilot implementation.			
<b>PHASE 6: PILOT TESTING OF PARNAS FOR SELECTED GROUP OF EMPLOYERS</b>			
This phase includes pilot testing of all subsystems of PARNAS on actual data delivered from representative set of employers and corrective actions taken.			
6.1	Full check-up of all subsystems of PARNAS on a real set of documents from an employer (to be selected)	Jan 1– Mar 30, 2003	1. SIF responsible for ensuring standard procedures between the employer and SIF departments on a monthly basis 2. YICRD responsible for check-up of the system
6.2	Checking all documents, manuals and equipment available in the regions included in the pilot project	Feb 1– 28, 2003	2. YICRD responsible for checking 3. PADCO responsible for technical support, monitoring and financing and travel expenses
6.3	Retraining personnel of district offices	Feb 15 – 28, 2003	1. SIF ensuring personnel attendance 2. YICRD responsible for retraining 3. PADCO responsible for travel expenses

Task No	Definition of Tasks	Period of Implementation	Assignment of Responsibilities 1. SIF 2. YICRD 3. PADCO 4. MOSS
6.4	Preparing booklets and explanatory materials about Personal Accounts, their importance and ways of usage	Jan 1 – Feb 28, 2003	1. SIF responsible for preparing of overall materials 2. YICRD responsible for computer set-up 3. PADCO responsible for delivery of materials and contracts for printing
6.5	Development of an inquiry system for employees applications' and PARNAS responses	May 1 – June 30, 2003	2. YICRD responsible for development 3. PADCO responsible for technical support, monitoring and financing
6.6	Pilot testing of the system through the full chain of information exchange: Employee – Employer – District – Marz – SIF – Archive	May 1 – June 30, 2003	1. SIF responsible for the work of the chain according the specifications 2. YICRD responsible for checking procedures and corrective actions 3. PADCO responsible for travel expenses
6.7	Analyses of deficiencies and shortcomings of the system. Preparing list of recommendations for the second version	May 15 – June 30, 2003	1. SIF responsible for analysis of organizational deficiencies 2. YICRD responsible for analysis of system deficiencies 3. PADCO responsible for technical support, monitoring and financing
6.8	Making necessary changes in procedures, methodologies, software and documentation based on pilot test results (version 2 of the system)	June 1 – 30, 2003	1. SIF responsible for making corrective orders 2. YICRD responsible for making necessary changes in PARNAS software and documentation 3. PADCO responsible for technical support, monitoring and financing
6.9	Preparing recommendations for the first stage of implementation of the system in one MARZ	June 1 – 30, 2003	1. SIF responsible for organizational recommendations 2. YICRD responsible for implementing recommendations 3. PADCO responsible for technical support, monitoring and financing
<p><b>Expected results from completion of phase 6:</b> the PARNAS system pilot tested in selected employer sites. Recommendations based on the pilot project prepared and carried out. Second version of the system developed. The system ready for Real Time Implementation on a wide scale.</p>			