Statistics Norway

Statistisk sentralbyrå

Halvard Skiri, Mirela Talka Kumbaro, Anne Abelsæth,
Stein Opdahl, Helge Brunborg and Dag Roll-Hansen

How to modernise a Civil Registration System
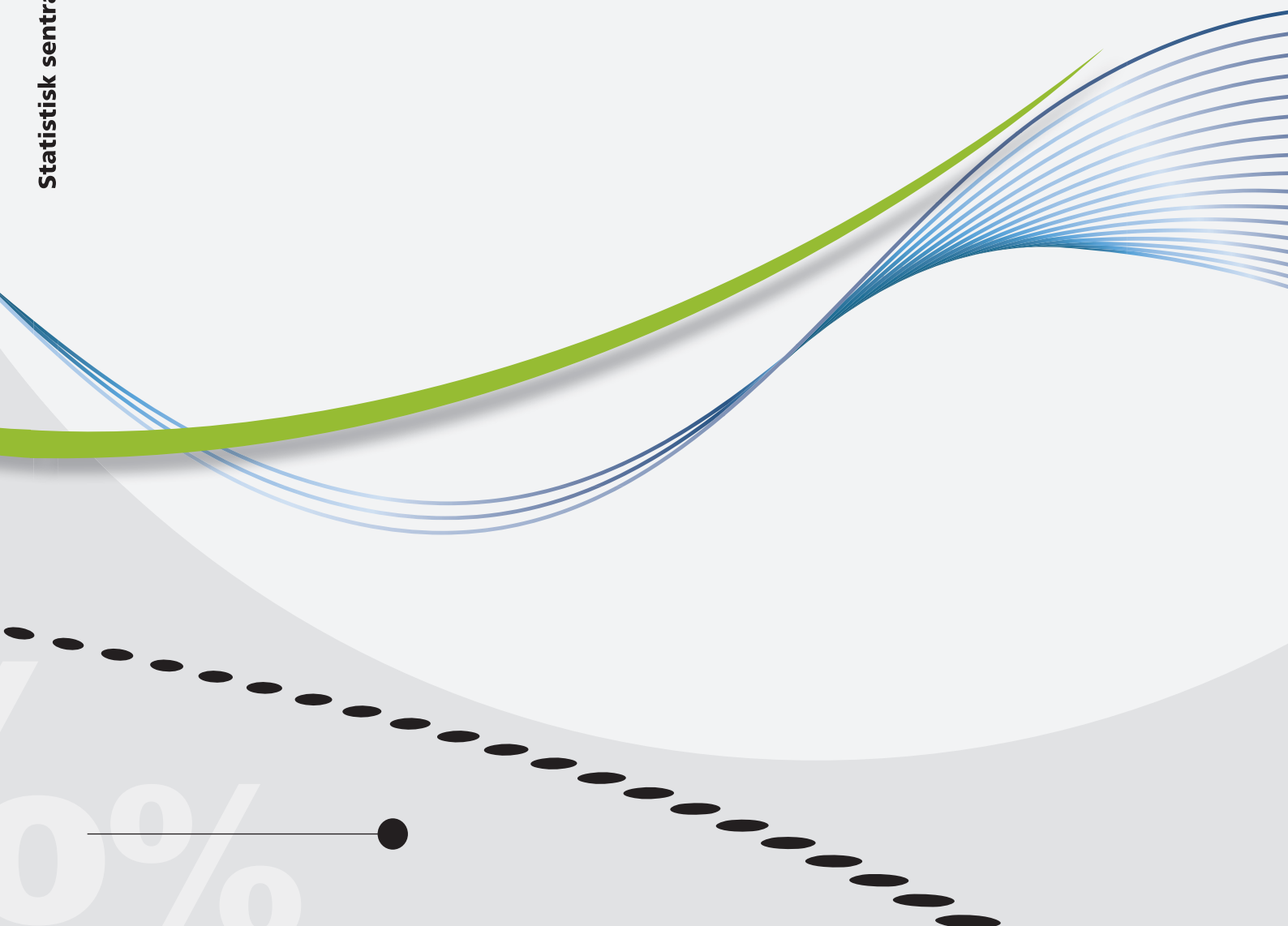
The case of Albania

*Halvard Skiri, Mirela Talka Kumbaro,
Anne Abelsæth, Stein Opdahl, Helge Brunborg and
Dag Roll-Hansen*

How to modernise a Civil Registration System

The case of Albania

Documents   In this series, documentation, method descriptions, model descriptions and standards are published.

Symbols in tables	Symbol
Category not applicable	.
Data not available	..
Data not yet available	…
Not for publication	:
Nil	-
Less than 0.5 of unit employed	0
Less than 0.05 of unit employed	0.0
Provisional or preliminary figure	*
Break in the homogeneity of a vertical series	—
Break in the homogeneity of a horizontal series		
Decimal punctuation mark	.

Preface

Some say that the world is getting smaller, but it is not. It just feels smaller, because modern technology helps overcome the distances.

To be part of the modern world, with its advantages and obligations an identity is required. For the government to provide schooling, health services and to know who should be eligible to vote, it needs to know who you are. It also needs to know who are to pay taxes, do military service and contribute to society in other ways.

This is why many countries want to keep track of their residents; to know when they are born, when they marry or divorce and when they die. The Albanian government wanted to modernize its system for civil registration. Statistics Norway has contributed to this process.

The process of developing the new civil registration system has been challenging. It has learned us a lot, among other things about clarifying roles and responsibilities. But we will get back to this. The result was successful, and Albania today has a modern civil registration system.

Abstract

Albanian authorities and Statistics Norway have cooperated with Albanian government institutions on modernising the Albanian civil registration system since 2001. The former register was based on hand written books. The primary partner on the Albanian side has been the Drejtoria e Përgjithshme e Gjéndjes Civile (General Directorate for Civil Status, GDCS). In 2009 colleagues from Instituti i Statistikës (Institute of Statistics, INSTAT) and Statistics Norway started cooperating, primarily on preparing for the production of register-based statistics in Albania.

Statistics Norway has contributed to a successful modernisation of the Albanian civil registration system. Today it is used for several administrative tasks, like establishing a voters' list and issuing of passports and other official identification papers.

GDCS have played an important role in modernising the Albanian civil registration system and have contributed substantially to the recourses needed to complete the work. INSTAT have experienced statisticians that can take the task of building register-based statistics further.

Contents

List of Acronyms

AP	Assistance Project (The Pilot Project from 01 September 2004)
CoE	Council of Europe
CoM	Council of Ministers
CS	Civil Status
CSO	Civil Status Office
CSS	Civil Status Service
DNR	Department of National Register
EUD	European Union Delegation
FR	Fundamental Register
GDCS	General Directorate of Civil Status
GoA	Government of Albania
ID card	Identity card
IFES	International Foundation for Election Systems
INSTAT	Institute of Statistics
ISSH	Social Insurance Institute
LAMP	Land Administration and Management Project
MLG	Ministry of Local Government (before 2003)
MLGD	Ministry of Local Government and Decentralisation
MoFA	Ministry of Foreign Affairs
MoI	Ministry of Interior
MoJ	Ministry of Justice
MoU	Memorandum of Understanding
NCR	National Civil Register
NOK	Norwegian Kroner
Norad	Norwegian Agency for Development Cooperation
NRA	National Register of Addresses
OSCE	Organization for Security and Co-operation in Europe
OSCE PiA	OSCE Presence in Albania
SN	Statistics Norway
TA	Technical Assistance
WB	World Bank

1. Summary

Statistics Norway (SN) is pleased to have been able to contribute to the important and challenging project "Modernisation of the Civil Registration System in Albania", later denoted the project. Due to an old-fashioned system of civil registration, the services to the citizens were poor and the system was of unsatisfactory quality. As a result of this project, the Republic of Albania has developed a modern and reliable system for civil registration. The establishment of the modernised Albanian National Civil Register (NCR) has provided reliable production of different important documents, like ID cards, biometric passports and voters' list. The production of biometric passports was one of the conditions for visa liberalisation for Albanian citizens: To make it possible to travel throughout the Schengen area without a visa. This was implemented in December 2010. The NCR also serves many other purposes, it e.g. provides an important source for the production of register-based statistics.

After the 1990s, faced with the new social-political factors (such as free movement, drastic urban changes, administrative changes, etc.) the Civil Status Service (CSS) in Albania started to reflect its real problems both from the legal and administrative points of view. Considering the urgent need, Statistics Norway presented a proposal for modernising the Civil Status (CS) system to the Government of Albania on 21 March 2001. In this project proposal three phases were outlined: The first one a planning phase, the second a pilot phase, and the third phase the modernisation of civil status service in all Albania. The last phase was too expensive for Norway to fund alone, that's why this part was mainly funded by European Union (2.5 million Euros) in cooperation with the Organization for Security and Co-operation in Europe (OSCE), SN, US Government, Council of Europe (CoE) and the Government of Albania.

Later, a fourth phase was added under a new name: "Developing Register Based Statistics in Albania". It aimed to scan historical register material and to pave the way for the production of register based statistics in Albania.

Statistics Norway's initial project proposal was well received by Albanian authorities. Albania decided to adopt the solution proposed by Statistics Norway, a solution based on the Nordic model – including introduction of a personal identification (ID) number and a central population register – adapted to Albanian conditions. In October 2001 SN established a project office in Tirana, with a project manager and soon after a local project coordinator. The Ministry of Local Government and Decentralisation (MLGD), before 2003 named MLG, became SN's counterpart. For several reasons the timetable turned out to be too optimistic, but grants for 2001 (4 million NOK) were made available for later use.

The key tasks during the inception phase were to assess the actual situation of the civil registration systems in Albania, to evaluate related projects and activities, to achieve necessary binding written agreements with the Government of Albania, to provide recommendations on how to proceed with the project in the current situation, to specify planning of activities within the project, and to advise on the MLGD project management and project working group.

Considering the good SN's project result with the pilot CS offices, in March 2003 OSCE asked the SN staff for rough cost estimates for the funding needs of the nation-wide CS modernisation. Two weeks later, SN presented a brief plan with cost estimates on a nation-wide CS modernisation in Albania to OSCE and MLGD. This document was well received by both parties and served as a basis for the EU Commission's fund-raising of the full-scale modernisation project.

By the end of 2006, an agreement was signed between the European Commission, represented by the European Commission Delegation (ECD) in Albania and the

OSCE, represented by the OSCE Presence in Albania, by which the OSCE PiA was entrusted to implement the project "Technical Assistance to the Government of Albania on modernisation of administrative address and civil registration systems" (the "TA Project"). The implementation of the proposed project activities was planned to take place between June 2007 and October 2009, but due to delays it was extended till December 2010.

The year 2008 marked a milestone for the national civil register project. At the end of the year, based on the register books, all resident persons in Albania were entered into a digital national register. With an online connection to all civil status offices throughout Albania, the register is used as the basis for providing voters' list, processing biometric passports and producing national ID cards.

In 2009 the Norwegian Ministry of Foreign Affairs chose not to support the project. However, SN took responsibility for financing the cooperation, supporting the work with 2 million NOK. Funds from Norwegian Ministry of Foreign Affairs were again made available in 2010.

During 2009 SN in Tirana developed an effective and affordable customised scanning tool based on camera technology together with a web distribution software, enabling transfer of scanned images to local CSOs and archives throughout Albania.

However, the General Directorate of Civil Status (GDCS) still had challenges ahead, where they inquired SN for further assistance. GDCS asked SN for further technical support, in particularly two areas; scanning of the archive register books and transfer of data from National Civil Register (NCR) to third parties. By the end of 2010 SN, together with the OSCE (financial support) and GDCS (logistic support), completed the digitalisation of these books, about 12 000, and created an important historical digital archive, accessible through the actual local Civil status offices (CSOs) for all residents throughout Albania. This scanning project is a success story, considering the limited SN funds available for the project and its importance.

The new NCR enables Albanian institutions to build a modern IT infrastructure where civil registration will be one of the cornerstones of the public administrative IT systems. SN has supported transfer of information from the NCR to Institute of Statistics of Albania, INSTAT, for producing register-based statistics.

One challenge was that SN was generally not consulted in decision-making processes. This became apparent during the process of purchasing software for the NCR. The software was purchased through a tender process, neither involving independent consultants nor SN. Our initial understanding was that the software should be licensed as Open course, enabling the GDCS, INSTAT and SN to maintain the system and to develop it further. At that time we thought there was a general agreement on the system requirements. This was however not the case, something that caused a challenge for the process of making the NCR available for users outside the GDCS. Furthermore, we have not seen it as our task to follow up on external agreements. Later we have realised that such issues must be discussed with our partner institutions to clarify the recommendations and requirements for further engagement form our side. Solutions to the challenges were found, and INSTAT now have access to the NCR. This is an example of a challenge that has occurred because SN was not sufficiently involved in the decision-making process.

Nevertheless, this project is another step toward the increase of transparency in the economy and simplifies the interaction between public administration, the nation's residents and the private sector.

Making a National Civil Register is challenging and the task may be best solved by involving other parties in addition to SN. For the technical implementation it may be useful to involve the Norwegian Tax Collection Authority, which is in charge of the national Norwegian Population Register, or another provider of relevant technical services.

Giving the Nation's Statistics Office access to the data should always be a part of building a National Civil Register. How this best can be done is a question that deserves attention.

Finally, the projects "Technical Assistance for the Modernisation of the National Civil Register in Albania" and "Developing Register Based Statistics in Albania" have shown that it is important to continue to invest in building and maintaining registers. Furthermore, they have shown that the importance of the register infrastructure is not limited to the institutions maintaining the data, but represents an efficient and effective tool to be utilised both in private and public sector, benefiting the society at large.

2. Introduction

When our development cooperation project on Modernisation of the Civil Registration System in Albania now has come to an end it is time to reflect on whether this was a success or failure and why so.

There should be no doubt, the Norwegian project has definitely been a success, with achievements far overreaching the objectives, and jointly with other support, managed to assist the Albanian authorities to build and maintain not only a register for the future, but a register linking back to the past and well designed to serve the various users in Albania in the years to come.

But, of course, it is equally useful to discuss how the financial support from Norway and the technical cooperation from Statistics Norway contributed jointly with other initiatives and whether this was achieved in an efficient manner.

In order to answer these questions it is useful to discuss the technical and organisational challenges when establishing an electronic population register, but also how the development cooperation approach has changed over the period, which in fact adds up to more than ten years.

Whether you want to establish a population register by modernising an old, hand-written family-book system, through one or more censuses, or from scratch, you are facing a number of technical and organisational challenges to be overcome. Statisticians may often say that to establish a large register may be demanding enough, but the real challenge is to develop a system that is running and regularly updated. Luckily enough we did not start from scratch in Albania. They already had a well established (but not well running) system in place with the family books, where all records for each family were written down on the family page in the register books.

But still the Albanians, and hence we in a shared manner, faced quite some challenges:

Organisational challenges
- New demands were in the pipeline, in the short run a voters' list and in the long run mainly the requirement by EU for a system of ID cards, but also to serve as the base for passports, driving licenses, bank IDs and other instruments for financial transactions.
- To ensure the legal base for the overall system and the applications.
- Several ministries had their stake in the work and the political leadership was not agreed upon.
- The existing, manual register system was in regular use to produce lots of various certificates such as birth and address certificates. How should a smooth transition to a modern system be organised?

Technical challenges and tasks
- To design a statistical system allowing for the necessary IDs and variables at the individual level, for the variables linking family members, and for migration.
- To design an IT system to match the statistical demands.
- To enter old family book data into the new system.
- A special challenge was known to be double registration of migration after the communist era.
- To procure and roll out the necessary software and hardware.
- To train the staff at the central administrative register unit and at the local level institutions.
- During the development and implementation phase to make sure the local registries could continue to issue certificates.

- To make sure the system was well designed for future secondary use, such as to serve the voters' list and the production of statistics

Development Cooperation challenges
- A main challenge was coordination and the need for a lead development partner. Since the task of modernising the population register is a huge one, several development partners were needed. Statistics Norway served the role as an overall technical adviser, but the costs and work to procure and roll out the hardware required a large donor such as OSCE and the EU. The Albanian Government decided to put out for tender the role of developing the software.
- Another challenge was that when the project started Statistics Norway followed the general recommendation of Norad to focus on technical issues. This recommendation was developed for countries where initially the Norad headquarter and later on the local Norwegian embassies would cooperate with the national authorities and agree upon the policy framework. Norwegian institutions such as Statistics Norway would then be asked to contribute to the technical implementation within such a policy framework. Today the general recommendations have changed and Statistics Norway would generally work actively to link up to other financial and technical donors.

Despite the technical tradition of development co-operation in Statistics Norway, we embarked at an early stage upon the work to push for a legal and organisational base and an overall agreement between the Albanian stakeholders and the work to link up to other donors. In periods these tasks demanded substantial work from our side and delayed the technical work.

Originally, three project phases with specific objectives were agreed upon:
- First phase: Strengthen the ability and capacity of the civil registration system by establishing formally a central administrative unit in charge of civil registration, a central national register and necessary legislation.
- Second phase: Strengthen the ability and capacity to serve the residents and authorities by establishing and developing the central administrative unit and the central register, and by carrying out the computerisation of 2 – 4 local civil registration offices, to gain experience.
- Third phase: Contribute to strengthen the modernisation of the civil registration in the rest of Albania. Other donors and agencies would be invited to participate, as this would be very resource-demanding. In addition to the change from handwritten books to digitised data, a development from a traditional Civil Registration system, towards the Nordic model of population registration adapted to Albanian conditions, was initiated. Civil Registration systems are often called Civil Status (CS) systems.

As spelled out later in this report, the project followed the track laid out by these three project phases leading up to pilot projects in Durrës and Shkodër to gain experience and to prepare for "the modernisation of the civil registration in the rest of Albania", as stated as the objective of the third phase.

Fortunately, close collaboration was developed with the OSCE voters' list project. In theory, we would have liked to encourage the development of a modern population register and arrange for the subset of the population above voting age to feed into the voter register. As discussed in this report, that was not a straightforward task, but anyhow the close co-operation between the OSCE project and the Norwegian project turned out to be mutually beneficial on both technical and organisational issues.

The objectives of the first two phases were a real challenge, but gave the project a clear goal and allowed for the path to be adjusted and still point towards the final goal. However, the open-ended objective of the third phase turned out to be more

of a challenge in the sense that no Albanian or donor institution was able to take the responsibility to serve as the lead and co-ordinating agency.

When the register system was almost taken to the end and it was a matter of completing and testing the software and rolling out the hardware from the successful tests in Durrës and Shkodër, neither GDCS, the Ministry of Interior, the OSCE project, nor any Norwegian institution was able to ensure a well co-ordinated process for the final software solution and a hardware tender.

Hence, when the Austrian development authorities offered to fund and the Austrian national statistical office offered to provide a technical solution through a business affiliate, all partners in Albania were very satisfied. Statistics Norway was, however, concerned about the ability of the Albanian institutions to run, maintain and further develop the software, but we were happy when we were told they would use an open source solution.

This allowed us to focus on the necessary add-ons, such as to:
1. Organise for how to transfer the already computerised information into the new system.
2. Computerise old information which was essential to make the future register complete for all living persons in Albania.

Hence a fourth phase was added aimed at strengthening the ability and capacity of the modernised CS offices to utilise old archive information by securing the material for the future. This was done by establishing a system for, and fund the work, to scan the old manual archive registers books in all Albania, in order to secure historical CS information. Further, it aimed at strengthening INSTAT's access to Central Population Register data in order to produce relevant statistics in a more rational way. As presented in the report, the first task was completed and the fourth phase objective fulfilled.

Unfortunately enough, it turned out that the Austrian offer was not as nice as perceived. They used open source code to design their system, but they did not provide access to the source code for the GDCS. Their justification was their guarantee for the system to work properly for the years to come. Rather than arranging for how new requirements, such as giving access to the data for statistical purposes by INSTAT by allowing for add-ons, they demanded additional pay for such tasks – hardly a way to build capacity.

Hence the overall conclusion from Statistics Norway is first, that this has been a very successful project where Statistics Norway has provided a core set of support and cooperation by working with Albanian partners as well as other development partners. But also second, that due to a) the lack of legal decisions when the project started, b) the lack of a coordinating register champion at Minister level, and c) the lack of one leading agency from start to end both at the Albanian side and at the donor side, the project demanded ten rather than five years to be completed, as well as substantially more resources than envisaged at the outset of the project.

Statistics Norway would be ready to assist similar projects in other countries, but would then make sure that the above-mentioned requirements would be met at the start or at given milestones, before embarking upon any professional technical co-operation.

In March 2001 Statistics Norway presented to the Albanian Government a three phase project proposal for modernising the civil registration system. The proposal was well received, and a Norwegian project manager was in place in Tirana from October 2001. An agreement between the Ministry of Local Government and Decentralisation (MLGD) and Statistics Norway (SN) was signed in January 2003.

From 2006 the project was a part of an international project managed by the Organization for Security and Co-operation in Europe (OSCE).

A fourth phase of the Norwegian-funded modernisation project was added later, based on a request form the Ministry of Interior in Albania (MoI) late in 2008. MoI asked Statistics Norway for further technical support, in particularly two areas. First they requested assistance in scanning old register books, containing historical information. Second, they asked for assistance in making the national civil register (NCR) available to INSTAT and other government institutions. An agreement was reached to scan the old register books and to assist in finding and implementing solutions to make the NCR available to INSTAT and assist in enabling INSTAT to produce register based statistics. The Norwegian contribution ended on 31 July 2011.

2.1. The background of the project

Following the 1990s, the right to free movement, as one of the basic principles of a democratic state, brought about huge demographic changes in Albania, changes that are now reflected both in view of emigration, and domestic migration.

In connection with preparations for the Albanian 2001 population census a Statistics Norway member of an international expert group in July 1999, Helge Brunborg, realised the strong need to modernise the country's civil registration system. After discussing the structure and use of a modernised system, involving also the Norwegian Embassy in Tirana, the Norwegian Government offered to provide funding for a pilot modernisation project with technical assistance from Statistics Norway.

Statistics Norway's project proposal was well received by Albanian authorities. The Albanian Government highlighted the need for improved civil registration services and decided to adopt a solution based on the Nordic model, including introduction of a personal identification (ID) number and a central population register, adapted to Albanian conditions.

The Statistics Norway contribution comprised conceptual and legal development as well as other technical assistance. The Norwegian funding through the Ministry of Foreign Affairs also covered hardware and necessary software for the pilot period, 1 December 2002 – 31 December 2004, for a number of local register offices as well as hardware and necessary temporary software for the large scale operation and a central register (2007–2009), together with training and some study visits. The last part of the project (2009–2011) covered activities related with the digitalisation of the archives of the civil status registers and the transfer of NCR data to other institutions, like INSTAT.

A Norwegian resident project manager, Halvard Skiri, was established with an office in Tirana together with a local project coordinator, Mirela Talka Kumbaro, from October/November 2001. Halvard Skiri left Tirana in June 2003, to be succeeded by another resident project manager, Børge Strand, in early September 2004, followed by Anne Abelsæth, October 2005 – September 2008, and René Schmidt, May 2009 to February 2010. From February 2010 until its end 31 July 2011, the project was managed by the local project coordinator, Mirela Talka Kumbaro, and the support team in Oslo coordinated by Dag Roll-Hansen.

At the beginning there was not full clarity about the political and administrative responsibilities for the Albanian civil registration system, as both the Ministry of Justice and the Ministry of Local Government and Decentralisation (MLGD) (later the Ministry of Interior (MoI)) were involved. As a consequence of the project the Government of Albania established the General Directorate of Civil Status (GDCS) under the Ministry of Local Government and Decentralisation (MLGD). Statistics

Norway had frequent contact with these institutions and also with the Institute of Statistics of Albania (INSTAT).

From 2006 the project was a part of an international project managed by the Organization for Security and Co-operation in Europe (OSCE). OSCE mainly focused on legal and administrative issues, as well as overall planning. SN took responsibility for technical assistance, development of software and procurement of necessary equipment.

In December 2008 the MoI rolled out the new National Civil Register (NCR), which was developed in co-operation with the Austrian company XION/BMI recommended by the Austrian Ministry of Interior. The implementation of the NCR at all CSOs in Albania has now been completed.

However, further assistance was needed. Late in 2008 MoI asked Statistics Norway for further technical support, on particularly two areas:
- scanning of the old register books
- transfer of data from the civil register (NCR) to other institutions in Albania, like INSTAT.

The Government of Albania and Statistics Norway have signed three agreements "On the Modernisation of the Civil Registration system in Albania", aiming to the development of a reliable central population register in Albania which meets international standards. The final target of the Albanian government was the commencement of issuing ID cards as a strong requirement for the integration of Albania in the European Union.

1. Protocol I (13.01.2003) covering the period 01.12.02 – 31.03.03[1] (210 000 USD)
2. Protocol II (02.02.2005) covering the period 01.09.04 – 31.08.05[2] (781 000 USD)
3. Agreement III (02.10.2008) covering the period 01.10.2007 – 31.12.2008 (3 mill. NOK)

To increase the understanding of the Nordic model, its possibilities and limitations, some study visits to Norway were organised, as indicated in the budget. The study visits were relevant not only for Civil Status directors and staff, but also for staff from other institutions which will use civil status data, such as INSTAT and the Social Insurance Institute (ISSH).

This cooperation has been funded by the Norwegian Ministry of Foreign Affairs (MFA) and executed by Statistics Norway. The overarching objective of the project was to assist the Government of Albania with the modernisation of the Albanian civil registration system.

---

1 Extended until 31.08.2003

2 Valid until new agreement was signed

3. Objectives

The overall objective of the project was to contribute to a modernisation of Albania's civil registration system for the benefit of the authorities as well as the residents of the country.

3.1. Original objectives

Originally three project phases with specific objectives were agreed upon.

- First phase. Strengthen the ability and capacity of the civil registration system by establishing formally a central administrative unit in charge of civil registration, a central national register and necessary legislation.
- Second phase. Strengthen the ability and capacity to serve the residents and authorities by establishing and developing the central administrative unit and the central register, and by carrying out the computerisation of 2 – 4 local civil registration offices, to gain experience.
- Third phase. Contribute to strengthen the modernisation of the civil registration in the rest of Albania – where other donors and agencies would be invited to participate, since this would be very resource-demanding. In addition to the change from handwritten books to digitised data a development from a traditional Civil Status (CS) system towards the Nordic model of population registration, adapted to Albanian conditions.

The project also aimed to strengthen the ability and capacity to perform technical assistance to the large scale Project in all Albania, starting with pilot projects in Durrës and Shkodër to gain more experience.

A fourth phase added later aimed at strengthening the ability and capacity of the CS offices to utilise old archive information by securing the material for the future. This was done by establishing a system for, and fund the work, to scan the old manual archive registers books in all Albania, in order to secure historical CS information. Furthermore it aimed at strengthening INSTAT's access to CS register data in order to produce relevant statistics in a more rational way.

3.2. Planned outcomes and outputs

By implementing the tasks outlined in the project documents for the original objectives, the planned outcomes and outputs were:
- An operative, administrative Civil Status (CS) office;
- A central national CS register database (prototype);
- 2 – 4 computerised local CS offices – "pilot offices" to get experience;
- A new, suitable CS law and other necessary legislation;
- A comprehensive, modernised nation-wide civil registration (CS) system in Albania.

By implementing the tasks decided later the planned outcomes and outputs were:
- Completed digitising of the CS offices in Durrës and Shkodër;
- Scanned old CS archives (CS register books) in all Albania;
- A comprehensive system for transferring CS data to INSTAT;
- Register based statistics produced by INSTAT.

3.3. Sustainability

The work to modernise the Albanian civil register and to make it accessible in an electronic format has been a joint effort between colleagues in GDCS and Statistics Norway. Both the tasks and the responsibility for accomplishing them have gradually been transferred to GDCS. This will enable the institution to maintain the registers.

The NCR and the recent population census in Albania (2011) are key elements in the development of modern statistics. Competence to utilise them to the produce register-based statistics has been transferred to INSTAT. Equally important is the relations established between colleagues in Albania and Norway, facilitating further co-operation after the end of the project. Also, INSTAT has sent a request for further cooperation with Statistics Norway.

3.4. Gender and equality

When using registers to make statistics, it is generally easy to make statistics illuminating differences based on gender. This can make differences in living conditions between women and men visible.

The Statistics Norway office in Albania was headed by an Albanian woman from March 2010 until the end of the project. Furthermore, there are many female staff members in our partner institutions, also in leading positions. This goes particularly for INSTAT, were also the Director General is a woman.

The cooperation on developing and exchanging competence has in our opinion made a contribution to strengthening the position of women, both in our partner institutions, and in the future potentially also in the Albanian society at large.

4. Historical background of the Civil Status Registration System in Albania

The Civil Status Service in Albania is a new service in terms of time. The period before the Albanian State was established (prior to 1912) was characterised by civil status fundamental acts (births, marriages and deaths) being recorded by religious institutions. In April 1929, the administration of King Zog 1st established the first offices of the Civil Status Service. Fundamental Registers (containing resident population) were first established in 1930 on the basis of a general registration of the population (door to door).

Thereafter, the main milestones of the first fifty years of Civil Status Service were:
- The General Census in 1945.
- The transcription of the Fundamental Registers in 1950.
- The General Census and Transcription of Fundamental Registers in 1974.

Albania has for many years kept local registers of the household, in communes and municipalities. Each register consists of books. The fundamental registers have a separate page for each family. In the books of acts the civil events births, deaths and marriages are entered. The old paper-based registers were cumbersome to use and had to be computerised to improve the quality and efficiency.

During the years of transition (1990–2010) an intensive process of migration within the country has occurred, as a result of which the structure of the population has been changing. During the last 15 years, Albania has seen a very intensive process of emigration of the population outside the country's borders, as well. For the period 1990–2000, the redistribution of the population inside Albania has been one of the most dramatic features of the Albanian transition. The northern districts lost a high proportion of their inhabitants, in some areas 40 to 50 per cent. This was mainly caused by internal migration, while the southern districts mainly lost inhabitants through emigration.

On the other hand the central parts of the country, and especially Tirana, saw a rapid increase in population (45 – 50 per cent in Tirana Municipality), leading to a largely uncontrolled process of urbanisation and suburbanisation which put enormous strains on the housing market as well as on infrastructure (water, electricity, roads etc.) and waste management. The redistribution occurred rapidly and has not followed the normal trends of urbanisation. The Tirana-Durrës region is the most rapid-growing one and could become a metropolis. More than one fourth (27 per cent in 2001) of the country's population is concentrated in this area and the trend suggests that the region will grow even faster in the future.

As a result the urban/rural structure of the population is also changing. In 1979 only 33.5 per cent of the population lived in urban areas, while in 2001 this share reached 42.1 per cent. Besides the natural processes of urbanisation, these changes are also due to the active migration flows inside the country with considerable masses of population moving from north to south and from east to west. Most of them are moving from the villages and small towns to the bigger cities. Lapraka (administrative unit no. 11 in Tirana Municipality) is one of the areas with the highest population of newcomers, with a predominance of young people or segments of society that traditionally have a high birth rate. The most popular communes for newcomers in Tirana District are Kamëz and Paskuqan north-east of Tirana Municipality, followed by the lowland districts Zall-Herr, Prezë, Vaqarr and Vlorë.

Many people do not any longer live where they are registered, and many events, such as deaths, are frequently not recorded. The data collection done by the Social Insurance Institute (ISSH) and the consequent fieldwork and analysis in connection with the 2000 local elections show that the quality of the Civil Status register data was far from being satisfactory. According to the Population Census on 1 April 2001 the

resident population of Albania was 3 069 000, while the civil status offices reported 4 028 000 – or 31 per cent more people – as of 31 December 2000. Of the discrepancy of about 960 000 persons, some 350 000 were found to be duplicates during the preparation of voters' list for the 2001 elections, while most of the rest of the discrepancy probably were citizens living abroad. For Tirana Municipality the relative discrepancy was even larger, 43.8 per cent, the population figures being 341 500 and 491 000, respectively. In addition several thousands of people are said to live in the most popular in-migration areas in Tirana without being registered there.

This system represented a need to be computerised to improve the quality and efficiency. In addition, the political changes and mass movements within and out of the country during the last decade have caused the registers to be very outdated.

The Civil Status Service made efforts to reflect correctly these demographic changes. However, lack of a suitable legal basis and the inappropriate administrative organisation have also led to the failure of having a proper recording of all events or phenomena pertaining to the citizens' civil status data and, sometimes, to their distortion, leaving room for abuses both from service employees and various falsifiers. So, the political changes and mass movements within and out of the country during the last two decades have caused the old registers to become steadily more outdated and thus less useful.

The Civil Status Service (CSS) in Albania was old-fashioned with the fundamental registers kept as hand-written books at over 400 local registration offices. This was an impediment for the creation of a modern administration with as few bureaucratic procedures as possible. Furthermore the system made it impossible to produce reliable voters' list, which have been repeatedly criticised in recent years before, during and/or after elections.

4.1. General Directorate of Civil Status (GDCS) and its main functions

The GDCS was established in June-July 2002 as part of the Ministry of Local Government (MLG), employing one director (as of July 2002) and two employees. This office, which initially had a status of a MLG department and was called the Directorate of Civil Status, was upgraded to General Directorate of CS in May-June 2003. The creation of GDCS was an important milestone in the implementation of the project, as for the first time there was an office at the national level, which could guide and coordinate the work of the district and local CSOs. Moreover, GDCS provides a centre for the nationwide civil registration system where the central National Civil Register database (NCR) can be maintained after the nationwide modernisation of the system. Without such an office the system could not have been modernised and centralised. Following the July 2005 parliamentary elections and the formation of a new government in October 2005, GDCS was transferred to the Ministry of Interior. As a result MoI became the counterpart of SN.

GDCS formerly was composed of two departments: The Department for Methods and Inspection and the Department of the National Register (DNR). The Department for Methods and Inspection drafted the legal acts related to the legislation on the Civil Status Service, as well as the methods, regulations, manuals, programs of qualification for the CS employees. It also controlled the execution of these functions in communes, municipalities, prefectures and in counsellors' services, in order to ensure a better service for residents of Albania and Albanian citizens abroad. The Department of the National Civil Register took care of the establishment and administration of the NCR. The NCR is a database covering all residents of Albania where the civil status components for individuals are collected and kept updated in a digital way. This department will follow up the Civil Status Service computerisation process, the establishment, updating and protection of the National Civil Register database.

At the end of the project period the GDCS had a larger staff of about 35 people and is composed of three departments: Department of National Register with a staff of 14 specialists, Department of Documentations and Procedures, with a staff of 11 specialists and the Department of ID Documents and Training with a staff of 9 specialists. The new structure creates new premises for the establishment of a unique state institution, making possible improved methodologies and facilitating access to civil status data from interested authorities.

Main functions of GDCS and the local Civil Status offices

- Registration of Acts and basic documents of the service
- Receiving and managing notifications (reports) on births, marriages and deaths
- Issuance of certificate from the Fundamental Registers or Books of Acts
- Declaration of marriage and issuance of the marriage certificate
- Transfer of civil status data when citizens change dwelling residence
- Managing change of name and surname
- Correction of civil status components
- Updating the Fundamental Registers
- Archiving of the Books of Acts (births, marriages and deaths)
- Providing information to other institutions.

Acts of civil status are the acts of births, marriages and deaths. Acts are unified authentic documents with equal legal power as those carried out in the court or before a notary. An act written by the CSS clerk and certified by his signature at the end of the document cannot be challenged, except when claiming its invalidation as inaccurate or fake before the court.

Before the modernisation of the Albanian Civil Status registration system, every 31 December each year at the end of the working day, the books of legal acts for that year were closed. On 10 January of the consecutive year, these books were handed over to the archives of the Civil Status Office in the region. As a result of the new system, there is no waiting for received reports in early January.

The most apparent problem with regard to the manual registration system was the procedures established for issuing certificates. As there was no official ID card in Albania (until 2009), certificates were needed for many purposes. This is particularly the case for the birth certificates, which are widely used as a basis for enrolling a child into school, applying for a passport, etc. A specific problem was that a certificate was valid for a period of three months only, even a birth certificate. The short life of these certificates meant that many residents needed new certificates over and over again. As a result, the total number of certificates issued per year amounted to around 8 million, a number considerably larger than the 3 million people living in Albania. Certificates were handwritten by a clerk after she or he had looked up the necessary information in one or more of the books. Afterwards the certificate was stamped and signed.

One of the fundamental duties of the Civil Status Service (CSS) is to provide information to other institutions. Today the CSS prepares information for the following institutions and purposes:
- Preparation of the voters' list.
- Preparation of monthly evidences on demographic changes for INSTAT.
- Monthly information for the Albanian Social Insurance Institute (ISSH).
- Preparation, in September each year, of the list of males who have reached the age to be called to military service.
- Co-operation with respective authorities for the verification of civil status data of citizens (police, prosecutor's office, courts, embassies, etc.).

4.2. Fundamental registers and the Books of Acts
The civil status information was stored in four manual civil status registers, the so-called *books*.

There were four different kinds of books:
- The Fundamental Register (the Family Register)
- The Birth Register
- The Marriage Register
- The Death Register

All entries in the books were hand-written, implying that they were old-fashioned and cumbersome to use. The Fundamental Register books were divided into a left page and a right page. The two pages combined provide information about a single family, the definition of which is close to the concept of the household in the Nordic countries. Information on each family member appeared in a single row.

The left page contained the following information:
- Code for book of the Fundamental Register
- Number of the row in page of the book
- First name
- Family name
- Father's name
- Mother's name
- Gender code
- Family relation code
- Date of birth
- Date of birth in spelling
- Code for city of birth
- Code for district of birth
- Citizenship
- Code for matrimonial status
- Maiden family name (in case of married woman)

The right page contained the following information:
Changes in the population: Deaths, marriages, divorces, migrations.

The remaining three kinds of books, also called acts, contained details on each of the specific demographic events: births, deaths and marriages. All changes were made by hand-writing in the family book. When a person died or migrated, his/her data were deleted (crossed out) in the family book. However, the original data could still be observed. A fundamental register may consist of several family books.

4.3. A need for action
Following the change of the system in 1991 and the onset of democratisation, the system fell into disrepair. Among other things, the reasons for this included massive population movements, a decline in the authority and effectiveness of the civil administration, and occasional political turbulences during the 1990s. The quality of the civil registration data declined so much that the information became almost useless for a variety of purposes, including the preparation of voters' list for national and local elections and for the tracking of vital events and population change at the national and local levels. This state of affairs called for remedial measures, which prompted action.

5. The Pilot Phase of the National Civil Register project

Based on the Albanian government's priority, Statistics Norway initiated a project in Albania "Modernisation of the Civil Registration System in Albania" and signed three agreements with the Government of Albania, the Ministry of Local Government and Decentralisation, which aimed at the modernisation of the Civil Status System in Albania. The project was financed by the Ministry of Foreign Affairs (MFA) of Norway. The project was divided into three main parts[3], of which the two last ones were:

- Pilot phase in local Civil Status offices. (Originally in the areas Kamëz, Bathorë, Klos, Prezë and Tirana 7. Later the pilot offices were changed to cover two of the biggest cities in Albania: Durrës and Shkodër.)
- Nationwide computerisation/modernisation of the Civil Status registers (385 local CS offices)

The specific objectives of the pilot phase was to develop a system that could be tested out on computerised data from a limited number of local registries (CS offices) in order to gain experience on routines for data entry, data checking, issuance of certificates etc, before the start of the nationwide modernisation.

SN suggested that the computerisation of the CS registers should be done gradually, by first computerising the registers in some municipalities and communes through a pilot phase. The remaining registers in the country might be computerised later, when sufficient experience had been gained and the infrastructure was adequate. Furthermore, SN proposed the development of a legal and technological basis for standardisation and the systematic exchange of data between the local registers. This would involve the establishment of a central register unit for co-ordination of the local civil registers. It would also be highly advantageous to establish a central population register for checking the data, updating the local registers, and transferring data between communes/ municipalities when people move. This central register could also be used for several administrative as well as statistical purposes.

5.1. The main activities of the first part of the pilot project:

- Legal framework (contributions made in cooperation with OSCE and Council of Europe) on:
  - Law on Civil Status
  - Law on ID number
  - Law on ID card
- Infrastructure and organisation
- Establishment of the General Directorate of Civil Status
- Training of the local staff
- Software development and hardware procurement

At the beginning of the project it was noted that the CS service was not conceived as a devolved function and that it was lacking the regulatory framework both for the procedures and the documentation. The change of subordination of this service onto the then Ministry of Local Government and Decentralisation (presently the Ministry of the Interior) and the approval of the new legal package for the CSS in 2002 and 2003, created the legal grounds for the reformation of this service[4]. As a result of the implementation of this package after 2004 there is available a

---

[3] See "Selected Documents on the Modernisation of the Civil Registration System in Albania Vol. II", http://www.ssb.no/english/subjects/00/90/doc_200514_en/doc_200514_en.pdf

[4] Read more about the laws on civil status and ID number in the publication "Selected Documents on the Modernisation of the Civil Registration System in Albania", http://www.ssb.no/english/subjects/02/90/doc_200402_en/doc_200402_en.pdf

completely unique documentation, with same procedures applied at all levels of this service. Upon the approval of the legal package, in October 2002 and in May 2003, steps for the establishment of the legal basis of the Civil Status Service (CSS) reform were made, and as a result of its implementation, we may say that the CSS is standardised and unified in all its structures and levels, with a unique documentation in full use and with the same procedures followed at all service levels.

This legal package introduced some new elements, enabling this sector to function in accordance with contemporary standards, such as:
- Liberalisation of events' recording procedures by the Civil Status Service, thus offering better assistance to the residents;
- Introduction of the Identity number (ID-number), a new component of civil status as a personal, unique number for each resident of Albania; which will be the only identification element for the residents;
- Decision to establish the National Civil Register in an electronic format reflecting the civil status components for each resident;
- Definition of criteria related to the issuance of identity documents according to European Community standards;
- Definition of criteria and rules with regard to civil status events' recording for Albanian citizens provisionally residing abroad.

5.2. The first part of the pilot phase, 1.12.2002 – 31.3.2003
In the first part of the pilot phase the project contributed to the modernisation of the Tirana administrative units number 3, 7, 10 and 11, as well as the rural commune of Prezë and the mainly rural municipality of Klos in the Mat district. During this period Statistics Norway's project in Albania provided technical and some financial assistance to the establishment of the General Directorate of Civil Status (see chapter 3.1). The financial assistance during this period has been rather limited.

An important part of the assistance from Statistics Norway to the Directorate during this period was assistance in beginning to write a plan for modernising all CS offices in Albania as well as designing the specifications for a tender for necessary software and hardware. This included software for the local offices and the GDCS as well as for the exchange of information between the local offices and the central database.

An important activity during this period was the study tour to Norway for senior people involved in the modernisation project. It was carried out 3–8 February 2003 and included visits to Statistics Norway, the Central Population Register, local population registries, the Mapping Authority (with the Property, Address and Building Register) and some distributors and users of population register data. The visit included three persons, of which two from MLGD (Mr Bledar Andona, Adviser of the Minister of MGLD and Ms Elvira Dervishi, Director of the Department of Civil Status) and Mr Ilir Beqja, Deputy Director General of ISSH, in addition to the SN staff in Tirana (Mr Skiri and Ms Talka Kumbaro). Unfortunately the Director General of INSTAT and a third representative of MLGD were not able to join the delegation, as planned.

5.3. The second part of the pilot phase, 1.4.2003 – 31.12.2004

During the second part of the pilot period, especially in 2003, Statistics Norway was willing to provide substantial technical assistance to the General Directorate of Civil Status as well as procurement of the hardware and software required by the Directorate. Reorganisation of the Civil Status Service has been one of the main tasks of the GDCS. The work on the creation of the new structure of this service has been completed.

The name of the Norwegian project was changed to the "Assistance Project" from 01 September 2004. For convenience the term "Assistance Project" (AP) is used in this report. The project aimed to support the efforts of the Ministry of Local Government and Decentralisation (MLGD) and later Ministry of Interior (MoI), as the main beneficiary, to develop fully comprehensive and reliable system for civil registration of the population in Albania.

The modernisation of the Civil Status Service was a priority of the Ministry of Local Government and Decentralisation. For this purpose an ambitious reform was initiated.

The main aspects of this reform were:
- Accomplishment of the necessary legal framework
- Reorganisation of the Civil Status Service
- Improvement of the content of the Fundamental Registers (family books).
- Computerisation of the Civil Status Service
- Training of the civil status employees

Legal framework
The new package of laws for the Civil Status represents the necessary legal base for the work of the Civil Status Service. The new package of laws was approved on 13.11.2002. Consisting of the law No 8950, dated 10.10.2002 "On the Civil Status" and the law No 8951, dated 10.10.2002 "On the identification number of the citizens" and the law No 8952, dated 10.10.2002 "On the identification document of the Albanian citizens". (The first and third laws have been in force from 28.11.2002, while the second one entered in force from 13.11.2003.) The Law "On the Civil Status" has been changed in order to better respond to the new reality and development of the CS system by the law No 10 129, dated 11.05.2009.

Improvement of the contents of the local civil status registers
The improvement of the existing registers focused on the Civil Status Service activity. Updating has been considered as a crucial point. The lack of updating is due to non-transfer of CS documents from one CS office to another, because of no reporting from the citizens who move, or work of insufficient quality done by the civil status offices or the postal service. Under the GDCS supervision communes, municipalities and prefectures started organised work in order to improve this situation.

Another problem with the local registers was the lack of street names and a numbering system for buildings. This was the responsibility of the council of the municipality/commune, but had not been done properly. The improvement of the registers' content has created a better base and more confidence in the computerised system.

The first part of the pilot phase turned out to last until end of August 2004, having been extended from 31 March 2003, since the Protocol was still in force. According to the plan, seven local CS offices should be computerised during the first part of the pilot phase. However, data from the left-hand pages of the fundamental registers in five pilot offices were entered into the computers between September 2003 and September 2004. Information available on the right-hand pages was not computerised when the data entry was carried out by professional data entry operators.

Initially all the data available in the fundamental registers were entered. Subsequent to this, the updating of the data was to be performed by the Civil Service registration officials at the pilot offices. As this did not happen because of their daily overcharged work, at least not fully, the operators were hired to enter the unrecorded data that was accumulated in the meantime.

Investment in hardware etc. was planned with enough capacity for the future nation-wide modernisation and also in order to secure enough and stable power supply in all offices. The extent and timing of procurement were decided in agreement with MLGD. A principle was that every employee should have his/her own computer, as soon as the physical conditions of the office were acceptable. The investment consisted of:
- Hardware:
  - Desktop computer for each CS employee
  - Laser Jet printers
  - CD writer
  - Inverter and batteries (for independent power supply)
- Software:
  - MS Windows SVR 2000 5 CLT (operative system)
  - INHABREG & CIVSTA application (developed by a local company, Intech+)
- Training:
  - One week of general computer training for each CS employee
- Operators for data entry

The data entry was considered completed in all pilot project offices. The financial assistance to GDCS provided by Statistics Norway during the first half of 2003 was rather limited, as expected. The plan was to procure hardware etc. for the central office (GDCS) during the second part of the pilot phase. However, as no decision on the application to Norad for funding of a second part appeared during 2003 and the need for hardware became evident. SN decided to advance some hardware for GDCS from remaining funding.

In March 2004 SN provided financial assistance to the GDCS for:
- 2 desktop computers
- 2 printers and fax machine
- Photocopy machine
- UPS etc.

The MLGD initiated, in collaboration with SN, an awareness campaign on the civil registration to the civil status offices. This campaign consisted on posters, leaflets and TV spots and was financed by the SN project. This awareness campaign, which was carried out in June 2003, was considered successful, because afterwards

a considerable percentage of residents reported migrations; that is residents started the procedure to transfer their CS documents to their new place of residence.

After the first SN project manager left Tirana in June 2003 the resident SN project coordinator continued to serve the pilot phase of the project, assisted by SN staff in Norway. Her main activity during this period was assisting the pilot offices in different problems they had related with the new process: Finding and hiring operators, collecting problems faced with the software and hardware (mainly equipments damaged because of power problems) and trying to resolve these problems with Intech technicians and the hardware providers. Training had to be organised for the second time for those employees of the pilot offices that had been appointed after local elections. She arranged many meetings with mayors to resolve power problems and to try to convince them to reduce the working hours open for the public, in order to give time for data entry, updating etc.

5.4. Decisions and events January 2003 – August 2004

In February 2003 the urgent need for software and hardware was much discussed, based on different strategic views. A SN initiative to collaborate with the International Foundation for Election Systems (IFES) and ECE on computerisation (data entry because of the coming election) of the pilot offices in Tirana was discussed and agreed on, but this solution was dropped by MLGD in the middle of March, because of the Central Election Commission's (CEC's) lack of confidence to the IFES procedure.

On 17 March 2003 SN presented the document "Nation-wide modernisation of the Civil Registration System in Albania – A brief plan with cost estimates (Second draft)". Hardware for Tirana 10 and Tirana 11 was procured in March 2003 and for Prezë and Klos in the first half of April 2003. However, priorities were changed. Necessary installations of Intech software etc. were effectively carried out, mainly by Intech. In April Intech also arranged training of two CS employees.

An obligatory evaluation meeting of the project (according to Albanian rules, since the formal period of the Protocol had expired), was held on 4 April, requested by MLGD.

The start of the modernisation of local CS offices was marked by a presentation and demonstration of new equipment in Prezë on 27 May 2003, with Minister Blushi, Prefect, Mayor and press (television etc.) present. Similar arrangements took place in Kamëz and Bathorë in early June.

The first SN project manager left Albania after 20 months' stay on 13 June 2003.

The MLGD application to Norad for 5.3 million NOK for funding of the second part of the pilot phase of the project was sent on 20 June 2003.

In May 2003 EU granted one million EUR for data entry of CS books for 2003 through the CARDS program. Another two million EUR was likely to be granted for 2004. These figures were confirmed in a round table meeting organised by the EU Delegation in Tirana on 24 November 2003. The purpose of this meeting was to discuss how best EU funds could be used, in the light of the needs of the stakeholders and of past and present work accomplished by key donors like Soros Foundation, USAID and Norway. The conclusion of this meeting was that the funds for 2003 (one million EUR) should be used for building up an address system.

In first half of November 2003 the French company Valtech Axelboss was chosen by MLGD to carry out a feasibility study of CSS modernisation. Valtech presented their proposal ("blueprint") in December 2003.

Hardware and equipment for the central CS office (GDCS) were procured in March 2004.

The positive answer from the Norwegian Ministry of Foreign Affaires (MFA) about more funding of the project was received in May 2004. After reorganisation MFA was again responsible for any continued funding of the project, after a period when the responsibility rested with Norad.

Because of the plans for a rapid full-scale modernisation made by Albanian authorities, with an international tender launched in August 2004, the plans for the Assistance Project (AP) had to be adjusted during the summer of 2004. The new situation required some adjustments of the project document, "Modernisation of the Civil Registration System in Albania. Pilot Project, Second part: 1 July 2003 – 31 December 2004", Tirana and Oslo, June 2003, and new guidelines were presented in a letter from Statistics Norway to the Director General of the General Directorate of Civil Status (GDCS) of 22 June 2004. In this letter it was proposed not to establish more pilot offices, but instead focus more on:
- Strengthening and developing the GDCS.
- Qualifying GDCS staff.
- Procurement of necessary hardware and software for a central database in the GDCS.
- Establishing a central database by collecting, importing and appending data from local CS offices.
- Developing solutions for regular data updating and data exchange.
- Developing methods for improving data quality – for which the central CS database would be an important source.

The opening of the international tender for the full-scale modernisation of the CS Service took place in August 2004. In November MLGD declared that the tender was annulled and not successful, without offering any explanation. At that time it was considered too late for yet another revision of the plans for the AP.

A basic activity of AP during the autumn 2004 was data collection from the pilot offices and also a few non-pilot local CS offices. Data were collected from eight local databases (of which one was not completely computerised). Altogether computerised data for 228 491 residents were collected from the seven fully computerised local offices during this period. A positive side effect of this data collection was that it also represented a security against loss of data, as the project staff discovered weak or non-existent local backup routines.

The project staff spent a lot of time becoming acquainted with the data as well as with the software used for data entry, in order to explore data quality and also in order to describe data and metadata in less technical terms. From the beginning this was done in good cooperation with the GDCS. One important experience from the data collection process was that the export procedures were too complex, especially to be run by the staff at the local offices. That is why we proposed to develop a separate functionality for data exchange between local and central databases with a more user-friendly interface. This functionality was developed by the Intech+ Company during January – February 2005, and was first tested on a real CS database (from Klos) in June 2005.

On the initiative of the Minister of Local Government and Decentralisation, Mr Ben Blushi, a National Conference on Civil Status was arranged in Elbasan, on 14.01.2005. The Assistance Project (AP) was invited to participate, and on request from the Minister, the Norwegian project was presented at the conference by Mirela Talka Kumbaro and the second project manager, Børge Strand. Participants on the conference were mayors from most of Albania, representatives from central Albanian authorities and institutions, as well as representatives from international organisations.

Unfortunately, by the turn of the year our counterpart (GDCS) became more and more occupied with other duties, because they were given the over-all responsibility for the voters' list for the coming national election (3 July 2005). The priorities for the GDCS were set directly by the Ministry, based on Article 55 of the new Electoral Code No. 9341, dated 10.01.2005. Accordingly the GDCS was very little involved with the AP for a long time. For the AP this was an unfortunate situation, and we had to work hard for having more resources allocated to our counterpart, and to involve them more in the project. Finally the GDCS received an additional IT specialist, and by the beginning of April two (out of three) director positions which had long been vacant, were filled.

More substantial results were reached gradually from March and onwards. The GDCS was strengthened in many ways: The technical infrastructure was strongly improved with a server, additional workstations, software licenses and Internet connection funded by the AP. (In the meantime OSCE financed a local area network and a separate server for the voters' list database). The main purpose of these investments was to establish the infrastructure for a central database for the population register. The final part of this was loading data from the local CS offices into the central database. This job was finalised on 27 May 2005, and a major milestone was reached.

During July 2005 the AP supported and financed the equipment of a permanent "Training unit" within the premises of GDCS with PCs. The intention is to establish infrastructure for in-house training (mainly IT) of CS employees from all over the country.

It is also worth mentioning that the AP from time to time was consulted by other organisations, projects and groups that both wanted advice and to hear about our experience, e.g. OSCE, the EU Commission and others.

Figure 1.   Organigram of the GDCS (2011)
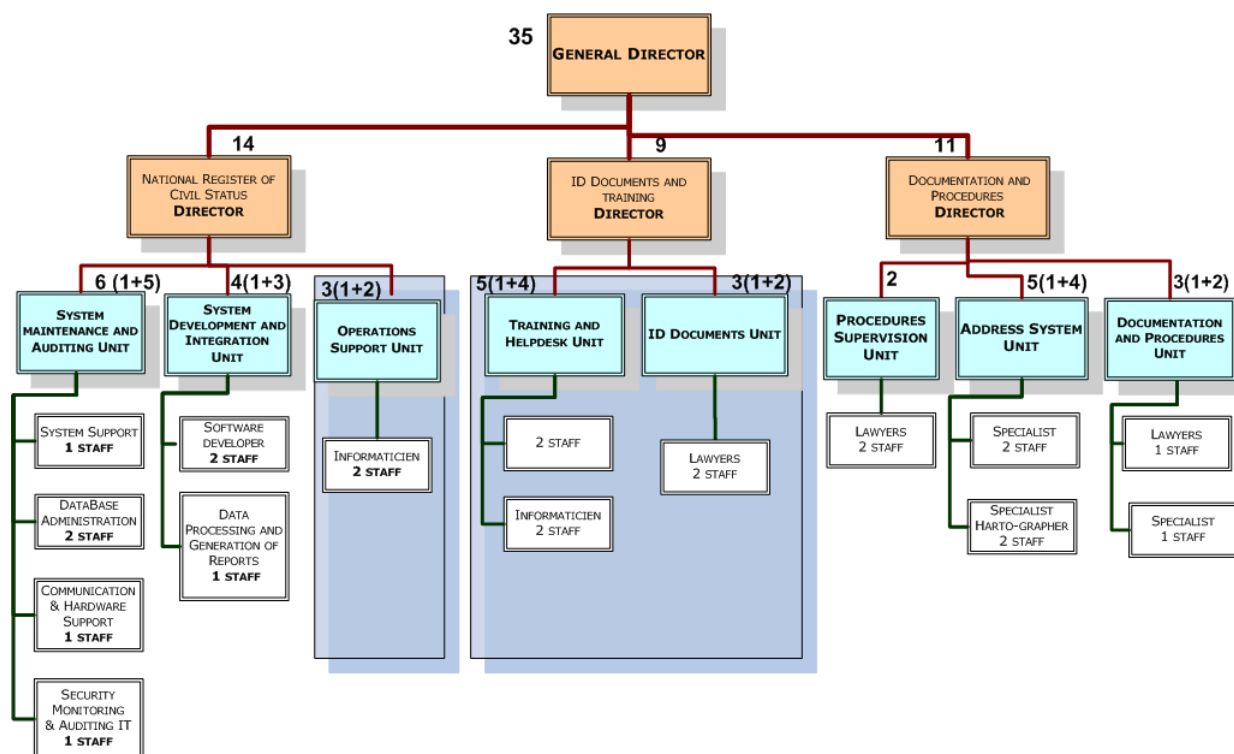
Our counterpart, The General Directorate of Civil Status (GDCS), was established in February/March 2002. The GDCS is now organisationally placed under the Ministry of Interior (MoI), but was initially under the Ministry of Local Government and Decentralisation (MLGD). The scheme below represents the organigram of the GDCS as it was in 2011.

Four directors constitute the top management of the General Directorate of Civil Status. The top executive is the "General Director for the GDCS", supported by the "Director of documentation and procedures", the "Director of National Register", the "Director of ID documents and training". Three directors left their positions during 2004: the Director for the Department of National Register (in June), the General Director and the Director for Department for Methods and Control (both in November). Unfortunately, there was no immediate replacement for any of them. Moreover, for a long time all these positions were vacant. This was a serious difficulty for the AP as no director could defend the position and the priorities for the Project towards the Ministry. In particular, this was a drawback from December 2004 and onwards, when the GDCS staff was put under pressure for delivering services for the voters' list etc. in preparation of the parliamentary election (03.07.2005). The major resource-demanding task for the GDCS was connected to preparations of voters' list for the election in 2005 and later in spring 2007. Priorities for the GDCS were given directly by the MLGD, and the co-operation between the GDCS and the AP suffered by this situation.

At the end of January 2005 a new Director for Department for Methods and Control was appointed. This was a step forward but the two other director positions remained vacant. On several occasions (February – March 2005) in meetings with MLGD representatives, including also a meeting with Minister Blushi, we asked about their plans for filling these positions, and (in short) we were explained that this process would take time. Finally, in the beginning of April a new director was appointed.

Another problem has been the lack of staff in the GDCS, especially IT specialists, to work on the Assistance Project (AP). As a matter of fact, only one employee at the GDCS was dedicated to the project from the beginning, and at times even this employee had to prioritise other tasks. This was not due to lack of will in the GDCS, but due to many political interest groups requesting services from GDCS at the same time. During this period the AP staff tried in several ways to involve GDCS more. In several meetings with the newly appointed director for The Department for Methods and Control and the Secretary General of the MLGD, we discussed these issues. We expressed the strong need for more resources and more involvement from the GDCS. An additional IT specialist was engaged in the GDCS afterwards, and this may perhaps be regarded as a result of our request.

During March 2005 we met with the Minister of Local Government and Decentralisation, Mr Ben Blushi. On that occasion we gave the Minister a briefing about the status for the project, what was achieved so far, and our immediate plans for both investments and training of the staff. We repeated our request for more involvement from the GDCS, which he fully understood. He appointed a contact person in the GDCS as coordinator for the project. Blushi also expressed his gratitude for the contribution from Statistics Norway, which he regarded as very important. But he also explained that in the present situation resources were urgently needed for the preparations for the election.

By the end of March 2005 we experienced progress – both in terms of additional employees, a new leadership in the GDCS, and also in terms of a strengthened technological infrastructure in the GDCS.

The main objective for the second part of AP was to "strengthen the GDCS", cf. the Protocol, Article 1 – paragraph 4. Several initiatives were taken to fulfil this

objective. SN has given support in various ways and on various tasks, like data collection from the pilot offices, converting data for the central database, etc. These tasks are described in details below. The GDCS has a limited staff of IT specialists, most of the time four persons, while a new IT specialist was transferred from the MLGD in February 2005. As mentioned above only one staff member was dedicated to the Assistant Project initially. (The remaining specialists were most of the time occupied with an old database from the Central Election Commission (CEC), i.e. mainly duplicate cleansing, and later with the voters' list for the 2005 election).

Study visit to Statistics Norway for IT specialists

One item in the plans for the AP was from the very beginning a study visit to Statistics Norway to train IT specialists from the GDCS. This visit was carried out from 4 to 8 April 2005. The participants were five IT specialists from the GDCS, accompanied by the Norwegian project manager, Børge Strand. The main objective for the study visit was SQL training. Three of the days were allocated to this. The computer training took place in the premises of Statistics Norway in Kongsvinger. There was also a visit to the local Civil Service office in Kongsvinger and a guided tour in Statistics Norway, Kongsvinger, focusing on "Information technology in Statistics Norway". All participants from Albania expressed great interest in this subject. The delegation also had an introduction to how Civil Status data are used for statistical purposes by Statistics Norway. Finally it was a session about in-house training in Statistics Norway – how it is organised and implemented. This was considered very relevant for the GDCS plans to establish an in-house training unit. The Albanian participants expressed afterwards that the training had been very good and useful for all of them.

Sponsored basic Oracle training

In March 2005 the Assistance Project also sponsored basic Oracle training for GDCS employees with EUR 3 000. This amount covered five days of training for four employees from the GDCS. This training was carried out by a specialist from the local company Intech+ and took place right before the Oracle installation at GDCS. It was considered very good and useful by the participants from the GDCS.

Through these two measures the AP contributed significantly to improve the qualifications of the IT specialists in the GDCS. A second study visit took place in September 2005. The main subject for the second study visit was to study civil status service in Norway.

Procurement of hardware and software for a central database

When the second part of the AP started, some major issues to be dealt with were:
- Data were only stored in local databases – there was no central storage.
- There was no software or hardware for a national (central) database in the GDCS.
- There was no "easy way" to extract data from the local databases for transfer to a central database.
- There was no functionality in existing systems for extracting and exchanging only the regularly updated data from the local CS offices databases to a central database.

The technical solution for all these issues, including establishing a central database, was intentionally to be developed by the winner of the international tender. While the tender process was ongoing, any alternative development stopped, for obvious reasons. When the tender was annulled, the situation was in many ways back to start.

Nevertheless, we decided that the AP should start on a small scale with data collection etc. to fulfil our project objectives. For that purpose we needed the data from the pilot offices (also from other local CS offices which had been

computerised), and we needed a database in the GDCS to receive and store these data. Another reason for having a central database was, of course, that this would be the main instrument for various quality checks.

Table 1.   Data collected from local CS offices

CS Office	Date of export	Number of records in main table
Preza	16.09.2004	6 094
Tirana no. 7	29.09.2004	52 497
Kamez	05.10.2004	38 984
Bathore	07.10.2004	21 549
Tirana no. 10	17.11.2004	26 405
Tirana no. 11	18.11.2004	52 035
Pogradec	25.11.2004	30 927
Total		228 491

The data collection activities mainly took part from September 2004 and throughout November. We included also collection from a few non-pilot offices. Data collection from the pilot offices was done by the AP staff, while collection from non-pilot offices was done by a representative from the GDCS accompanied by the AP. When we started the data collection in September 2004, this had never been attempted previously. The method was to create an Oracle dump from each local database. In each case this is a copy of the *entire* database, including both data and metadata, and with the status at that particular date. Each dump file was then transferred to a CD, and stored in the GDCS premises. These dump files were finally loaded into the Central Database at the GDCS as mentioned above. The collection was a quite resource-demanding process as we had to visit each of the local CS offices and physically collect the data.

Sometimes we met unforeseen problems – either of a technical character or other kinds of problems. A common problem was power supply. Sometimes we could not collect data as planned because of power cuts when we arrived the local office, and we were either forced to wait or try again some other day. We always contacted the local offices in advance of our visits, and also asked if the needed technical equipment was present (CD burner). In one case we had to install the CD burner before we could complete our task. Given the lack of infrastructure for more advanced transfer of data, only physical transfer (on CD or other media) seems realistic for a long time ahead. The data collection described above must be considered as a one-time operation: It is only the first time that a copy of the entire database is needed. Future data transfer from local offices to the GDCS, and between the local CS offices, should only comprise updates and changes made since the first dump. The regularity in this is of course an important issue. Ideally, a transfer from a local to the central database should be done on a daily basis, but that was not realistic at that time, cf. comments above. One objective for the continuation of the AP should be to develop regular routines and find a realistic frequency for data exchange.

The original Oracle export procedure was too complex – both in general, and for the local CS staff in particular – and had to be simplified to facilitate regular transfer of updates. What was needed was a functionality that could be operated locally and only extracting updates from local databases. Requirements for such functionality were in December 2004 presented to Intech+, that developed software for this functionality during January and February 2005.

During December and January we loaded (imported) the dump files into an Oracle data base. By means of PL/SQL we could access the database, view both the data and the metadata, run queries and export single tables. We concentrated our investigation on the main table, which we exported and transferred to a systems-

independent format (TXT, CSV and others). The seven main tables (apart from the database from Klos) were then appended to one table. Several CSV-files for the GDCS were also created through this process.

The results described above are based on the appended version of the main table from the seven local bases in question (228 491 records). The software used for analysing the data was mainly SAS (Statistical Analysis System).

The Intech+ system developed an application named "Inhabreg", which consists of nearly 60 tables. There is one main table and a number of auxiliary tables, code explanations, link tables, etc. Below each of the fields in the main table there is a description and a comment about the contents. The main table reflects the left-hand side of the main page of the Fundamental Register (FR): each column from the FR is found as a column/field in the main table. In addition, the main table contains fields that are not to be found in the FR – mainly fields that are generated by the system.

The GDCS initially wanted to develop their own preliminary solution for the central register, but this would be both time-consuming and expensive. A natural choice for the central database was to use the same system that was installed in the pilot offices. This application (running on an Oracle platform) was developed by the local company Intech+, mainly for data entry at the local CS offices. As the tender was going on, this was however not possible, because Intech+ was among the bidders.

When the tender was annulled, we decided together with the MLGD and the GDCS, to use a version of the Intech+ software as a central database. This decision triggered a number of investments in the GDCS – funded by the AP. For this purpose the GDCS had to be equipped with a server, licenses for software (Oracle Standard Edition and PL/SQL), a few more workstations, and the Intech+ application itself.

In the beginning of March 2005 the following objectives were outlined:
- Procurement and installation of a server and the needed workstations in the GDCS.
- Procurement and installation of Oracle licenses (Standard Edition).
- Procurement and installation of PL/SQL licenses.
- Intech+ software ("Inhabreg") installation.
- Loading data from seven local CS offices into the central database.

The server and the additional equipment were delivered during the first days of April 2005, and the equipment was distributed and installed the following days. At the same time the OSCE also equipped the GDCS with a server, for the voters' list database. From the middle of April 2005 a lot of construction activity took place in the premises of the GDSC. The work was finished during the first week of May.

Intech+ completed the installation of software and loaded the dump files from the local CS offices into the Central Database. Thus, a major milestone was reached by the end of May. Loading the data from the local offices was not carried out without problems. The experiences from this process are explained in more detail below.

Other investments
In December 2004 the GDCS proposed some investments for strengthening their organisation. For these investments they asked for financial support form the AP investment budget. The proposals were discussed with the support group in Oslo in January 2005, and the proposal was approved.

Improving communication network
The GDCS needed investments for an internal communications network, including access to Internet. This investment would improve internal communication e.g. through e-mail, and also improve the utility of shared facilities like peripheral equipment etc. Above all this would facilitate the communication between GDCS and the Albanian consular services, in embassies all over the world, since these offices are part of the CSS and store important data. However, by April 2005 the local area network was ordered and paid for by the OSCE, since this was also urgently needed for the work with the voters' list. The AP instead supported the GDCS with Internet access which was operational from the end of April. This also made it possible for the GDCS to create a web-site for the voters' list.

Building a Training Unit in the GDCS
A main idea from the GDCS was that the proposed training unit would be a permanent centre within the GDCS. The need for training of employees in the CS offices is unquestionable. In CS offices across the country there are about 600 civil status service employees who are in great need of basic computer training. According to the GDCS plans this unit would also serve as a long-term solution for any other training needed within the GDCS, employees from local CS offices, operators and specialists. For the training centre in particular, the GDCS was asked to work out a plan for its use, and to give priority to training employees from the pilot offices when the installation was ready. During July 2005 the AP financed the required IT equipment for this unit.

5.5. Evaluation of the project – October 2005
At the same time as the third project manager from SN, Anne Abelsæth moved to Tirana to work in the project, a mission to evaluate it was visiting Tirana. This delegation consisted of Otto Andersen and Miroslav Macura. Their main conclusion was that the project was sustainable and needed to be finalised.

Their report was of great help to focus right at what was then believed to be the last year of the project, pointing at obstacles and constraints of the project[5]:

Discontinuities on both Norwegian and Albanian sides:
- The project was more or less put on hold while the MFA and NORAD was reorganising.
- Creation of voters list was extremely time-consuming for the GDCS, who had little time for the AP.
- Dysfunctions of the Albanian Civil Registration System, as to infrastructure as well as politically and organisationally.

They also pointed to some outstanding issues that have to be resolved:

ID numbers: at the time of the report, there were no unique ID numbers for the citizens of Albania. There was, however, the law on Identity Number of Citizens (law No. 8951) which stated not only that ID numbers where to be created, but also how, and which organisations/governmental body should use them.
Identity Cards: The evaluation team concluded that issuance of identity cards for the population is not a precondition for the introduction of a modern civil registration system, but rather a natural and valuable consequence of the system which also serve to keep the system updated and timely.

Address system: There were no functioning address system in Albania, and this is a very important part of a civil registration system. There were, however, plans for implementation of an address project with a planned project period from December

---

[5] Evaluation of the Project «Modernisation of the Civil Registration System in Albania» - Selected Documents on the Modernisation of the Civil Registration System in Albania. Vol. III, http://www.ssb.no/english/subjects/02/90/doc_200402_en/doc_200402_en.pdf.

2005 to June 2006. The team was convinced that a project of this magnitude needed much more time and that more advance planning was needed.

Voters' list: Any democracy needs trustable voters' lists. At all elections up to the time of the evaluation mission, the voters' list had been criticised for being incorrect and manipulated. With a working civil registration system this problem will be eliminated. The creation of voters' lists also consumes a lot of time and efforts.

The evaluation report concluded that completion of the pilot phase was an essential prerequisite for a launching of a full-fledged nationwide modernisation of the registration system. It also suggested that the pilot phase should overlap with the full scale project, but also stressing that lessons that will ultimately emanate from the pilot phase should be used in the course of the full scale project.

5.6. The third part of the pilot phase, 1.8.2005 and onwards

After the evaluation mission, a new phase of the project started. During the summer of 2005, there had been a parliamentary election, and the new prime minister announced that within one year, Albania should not only have a working civil registration system, but also ID cards for every resident over 16 years of age. Nobody believed it could be done in that short period, but the project got a new incentive to go on, and a lot of positive support from the stakeholders.

The new project manager soon discovered that the data at the pilot offices had never been updated, and also that one of the pilots (Klos) had even done the data entry. Also the project wanted to focus on infrastructure and data exchange between the systems, which was impossible at the current pilots, as some of them were too remote. In cooperation with GDCS, it was decided to establish new pilots, including all of the Civil status (registration) offices of the cities Durrës and Shkodër (the second and third biggest cities of Albania) and also establish network between them. Data entry was done with a modified version of the software created to make voters' list, and it was also decided to have "double data entry" – to enter all data twice to easier find errors. This method was modified before it was used in the country-wide project: Instead of just entering data twice, the data from the second data entry was compared with the first entry real time, discovering errors immediately to correct them at once.

The Intech software for updating the register used in the earlier phase was considered too complicated, so new software was developed by SN. This software was the one used for the first one and a half year of the country-wide civil registration system as the software planned to use was not finished in time.

The pilot was continued after the main project started, both projects running in parallel for some time.

5.7. Remark

We recognised that the system developed by the AP for the central database, most likely would be replaced by a new system. However, a lot of the investments and contributions from SN remained permanent: The AP has contributed by building infrastructure in the GDCS and in the pilot offices, as well as organisational development both locally and centrally. It has also contributed to developing a more qualified staff. Finally it has made a contribution to the quality and handling of data; data now can be exported from the existing system and imported into the permanent, future system. Information about a large number of citizens was computerised during the first part of the AP.

6. Scaling up the National Civil Register project

The full-scale modernisation of the Civil Status Service was never intended to be fully funded by Norway.

An important part of Statistics Norway's assistance to the GDCS during this period was to prepare a brief plan with cost estimates for the modernisation of the whole Civil Status Service in Albania. The work to design specifications for a tender for the software and hardware required for this was also started. These specifications were expected to include software for the local offices and the Directorate as well as for the exchange of information between the local offices and the central database. SN offered assistance on this task, but did not get more involved in this, since MLGD decided to arrange an open international tender on the nation-wide modernisation.

However, in March 2003 OSCE asked the SN staff for rough cost estimates needed for the funding needs for the nation-wide CS modernisation. Two weeks later SN presented a brief plan with cost estimates on a nation-wide CS modernisation in Albania to OSCE and MLGD. This document was well received by both, and served as a basis for the EU Commission's possible fund raising of the full-scale modernisation project.

The most fundamental part of the new system is the National Civil Register, which was the other objective to be met.
The Norwegian project plans have all the time aimed at the establishment of a nation-wide modernisation of the Albanian Civil Status Service. But the plans have also been very clear about the sequence of activities: The objective of the pilot project was to gain experience for the full-scale modernisation. Thus the pilot must logically be completed before the final part. Nevertheless, Albanian initiatives and proposals to start and complete the modernisation of the rest of the country have been launched during the project period.

The objective of SN project during the implementation phase from 2006/2007 was to provide technical and finance assistance (together with OSCE project) to implementation of the MoI modernisation project based on an overall strategy approved by the Government of Albania. The Government had to take a decision on the number of CSOs and their tasks during the preparation of the overall strategy. Before starting the large scale project, the The MoI strategic plan suggest that CSOs serving less the 3 000 inhabitants are closed down. The closing of offices (and therefore the number of necessary refurbishments and staff) can also be seen in light of development of the ID card project. The main workload of CSOs relates to issuing of certificates. Once the ID cards are issued the number of issued certificates for identification purposes is decreased. The CSOs' main task will then be registering civil status events (birth, marriage, death, name change etc.) and handling of application for ID cards and passports. It could be anticipated that daily number of activities will decrease as well since civil acts for one person do not take place on a regular basis.

6.1. Concession for Civil Status Service

After the first plans (2004) for an International tender on the full-scale modernisation of the Civil Status Service failed, due to irregularities, another plan was launched in January 2005. This was based on a special concept in the Albanian legislation called "concession". This is a regulation of out-sourcing, or privatisation, of some Government services in general, but also about what kind of duties that may be the object of concession.

In February 2005, the Albanian Parliament approved an amendment to Law No. 7973, dated 26.07.1995, "For the Concession and participation of the private sector in public services and infrastructure", which would allow a private company to be a

concessionary company in some branches of the public sector. The concession issue was brought one step forward through a decision by the Council of Ministers of 6 May 2005. According to this decision, the CS Service was defined as a service object of concession.

The MLGD and the Ministry of Economy became authorised to adopt the relevant procedures. According to the General Secretary the plans might possibly be realised towards the end of 2005, but the Civil Status Service itself would still remain public, however. The private company in this case would be expected to make its profits from selling ID cards.

The scope and objective of the second phase of the AP was, to give advice on the development of a reliable and modern system of civil registration of the population, including establishment of a computerised central civil registration system. More specific, technical assistance on infrastructure and organisation, IT issues including temporary software development and hardware procurement, training and quality control of data.

In June 2006 upon the request of MoI/GDCS, the SN started the project of modernisation of civil registration in the municipalities of Durrës and Shkodër. The project in Durrës and Shkodër was considered as a preliminary and necessary test for both the new procedures and the alternative versions for the method of the realisation, before the big project was launched for execution throughout the entire country. The experience of this work was meant to be used to create a sustainable national plan for accomplishing the modernisation of the Civil Status Service. The main reasons for selecting these two municipalities were: (1) the population number, the municipality of Durrës has about 190 000 inhabitants and the municipality of Shkodër 113 000 inhabitants; (2) in the municipalities of Shkodër and Durrës there are big informal areas as well as restrictive or limiting informal areas which are very problematic.

The main activities and steps followed were:
- Preparation of the offices' infrastructure
- Technical specifications for hardware and software
- Procurement
- Network installations
- Data entry software
- Updating software
- Training of operators
- Data entry

The plan was to start the data entry in March 2006, but because of GDCS involvement on the voters' list preparation, this process was almost two-three months in delay. The data entry in Durrës and Shkodër was finalised successfully and the corrections of errors as well. At the same time we organised and trained the CS employees in these municipalities. The training consisted on basic knowledge of:
- Windows XP
- Word XP
- Excel XP
- Printer, CD, floppy use etc.

The data entry and data cleansing process in these municipalities was done by operators and not by the CS employees, due to their overload with the service to the public during working hours.

The national civil register data base includes the personal records of all residents in the country. The principle objective of the civil registration was to make *once-only* entries of personal records of the eligible persons, and to subsequently use these on

multiple occasions (electronically). The data registered in the civil registration database are registered in a uniform way, based on original documents certifying civil events like Fundamental Registers and Books of Acts. The multiple uses of data by other institutions ensure that all public administration institutions perform their tasks using the same information coming from the civil registration system. A conceptual map of the project for the modernisation of the civil status service drafted by the MoI of Albania is shown on the below scheme.

As it is explained in the scheme, the aim of the project was to cover all elements of the Civil Registration System, influencing considerably on the Civil Status Services through changes in the information.

Figure 2.   A conceptual map of the project for the modernisation of the civil status service
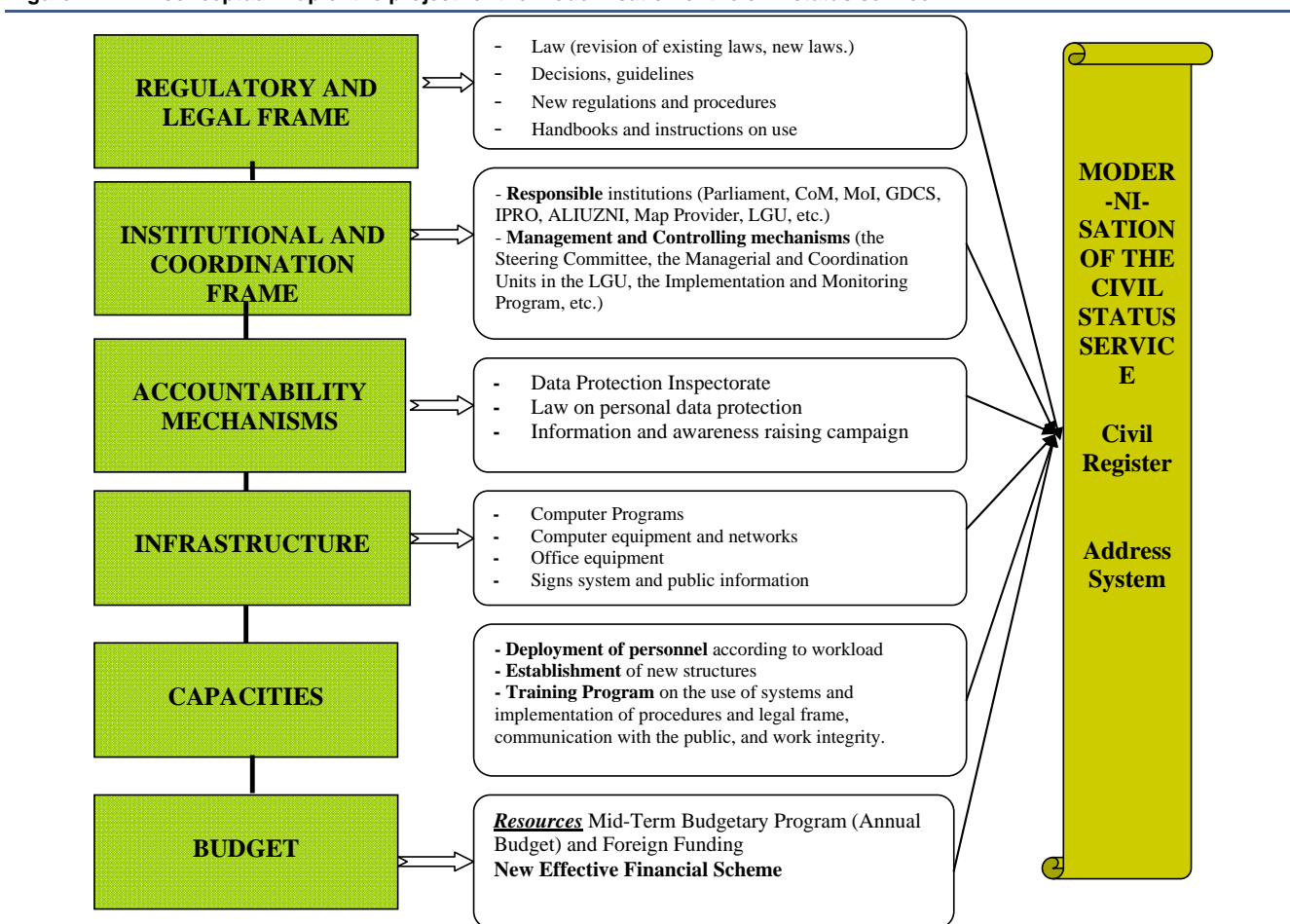
During the large scale project SN was a partner with an OSCE project, an EU funded technical assistance (TA) project. SN was member of the Steering Committee, lead by the Deputy Minister of Interior as represented in the chart below.

The main functions of the Steering Committee was to evaluate progress of the TA Project, consider proposed activities and address possible problems encountered during the TA Project's implementation.

The Steering Committee has met at least once every six months. The Steering Committee is asked to take necessary decisions in order to start the substantive activities of the TA Project in a coordinated way under the current circumstances.

Figure 3.   The OSCE technical assistance (TA) project
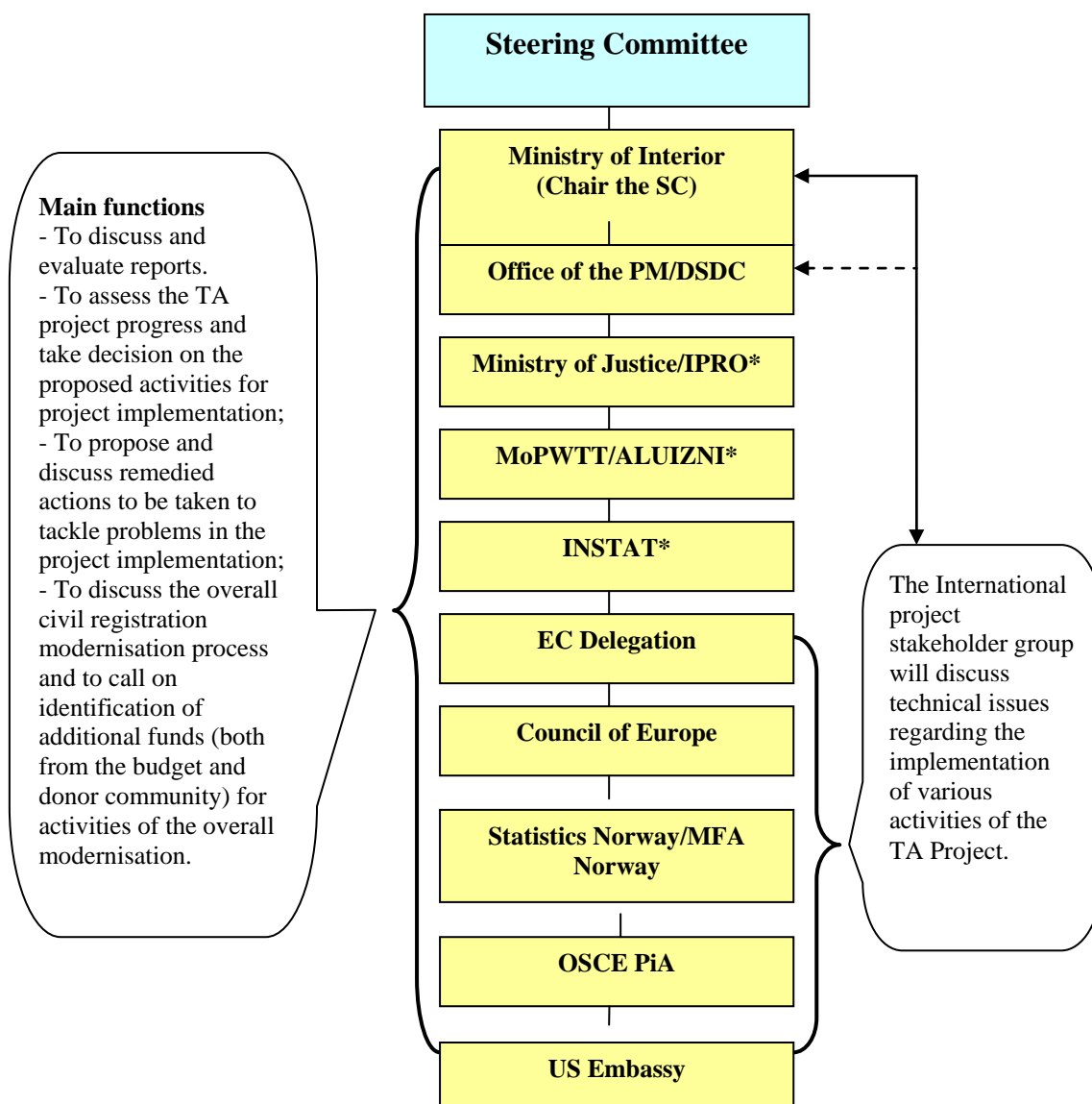
6.2. Lessons learn by SN during pilot in Durrës and Shkodër

Statistics Norway (SN) has worked on the pilot project "Modernisation of the Civil Registration System in Albania" since 2001. The pilot project has involved the computerisation the Fundamental Register books in 15 CSOs, including the entire municipalities of Durrës and Shkodër. The SN experience accumulated at the pilot project CSOs is highly relevant for how to precede with the computerisation of the FR books in other local government units.

During the pilot project plan preparation, SN aimed not only to produce the project description, but also increase GDCS capacity in project planning. During the planning phase it became clear that the GDCS capacity in relation to project planning and budgeting should be considerably strengthened. The main lesson learnt for the project is that significant time should be planned and resources devoted to assist the GDCS to develop an overall strategy on modernisation of the address and civil registration systems in Albania, including a specific plan of activities. SN considers the GDCS capacity building as an extremely important element. This substantiates the proposal to devote significant technical assistance to further improve the project plan itself.

The temporary data entry software devised by the GDCS, together with SN, for computerisation of the FR records, has been improved. Fully fledged database design was needed to ensure the integrity of the system.

SN procured computer equipment to pilot project CSOs. While there were no major problems with procurement, it had to be carefully planned and supervised. Particular attention has been devoted to delivery and installation of the equipment, in line with agreed specifications and locations.

For the pilot project SN hired students to do the data entry. Main findings on human resources for data entry were as follows: (a) ideally data input operators should be persons familiar with operating computer equipment, if available, computer science students or alike; (b) operators should be trained on the data entry software by the GDCS staff, who would continue to act as regional coordinators and help desks, and (c) operators should be given clear terms of reference, contracts with payment provisions for gradual payment increase based on performance and a clearly defined work schedule. Consideration could be given to work with a lesser number of trained data entry teams that will travel from one local government unit to another in order to do the data entry in several locations in a succession. It could be argued that such teams will progressively improve their performance and the typing errors level could be reduced in the course of time.

Data input in Durrës and Shkodër took place in the premises of the CSOs, as required by law. Some CSO premises may not be well suited for additional staff working on computerisation of the FR books. Careful consideration has been given for possible alternative premises for efficient computerisation of the books.

SN project staff estimated that almost 90 percent of the computerised data records from the double data entry in Durrës and Shkodër differed and had to be corrected. The high percentage of errors made us realise that we had to organise work differently. Consequently, the methodology was changed before expanding the project to a national level. Then, the corrections were done as part of the second data entry, while the operator still had access to the books.

After the correction of data at the local offices, procedures and routines had to be established to identify multiple records to further cleanse the data. The process of installing an Oracle database and importing the data was successful because considerable preparation time was allocated to improve the data quality. It should be recognised that data quality from computerisation may be poor and that considerable time has to be planned to improve data quality from data input operators.

Once the data of a local government unit's FR books have been entered into a computer database, subsequent civil status events have to be reflected in the database on a regular basis, to prevent "outdating" of the database. The software used for updating the database of the FR books was only for temporary use, and was developed to synchronise the hard copy FR books with computer-based FRs. There was no software for the future civil registration system. Comprehensive and professional software for the future civil registration system should be developed.

SN assessed that the capacity of CSO employees to manage computer-based civil registration system was limited. It was recommended that all CSO staff should be trained in basic computer skills. After basic IT training, CSO staff should be trained on the new civil registration system software. SN anticipated high risks associated with necessary training on basic computer skills of the CSO employees who were often persons feeling uncomfortable working on a computer. Training of the CSO employees was recommended to be one of the key activities.

Computerisation of Shkodër and Durrës FR books started in June 2006. The data entry process ended in April 2007. The number of data entry operators varied, reaching a maximum of 20 persons working at the same time. After the computerisation there were 309 312 records in the database. Therefore, taking into account various difficulties and presuming that 20 persons worked all the time, it can be estimated that one data entry operator in one month computerised 1 550 records.

The main issue to resolve in the future in order to increase productivity of the data entry exercise is to seek exclusive assignment of the GDCS and CSO staff on computerisation of the FR books. Additional people should be attracted to complete the data entry and to avoid delays caused by daily CSO work, peak times for requests of certificates or election periods. Uninterrupted power supply should be supplied to CSOs. In this regard, the GDCS should either enter into special agreement with the power supplier KESH or generators should be provided to CSOs. Furthermore, special supervisors should be employed to oversee the data entry operators' work and to provide assistance to CSOs.

6.3. Large scale project collaboration with GDCS and OSCE

Based on the plan agreed on with the MoI and OSCE the data entry process was done in five groups of civil status offices. Initially the first group completed the data entry process through double data entry and the data cleansing with the help of the software. Temporary software of data entry was developed by the SN project manager. Several modifications of the temporary software were done due to the list of changes asked for by GDCS in written forms.
After experiencing that double data entry and data cleansing by software was a very time- consuming operation, it was decided to change the methodology and also follow the data cleansing process by verification by CSO staff.

The main activities of the SN project during this phase**:**
* Finalisation of the implementation of the new National Civil Register (NCR) in all CSOs nationwide (in cooperation with MoI and OSCE, an EU funded project)
* Procurement of equipments for almost 500 CS offices (PC, printer, inverter and battery)
* Development of the data entry and data cleansing software for computerisation of the Fundamental Register (family) books and the books of acts (births, marriages, deaths)
* Cleansing of data by using the double data entry feature
* Capacity building and training of the local CSOs staff
* Address system, assistance on some legal issues.

Computerisation of the Fundamental Register books
The creation of the first NCR database was based on the following statement: "The starting point of the new system is to set up the data base of the residents' civil status based on a data entry process, which register all active records in the Fundamental Registers."

Statistics Norway has been part of the modernisation of the Civil Registration System in Albania since 2001, with the goal of computerising FR books at local level and creating a database at central level. SN in cooperation with GDCS, has accomplished these tasks in 5 local offices and the cities of Durrës and Shkodër. SN continued to work on this and has contributed to the Technical Assistance (TA) Project conducted by OSCE in various ways; SN has been one of the key partners of the TA Project and lessons learnt from SN have been applied in implementing the TA Project of OSCE.

The main duties on the civil registration system:

- Draft an enrolment plan, including recruitment of personnel, for computerisation of the existing hard copy civil status records from the FR books, in cooperation with GDCS and OSCE.
- Develop the software for data entry.
- Develop the software for the data cleansing.
- Develop the manuals and different instructions on data entry and data cleansing procedures.
- Draft a training plan and train the trainers.
- Begin activities on computerisation of the FR books according to the enrolment plan in cooperation with GDCS and OSCE.
- Review and draft amendments to civil status legal framework.

Figure 4.   Temporary software for double data entry

Figure 5.   Temporary software for data cleansing

After the data entry was completed in about 500 offices around Albania, the main concern was the identification and cleansing/removing of the suspected duplicates on the data base.

After experiencing that double data entry and data cleansing by software was a very time consuming operation, it was decided to change the methodology, and to follow the data cleansing process used for verification by CSO staff.

6.4. Defining the methodology for qualitative improvement of the NCR database

Definition of the criterion "what is a record suspected for duplication"
According to GDCS experience, although over the period 2004–2006, a great work has been done to remove all duplications, i.e. a resident's records existing in more than one Fundamental Register. There are, however, some indicators that show that there still exist duplicates in the Fundamental Registers.

One of the main duties of the project during the preparation of the initial database is to ensure every resident's uniqueness in this database. In order to fulfil this task, the project must ensure that the residents' records are not entered two times in the database. The key elements, on the basis of which it was determined whether each citizen's record is entered more than once into the database, are six: *name, surname, father's name, mother's name, date of birth* and *place of birth*.

Procedures to cleanse the Civil Service Status Fundamental Registers
All records suspected to be duplicates should be subject to the cleansing procedures. With cleansing we mean the removal of a citizen's data from a Fundamental Register, when it is a known fact that the citizen has moved and is registered in another Fundamental Register and has *"at least four complete elements, plus the same root in the fifth element"*.

Figure 6.   Data-cleansing software

6.5. Determination of Procedural Elements during Transitory Period

Documentary Transition
The first question in relation to the implementation of the electronic system of the CSS is: *"Shall we immediately proceed from the manual system to computerised system of the CSS, or shall we continue with the two systems in parallel?"*

Recording the new acts that have occurred during the data entry period
During the entire data entry process, the situation of Fundamental Registers would necessarily have to remain frozen, i.e. the situation existing at the start of the data entry process will remain. Subsequently, the changes occurring in the Fundamental Registers through the records of acts or procedures followed by the CSS during that period will not be reflected in the database. Acts or procedures (corrections etc.) that will be performed during the data entry process will be reflected in the Fundamental Registers in the same way as they are reflected at present, but they will be made distinctive from the previous records. To this end, SN proposed that these records should be made in *Capital letters and in Distinguished Colour*. The SN project tested this method in the pilot project in the municipalities of Durrës and Shkodër and concluded that it is the most effective method for the CSOs that have a high number of citizens and the risk to provide inaccurate documents during the data entry period.

Figure 7.   Software for recording the new acts that have occurred during the data entry period

However, the computerisation of the FR books was based on the principle *once-only entries* of personal records of the eligible persons, and to subsequently *use these on multiple-occasions* (electronically).

After the data entry process was over all around Albania, the SN project has:
- Converted the SQL DB to ORACLE DB.
- Developed a temporary software for printing certificates from the system.
- Created the local DB.
- Imported local DBs in one DB.
- Exported DB to the Austrian company XION/BMI.
- Made quality check of registers' content before handing them over to the Austrian company XION/BMI.
- Made quality check, daily routine for correction found during quality check.
- Solved problems with the Db/test system, cleansing of data/duplicates.

If the citizens during the application for a national ID card or a passport find errors, they have to go to the local CS office where they live and submit a request for corrections. Then the CSO staff checks in the fundamental register. If the FR shows the same information, then the citizen has to go and check the act of birth at the CS registration office. The establishment of the Albanian National Civil Register has provided reliable production of different important documents, like ID cards, biometric passports and voters' list.

Figure 8.   Project structure
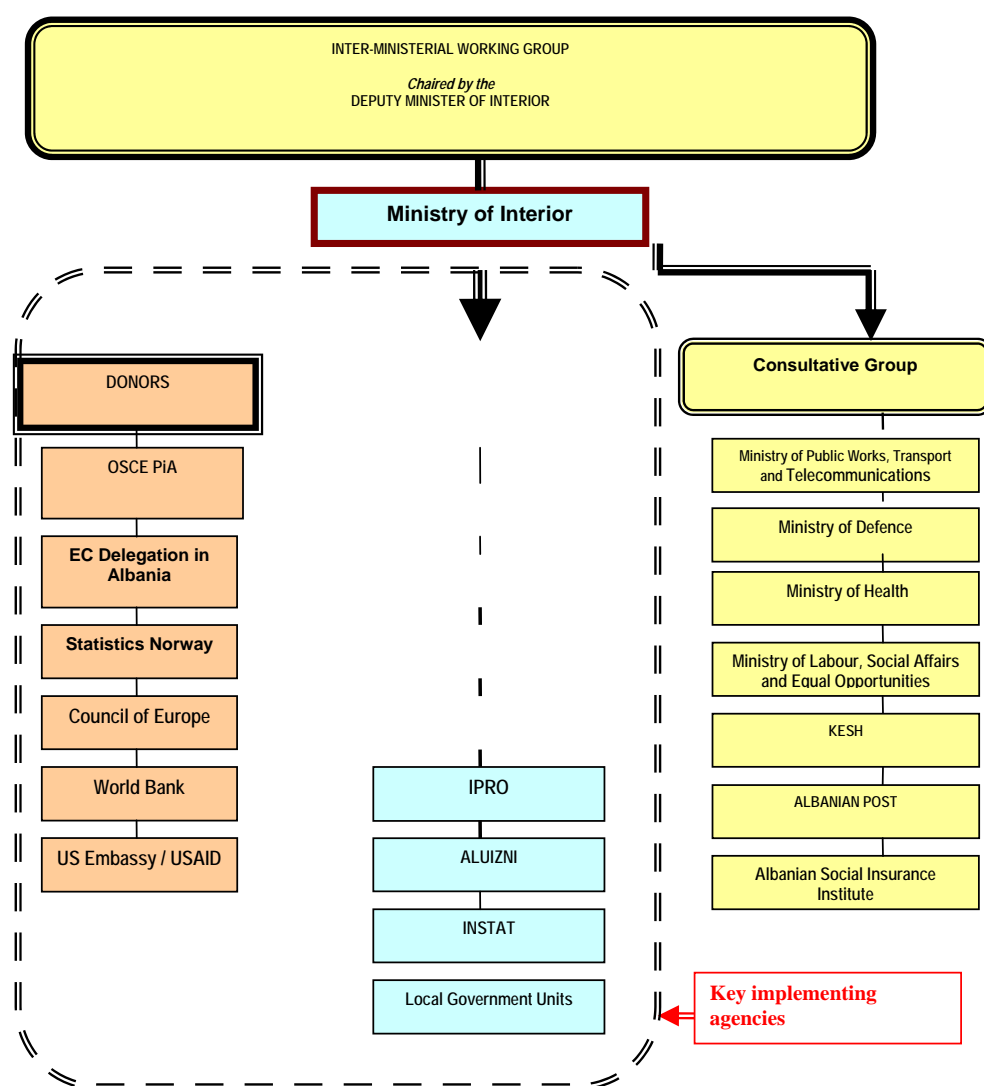
6.6. Remarks

The multiple uses of data by other institutions ensure that all public administration institutions perform their tasks using the same information coming from the civil registration system. The software system and legal framework should be developed along this basic principle. The Albanian Government welcomed the cooperation with the Austrian MoI and through them the Austrian company XION/BMI, as they thought the Austrian Government would provide the software and application and assists with the implementation. Later it turned out that the Austrian MoI saw the cooperation as an ordinary business agreement between the Government of Albania and the Austrian company.

The establishment of an electronic national register of the population and the issuing of the ID number as a personal and unique identification for each Albanian resident, has now been completed. Finally, the project "Modernisation of the Civil Registration System in Albania" has shown that it is important to advocate the importance of investing in registers. At the same time it is crucial to ensure that the register infrastructure is not limited to the institutions maintaining the data. It is an efficient and effective tool to be utilised both in private and public sector benefiting the society at large.

7. Scanning of the old archive registers of civil status service

After the modern National Civil Register (NCR) was established, the civil registration in Albania still had challenges ahead, where further assistance was needed. Late in 2008 MoI asked Statistics Norway for further technical support, particularly in two areas; scanning of the FR books, and the transfer of data from the NCR to third parties.

After completion of the computerisation of the local Civil Status registers, cleansing of the CS data base and printing of all kinds of certificates, SN extended its contribution and assistance by initiating another component of the project and extended the project activities with the regard to the digitalisation of the Civil Status archives (books).

The fundamental register (FR) books are not only important because of their historical value, but because they contain important legal information which is used by Albanian citizens to certify family relations and ownership rights. However, during the data entry operation for the national database (NCR) only the information about living persons was entered. Scanning the FRs stored in the archive CS offices will digitally link the old register with the new electronic register. With the digitalisation of these books, GDCS would be able to create an important historical digital archive, accessible for all citizens throughout Albania, and at the same time protecting their property rights.

Early in 2009 a delegation from GDCS visited Oslo to learn how scanning of archives are done in Norway. According to the terms of reference, SN had to run a pilot during 2009 to test if it was viable to set up a scanning project for the fundamental books in the CS archives in Albania. The scanning project would secure and digitalise the old registers.

The preparatory phase and the consultations that took place in that context, called for mobilising financial resources from the donor community and/or GoA as a very important condition for the implementation of this project. There are 37 CS archive offices in Albania. The CS service is organised as follows:

Figure 9.   Organigram of the Civil Status Service (CSS)
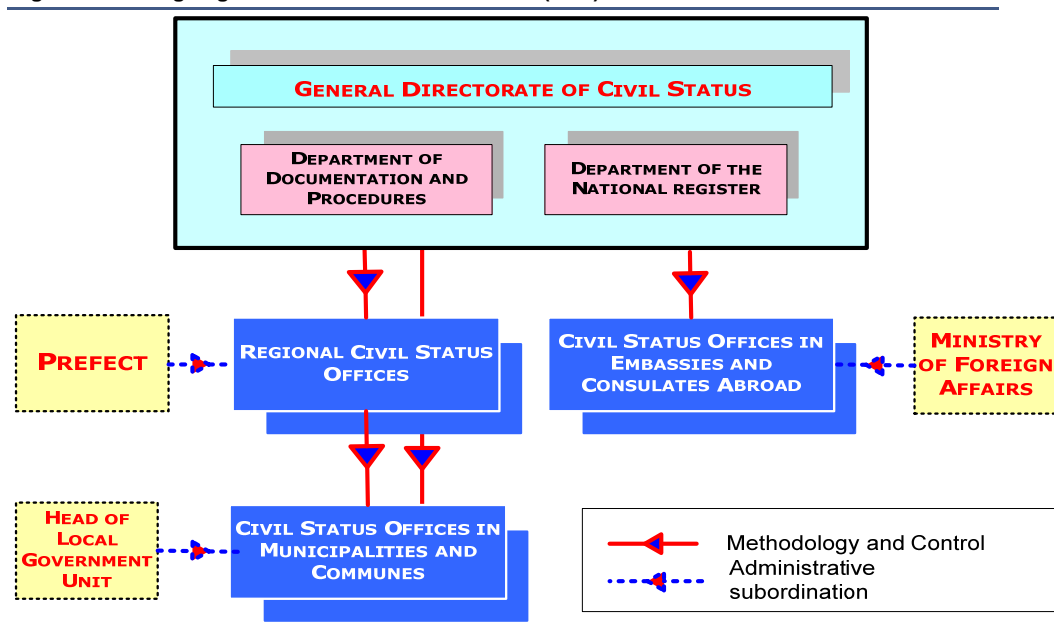
7.1. Some arguments for accepting the request from MoI on scanning the archive FR

- The implementation of the project "Modernisation of the Civil Registration System in Albania" and the running NCR, the national electronic register of civil status, has significantly improved the service towards the citizens. However, the service offered by the CSO branches in the region was not at the level that could respond in an adequate way to the requests to this service.
- The historic data of the citizens are stored at the archive of the civil status offices which made it impossible to integrate them in the electronic system already established to the Civil Status Service at the communes and municipalities.
- It was impossible to have a unique modern system of civil status in Albania if the data at the region level are not digitalised/computerised. The CSO in the region level are also part of the CS service in Albania.
- The poor physical condition of the registers in the archives was another reason for the digitalisation of the archives of the civil status.
- The digitalisation of the archives of the civil status would facilitate the management and manipulation of these data.
- The digitalisation of the archives of the civil status will increase the efficiency and quality of the service to the citizens and other users of data.

SN resources are used as seed funding to initiate and complete project formulation for the digitalisation of the 36 archives of the CS at district level and to ascertain the feasibility of the selected methodology and approach. A Working Group on Technical Assistance, composed of The General Directorate of Civil Status and Statistics Norway, have considered various options and follow in-depth consultations, in order to agree on a methodology to prepare the digitalised archives, based on the existing handwritten registers.

7.2. The civil status branches in districts (archives)

There are 37 CS offices at this level. These offices are part of a prefecture's administration and are organised on prefecture and district bases. According to the article 67 of the Law No. 10129, dated 11.05.2009, the main duty of the CS offices in districts is the administration of the archive of the Civil Status Service and respectively the administration of the old Fundamental Registers (FRs) for the years 1923, 1930, 1945, 1950 and the Books of Acts (birth, marriage and death) from 1929 until today.

The main duties of the civil status branches in districts/regions are reporting, control, administration of access rights of users and administration of the archives of the registers of the Civil Status Service in regions:
- To issue certificates of civil status based on the documents under its administration, on the request of the residents or the Civil Status office in a commune or municipality.
- To issue information and data to public institutions and private juridical persons (natural legal person) as provided by the law.
- To report to the head of prefecture and General Directorate of Civil Status about the activity of office branch and offices in communes and municipalities.
- To receive and distribute to the civil status offices of communes and municipalities, notifications and instructions coming from other state institutions.
- To control the activity of civil status offices in communes and municipalities and to propose necessary steps (if needed) to the respective organisations.

The work load of CS Archive offices in big districts like Tirana, Durrës, Elbasan, Fier, Vlorë etc. is high. Each of these offices might issue an average of 100 certificates or other documents per day. These documents or certificates are mainly issued because of:
- property problems,
- social insurance verifications,

- foreign embassy verifications,
- general attorney verifications,
- date of birth verifications and
- surname before marriage verifications etc.

The most used/requested source documents are the Fundamental Registers of 1950 and 1974, as well as the Books of Acts belonging to this period.

Figure 10.   The distribution of CS archives offices of Albania, according to districts
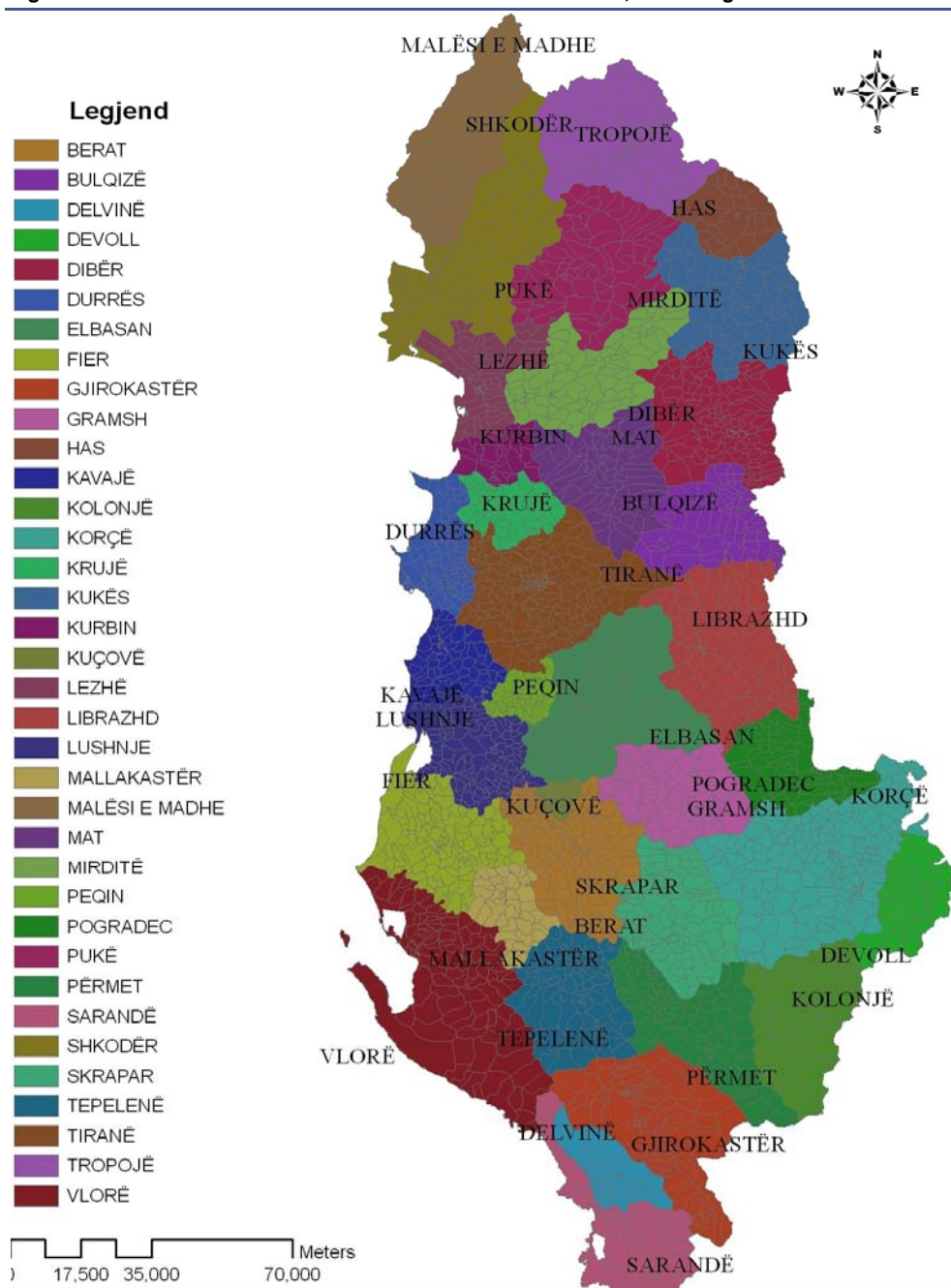
The old fundamental registers (handwritten books) and the books of acts that are stored at the archive offices of the CS in the region are not standardised in size, because they have been changed in different periods. Generally their physical status is very poor. Some data in these registers are not readable, some pages are damaged etc. At the same time, some archive offices do not have the basic necessary physical conditions to maintain these registers.

Figure 11.   Fundamental Registers in a Civil Status Archive office

The SN project received from the Ministry of Finance of Albania, approval for the refund of the prepaid VAT paid in 2008 of EUR 157 000 in connection with the purchase of hardware and standard software for all the CSO offices in Albania. The amount was confirmed and approved by GDCS and by the budget and the money was made available on Statistics Norway's account. The project proposed to include this fund in the 2009–2010 budgets and to use the funds on purchasing scanning equipment and procuring distribution system.

With a very limited budget and estimated cost ranging from 70 000 EUR and above for a single scanner, the project had to look for alternative solutions for scanning the FR books. Another challenge was the Albanian law which prohibited moving the registers from the archive to a central location for scanning.

Initially the project searched for other projects in Albania that were scanning books. The project manager visited scanning projects of cadastre offices in Kosovo, Serbia and Albania. The LAMP project in Tirana was scanning cadastral registers and other documents based on camera solution. The same solution was used successfully in Kosovo. So, the final best idea of the project staff was to organise scanning project using camera technology.

Based on new ideas, the project developed and tested a photo table with camera. Software for capturing and indexing each image during capture was developed and tested. A second software and database for importing and storing of images was developed together with functionality for quality control including attaching metadata to the scanned images. Finally, viewing software for distribution was placed on the top of the database ensuring that the images were searchable and could be distributed to the users via a web interface. Certificates based on these images can be produced and printed.

Once the scanning images are controlled and metadata has been attached, GDCS can distribute the images through their own network to CSOs and/or store images on local computers in each archive. The advantage of this solution is that all CSOs throughout Albania would have access to the images, contributing to the "one stop shop" concept where a citizen can get all information needed in one office, instead of visiting several offices to search and receive the information and a printed certificate.

Figure 12.   A photo table with the camera

Pilot phase of scanning project

The project of scanning archives started with a pilot phase in the CS archive office of Tirana. The pilot phase, which was successful, lasted for 5 months, a little bit more than planned, due to limited resources. The pilot started in the CS archive No. 1 in Tirana, which covers the municipality of Tirana, for a total of 499 FRs. The number of pages scanned in this office was 110 850. The fundamental registers in archive No. 1 in Tirana were scanned during the period September to December 2009. The quality check and attaching metadata to the images from the first office took more time than planned, due to limited staff from GDCS dedicated to this operation. Later, in January and February 2010, a full scanning team from GDCS worked in archive Nr. 2 in Tirana. There were 4 operators working in two shifts of 6 hours. CS archive No. 2 covers all the communes of Tirana in the rural area, with a total of 451 FRs. The number of pages scanned in this office was 41 301.

After the scanning of the FRs in these two archive offices of Tirana, the process of quality check took place. After that the process of corrections of images the scanning was considered to be of low quality. Based on the progress of the pilot phase, more adequate software and technology was developed, enabling GDCS to take over the control of the scanning production during the second half of 2010. Technical training was given to IT personnel and operators performing quality control and entering metadata at GDCS, as well as to scanning operators at the local level. The 37 archive offices contain a total of about 11 000 FRs and a number of approximately of 1.2 million pages. Our scanning experience in Tirana municipality's archive was of about 17 fundamental register books per week.

To be able to finalise the scanning within the planned period of the SN project, the project estimations showed a need for seven more cameras and photo tables in addition to the current three which were in use, and in addition extra storage capacity. Due to limited financial resources of the SN project, GDCS and the Ministry of Interior presented a request for extra funds to the OSCE presence in Albania. The SN project was also in contact with EU and OSCE, which were willing to finance the unmet needs of the project. The contribution of OSCE covered the 7 complete sets of equipment (camera, lighting, computer etc.).

Investments for project implementation
- The SN project used its resources to buy: 3 cameras, 3 photo tables, 3 sets of lighting, 3 computers.

- The OSCE project used its resources to buy: 7 additional cameras, 7 additional photo tables, additional storage 30 TB, transport etc. for an estimated cost of about 106 500 EUR.
- GDCS has contributed with staff locally and centrally, reducing the cost for operators.
- The estimates do not include scanning the books of acts, which was conducted later and required more storage capacity and additional man months by the operators.

The experience gained by the SN project during the pilot phase in Tirana's archive offices was very useful for the continuation of the project together with OSCE in the rest of the country. A very detailed plan of distribution and installation of equipments was drafted. Training of operators took place in all the respective offices.

The technology adapted is use of digital camera, Canon EOS 5D. Its main characteristics are:
- Full frame camera, qualified the best for the year 2009
- High image quality
- Programming options
- Easy to move from one office to the other

Figure 13.   A photo table with the camera in action

The SN office in Tirana was in charge of planning, implementing and testing. Furthermore, the project was strongly supported by the director at GDCS, who has been assisting with resources when needed.

The main intentions of the pilot phase of the scanning project were to test and document the methodology, and to test the hardware and software used. Another intention of the pilot was to reveal problematic areas that had to be addressed before production could start, as well as possible improvements to the technology used. Finally, at the end of the pilot a feasible implementation plan and cost estimate was produced for review by management at GDCS and SN.
The following main topics were documented during the pilot test:
- Training of operators
- Manual production
- Production testing
- Software testing

Project highlights from the pilot phase
- A successful pilot phase was finished with all fundamental registers scanned in two CS archive offices of Tirana.
- Pilot scanning program have been tested and installed.
- Scanning program for scanning software (using camera technology).
- Metadata-base including module for quality check and attaching metadata to scanned images has been developed.
- Web solution for distribution of images has been finalised
- Three high resolution cameras and photo tables were used in the archives scanning fundamental books.
- Basic server and storage was procured and installed at GDCS.

The training provided helped the operators to feel more comfortable and competent with this operation. It was a step-by-step approach that met the technical requirements of this operation.

During that training the operators learnt:
- The scope/objective of this project (scan paper registers and convert them to digital images)
- The technology to be used
- Understand the importance of the quality during different steps of the scanning process
- To print the bar-code
- To take pictures
- To save images

The training was structured as follows:
- Part I: Camera and settings
- Part II: Lighting
- Part III: Printer and bar-code use
- Part IV: Entry of metadata

Manuals and instructions were produced. One manual for the operators contains practical guidance on how to operate the scanning equipment, including:
- Camera and settings
- Instructions on how to operate the software
- Instructions on how to operate the hardware (including camera settings and lighting)
- Lighting conditions and minimum physical conditions of scanned material
- Entering of metadata
- Quality control
- This manual also contains a check list for start up of operation before each shift and close after the end of the shift.

The second manual is the IT manual which describes how to install the various software components and to import databases and files to the "master" database. The third manual is a brief instruction on how to operate the viewing software, such as searching functionality.

The following types of testing has been performed and documented during the pilot:
- Production capacity
  - Per hour/shift using one operator per photo table
  - Recommendations
- Types of improvements to the photo table / work station / work environment
- Description of constraints (example shape and condition of the material to be scanned)

- Improvements/problems using the bar-code
- Experiences from usage of glass plate
- Lightening conditions using:
  - Normal lights
  - Professional light
  - Glass plate with and without light
  - Recommendations
- Testing of lenses
  - 50 mm
  - 24 mm
  - Recommendations
- The software testing consists of testing of test cases
- Software for cropping images
- Further development – second generation scanning without printing bar-codes

Figure 14.   A scanned image

#	COMPONENT NAME	ORGANISATION(S)	OBJECTIVES
1	Planning, coordination and project management	SN/MoI	Develop national management capacity to implement internationally accepted and transparent methodologies to improve the quality of service of CS archives.
2	Data scanning	SN/MoI	Establish a Data Scanning Centre and develop a central data processing capacity, co-ordinating and monitoring and revision activities across the Republic.
3	Training	SN	Develop training documents, training by SN project staff in 37 local offices.
4	Follow up	SN	Develop documentation and forms to be used by operators and supervisors. Provide statistics, information for GDCS and OSCE.

Figure 15.   Digitalised information
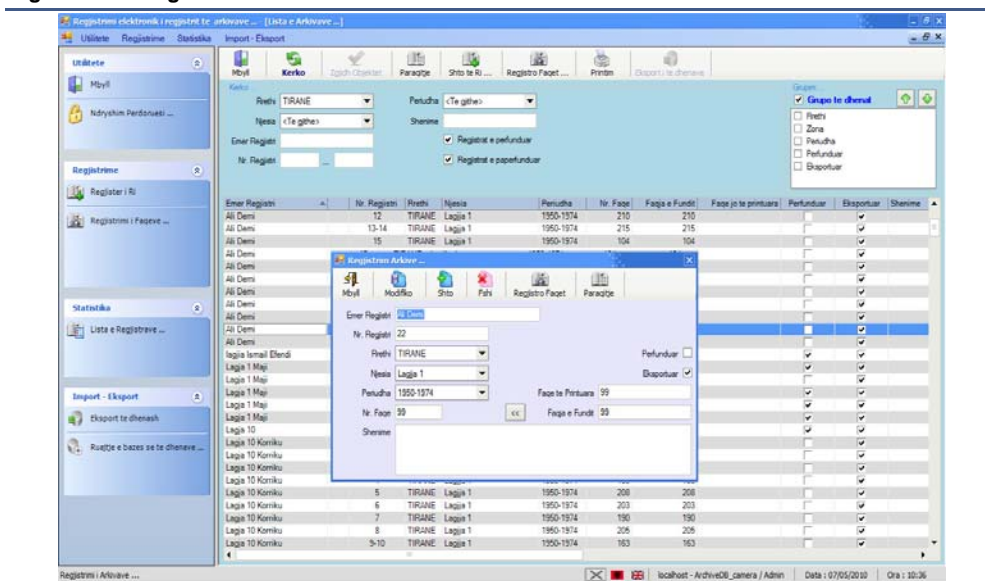
GDCS continuation plan
- Scan existing fundamental registers at CSO offices in conjunction with the removing of the fundamental register at CSO level (1974–2010).
- Scan the books of acts (birth, marriage, death) stored at the archives and at CSO level.
- Network connection between 37 local offices and GDCS.

Metadata set
- For the fundamental registers (books)
- For the books of acts
    - Search criterions
- User interface: Web based

Figure 16.   Web-based digital archive work flow
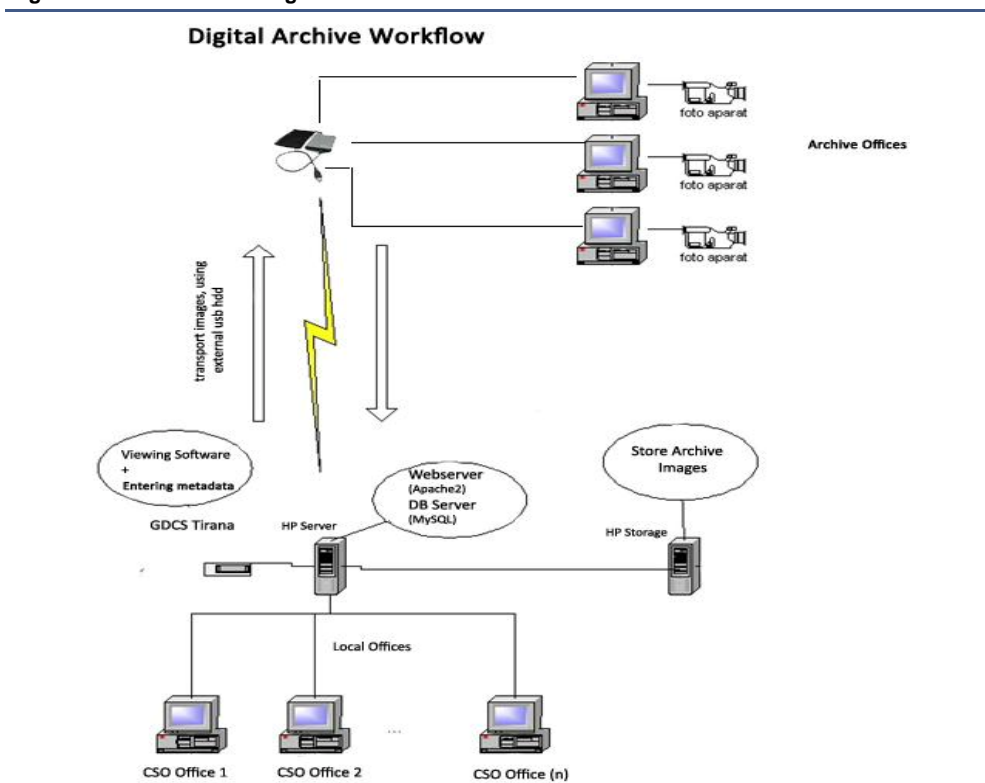
The following table shows the information regarding total number of Fundamental Registers scanned per district and region of Albania, number of pages scanned and number of metadata entered by GDCS staff.

Table 2.   Number of Fundamental Registers, pages and metadata digitalised per district and region.

Prefecture	District	Scanning	Total FR	Total page	Metadata
TIRANE	TIRANE BASHKIA	Completed	499	100842	98814
	TIRANE PREFEKTURA	Completed	451	41301	41241
	KAVAJE	Completed	215	28698	28112
DURRES	DURRES	Completed	291	44687	44166
	KRUJE	Completed	150	15176	14845
LEZHE	LEZHE	Completed	278	21633	21297
	MIRDITE	Completed	145	14897	4485
	LAC	Completed	106	11757	5641
ELBASAN	ELBASAN	Completed	602	65077	61697
	LIBRAZHD	Completed	157	22229	21159
	GRAMSH	Completed	200	15846	15418
	PEQIN	Completed	118	10538	10341
KORCE	KORCE	Completed	584	71937	71211
	POGRADEC	Completed	175	16764	16668
	KOLONJE	Completed	245	18315	Completed
	DEVOLL	Completed	144	16653	1197
GJIROKASTER	GJIROKASTER	Completed	345	33899	29967
	TEPELENE	Completed	146	16970	16143
	PERMETI	Completed	235	18091	15240
VLORE	VLORE	Completed	605	65306	Completed
	SARANDE	Completed	239	26511	26190
	DELVINE	Completed	84	9937	Completed
DIBER	DIBER	Completed	339	36237	Completed
	MAT	Completed	164	18512	Completed
	BULQIZE	Completed	158	17227	Completed
KUKES	KUKES	Completed	203	23970	Completed
	HAS	Completed	65	4960	Completed
	TROPOJE	Completed	219	18140	Completed
SHKODER	SHKODER	Completed	542	73287	Completed
	M.MADHE	Completed	164	14963	Completed
	PUKE	Completed	193	15121	Completed
FIER	FIER	Completed	757	78713	Completed
	MALLAKASTER	Completed	144	17120	Completed
	LUSHNJE	Completed	530	50823	Completed
BERAT	BERAT	Completed	409	42559	Completed
	KUCOVE	Completed	89	9146	Completed
	SKRAPAR	Completed	296	16229	Completed
SHUMA			10,286.00	1,124,071.00	543,832.00

The process of entering the metadata was a very time-consuming the operator staff of the GDCS. The SN project staff made considerable effort to establish GDCS ownership of the project. GDCS gained enough capacity and knowhow to finalise the operation that was done by scanning of the books of acts which completed the whole system of CS archives.

7.3. Output of the scanning project

- Stored and safeguarded important information which is used daily by Albanian citizens for documentation purposes, such as ownership to land and document family relations.
- Decreased workloads at the archives by electronically accessing the archive.
- Distribution system of images to local offices (CS offices and archives).
- A "one stop shop" project, where residents can access and receive all information at their local CSO office (no need to visit archives in many cities as the images are available at their local CSO level).

8. Transfer of data from the NCR to INSTAT

The Albanian Statistical Institute (INSTAT) has the role of an independent institution in charge of producing timely, relevant and transparent statistics. The Albanian government has approved the National Strategy for Development and Integration (NSDI), which includes the periodical monitoring of social and economic indicators and attributes an important role to INSTAT. In this regard improvement of the performance of INSTAT in terms of management, data collection, data processing and the cooperation with ministries and other institutions like GDCS, as well as with the regions, is very important.

During the last 2–3 years of the project, SN re-established a co-operation on statistical production with INSTAT. Some co-operation with INSTAT was established as early as 2002.

On 22 June 2010, the INSTAT Director General, Ms Ines Nurja, sent a letter to the Director General of SN, Mr Øystein Olsen, asking for a collaboration and assistance on an electronic periodically update of the population census data with data from the NCR.

To improve periodicity, quality, reliability and comparability of data and indicators, especially on demography and vital statistics, Statistics Norway has strongly recommended that INSTAT should start to use the National Civil Register (NCR) already available in the production of statistics. Already in September 2002 the SN staff in Tirana invited INSTAT to a collaborate through the reference group for the project, but little interest was shown at this early stage.

The new civil register (NCR) enables Albanian authorities to build a modern IT infrastructure where the civil register will be one of the cornerstones of the public administrative IT systems. With the implementation of a proper distribution system, the register can provide real time access for different external users. Furthermore, this project is another step to increase the transparency in the economy and simplify the interaction between public administration, the country's residents and the private sector.

During the last months of the project period SN was able to facilitate the transfer of data from NCR to INSTAT. The lack of progress in doing this earlier in the project is first and foremost due to the cost of implementation and to weak decisions made at deputy minister level at MoI of Albania.

INSTAT certainly welcomed the efforts and new ideas within the limited assistance given by SN during 2009. The most important contribution was the drafting of a system specification for distributing data from NCR to INSTAT, including additional information for vital statistics. These efforts made by the project during 2010–2011 have resulted in a successful distribution of NCR to INSTAT. In addition, the project has been working to enable INSTAT to use the data in the production of register-based statistics, through short term missions on registers and SAS training. Unfortunately, due to lack of support from the MFA of Norway, no further cooperation with INSTAT is possible.

INSTAT needs to compare the data collected during the Population and Housing Census of October 2011 with the civil register data from NCR. Based on the combination of the census data and civil registration data, INSTAT aims to create a statistical Population Register, which is a continuous recording of demographic and socio-economic characteristics of a population. During several discussions with civil register representatives at GDCS they initially agreed to give to INSTAT only the variables needed for data comparison.

Meetings were held together with GDCS, INSTAT and the Data Protection Commissioner on clarifying the remaining issues before NCR data could be given to INSTAT. The final decision of data to be distributed rests with GDCS and the Ministry of Interior. After many hesitations from the deputy minister of MoI, finally a Memorandum of Understanding (MoU) was signed between INSTAT and GDCS in November 2010.

A solution for the transferring of data was discussed with Ministry of Interior and XION/BMI Austria, the supplier of the civil register to GDCS. A final proposal for distribution was sent to the company XION/BMI from GDCS, by means of which data could be transferred to INSTAT.

One challenge to the process of making the NCR available to external users outside the GDCS must be mentioned. The necessary software was to be purchased through a tender process, neither involving independent consultants nor SN. At the time we did however get the impression that there was a general agreement on the system requirements, implying that the software purchased for the NCR should be licenses as Open source, enabling the GDCS, INSTAT and SN to maintain the system and to develop it further. This was however not the case, something that caused a challenge for the process of making the NCR available for users outside the GDCS. This added costs, both in terms of working hours and fees to the software supplier. Further, we have not seen it as our task to follow up on external agreements. Later we have realised that such issues must be discussed with our partner institutions to clarify the recommendations and requirements for further engagement form our side.

8.1. INSTAT forms received by local CS offices

Forms filled in by local CSOs were approved by INSTAT in 2004 based on the Law on Official Statistics, no. 9180, dated 05.02.2004. One of the duties of the Regional Branch of Civil Status is to provide data to state institutions and private legal persons, in the manner specified by law.

Earlier INSTAT got paper forms from civil register offices on vital events such as births, deaths and marriages. INSTAT could not get these data in an electronic way because they were not part of civil register database. The SN project and INSTAT judged that there was an immediate need to have a system for data capturing in the civil register offices and an interface for data transferring to INSTAT. This system should be developed by the Austrian company XION/BMI which has developed the civil register NCR and has a contract of maintenance with the MoI of Albania for three years.

The SN project staff has held many meetings with GDCS explaining that is very important that INSTAT can get the identification data (such as name, surname, ID etc.). These data are very important for having an updated database on demographic events, and thus a valuable source for demographic statistics.

According to the Law on Official Statistics, 356 Civil Status offices throughout the country are obliged to report to INSTAT every month. Every 7th of each month these offices must send information regarding births, marriages, deaths and deaths during the first year of life to INSTAT. The information to be reported includes all the vital events happened each month received at the respective CS offices. There are four models/forms to be filled up by the CSOs employees and send to INSTAT:
- Form of birth D-2
- Form of marriage D-3
- Form of death D-4
- Form of death within the first year D-5

These forms are all individual forms, filled for each vital event (birth, marriage, death).

The books of acts (birth, marriage, death) are used as source information for completing all these forms. The majority of this information was already available on the NCR. The missing variables/fields were:

> 1. Form of birth D-2
> Pregnancy duration (week)
> Weight of child
> Order of birth
> Education level of parents
> Parents' source of income
>
> 2. Form of marriage D-3
> Education level
> How many marriages (marriage order)
> Source of income
> Children from previous marriages
>
> 3. Form of death D-4
> Initial reason
> Code of disease
> Place of accident
> Source of income
>
> 4. Form of death D-5
> Initial reason
> Code of disease
> Place of accident
> Object that caused the death
> Time of accident

The Memorandum of Understanding that was signed between INSTAT and GDCS in November 2010, allow the building of an interface that enable INSTAT to access the NCR.

8.2. The INSTAT – NCR Interface

According to the MoU between INSTAT and GDCS, data should be made available to third parties, and government institutions in particular. They should be able to get access to services and data through the online system of NCR, in accordance with the legislation in force. MoI is also committed to provide third parties and government institutions in particular, access to data on addresses in Albania, which will be facilitated by the National Register of Addresses (NRA), when this system will be completed.

Given that, INSTAT, based on the law No. 8669, dated 26.10.2000, "On the general census of population and households" is responsible for conducting the Census in 2011, the MoU ensures the availability to INSTAT of the expertise, technological capacity and necessary information from the Ministry of Interior. They are to do this by contributing to facilitate the work of this institution for the development of an electronic interface, through consultation of the data of the NCR and NRA. The SN project has developed an interface to facilitate the transfer of data.

Technical details of the interface build by the project IT
INSTAT needed to compare its own population register with the NCR. The INSTAT population register is created by the 2001 Census, while the NCR database is daily updated by the local CS offices. Matching this information on both registers will serve creating a more reliable source of information.

The solution:
Statistics Norway developed a web interface in order to allow INSTAT perform matching of its own data with the NCR.

Technology used:

Front-end:	Web 2.0. Secure Ajax
	JavaScript with Prototype & script.aculo.us
Back-end:	PHP 5.3
Web-Server:	Apache 2.2 Zend Server
Database-Server:	Microsoft SQL Server 2008 R2
Network:	GovNet Intranet (secure Governmental Network)

Implementation details and security:
At the GDCS's server room, there are two servers configured by SN staff for the purpose of this application. It is one web server that runs the business logic and one database server that runs the stored procedures, matching algorithms and stores the data.

The software is a mix of web programming and PlSql programming. It runs on a secure governmental network that is maintained by The National Agency on Information Society
 (AKSHI). Although there is good security offered by the network infrastructure, this application is build with security in mind, given the information's sensitivity. Here are some security details:
- Properly configured Apache web server, with hatches and rewrite rules.
- Apache allows only INSTAT's IP as a host that can access the software.
- Allowed hosts are checked also in software level (PHP). They can be easily configured.
- Username/password authentication.
- User sessions are stored in the database. This allows for much more control.
- Each user can login only from one location at a time; no multiple logins with same user.
- Session expiry is set to 10 minutes after login. It can be easily configured.
- Encrypted user passwords in database.
- Automatic file deletion and garbage collection after each INSTATs transaction.
- Limited access to the temporary folder where the uploaded files reside.
- Every action is stored in a log table, with the user ID and remote IP.

The application:
This software is designed to perform these basic operations:

Step 1. - Allow the INSTAT operator to upload a text file into the server for matching purposes. This file should contain information regarding Albanian residents sorted in the proper format. Each file can contain up to 5 000 (VARIABLE) records per file and not exceed a maximum upload size limit. All this information is INSTAT's property and is handled with care without being stored anywhere in the server or database. It is kept temporarily, and is deleted after finishing. Every uploaded file is garbage collected after three minutes if not used.

Step 2. - Analyse the file contents, and display any error. All records that do not match the requested pattern or contain inappropriate data, will not be matched. The operator can download during this step the 'bad records found', if any.

Step 3. - Perform data matching and get the results.

- All the uploaded data are temporarily inserted into the database for matching purposes.
- After successful insertion, some stored procedures are executed and this information is confronted with the NCR data that are stored in this database.
- To every matched record it is attached also the proper algorithm letter that matched it.
- The algorithms used to match the data are the following:

A	Search based on first name, last name, father's name, date of birth, sex.
B	Search based on first name, last name, father's name, month of birth, year of birth.
C	Search based on first name, last name, father's name, year of birth.
D	Search based on last name, father's name, date of birth and first name differs by one letter.
E	Search based on last name, first name, date of birth and father name differs by one letter.
F	Search based on first name, father's name, date of birth and last name differs by one letter.
G	Search based on last name, father's name, date of birth and one letter more by first name.
H	Search based on first name, father's name, date of birth and one letter more by last name.
J	Search based on last name, first name, date of birth and one letter more by father's name.
K	Search based on first name, father's name, date of birth and sex.
L	Search based on first name, last name, date of birth.

This operation is identified by a unique transaction number. If an error occurs, everything is rolled back and no sensitive info from INSTAT's data remains in the database.

This application is very flexible and executed asynchronous. This means that the operator can submit a "heavy" job, logout and come back later to get the results. This means no click and wait. Every operation is stored in the logs table and made available to the user. The user can search in the historic transactions and download an older matching transaction's result many times.

The interface is very user-friendly and permits also operations like e.g. changing user password or profile information.

Changes to NCR/XION
The operation of collecting information through the NCR on births, marriages, deaths and, in particular infant deaths, has not been very effective during the last years. Also, the information collected by handwritten forms from INSTAT has not been very accurate. On the other side collecting and entering of such information by INSTAT operators in its own database is an expensive and time-consuming operation. After the NCR was established, INSTAT has asked MoI and GDCS to provide such information electronically. This was not possible because these fields included at the forms D-2, D-3, D-4 and D-5 were not collected and entered to NCR by civil status employees. This information is not considered part of the CS components.

The only available solution was to ask the Austrian company XION/BMI (responsible for the maintenance of NCR), to make some changes to NCR and add these extra vital fields needed requested by INSTAT. The cost for development for the transfer of NCR data to INSTAT, including additional vital statistics fields (these fields will also be used to check the census file), was 40 000 EUR. The development cost will among others contain the following elements:

- New Graphic User Interface for birth, marriage and death
- Generating rules to avoid not filling in forms during the process
- Generating database entries for statistics
- Generating periodical batch for all statistic data
- Testing the environment
- Deploying on the production system
- Generating documentation

According to the offer received from XION/BMI, the product should have been ready by the end of June 2011. XION/BMI was still working on the final solution the project ended one month later. The final delivery of the product has later been approved by INSTAT.

8.3. SAS and register based statistics

SAS licenses
Considering the need of INSTAT for using the SAS program for processing the data collected during Census, the project has paid for 30 SAS licenses. The procurement of the licenses is part of a cooperating social responsibility agreement between SAS Institute and Statistics Norway.

SAS training
The first "basic" SAS training course was executed at INSTAT where 25 persons participated. Kristian Lønø from SN held the course on basic SAS knowledge. According to the feedback from the courses and questionnaires the staff at INSTAT were very satisfied and were looking for more training (intermediate and special topics training).

A second SAS training was held again by Kristian Lønø from SN during 14–18 February 2011, where 12 persons participated. The topics of this training were: SAS addressing proc sql, data management, tabulations and macro programming.

Training in development of register based statistics
A training workshop in development of register based statistics was organised by the project 27 June–8 July 2011. The workshop was held by Kåre Vassenden from SN on development of register based statistics, based on the National Civil Register (NCR). The primary aim of the mission was to contribute to the development of register based statistics, based on the Norwegian experience. Other aims was to assist in the preparations of making statistics based on the Census 2011 and the NCR, and to assist in the preparations to meet the requirements and recommendations of Eurostat regarding statistics based on population censuses.

9.   Challenges

Already from the project start in 2001 Statistics Norway (SN) met several challenges during its efforts to plan and carry through the project in Albania. One fact with impact on the project progress was the unstable political situation in 2001–2002, with four different governments (reigns) before any agreement was signed. This situation was not easy to foresee.

Before the project start MFA and SN considered Albania to be a challenging country for a twinning project. Therefore three SN delegations visited Tirana to examine the actual situation, to explore the Albanian Government's interest for such a project and make demands. The period until any agreement was signed became much longer than expected, to some extent due to the unforeseen, unstable political situation coming up around project start. However, the Government's lacking ability to follow up on its pronounced interest and SN's demands were not expected.

9.1.   Initial challenges

SN did foresee that thorough planning, small scale testing and systematic work towards a goal might be rather uncommon in Albania, but underestimated this problem. It was difficult to get SN's Albanian counterpart and other Albanian agencies to plan and work systematically, to avoid rushes to try to compensate for less active periods – especially before important decisions. The project proposal presupposed gradual introduction of the CS modernisation, starting with a small-scale pilot project to get experience. This approach turned out to be unfamiliar and hardly acceptable among Albanian authorities, both during planning as well as implementation. As a result of this, the Albanian Government insisted on switching over to full scale planning without waiting for experience from pilot offices.

No doubt the Albanian Government welcomed this CS modernisation. However, culture and traditions play a role, so the *way* to do it became a matter of discussion. The Albanian priorities could differ from the Nordic ones. Thorough planning and steady work according to agreed plans seemed not to be given priority. On the other hand, elections and preparation of voters' list before an election were definitely prioritised activities. These challenges were expected, but still underestimated.

Another unexpected circumstance was the lacking Albanian ability and will to bring to the project only competent and experienced staff. Some intelligible examples of replacements, without SN staff being consulted, influenced the project negatively, and tended to weaken the future expectations for the project.

Because of the manual CS situation and the big number of unregistered migrations after 1990, the Albanian authorities welcomed a revision of the CS law, but – like even the Council of Europe (CoE) – they were initially much against the SN proposal to include address (place of residence) among the CS data, and also in the CS law. CoE's attitude was surprising to SN.

Like in most other countries with modest experience from computerised modern civil or population registration, also Albanian authorities had to be reminded on that:
- CS modernisation means more than slavish data entry and computerisation of manual information and existing routines.
- Modern IT equipment is no real "sesame", since comprehensive reporting routines and instructions have to be established and followed anyhow.
- It is not necessarily the *residents* that always (mainly) should report to CS authorities, as reports could be sent from the primary source (midwife, physician, probate court etc).

- A correct register (up-to-date situation) at a CS office at a given date has to be updated regularly, in order not to be outdated. Necessary time for achieving such a well updated data source is often incompatible with demand for results.

The office space situation for both SN's possible counterparts turned out to be problematic. In order to get maximum effect from its presence in Tirana, SN strongly preferred and contended shared office space with its counterpart several times. Unfortunately, shared offices were not possible during the first 20 months of the project.

In 2001 a family in Albania had to pay a considerable amount to report migration to another municipality/commune, and thus get their civil status documents moved. This governmental payment would tend to prevent reporting, and therefore result in lower register quality, as to place of residence. Furthermore, to drop this payment was not easy, since it was said to represent a major source of income for authorities in Tirana districts. On SN's pointing out, a considerable reduction of this payment was proposed and later implemented.

The time to get the necessary approval of the agreement between MLGD and SN was affected by formalities, since the draft had to be approved by four ministries in addition to MLGD.

Among residents, as well as government employees, there could be identified some kinds of "ill will" to the project, which had to be allowed for:
- residents' general negative attitude to authorities, especially central authorities, cf. earlier experiences
- governmental employees have very low salaries, and are therefore not motivated for extra work
- corruption at various levels
- slowness/ill will among government officials/employees to change regulations etc. – status quo more easy

These tendencies were not unforeseen, but some of them proved to be more important than expected.

Some other initial challenges were:
- To find a binding counterpart. The final admission by MLG (later changed to MLGD) of being SN's counterpart came in March 2002, 12 months after the well-received presentation of the SN project proposal to Albanian authorities. A contact person in MLG was pointed out quickly, but was soon replaced by one person in MJ, who turned out to be very little available and also revealing modest interest. An accomplice reason for this long time proved to be shared CS responsibility between ministries.
- To achieve a binding, written project agreement. The very first agreement was signed in January 2003, 22 months after the well received presentation of the project proposal. However, formalities on both sides and some lack of confidence about expectations and project funding meant extra delay.
- To get an overview over relevant formal information – organising, laws, regulations etc. of importance for the project. The agreements' paragraph saying that the Ministry shall provide all relevant assistance, information and documentation was far from fulfilled. To see and understand the de facto situation, partly due to weak infrastructure, and to decide realistic possibilities.
- To achieve an active Albanian attitude in the collaboration – get counterpart members to take initiatives and to inform SN unasked about other international contacts and arrangements in the CS field, in order to gain maximum governmental effect.
- Cultural obstacles, tradition – weak ability to shape suitable laws, based on thorough preparatory work, including hearings. According to Albanian

legislative tradition the draft CS law dated November 2000 was extensive and detailed, like even later drafts of this and other laws. In general there seemed to exist no legal Albanian tradition with brief (scarce) laws (enabling acts) accompanied with more extensive regulations, allowing for more flexibility.

- To activate the working group to deal with the draft CS law. This group, pointed out on SN's proposal, happened to be less technical and more political than according to SN's wish. Even after some formal meetings in this big group, no major issues in the existing or draft CS law were regarded until early April 2002. Fortunately, the new MLG minister Ruka took actions and hastened the legal work so a new CS law, together with laws on ID number and ID card, could be approved in October 2002. However, even SN's repeated comments to the draft CS law did not seem to be much considered. SN was never asked to comment the two other draft laws, but still did so.
- To prepare and finish the first agreement in October – December 2002. SN's counterpart had a strong opinion on how to model the agreement, while Norway unfortunately happened to be in a problematic period with uncertainty because of change of responsibility between MFA and Norad. At the same time MLG expressed impatience and a strong wish to force the project plan by asking SN to prepare a country-wide project plan very quickly, without waiting for experience from pilot offices. However, this difficult situation improved considerably after signing the agreement in January 2003.
- To overcome another difficult period in March 2003 characterised with distrust to SN about the funding and to SN's will to buy equipment, since this activity had not started immediately – again without any pilot experiences.

9.2. Challenges later in the project

After the initial challenges, the implementation of the project has gone more smoothly. However, some challenges should be mentioned:

The project has later faced a series of challenges in making equipment work under difficult circumstances, e.g. with an unstable power supply and staffs limited skills using modern technology.

In 2009 the Norwegian Ministry of Foreign Affairs chose not to support the project. This was an unexpected challenge to the project. Statistics Norway usually does not finance development cooperation, but the need to bring the project to a successful end, made it necessary for SN to support the work with 2 million NOK. Funds from Norwegian Ministry of Foreign Affairs were again made available in 2010.

The supplier of the software purchased for the NCR could have been licensed as Open source. This would have enabled the GDCS, INSTAT and SN to maintain the system and to develop it further. It caused additional costs, both in terms of working hours and fees to the software supplier. This have delayed the last part of the project, and added challenges to making register based statistics within the project period.

9.3. Remark

Several of the challenges experienced by the Statistics Norway is caused by the fact that we have not managed to be sufficiently involved in the decision making process. We have mainly been focusing on ensuring the quality of the technical implementation of the project. This has led to that we have not been sufficiently involved in the core processes driving the development of the project.

10.　Achievements

10.1.　Achievements related to objectives

The overall objective, a modernised civil registration system for all Albania, was achieved in cooperation with international and other national agencies. However, the progress of the project was slower than first expected.

Except for some delays the achievements for the original objectives were very close to what was planned for each project phase. One exception is that register based statistics is not published in the last phase of the project.

The first phase: A central administrative unit to be in charge of civil registration was formally established very soon. A new CS law was approved, even if considerably later and less modern than expected by SN. A central national register and necessary other legislation on the personal identification number was approved. The project has contributed to strengthen the institutional framework; the ability and capacity of the civil registration system.

The second phase: The ability and capacity to serve the country's residents and authorities was through establishing and developing the central administrative unit and the central register strengthened by the computerisation of 5 local pilot CS offices and a few other offices, gaining experience. Because of some obstacles and challenges met the sample of local SC offices as pilot offices had to be revaluated and changed.

The third phase: A considerable contribution to strengthening the modernisation of the civil registration system in the rest of Albania was given. In addition to a change from handwritten books to digitised data there was a development from a traditional Civil Status (CS) system towards the Nordic model of population registration, adapted to Albanian conditions.

The fourth phase: Give users and producers of statistics a more relevant and updated data. This was achieved through making historical material accessible in an electronic format, and through the production of register based statistics.

An important achievement, especially with relation to Albanian authorities, was that the project since 2008 has delivered an improved and indisputable basis for voters' list at elections.

10.2. User effects of the project

Albania today has a modern civil registration system. This facilitates the work of government institutions and residents of Albania. For the government it is easier to administer the population, and the public have easier and cheaper access to services like ID documents, more reliable voter registration, etc.

Today the NCR is shared with INSTAT, to facilitate the production of statistics. This enables INSTAT to make register based statistics. This is a powerful tool to make cost-effective statistics of high quality

If the register is also shared with other public and private institutions, it may serve a range of purposes, like facilitating opening a bank account, taxation, school enrolment, social services, property rights and many others.

11. Final remarks

We have seen that highly skilled and motivated local employees can be an important asset in the implementation of a project.

We have also seen the importance of being involved in the decision making process, to be able to contribute to a sustainable framework for the implementation of the project. Some of the challenges we have faced are caused by the fact that we have not managed to be sufficiently involved in strategic decisions influencing the project. This relates to a range of topics, like the level of priority, allocation of staff and decisions on purchases of tools for the project.

Making a National Civil Register is challenging and the task may be best solved by involving other parties in addition to SN. For the technical implementation it may be useful to involve the Norwegian Tax Collection Authority or another provider of relevant technical services.

Giving the Nations Statistics Office access to the data should always be a part of building a National Civil Register. How this best can be done is a question that deserves attention.

Further reading

Selected Documents on the Modernisation of the Civil Registration System in Albania (Documents 2004/2),
http://www.ssb.no/english/subjects/00/90/doc_200402_en/doc_200402_en.pdf.

Selected Documents on the Modernisation of the Civil Registration System in Albania Vol. II" (Documents 2005/14),
http://www.ssb.no/english/subjects/00/90/doc_200514_en/doc_200514_en.pdf.

Evaluation of the Project «Modernisation of the Civil Registration System in Albania»: Selected Documents on the Modernisation of the Civil Registration System in Albania Vol. III (Documents 2006/1),
http://www.ssb.no/english/subjects/00/90/doc_200601_en/doc_200601_en.pdf.

Appendix A: Project Synopsis

Project Title	Modernisation of the Civil Registration System in Albania
Beneficiaries	Ministry of Interior of Albania (MoI), the General Directorate of Civil Status (GDCS) and the Institute of Statistics (INSTAT)
Total Funded Budget	NOK 21 302 000 EUR 2 506 000
Funders The Norwegian MoFA Statistics Norway	NOK 19 302 000 (EUR 2 271 000) NOK 2 000 000 (EUR 235 000)
Project Start Date	October 2001 (Planning phase)
Project End Date	31 July 2011
Contracting Authority	Statistics Norway

Project phase names used 2001 - 2011

Period	Project phase names mainly used	Corresponding original phases
2001 - 2002	Planning phase	First phase
2002 -.2003	Pilot phase - first part	Second phase
2003 - 2004	Pilot phase - second part	Second phase
2004 - 2005	Pilot phase - Assistance Project (AP)	Second phase
Oct. 2005	Evaluation of the project	Second phase
2005 - 2006	Large Scale Project - planning	Third phase
2006 - 2007	Large Scale Project.- Pilot Durrës, Shkodër	Third phase
	Large Scale Project - Technical Assistance (TA)	
2007 - 2009	Project	Third phase
2009	Scanning Project - pilot	Fourth phase
2009 - 2010	Scanning Project - CS archive books	Fourth phase
2010 - 2011	Distribution of NCR data to INSTAT	Fourth phase

_____

Project managers in Tirana
> Halvard Skiri, October 2001 – June 2003
> Børge Strand, September 2004 – August 2005
> Anne Abelsæth, October 2005 – September 2008
> Børge Strand, September 2008 – January 2009
> René Schmidt, May 2009 – February 2010

Local SN staff
> Mirela Talka Kumbaro, 14 November 2001 – 31 July 2011
> Erald Karakashi, 8 July 2008 – 31 July 2011

List of figures

List of tables

Statistisk sentralbyrå
Statistics Norway