

Sida's Support to the Land Reform Related Activities in Estonia

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**Department for Central and
Eastern Europe**

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Sida Evaluation 01/38

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Eastern Europe**

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Notice to Readers

This report has been generated as part of the overall evaluation of Sida's support to the Land Reform related activities in Estonia, Latvia, Lithuania and Poland. A series comprising following Sida evaluation reports:

Sida Evaluation 01/29 "Poland"

Sida Evaluation 01/30 "Lithuania"

Sida Evaluation 01/31 "Latvia"

Sida Evaluation 01/38 "Estonia"

This report has been generated as part of the Terms of Reference for Sida Project 2000-0036085. The project was executed in 2001 and involved the review of a number of Sida sponsored projects in the Baltic States and Poland.

The Terms of Reference required that a separate report be generated for each of the countries where projects were reviewed. Each report includes an analysis, per the Terms of Reference, for the projects executed within the countries as follows:

Estonia	Öst-1996-235	Latvia	Öst-1995-008
	Öst-1996-280		LVA-0691
	Öst-1998-227		Öst-1997-177
	Öst-1999-180		Öst-1999-179
	Öst-1996-214		
	Öst-1999-138	Lithuania	Öst-1998-465
			Öst-1997-217
			Öst-1998-45
Poland	Öst-1995-150516		Öst-1998-186

The project team was also requested to review the project proposal that has been submitted by Lithuania for consideration by Sida. This is project Lithuania Öst-2000-002319. This assessment is included in the Lithuanian country report.

For additional information concerning the other reports please contact the following:

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Executive Summary

The Swedish International Development Cooperation Agency, Sida, issued a Request-for-Proposals (RFP) in January 2001 to perform an Evaluation of Swedesurvey projects in the Baltic States and Poland. The Terms of Reference (TOR) requested an assessment of some 16 projects that had been conducted by Swedesurvey and Mr. Jim Widmark and a review of a proposal submitted by the Lithuanian Government for funding to continue some ongoing work in that country. Sida has funded all of the work. WaterMark submitted a proposal that included an assessment of the existing project paperwork, discussions with project personnel (Swedesurvey, Sida and in-country officials) and then a field visit to the actual projects sites; WaterMark Industries was awarded the project. This report summarizes the findings of WaterMark's investigations in Estonia and offers recommendations for future activities in Estonia.

The objective of the project was to evaluate the Sida funded land administration initiatives in each of the four (4) countries where projects were being reviewed. There were a number of key factors that were identified and analyzed from an institutional perspective, that relate to the economic development of the land market. WaterMark also attempted to determine the main remaining weaknesses of the administrations and how these weaknesses and limitations affect the delivery of the respective authority's mandate.

WaterMark executed the plan outlined in the response to the Request for Proposals. The general approach was to conduct the review in three (3) phases:

- Phase 1 Project preparation including initial field visit plan
- Phase 2 Field visits for the purpose of information collection
 - review of institutions and current situations within the countries
 - evaluation of Sida projects
- Phase 3 Analysis and report preparation

WaterMark received a number of documents related to the projects that Sida wanted assessed. WaterMark reviewed the documentation to evaluate all of the projects in each of the countries involved. This task included reviewing numerous types of project related material where it was available.

The WaterMark team then visited Swedesurvey AB in Gävle, and met with the Swedesurvey personnel involved with the projects. WaterMark also received and reviewed additional project documentation relating to project contracts, reports, work plans and expenditures.

WaterMark met in Stockholm with the Sida task manager Hans Lundquist and other members of Sida responsible for projects in the individual countries.

The WaterMark evaluation team left for the field work portion of the project on April 28, 2001 by departing for Estonia to complete assessments of seven projects. The team then proceeded to Latvia and conducted assessments of four projects. The team then proceeded to Lithuania and conducted assessments of five projects.. From Lithuania the team moved to Poland where it conducted an assessment of a Polish Project. One member of the team returned to Lithuania and Latvia to deepen the assessment of the system of mass valuation for taxation. The Team then returned to Stockholm where we met with Sida and provided them with an overview of the project findings.

This report was prepared by WaterMark, in the performance of this contract and submitted to Estonia, Latvian, Lithuanian and Polish officials, Swedesurvey and Sida for review and approval. The report includes an analysis of the various findings and recommendations from the interviews and project documents.

WaterMark Industries Inc. visited the Estonian National Land Board (ENLB) where presentations on the organization of the enterprise and the general operation of land management in Estonia were provided. WaterMark asked questions in an attempt to determine the degree to which ENLB interacts with major players and stakeholders in land administration, considering both existing government bureaucracy and relevant legislation.

WaterMark also visited a number of other public and private entities in Tallinn and Haapsula to gather information in order to assess the knowledge transfer from Swedesurvey to their Estonian counterparts. A visit was also made to the Municipality of Haapsula where the results of the Swedish projects were observed in both the ENLB county office and in the municipal offices responsible for land use planning and valuation.

The ENLB interfaces with a number of different government agencies, departments and ministries of the Estonian government through the course of executing its mandate.

The ENLB has been very successful in adopting a management strategy of contracting out services to the private sector, thus allowing itself to become a standards and management agency. This has resulted in a strong competitive and innovative private sector in surveying and mapping, with companies not only working within Estonia and with partners in other countries.

The technical aspects of the mapping projects have been achieved. Project deliverables have been met and there is evidence that the Estonians have been able to translate the Swedish assistance into functioning entities in their own country.

The technical aspects of the land management project have been completed successfully with the major exception of the planned pilot project in two municipalities. Although the planned project might have been useful, the time delay in implementation resulted in changes in priorities. The goals of the planned project have been achieved, as evidenced in the city of Haapsalu. The planned objective of evaluating the use of general versus specific (precisely surveyed) boundaries was not met. However, in this case, the surveying and mapping framework development basically made the evaluation of boundary survey methodologies irrelevant.

The technical aspects of the management consultancy projects have been completed successfully. The projects aimed to strengthen the management capacity at the Estonian National Land Board. The ENLB has benefited from the assistance as was evidenced in the way in which the current programs were presented to WaterMark and the clarity of vision the organization has for the future. The development of management capacity is a continuous process and further assistance in this area may be warranted if requested by Estonia. The management projects were executed in an appropriate fashion according to the Estonians.

The project management aspects for the mapping projects and the land management system project could be improved. Documentation in the form of project reporting was limited for all of the projects. WaterMark recommends that both the project management terms and conditions for Swedesurvey projects and the required reporting of the project managers be improved.

Lessons learned on this project include the need for better reporting and review, reinforcement of the need for project champions for successful projects and the benefits of pilot projects as a mechanism to transfer knowledge and technology. The management consulting assistance appears to have been very successful and could serve as a model for other projects.

1 WaterMark Project Background

The Swedish International Development Cooperation Agency, Sida, issued a Request-for-Proposals (RFP) in January 2001 to perform an Evaluation of Swedesurvey projects in the Baltic States and Poland. (Sida registration number 2000-0036085). The Terms of Reference (TOR) requested an assessment of some 16 projects that had been conducted by Swedesurvey and Mr. Jim Widmark¹ and a review of a proposal submitted by the Lithuanian Government for funding to continue some ongoing work in that country. Sida has funded all of the work. (The complete Terms of Reference for the project are included in Appendix A).

WaterMark submitted a proposal that included an assessment of the existing project paperwork, discussions with project personnel (Swedesurvey, Sida and in-country officials) and then a field visit to the actual projects sites; WaterMark Industries was awarded the project.

The Terms of Reference for the WaterMark assessment project require that a report for each country be submitted individually. This report summarizes the findings of WaterMark's investigations in Estonia and offers recommendations for future activities in Estonia.

¹ Mr. Widmark is an individual that was retained as a management consultant to provide advice and council to in-country senior management. Sida funded Mr. Widmark's work.

2 Evaluation Methodology

The objective of the project was to evaluate the Sida funded land administration initiatives in each of the four (4) countries where projects were being reviewed. Among the key factors that were identified and analyzed from an institutional perspective were:

- state of economic development, land and housing markets, land restitution/privatization and property taxation
- programs related to the allocation, adjudication, and registration of rights (including documenting the present status of the land registration system/land book)
- progress of legislation as it relates to property
- organizational structure and inter-ministry cooperation (including defining the responsibilities of the central, regional and local governments)
- the financial situation within government (including determining the level of support government agencies receive to fulfill their tasks)
- client satisfaction (e.g., with the systems used when banks need collateral, selling and buying of real estate, municipal planning needs including information required for real property taxation)
- relation to other projects (e.g., World Bank and EU/PHARE)
- environmental issues related to property
- gender issues in the organization and with respect to property.

WaterMark also attempted to determine the main remaining weaknesses of the administrations and how these weaknesses and limitations affect the delivery of the respective authority's mandate.

WaterMark evaluated the performance and results attained by the Sida supported projects, listed in the Terms of Reference, in the fields of aerial photography, mapping, transfer of know-how and technology, and the development of land information and land management systems for the purposes of taxation. For each project, the project relevance, impact, cost-effectiveness and sustainability were evaluated.

On contract award, WaterMark executed the plan outlined in the response to the Request for Proposals. The general approach was to conduct the review in three (3) phases:

- Phase 1 Project preparation including initial field visit plan
- Phase 2 Field visits for the purpose of information collection
 - review of institutions and current situations within the countries
 - evaluation of Sida projects
- Phase 3 Analysis and report preparation

2.1 Project Preparation

WaterMark requested and received a number of documents related to the 16 projects that Sida wanted assessed. WaterMark reviewed the documentation to evaluate all of the projects in each of

the countries involved. This task included reviewing the following types of information, where it was available:

- initial contracts and amendments outlining objectives, terms of reference, and budgets and any subsequent amendments to the contracts;
- all quarterly and annual reports from Swedesurvey to Sida, including any budget or methodological changes;
- project work plans;
- consultancy reports;
- final reports and expenditures, if the project was completed

This analysis, including the institutional and economic review, provided the background for both the evaluation of existing Sida projects and for determining the relevance of future projects. Criteria developed for the evaluation was modified as required during the course of the analysis.

The documentation review assisted WaterMark in the identification of those personnel who were integral to the projects being assessed. WaterMark, with Sida's assistance, contacted those individuals to determine schedules and time commitments and then revised the originally proposed project schedule. A list of these individuals is included in Appendix B.

The WaterMark team then visited Swedesurvey AB in Gävle, and met with as many of the Swedesurvey personnel² involved with the projects as possible. WaterMark also received and reviewed additional project documentation relating to project contracts, reports, work plans and expenditures.

WaterMark met in Stockholm with the Sida task manager Hans Lundquist and other members of Sida responsible for projects in the individual countries³. After including Sida specific issues to be investigated while on mission, the WaterMark plan was modified and accepted.

2.2 Field Visits to collect Information

The WaterMark evaluation team left for the fieldwork portion of the project on April 28, 2001 by departing for Estonia to complete assessments of the following projects:

Öst-1996-235	Öst-1996-280	Öst-1998-227
Öst-1999-180	Öst-1996-214	Öst-1999-138

The team then proceeded to Latvia and conducted assessments of the following projects:

Öst-1995-008	LVA-0691	Öst-1997-177
Öst-1999-179		

² Those Swedesurvey personnel that were seen as important to the project review but who could not be interviewed in person were communicated with via email.

³ WaterMark met with Ms Marie Larsson responsible for Estonia and Mr. Erik Wallin responsible for Poland. WaterMark was provided contact details for Ms. Helén Nilsson who was responsible for Lithuania and who was on mission in Lithuania. WaterMark met with Ms. Nilsson in Lithuania.

The team then proceeded to Lithuania and conducted assessments of the following projects:

Öst-1998-465

Öst-1997 217

Öst-1998-45

Öst-1998 186

Öst-2000-002319

The team then proceeded to Poland and conducted an assessment of the project Öst-1995-150516. One member of the team went to Lithuania and Latvia subsequent to the Poland assessment to deepen the evaluation of the projects' contribution to the development of real estate markets and the system of valuation for taxation.

The team then returned to Stockholm where we met with Sida and provided them with an overview of the project findings.

2.3 Analysis and report preparation

This report was prepared by WaterMark, in the performance of this contract and submitted to Estonia, Latvian, Lithuanian and Polish officials, Swedesurvey and Sida for review and approval. The report addresses

- the efficiency of the project delivery,
- the effectiveness of the project approach and deliverables, and
- the ability of the projects to support Sida's development goals.

The report includes an analysis of the various findings and recommendations from the interviews and project documents and offers the following documentation:

- findings of the project evaluations
- recommendations related to the findings
- considerations for future strategies for Sida.

3 Project Background

WaterMark Industries Inc. visited the Estonian National Land Board in Tallinn where a brief review was provided on the organization of the enterprise and the general operation of land administration in Estonia. WaterMark asked questions to determine the degree to which ENLB interacts with major players and stakeholders in land administration, considering both existing government bureaucracy and relevant legislation. The ENLB provided an excellent overview of their future system and organizational plans.

WaterMark visited the state mapping firm and a private survey firm in Tallinn to assess the knowledge transfer from Swedesurvey to their Estonian counterparts. In addition, WaterMark visited a county office of the ENLB and municipal government authorities in Haapsalu to examine some of the benefits derived from the Sida projects.

3.1 Program Context

As per the document “Country Strategy for Development Cooperation for Estonia⁴” the Swedish Government established a country strategy for development cooperation with Estonia to guide the direction of Swedish development cooperation with Estonia during the period 1999 to 2001. The strategy sees Estonia as an important partner in most fields, from both bilateral and regional perspectives, not least within the framework of Baltic Sea policies. Sweden is interested in deepening Swedish-Estonian relations in various areas of society.

Of the overall objectives of Swedish cooperation with Estonia, at least two are addressed by the project being reviewed:

- to deepen the culture of democracy
- to support a socially sustainable economic transition

The projects being reviewed during this audit focused on three specific areas:

- Developing the institutional capacity to make maps from aerial photography to support land reform and the development of a land management system.
- Developing components of a land management system including the capability for mass valuation of real estate for the purpose of taxation and the capacity for parcel registration,
- Developing organizational and management capacity to establish a modern, sustainable land management agency

The goals of these projects directly promote a socially sustainable economic transition by supporting, within public administration, the development of property inventories, and tax administration. By doing this it also intuitively supports the deepening of the culture of democracy. These systems are also essential to the efficiency and security institution of private property that is part of the economic transition in Estonia.

⁴ Country Strategy for Development Cooperation for Estonia, January 1, 1999–December 31, 2001, Ministry of Foreign Affairs

3.2 The Mapping Projects

There were two (2) mapping related projects reviewed by WaterMark: Öst-1996-280 that resulted in the ENLB acquiring a photo-laboratory, completing some training, acquiring some equipment and completing orthophotomaps and line mapping; and Project Öst-1998-227⁵ that focused on the acquisition of aerial photography and the creation of orthophotomaps.

3.2.1 Öst-1996-280 –photography laboratory and mapping production

The mapping project under Öst-1996-280 commenced in December 1996 and went until December 1998. It was for a value of SEK 5 000 000 and was between Swedesurvey and the Estonian National Land Board (ENLB).

The project included the following components:

- Training in digital photogrammetry, digital cartography, PATM-PC-GPS software and management practices
- Consultancy for studies for a photo lab, general photogrammetry and database creation
- Equipment and software including SOS mapping software, PATM-PC-GPS software, extra copies of diapositives and photo lab equipment
- Mapping including orthophotomap production at scales of 1:10 000 and 1: 2 000, aerial triangulation and digital line mapping
- Project management from the Swedish side

The deliverables included the following:

- Training courses in Estonia and Sweden for people in the Estonian Mapping Centre (EMC)⁶, including
 - 2 people in management training in Sweden
 - 2 people trained in digital photogrammetry in Sweden (2 weeks)
 - 4 people trained in digital cartography in Sweden (4 weeks)
 - 4 weeks training in software and map production
- Consultancy studies were conducted on the mapping laboratory facilities in Estonia, photogrammetry procedures, and equipment⁷
- Equipment and software
 - A photo lab was acquired/built
 - Software was acquired
- Mapping
 - Aerial triangulation and block adjustments were delivered with a block index, lists of coordinates as well as all coordinates on a floppy diskette.
 - Orthophotomaps
 - digital data - 281 digital orthophotos were delivered
 - Analogue data –
 - Harju 180 sheets (1: 10 000) 1 set of negatives and 1 set of copies on paper
 - Kuusalu 51 sheets (1:2 000) 1 set of negatives and 1 set of copies on paper

⁵ Öst-1998-227 was continued under Öst-1999-180.

⁶ Staff who were trained have been retained by the Mapping Centre.

⁷ Some of the consultancy reports were provided to WaterMark by Sida.

- Kose 45 sheets (1:2 000) 1 set of negatives and 1 set of copies on paper
- Aisme 4 sheets (1:2 000) 1 set of negatives and 1 set of copies on paper

In total 280 sheets of negatives and hard copies on paper were delivered.

- Line mapping
 - Digital data
 - Data bases in SOS-MAP format containing digital line mapping of Viimsi, Vasalemma, Keila, Laitse, Kernu and Tapa were delivered on floppy diskettes.
 - Analogue data
 - A total of 145 hard copies, at the scale of 1:2 000 were also delivered plotted on film

3.2.2 Öst-1998-227 and Öst-1998-180 – aerial photography and map production

Öst-1998-227 – Assistance to the Estonian Land Board in Aerial Photography was designed to continue the map production in Estonia that provides the basic framework for land reform implementation. It was to result in the collection of black-white aerial photography over 148 sq km of Estonia (covering 17 settlements) at the scale of 1:10 000 and produce digital line mapping over an area of 20 sq km (one municipality).

The project commenced in 1998 and was initially designed to be completed by December 31, 1998. It was extended under project approvals until the spring of 2001.⁸

Project Öst-1998-01604 was between Swedesurvey and the ENLB and was originally for a value of SEK 3 745 500. Project Öst-1999-180 increased the budget an additional SEK 798 699 making the final budget for the project SEK 4 544 199.

The following products were to be delivered from the aerial photography:

- Air photo negatives
- GPS data for the exposed images
- Flight index
- Film reports
- Digital line map over the municipality of Haapsalu

The following products were to be delivered from the line mapping:

- hard copies on transparent film plotted on a drum plotter at the scale of 1:2000
- on floppy disks.

Extension

The extension of the project until the year 2001 included the following extra deliverables:

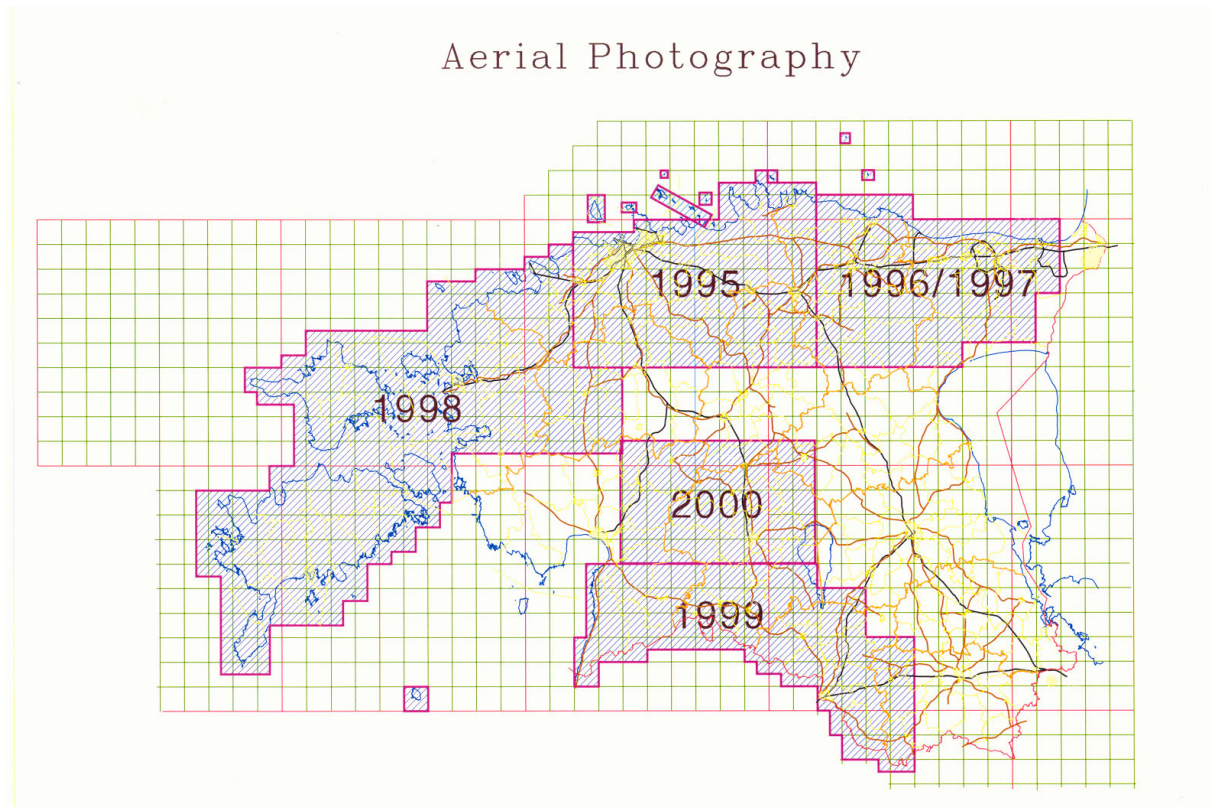
- split 1:25 000 (color, 10 500 km²) into two parts:
 - in 1999 fly 6100 km²
 - in 2000 fly 4400 km²
- additional Aerial Photography at the scale of 1: 10 000 (B/W, 417 km²):

⁸ There was a single document provided to WaterMark for both project Öst-1998-227 and project Öst-1999-180. Both documents are in Swedish. The documents refer to budget amounts included in Öst-1998-01604 and refer to that project.

- in 1999 fly 217 km²
- in 2000 fly 200 km²

The estimated additional cost of the activity was SEK 798 699.

Figure 1 – Aerial Photography Coverage in Estonia



3.3 The Land Management Project

There was one (1) land management project conducted in Estonia that was reviewed by WaterMark: Öst-1996-235.

3.3.1 Öst – 1996 – 235 and Öst – 1996-280

Öst 1996 – 235 involved work that was conducted between September 1996 and February 1998 (completed by September 2000). The project value was SEK 2 911 000. The project was between Swedesurvey and the ENLB and included three separate initiatives.

Initiative 1	Mapping
Initiative 2	Training course in Cadastral Systems Training course in Valuation Methods
Initiative 3	Pilot Project – 2 Years

The following provides details of each initiative:

Initiative 1 – Mapping

Initiative 1 was a mapping project that was never mentioned again.

Initiative 2 – Training

The course in Cadastral Systems (20 people) was conducted in Gävle. The overall objective of the training was for the Estonians to develop an understanding of a multi-purpose Cadastral System.

The course in Assessment Methods (20 people) was conducted in Estonia. It included training in valuation methodology.

Initiative 3 – Pilot Project

The area chosen for the Pilot Project was to be Tapa (township) and Saksi (rural) districts. After the project was completed the following should have been achieved:

- Systems for real estate formation will have been practically demonstrated and evaluated;
- Methods for the production of register maps demonstrated;
- Possible methods for linking cadastral attribute data to map data illustrated;
- Cost efficient field methods based on the use of suitable equipment will have been demonstrated and evaluated;
- Models for real estate valuation and taxation will have been developed and tested;
- Questions related to the impact of the current legislation, organization on Land Reform activities will have been studied.

The project execution was to include the following steps in different combinations:

- Identification of old boundaries, adjudication, real property formation, re-allotment and consolidation.
- Ground surveys.
- Introduction of a demonstration system that includes both graphical and attribute data.
- Introduction of a demonstration system for real property valuation.
- An evaluation of the need for modified legislation and organization.

- A full evaluation of the pilot project.

The project was conceptualized in 1994 but was not approved until 1996. This approval was granted without a review of the original project scope. The cadastral surveying and mapping was not conducted and the documentation is generally silent to any part of the project being involved in mapping. The training was conducted and was successful.

In May of 1997, however, issues arose when it came time to plan the pilot project.

When four specialists from Swedesurvey AB made a visit to the municipalities of Tapa and Saksi in order to get a review of the current situation, it became evident that the situation had changed radically from the time when the plan was initially developed. The land reform process in Estonia progressed very rapidly and a number of new laws had been adopted and several amendments had been made to the existing laws (i.e., restitution of properties using general boundaries had been accepted). Also the use of software in local cadastral offices had been harmonized with the national office. Both the restitution using general boundaries and the software issues were identified in the Tapa-Saksi Pilot Project as areas to be tested and implemented.

The meetings held during the visit between the representatives of Swedesurvey, the municipalities of Tapa and Saksi, and the Land Board did not result in mutual agreement on how to tackle the problems and how to re-configure the project to address the new situation. It was decided to return to the above questions in the autumn of 1997.

In September 1997, the Tapa City Government withdrew from the pilot project citing an inability to provide the necessary specialists for the implementation of the project, and difficulties in funding their input to the project. It was also indicated that with the main emphasis of the Project being shifted to the Saksi municipality, the benefits for the town of Tapa were reduced. As the workload of the Estonian National Land Board was at the time very heavy, the Land Board could not send its specialists to both Tapa and Saksi municipalities.

The project was then officially cancelled. In hindsight, it would appear that events overtook the proposed pilot. The project would have tested various survey methodologies for cost effectiveness and information quality. However, the decisions on methodology were made by the ENLB and most of the required surveying and mapping has now been completed.⁹ The proposed test would have been valuable in the early to mid 1990s but it is not important today with most of the land restitution work complete.

WaterMark visited the municipality of Haapsalu where the ENLB demonstrated that the Sida mapping, technology and knowledge assistance to the Board had been transferred to the County Offices (there are currently 15 in Estonia) and to several municipal departments. It is at the County Office level that most of the activities in parcel formation and valuation take place. The Municipality of Haapsalu (in charge, for example, of preparing property values for taxation and for land use planning) were actively using the mapping and data from ENLB in their own computerized systems.

⁹ The Director-General of the ENLB in a letter to Sida dated 98-02-16 stated that “the opinion of the ENLB is that there is no sense to perform the activities as outlined in the Pilot project, as the majority of these issues have already been settled at the governmental level, Thus it can be said that the right time to implement the Pilot Project has unfortunately passed...”

3.4 Management Contracts

There were two (2) management consultancy contracts issued during the period addressed in the WaterMark review: Öst-1996-214 / Öst-1999-138. These were Personal Services Contracts for services provided to senior management of the ENLB by Mr. Jim Widmark, a former Surveyor-General of Sweden.

Project 214 / 0573 was focused on strengthening the management capacity at the Estonian National Land Board (ENLB). The contract for this work was provided to WaterMark. A Senior Advisor was to advise managers and staff in their daily work to speed up the land reform and to overcome the existing bottlenecks. These activities were to occur over a six-month period and be on a part-time basis.

The Objectives of the project were to:

- strengthen the management capacity at ENLB
- optimize the resource use and coordination of internal and external inputs,
- introduce a system for strategic planning,
- introduce a system for target and resource steering,
- introduce a system for internal coordination,
- introduce a model for a continuous dialogue with external donors, and
- design a development plan of the management for ENBL.

Project 1999-138 aimed to strengthen the management capacity at the Estonian National Land Board (ENLB). On a part-time basis during six months, a Senior Advisor supported managers and staff in their daily work to make optimal use of all existing resources to reach the aims and objectives of the ENLB. There was not a contract provided to WaterMark that referred to this work. The objectives for the project are taken from the final report.

4 WaterMark Findings

The WaterMark team made assessments of:

- the institutional arrangements related to land administration existing in Estonia from a general perspective
- the output and results of the specific projects funded by Sida.

The sections that follow offer details of the findings.

4.1 Institutions

The findings outlined in this section relate to government activities as a whole and how the assistance provided to Estonia, by Sweden, has made an impact on the Estonian government's approach to land management issues and thus its eventual acceptance as a EU member state.

With reference to institutions, WaterMark conducted our review based on the “staircase model” and its three indicators:

- Does the organization deliver expected output?
- Does the organization carry out internal changes on its own?
- Does the organization work actively with its clients?

National Government Operations

The total area of Estonia is approximately 4.4 million hectares and in 1940 approximately 3 million were in private ownership, including ownership by foreign nationals (e.g., Swedish ownership along the Baltic coast). The goal after independence was to privatize, restitute, and/or compensate (partially or completely) all but a small fraction of land held for state or municipal purposes. This land reform is on track and will be completed in 2002.

Estonia's 1.44 million people are governed by 243 local government authorities located in 15 counties. The Land Reform (privatization and restitution) is to be completed 2002 in an effort to have Estonia to join EU, in theory, in 2004.

4.1.1.1 General Progress of Land Reform

WaterMark first met with Mr. Raivo Vallner, Vice-Director General of the ENLB and Ms. Maila Marka, Head of International Relations. Additional details were obtained from the Director of ENLB, Mr. Kalev Kanger, and from presentations by staff members.

The two processes – privatization and restitution – have overall been successful given the complexity of having claims from people who were dispossessed during the war years, as well as those currently occupying the land. Estonia eventually settled on a system where land could be privatized without requiring a ground survey. It is in this respect that the orthophoto mapping is extremely important, allowing speedy resolution of claims with low cost to the applicant.¹⁰ In essence this was an implementation of the pilot project's proposed general boundary methodology. A survey plan with more precise boundaries must be prepared on sale of the

¹⁰ An estimate was given of EEK 3 000 for a surveyed parcel versus EEK 300 for boundary delimitation using maps. These figures would vary from rural to urban and depending on the size of the parcel.

property, thus improving the quality of information about the land parcels. Banks support this two-phased approach by considering land without a survey less valuable as collateral.

Despite a relatively low GDP (\$6 040 US per person) compared with EU countries, Estonia will probably be an early member of an expanded EU (membership “planned” for 2003 but unlikely before 2004 since the Baltics will probably enter together)¹¹. In land reform and land administration, Estonia has progressed steadily and should be ready for membership. Land issues to be resolved may include subsidies for agriculture (Estonia will have to conform to EU policies), land valuation for taxation, merging or linking of land records systems, privatization of land under apartment buildings, and development of an address register.

Most of the activity surrounding the land market is in the major cities and coastal regions, where land values have increased rapidly in the last few years. Agricultural land values have remained fairly static. A report entitled “Estonian Real Estate Markets in the First Half of 1999” was provided by ENLB in English. Figures for that period showed that in Tallinn for example, there were 13 452 cadastral units or parcels registered in the Land Cadastre. Figures from the Ministry of Justice show that there were 484 transactions involving those parcels, approximately 75% of which were residential properties. In Valga County (a rural county in the south) there were 9 502 parcels registered and only 50 transactions. According to a Baltic State report in 2000¹², approximately 5% of the properties in Estonia change ownership annually and over 90% of these are residential and commercial properties.

Approximately 50% of properties are registered in the Property Registry (registry of rights). In the ENLB, approximately 338,000 parcels were registered in the cadastral consisting approximately 2.7 million hectares of land by April 2001.

4.1.1.2 Estonian National Land Board, Ministry of the Environment

Information on the ENLB was obtained from Mr. Raivo Vallner, Vice-Director and Head of Geodesy, and various staff members in presentation on the background and future plans for the Board. Mr. Kalev Kanger, Director General, also spoke to the political and institutional issues facing the ENLB and its impact on land reform and the ENLB role. (Also see: www.maaamet.ee)

Two major features of the Estonian situation in surveying and mapping are the high degree of privatization and a relatively small government agency. This cannot be compared directly to neighbouring countries, however, because agencies in each of the four countries visited had different mandates and thus different staff requirements. Nevertheless, Estonia appears to have a streamlined land agency. Part of the credit for this efficiency was attributed to the General-Director’s leadership. Senior management also noted the importance of the management consultancies with Mr. Jim Widmark to the Board’s operations and strategic management function.

Another feature is that the Estonian Mapping Centre (EMC) is outside the Land Board, as are remnants of the former Bureau of Technical Inventory (The Building Register is now in the Ministry of Economy) and the Property Register (with the Ministry of Justice). This means that the mandate of the Land Board is primarily:

¹¹ The Economist [2001]. “Knocking at the Clubhouse Door.” Reprint from Aug. 30, 2001.; also “A Survey of European Union Expansion.” May 19, 2001. Note also that Briefing Paper No. 8 on “Estonia and the Enlargement of the European Union.” At www.eurparl.eu.int/enlargement, March 2, 2000, Estonia is singled out with Cyprus and others as the only Baltic State where “significant progress has been made”.

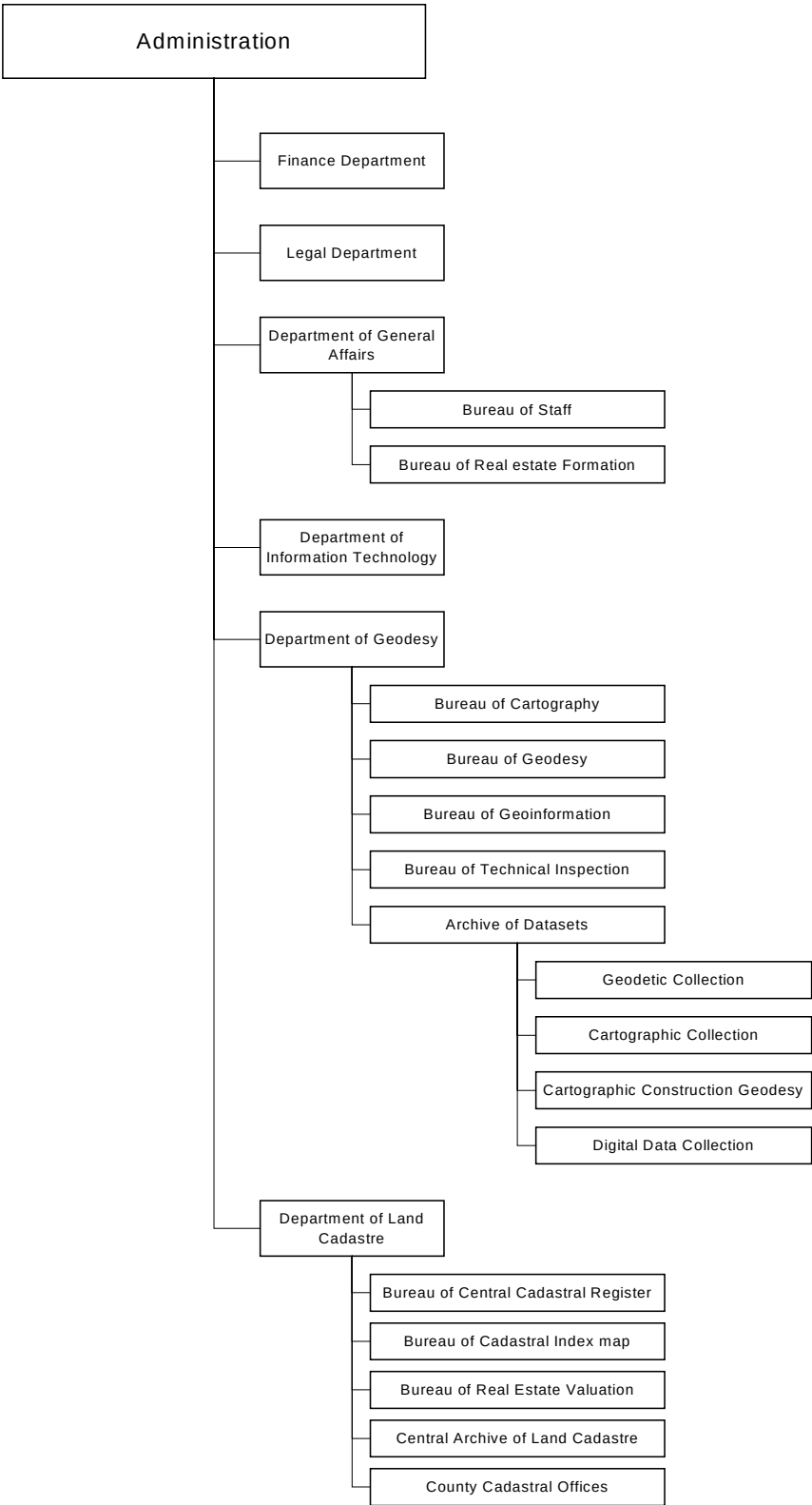
¹² [Spring, 2000] “Review of Baltic States Real Estate Market.” Tallinn: Estonian Land Board.

- governing the land reform,
- managing the surveying and mapping framework (most activities are now undertaken by the private sector),
- dissemination of information, and
- preparation of data and methodologies for assessment of land.

There are 240 positions in the Estonian Land Agency with 213 now filled. The private sector offers higher salaries and thus attracts skilled personnel. However with 27 unfilled positions, the Land Board can now offer more competitive salaries to retain existing staff and to attract new staff as required. There are currently 15 county offices with small staffs.

The Estonian Land Agency has the following departments directly related to the Sida funded projects (see Figure2). In the proposed new structure, geodesy, cartography and GIS will be separate departments. The transaction registry that monitors real estate transactions and sale prices will also be separate

Figure 2 – Organizational Chart of the Estonian National Land Board



Legal Department

This group of lawyers is mainly concerned with drafting and reviewing legislation and resolving legal issues as they arise.

Bureau of International Relations

This Bureau is responsible for all international co-operation agreements and for organizing all international visits and study tours, etc. As an illustration of the effectiveness of this Bureau and its ability to relate to clients, of the four countries reviewed by WaterMark, only Estonia and Lithuania responded in a timely manner to WaterMark's request for an interview plan. In Estonia, this plan was modified efficiently on the first day to include more interviews.

Department of Real Estate

This department contains the Bureau of Land Reform and Bureau of Real Estate Formation (subdivision). At the central headquarters this department is responsible for the procedures and regulation of activities in land reform. The actual activities occur in the 11 County offices (one of which is located in the Headquarters building). With completion of the land reform in 2002, this department will become the State Land Office.

Department of Information Technology

This department is responsible for maintaining the computer networks within the organization, including support for the 15 County offices.

Department of Geodesy and Geoinformation

WaterMark met with Mr. Kalev Partna, Head of the Department and various members of the staff.

This department is responsible for the underlying spatial reference framework for Estonia, including linking of the framework with those of neighbouring countries. It is also responsible for topographic mapping, archiving of data (in hardcopy and digital format) and for the management and dissemination of data other than cadastral data. A major function of the department is management of mapping and geodetic surveying contracts and quality control.

From 1992, Estonia began using a Lambert Conformal Conic spatial reference system. The Estonian national geodetic network consists of 212 first and second order geodetic points, including 7 points in the European network. Densification will be completed by the end of 2001. There are approximately 100 local networks, but transformation parameters are only available for about 30 of these. Currently two (2) gravimeters have been borrowed from the US National Imaging and Mapping Agency (NIMA) for two (2) years to improve the national vertical control network. The Department wants to establish a geodetic database and indicated that there is a need for technical assistance in this area.

The Estonian Topographic Data Base is a first priority for the Department for assistance in determining what data should be included and how it should be structured. The mapping produced under the Swedish and other foreign assistance has provided the base for Estonia and is now being upgraded with new photography and digital production. This work was originally outsourced to the Estonian Mapping Centre, but will now be put to tender.

Ms. Kirra Moisja, Head of the Cartographic Bureau (physically based in Tartu) discussed the history of the Swedish mapping assistance in detail, outlining problem areas, relationships to other mapping initiatives, and the quality control function. A large part of the Bureau's function today consists of contract management and quality control. Now that Estonia has moved to digital colour ortho-photography, there have been some problems in processing for the final product (e.g., uneven colour between strips, poor topology). Swedesurvey has been assisting at various stages from flight planning to final production. With appropriate training, Estonian firms can now perform these functions.

WaterMark received presentations from several staff members, including Mr. Kristian Teiter, Head of the Bureau of Geoinformatics. Mr. Teiter outlined the current status and future plans of the Bureau with regard to accessing, managing, and distributing geoinformation, with a focus on cadastral data.

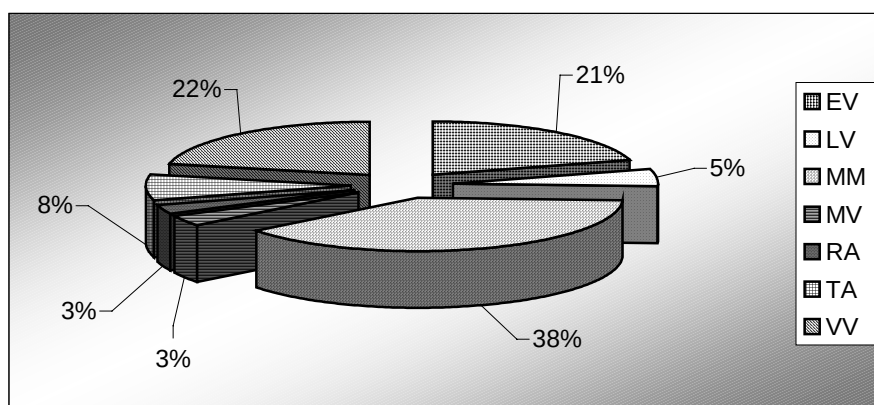
Both the ENLB and the Department of Justice (Property Registry) use Oracle Data Base Management Systems and information can be linked through a common property identifier. The parcel data can be viewed on an orthophoto map background at 1:10 000 and with a base map of 1: 1 000. GEOMEDIA and GEOMEDIA WEB are used for GIS capabilities and for web-based information. In August 2000, ENLB began a linkage to the Building Register maintained by the Ministry of Economy.

The ENLB is very aware of the need to provide public services, including access to information. One plan is to develop a geospatial information infrastructure to link the data held by many agencies and provide better access to data. ENLB now has a Public Service System for six(6) counties for access by land surveyors (for geodetic, cadastral, and background map data) municipalities, and members of the general public on a license or transactions fee basis. It was noted that some large municipalities, such as Tallinn and Tary have their own geographic information systems.

Future plans include linkages to the national topographic database and data exchange agreements with utility companies (e.g., ENLB requires information on servitudes and other restrictions on properties). Utility firms are beginning to use the Public Service System. In future it is expected that 20% of the cost of the system will be self-funded through user-pay information services.

The map office has the following statistics concerning the products they sell to what customers.

Figure 3 – Year 1999 Customers



where

EV – companies

LV – municipalities (city administrations)

MM – surveyors

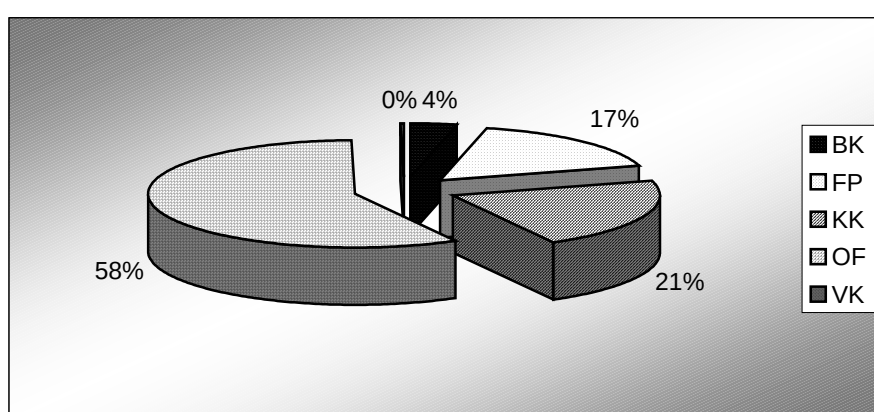
MV – county administrations

RA – governmental institution

TA – research institution

VV – municipalities (commune administrations)

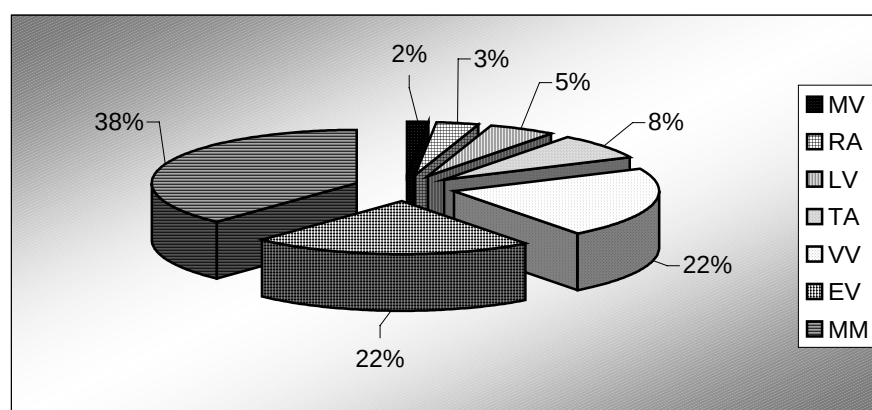
Figure 4 – Year 1999 Products



where

1. OF – Orthophotos 1:10 000 ja 1:2000 (rasterdata)
2. FP – photoplans 1:10 000 ja 1:2000 (rasterdata)
3. KK – catastral ground map 1:10 000 (rasterdata)
4. BK – Estonian Basemap 1:50 000 (vektordata)
5. VK – cityplans 1:2000 (vektordata)

Figure 5 – Year 1999.Orthophotomap Customers



where

EV – companies

LV – municipalities (city administrations

MM – surveyors

MV – county administrations

RA – governmental institution

TA – research institution

VV – municipalities (commune administrations)

Department of Land Cadastre

This department provides the control and management of the cadastral system in development both to support land reform and to support the cadastral registry of land parcels. Information on apartment and building units is maintained by the Ministry of Economy.

The cadastral functions are largely undertaken at the 15 County offices. Much of the field work is done by the private sector. Cadastral maps are produced from the orthophotos and field surveys (when available) and made available to municipalities and other users. During the review, WaterMark visited cadastral offices in both Harju and Laane counties. In each office staff maintained graphical and textual files for the land cadastre. Several staff members had attended cadastral courses in Sweden.

WaterMark met with Mr. Rein Lehtveer, Head of the Valuation Bureau, and Anders Haas a staff member who recently took the one year Masters course in Land Management at the Royal Institute of Technology in Stockholm. It was noted that a two (2) week valuation training course by Swedesurvey was also provided in Estonia for approximately forty (40) staff members of the ENLB.

Property taxes are collected by the Estonian Tax Board, which will soon be able to access the Land Cadastre directly. The ENLB is responsible for assessing land value for the purposes of taxation. The Valuation Bureau has been operating for approximately 5 years with 30–40 persons. All of Estonia is valued using a zoning method similar to that used in Sweden. Local governments actually set the rate of taxation and property tax makes up approximately 1% of the local city budgets and in rural municipalities, it comprises approximately 30–40% of the budget. The Building Register maintained by the Ministry of Economy may be merged with the land cadastre after 2005.

The Valuation Bureau maintains the Transaction Data Base, from which sales values are available to real estate appraisers and government valuers. Value information is received by the Board from the municipalities and notaries (not from the Property Registry).

There is an Association of Estonian Real Estate Valuers, and members are licensed by the Chamber of Commerce. The ENLB also issues licenses for valuation of land parcels. Eighteen (18) staff members of the ENLB hold these licenses.

The Valuation Bureau also maintains a digital soil map for use in valuing agricultural land. A legacy from Soviet times is a large number of soil samples in the headquarters building and the ENLB may re-establish soil classification data base. However, property values are now based on market transactions and not soil quality alone.

There have been mass assessments in 1993, 1996, and in 2001 for all properties in the country. The ENLB will be changing this system to the Swedish model, where one type of land use (e.g., residential, commercial, industrial) will be assessed each year. In this way, a smaller staff can be kept permanently employed (as per the Swedish system).

Future Plans for the ENLB

After land reform is completed, the organization plans to restructure as follows:

- 3–5 regional offices will replace 15 county offices
- a new computer system will be implemented with one central server to improve data services;
- public access to the databases will be increased through Internet and Mobile Phone (this is already in place for private land surveyors and is increasingly utilized by notaries)
- there will be a greater future emphasis on data bases and information services.

The ENLB demonstrated an overall commitment to improving customer service. Two impediments to making this happen are the splintering of the property databases amongst three (3) Ministries: Environment (Land Cadastre and Valuation); Justice (Property Registration; and Economy (Building Registry). The degree to which these registries will be able to be linked is beyond the scope of this review which concentrated on the mapping and management consultancies funded by Sida.

4.1.1.3 Estonian Mapping Centre

When Swedish support began through BITS, the Estonian Mapping Centre was state owned. Today it is 100% self-financed, with its largest client being the ENLB. The Board leases equipment (e.g., equipment supplied by Sweden and Switzerland) and space to the Mapping Centre. The Centre has 91 employees in three production departments: Mapping, Geographic Information Systems (GIS), and Surveying. The latter is to become a separate company in future. In GIS, the Centre is collaborating with Swedesurvey on production of 1:50 000 mapping from satellite imagery.

The main task of the Centre is map production and the Centre can produce maps with analogue technologies and, since 1995, with digital methodologies. There are currently two (2) shifts of eight (8) hours, five(5) days a week. Major contributions of the Sida assistance to the Centre have been in equipment (leased by the Centre from the ENLB), software, training, and production management advice, including client relations. One might question whether this assistance gives the Mapping Centre an unfair advantage in a competitive market. However, this problem is not limited to Estonia and the government mapping sectors have become privatized to some degree as

governments implement self-financing arrangements. In Estonia, there appears to be a growing private sector in GIS, mapping, and surveying and the Land Board is no longer sole-sourcing contracts to the Mapping Centre.

The Centre was the recipient of all of the mapping training, which in hindsight may not have been desirable because staff of the Land Board also need mapping skills in order to perform quality control (QC). Quality, as well as competitive prices, is an important aspect of the contract award, according to the Board. Currently the Mapping Centre performs QC on the flight (e.g., for overlaps and gaps in the photography) and the Land Board is responsible for the QC of the orthophoto maps, i.e., the product the Mapping Centre provides to the Board.

The Mapping Centre, as recipient of most of the capacity building, has demonstrated that it has the knowledge and equipment to perform the mapping work required. The Centre now needs to refocus on customer service, with possible diversification of services, to remain viable. Senior management indicated that these changes are underway.

4.1.2 Private Sector

In land reform, approximately 50% of the land parcels are surveyed on the ground. Descriptions for the remainder consist of map derived sketches and co-ordinates. Most of the survey work is contracted to the private sector which has grown in response to outsourcing. With land reform nearing completion, these firms need to diversify. Land consolidation as well as suburban subdivision (land formation) will probably increase.

WaterMark visited one local private survey and mapping firm, EOMAP¹³, to investigate the relationships between the ENLB and the private sector and to better understand the challenges. This firm began in February 1992 and concentrated on map production and distribution until 1998 when it also took on a land surveying role in response to outsourcing of cadastral works and the development of a land market. They currently perform 100 to 150 surveys a month. As land reform is completed, EOMAP will now looking at topographic mapping market, subdivision surveys, and consolidation surveys.

EOMAP has a staff of 70 persons, 30 in Tallinn office and 40 in three other regional offices. They have purchased mapping equipment gradually, and specialized in tourist maps and orienteering at first. They now use Bentley /Micro Station GIS and provide GIS services for small municipalities.

EOMAP has been contracted for map digitizing in Denmark, land surveying in Germany and have partnered with local firms in Russia and Ukraine. They will soon be getting ISO 9001 certification.

4.1.3 Municipal Governments

WaterMark met with officials from the Municipality of Haapsula, including the Mayor, Mr. Urman Sukles, and Deputy-Mayor, Mr. Heino Tamm. The purpose of the visit was to see how the ENLB interfaces with the municipality and how ENLB products are used.

Haapsula has a population of 13 000 and used to be the site of a Soviet air base. The main economy today is in textiles, tourism, and wood.

The assessment indicated that the Mayor's Office had proved to be more effective with the digital data provided by the ENLB. This is used for producing maps for developers and for property

¹³ WaterMark met with Mr. Margus Vinkel, Board of Directors and Mr. Heita Halukma, head of the Development Division.

valuation and land use planning. Swedesurvey provide the mapping software and the municipality regularly exchanges data with the Laane County ENLB Office.

4.1.4 International Activities

A feature of Estonian development during the 1990s is that land reform (privatization and restitution) was finished quickly and this affected some projects. For example, the World Bank assisted the Ministry of Agriculture and by the time that the project started, the Terms of Reference were redone to reflect that most restitution was done. The World Bank is now proposing a land consolidation project¹⁴ with the Ministry of Agriculture; with the Land Board is acting as the implementation unit.

The ENLB received assistance from Denmark and Britain through PHARE for development of the land cadastre. Finland also provided some assistance in valuation and land registration but attempts to implement a Finnish type system were not successful.

Mapping assistance came from Sida (training and photography) and Switzerland provided the major equipment (Leica). The Land Board uses GEOMEDIA introduced by Denmark in 3 counties now for administrative and state boundaries. A new PHARE project will produce more up-to-date colour orthophoto mapping for critical areas that have been covered in black and white over 6–7 years ago. This mapping will have a wider use (e.g., for land use planning and emergency measures).

The ENLB is participating in the Map Baltic Sea Region Project at 1:1 000 000 and in other Baltic Commissions such as those on Land Reform, Geodesy, and Cartography. The Baltic States also collaborate on the collection of real estate data for market analysis. The week before the visit by WaterMark, the Latvian State Land Service had visited to review the organizational and management structure in their attempts to streamline their own organization. Three weeks later a Lithuanian delegation was visiting to compare developments.

The Estonian Association of Land Surveyors is the member association of the International Federation of Surveyors but ENLB staff also participate. The ENLB is also represented On the UN ECE Working Party on Land Administration (formerly MOLA)

Entry in the EU has presented many requirements that Estonia must meet. One such requirement is the development of an information system for payment of subsidies to farmers for loss of trade expected after Estonia enters the EU (although there will probably be few subsidies to Estonian farmers). The ENLB has established an Agricultural Registry with the Ministry of Agriculture for this purpose. These and other activities require digital orthophoto maps that have been completed in the latest mapping projects, but do not exist for many earlier flown areas of the country. While the Board will do the preparation and quality control for this new mapping, the map production has been tendered nationally and internationally. This is one demonstration of how the ENLB has evolved into a modern mapping and land management organization.

4.1.5 Professional and Education Infrastructure

In Estonia there are 23 Real Estate Appraisers with internationally recognized licenses and there is a larger Association of Real Estate Valuers who are licensed by the Chamber of Commerce. All

¹⁴ During restitution and privatization many of the parcels created are not really economically viable. As private industry and assets grow, larger parcels will be required to support economic activity.

mass assessment is done by the ENLB and the Board also licenses valuers specifically for land (and not buildings) valuation.

There are three different licenses for land surveyors: cadastral (property boundaries), geodetic, and building surveys. There is also a license for geoinformation and mapping. The Association of Land Surveyors has approximately 250 members. Most of the private firms are currently doing cadastral surveying.

Education in land management, surveying, and geoinformatics is provided at several universities in the country through programs in geography, geodesy, and agriculture.

4.2 Projects

This review includes comments from a strategic perspective, from a technical perspective and from a management perspective. The strategic review addresses issues from a Swedish perspective vis-à-vis the funding program. The technical reviews address the content of the projects. The management review addresses how Swedesurvey implemented the content of the projects.

Strategic Perspective

The Estonian EU Accession Program is now underway and membership is planned for 2003 or 2004, depending on the source. The actions to be taken with respect to issues addressed by the projects under review are covered under the following:

1. Creation of favorable conditions for the development of real property and credit markets
2. Ensuring the development of the land cadastre and register information system
3. Establishment of a real property valuation system for taxation
4. Provision of the mapping base for the land cadastre and property registration and many other land-related activities

Mapping is often underrated as a means of achieving property reforms, environmental management, and economic development. However, without an appropriate mapping base many of these other activities are hindered. Sida's projects in Estonia have played an important role in moving Estonia towards membership in the EU. It is not surprising that the Sida projects have helped Estonia move towards EU accession, since that has been an aim of the assistance for several years. By and large, all the successes of the Sida projects, whether technical or institutional, have contributed to this goal.

4.2.1.1 Environmental Impact

These projects do not have a direct impact on environmental issues. However, good mapping information and the capability to portray that information can assist in very dramatic ways to environmental issues and protection. For example:

- Maps are used in contingency planning and response to environmental accidents;
- Land parcel data is an important source of information for identification of high stress areas where new development may be compromising the local environment;
- Zoning, using property and other map data, is used to appropriately plan the development of cities and facilities to manage environmentally sensitive areas in municipalities and rural areas;

- Emergency response capabilities provided by the integration of accurate positioning and graphic maps can facilitate a more appropriate response to an emergency, either environmental or otherwise.

4.2.1.2 Gender Issues

There appear to be few issues in this project with respect to gender. These can be divided into two components:

- *Participation in the Project and Land-related Agencies:* The Sida practice of ensuring women, as well as men, participate in study visits and training helps to ensure that women are given opportunities to become directly involved with the project. As found in Sida land administration projects in other countries, this should assist Estonian women in competing for project-related positions. The ENLB has several women in management positions (e.g., Head of Bureau of Cartography) who are directly involved with project implementation. Under the former Soviet system, men traditionally dominated the geodesy and field surveys sections while there were more women than men in cartography, cadastre, and valuation. The question of whether women will be able to assume top positions in the agency will have to be answered over time, but projects such as the ones reviewed here will certainly enhance the chances of active participation. It was noted that no women were involved from the Swedesurvey side in training. This was seen as a way to provide role models for Estonian women.
- *Access to Property:* WaterMark was told that the law protects the rights of men and women equally with respect to access to real property, including provisions for divorce and inheritance. Both women and men submitted claims for and acquired restituted property. As in other countries however, to make this access effective, people also need access to financial resources, information, and legal recourse. In this respect the Sida assistance in mapping and valuation helps to ensure that property rights in land are clearly documented, recognized in law, and given security. However it will be necessary to merge the Property Registry and Building Registries with the Land Cadastre to truly achieve effective security of rights and efficiency of access to information.

4.2.2 Technical Perspective

Mapping projects

The technical aspects of all of the mapping projects *seem to have been achieved*¹⁵. Project deliverables have been met and there is ample evidence that Estonia has been able to translate the Swedish assistance into a functioning entity in the country. Specific findings are as follows:

1. The Estonian side is satisfied with the assistance provided.
2. The transfer of knowledge concerning mapping production has been completed and has resulted in Estonia acquiring and being able to reproduce digital orthophoto mapping products.

The ENLB has succeeded in implementing a system where the cadastre is continually maintained on the orthomapping base and this base is used in offices throughout the country.

¹⁵ This statement is based in large part on the fact that the mapping is complete and the capability for mapping has been established in the Mapping Centre.

Appropriate training has been provided with possibly the exception noted above that only Mapping Centre staff received map production training. This was not a problem at the time the agreements were made, but limits the knowledge to a now self-financing organization that is separate from the Land Board.

4.2.2.2 Land management project

The technical aspects of the land management project *have been completed successfully with the major exception of the planned pilot project* in two municipalities. Although the planned project might have been useful, the time delay in implementation resulted in changes in priorities. The goals of the planned project appear to have been achieved, at least in the city of Haapsalu.

Project deliverables have been met with respect to training and there is ample evidence that from a land management perspective that Estonia has been able to translate the Swedish assistance into functioning procedures in the country. Specific findings are as follows:

1. The Estonians are satisfied with the assistance but would like to have more assistance in several areas.
2. The Swedish training has provided practical examples in valuation as well as valuation theory. Estonia adopted a zoning method similar to that used in Sweden.

The Estonian side has a good understanding of how and what information and systems must be established in Estonia to develop further the mass appraisal system and provide better land information services to the public using new technologies.

4.2.2.3 Management projects

The technical aspects of the management projects *have been completed successfully*. The projects aimed to strengthen the management capacity at the Estonian National Land Board. Optimal use of all existing resources was the focus. That the organization has benefited from the assistance was clear in the way in which the current programs were presented to WaterMark and the clarity of vision the organization has for the future.

The development of the management capacity is a continuous process and further assistance in this area may be warranted if requested by Estonia.

ENLB has contributed to the project as promised. The costs of the Management projects ended in conformance with the budget. During the projects, the availability of an experienced manager as adviser to the managers and staff at ENLB strengthened the management capacity at ENLB.

The staff of the ENLB valued the assistance provided by a senior person such as Mr. Widmark very highly and indicated that his influence was important to the organization and its growth. He also appears to have successfully mentored many of the young people who are now in key management positions. Mr. Widmark was also able to co-ordinate Swedish aid and that of other donors.

4.2.3 Management Perspective

The management aspects of the projects were reviewed from a task management perspective and from a financial management perspective.

4.2.3.1 Mapping projects

Project Management

The documentation for these mapping projects is less than one would expect from projects this large. One would expect more routine documentation to be provided for ongoing projects, of such large amounts of money, over such long periods of time.

The mapping portion of one project seems to have just disappeared in the documentation.

Financial Management

A review of the financial management aspects of the projects was deemed by Sida to be outside of the scope of the WaterMark project. Comments made in this report are an indication of the degree of the documentation that was included in the project reports.

The documentation supporting financial management of the mapping projects was limited. However, it is worth noting that there was a budget problem in project 1996-280 that did seem to be addressed. The Swedesurvey project manager understood the cost overrun and was able to make some recommendations:

4.2.3.2 Land management projects

Project Management

From a project management perspective, this project did have some documentation, largely in the form of letters requesting clarification of the pilot project. These were sufficient to determine that training had been conducted but there was no specific report on the training itself.

It would appear from the letters and discussions with Swedesurvey in Gävle that in good faith Swedesurvey a) tried to initiate the original pilot project and actively sought a response from their Estonian counterparts; b) at one point suggested a transfer to a new municipality, Haapsula. As reported above, however, the goals of the pilot project had been achieved to the satisfaction of the ENLB and the project was cancelled. In this respect, Swedesurvey managed the situation well.

In the case of the mapping (Project 1 of the initial agreement) there is no documentation to clarify whether it was part of the pilot project or part of other mapping projects.

Financial Management

A review of the financial management aspects of the projects was deemed by Sida to be outside of the scope of the WaterMark project.

4.2.3.3 Management projects

Project Management

This does not apply here as Mr. Widmark was acting as an independent consultant. One can assume that his time was managed well by the success of these projects.

Financial Management

A review of the financial management aspects of the projects was deemed by Sida to be outside of the scope of the WaterMark project.

5 Conclusions/Recommendations

The conclusions/recommendations of the WaterMark team are divided into the following:

- Institutions
- Projects

Each of the conclusions and recommendations address the findings in Section 4.

5.1 Institutions

5.1.1 National Operations

The WaterMark Team concludes that the Estonia has been successful in entrenching methods and procedures that are consistent with a country that maintains a functioning, secure land management/administration system.

With respect to the *Staircase Model*, those parts of the government responsible for surveying, mapping and valuation deliver what is expected, can adapt to changes dictated by internal and external demands and are becoming more sensitive to the demands of their customers.

Examples are as follows:

- The ENLB has decentralized or outsourced most of its activities enabling the organization to be streamlined and enabling the development of a strong private sector.
- The land reform is nearly completed and both the ENLB and private sector are making plans to adjust operations accordingly.
- The Mapping Centre is able to function as a self-financing unit and knows that it will now have to put more emphasis on issues such as quality control and client services to remain viable.
- The ENLB has a mature perspective on understanding some of the limitations of the current systems and is making decisions and is putting in place strategies and contingency plans to address these deficiencies, in the longer term.
- The government is instituting measures to meet the requirements of EU admission. (An EU requirement is to have E-Gov. and the ENLB has been developing this.)
- The government of Estonia is actively working with its Baltic State neighbours to share land information that is of benefit to them all. (There is a program to exchange data between the Baltic States.)
- The ENLB is also developing a clear vision for improving land management and land information services in the future.

The WaterMark team therefore concludes that the Estonian side has achieved an effective acquisition of Swedish knowledge through the projects and is now able to design, develop, and efficiently implement appropriate strategies in mapping and land management on its own.

However, while real property markets are functioning, the institutional infrastructure may impede optimal operation. The main reason is that there is no real linkages between the Property Registry (Ministry of Justice), Building Registry (Ministry of Economy) and Land Parcel Registry (ENLB).

This separation will continue to create duplication of systems and efforts, impede effective and efficient land transactions, and limit the quality of integrated information the Estonian government needs to conduct land management:

1. *WaterMark recommends that in-country Swedish Embassy and Sida representatives be briefed as to project progress and implications.*
2. *WaterMark recommends that any future efforts by Sida encourage the integration of the various land registries to ensure services that have better quality and are more efficient.*

5.1.2 International Activities

WaterMark concludes that the Estonian government is examining any and all options to fund its efforts to address the requirements to enter the EU. (e.g., the World Bank Grant/PHARE Projects).

3. *WaterMark recommends that Sida endeavor to track Estonia's efforts to secure international funding for projects so that Sweden can both complement those efforts, should it desire to do so, and ensure that Swedish funding is not redundant.*
4. *Watermark also recommends that Sweden continue to work with Estonia in ensuring that all of the land and information requirements for EU membership are met as soon as possible.*

5.1.3 Professional and Educational Infrastructure

The WaterMark Team concludes that the land information concept is well established in the education and training infrastructure. One of the better methods to determine the degree of acceptance of a technology, methodology, or ideology in society is to review its penetration into the education system. An established training infrastructure with certification and rules for admission usually bodes well for the longer-term survival of the 'new' ideas.

WaterMark also notes the rapid development of the private sector in Estonia. This has enabled the ENLB to become streamlined and focused on an appropriate government objectives in a market economy, i.e., providing the public good services, contracting out routine processes to the private sector, providing effective quality control and contract management, investigating the potential role of new technologies and organizational structures.

5. *WaterMark recommends that Sida use the Estonian National Land Board as one example of effective management training and organizational reengineering to meet development objectives.*

5.1.4 Environmental Impact and Gender Issues

The evaluation found that there were no negative environmental impacts caused by the projects. Instead, it should be noted that the mapping and land management projects provide a critical basis for many kinds of land use planning and environmental monitoring activities.

Gender equity related to access to property are addressed in the legislation and property restitution procedures. However, there is also a need for financial and legal resources to make that access is effective. In this review there were no specific barriers discovered. The current Sida funded projects

only address this indirectly by improving the information base for land registration and improving knowledge of market values that will also be used by credit institutions.

In former Soviet countries, there is a general division of labour where cartography, valuation, and cadastral activities are often female dominated and geodesy and field surveying are male dominated, yet in almost all cases there are few women in senior management. Sida policies for gender inclusion in study visits and training help to ensure that women actively participate in the projects, thus providing a foundation for future promotion and advancement. With the emphasis on gender inclusion and support of education and new technologies, Sida funded projects should help to lessen any gender inequalities in the workplace but this will be a long term transformation.

6. *Swedesurvey should strive to actively involve more professionally experienced women from the Swedesurvey management and training side to serve as role models in all projects.*

5.2 Projects

5.2.1 Technical Recommendations

5.2.1.1 Mapping projects

The WaterMark Team concludes that the mapping support provided to Estonia was appropriate, and moreover that it will greatly benefit the country. Whether land reform could have advanced as quickly without the mapping would require further study. However, it is clear that the availability of good mapping has allowed options such as limited field surveys on first registration to be implemented and has supported the development of private sector firms who will value add.

5.2.1.2 Land Management projects

The WaterMark Team concludes that the training provided during the land management project was successful and has assisted ENLB to develop their own strategies for land reform and land information systems. Certainly staff members often referred to what “they saw in Sweden” and how that influenced what they later developed in Estonia. This was heightened by the management training and mentorship in Estonia. That the pilot project and mapping did not proceed, only shows that events often overtake the best laid plans.

There is still a great deal of work to be done in Estonia and the ENLB has made recommendations as to where Swedish assistance could further assist Estonia’s preparation for EU membership and general economic development.

7. *WaterMark recommends that Sida continue to support Estonia in developing a modern land management system, especially through specific training when requested and through appropriate advisory roles.*
8. *WaterMark further recommends that in any future endeavor with Estonia, that Sida press upon the national government the need to integrate the registries for land, buildings, and title.*
9. *After discussions with the ENLB, WaterMark recommends that the following areas be considered for further Sida assistance:*

- i. *Development of the National Topographic Data Base and Initial Development of the National Spatial Data Infrastructure (NSDI)* which will improve the efficiency of government services by integrating data from various Ministries, allow greater dissemination of information to the public, and provide the basis for expansion of the private sector
- ii. *Creation of a Geodetic DataBase: This would provide cadastral offices and the private sector with the geodetic control information required for surveying, aerial photography, environmental modeling etc.*
- iii. *Creation of a Digital Archival Information System:* There is currently a metadata data base but it does not have the spatially referenced functionality for public service and access
- iv. *Development of the Address Register* that will be required for EU membership, although it is not yet clear which Ministry will be responsible (This Register is essential for Emergency Measures Procedures and many other socio-economic benefits of land information);
- v. *Further development of the Register of Real Estate Transactions* on which development of the land markets and mass valuation for equitable property taxation will depend.
- vi. *Inclusion of servitude information in the Land Cadastre.*

The ENLB has indicated that any support in the above areas should be based on the following knowledge transfer mechanisms:

- Staff training (very specific to the issues – not general courses)
- Financing of university degree courses
- Work study terms for staff with Swedish agencies
- Specific advisors where appropriate.

5.2.1.3 Management projects

The Management Training given by Mr. Jim Widmark was particularly effective in Estonia.

10. *WaterMark recommends that this type of training and mentorship model be used by Sida in other countries and in other development areas where appropriate persons can be found.*

5.2.2 Management Recommendations

5.2.2.1 Project Management

The WaterMark Team concludes that the lack of project management documentation resulted in a lack of information concerning the progress of the projects being provided to Sida by Swedesurvey and no evidence of control of the financial aspects of the project budget by Swedesurvey or Sida.

11. *WaterMark recommends that Sida require timelier reporting from Swedesurvey. This would result in Sida receiving information in time to effect the necessary changes in project implementation*
12. *WaterMark recommends that Sida implement a policy of periodic face-to-face meetings between Swedesurvey and Sida, on each of their projects. This would increase the accountability for both Sida and Swedesurvey.*

5.2.2.2 Financial Management

A review of the financial management aspects of the projects was deemed by Sida to be outside of the scope of the WaterMark project.

Figure 6 summarizes the WaterMark recommendations.

Figure 6 - Summary of Recommendations

Project Aspect	Review Area	Recommendation
Institutional	National Operations	1. WaterMark recommends that in-country Swedish Embassy and Sida representatives be briefed as to project progress and implications.
Institutional	National Operations	2. <i>WaterMark recommends that any future efforts by Sida encourage the integration of the various land registries to ensure services that have better quality and are more efficient</i>
Institutional	International Activities	3. <i>WaterMark recommends that Sida endeavor to track Estonia's efforts to secure international funding for projects so that Sweden can both complement those efforts, should it desire to do so, and ensure that Swedish funding is not redundant.</i>
Institutional	International Activities	4. <i>Watermark also recommends that Sweden continue to work with Estonia in ensuring that all of the land and information requirements for EU membership are met as soon as possible.</i>
Institutional	National Operations	5. WaterMark recommends that Sida use the Estonian National Land Board as an example of effective management training and organizational reengineering to meet development objectives.
Project Specific	Technical – Mapping	6. <i>Swedesurvey should strive to actively involve more professionally experienced women from the Swedesurvey management and training side to serve as role models in all projects.</i>
Project Specific	Technical – Valuation	7. WaterMark recommends that Sida continue to support Estonia in developing a modern land management system, especially through specific training when requested and through appropriate advisory roles.
Project Specific	Technical – Valuation	8. <i>WaterMark further recommends that in any future endeavor with Estonia, that Sida press upon the national government the need to integrate the registries for land, buildings, and title.</i>

Project Specific	Technical – Valuation	9. After discussions with the ENLB, WaterMark recommends that the following areas be considered for further Sida assistance: • Development of the National Topographic Data Base and Initial Development of the National Spatial Data Infrastructure (NSDI) which will improve the efficiency of government services by integrating data from various Ministries, allow greater dissemination of information to the public, and provide the basis for expansion of the private sector • Creation of a Geodetic DataBase: This would provide cadastral offices and the private sector with the geodetic control information required for surveying, aerial photography, environmental modeling etc. • Creation of a Digital Archival Information System: There is currently a metadata data base but it does not have the spatially referenced functionality for public service and access • Development of the Address Register that will be required for EU membership, although it is not yet clear which Ministry will be responsible (This Register is essential for Emergency Measures Procedures and many other socio-economic benefits of land information); • Further development of the Register of Real Estate Transactions on which development of the land markets and mass valuation for equitable property taxation will depend. • Inclusion of servitude information in the Land Cadastre.
Project Specific	Technical Management	10. WaterMark recommends that this type of training and mentorship model be used by Sida in other countries and in other development areas where appropriate persons can be found.
Project Specific	Project Management	11. WaterMark recommends that Sida require timelier reporting from Swedesurvey. This would result in Sida receiving information in time to effect the necessary changes in project implementation
Project Specific	Project Management	12. WaterMark recommends that Sida implement a policy of periodic face-to-face meetings between Swedesurvey and Sida, on each of their projects. This would increase the accountability for both Sida and Swedesurvey.

5.3 Limitations of the Review

1. This evaluation was focused on Sida's support to the ENLB. The ENLB currently does not have a mandate in property rights or building/apartment registration. Therefore the focus of the interviews was on the impact of the mapping support, the impact of one training course in cadastral systems in Sweden, the valuation component of the proposed land management, and the management consultancies. Elements of the overall Estonian land management and property system were investigated where possible, but property registration and credit arrangements were deemed secondary issues under the actual Swedish involvement in Estonia.

6 Lessons Learned

1. Sida requires a better system to track project progress and reporting. Inadequate and untimely reporting leads to projects being delivered out of scope and over budget.
2. Sida should audit projects routinely during project execution and directly after projects are completed. Failure to audit projects in a timely fashion leads to the continuation of undesirable practices over subsequent projects. Projects that are not audited for some years after a project is completed and individuals have moved on provide very little information about project activities. They only provide some assurances that the project was executed in some fashion.
3. Successful projects require champions on both the Swedesurvey side and the counterpart side. If people are interested and committed, the work gets done, even when things happen to impede the work.
4. Land reform projects are long term and require long term support if the eventual goals are to be realized. In the 1990s, western nations have expected change in the former Soviet world to be accomplished in a decade, when the same changes and system development took centuries at home. Donors should be more cognizant of the need for long-term support and more patient with the institutional structures that are reacting to rapid change.
5. Successful consultancies in management can be as effective and can potentially have more long lasting effects than direct aid in terms of technologies and system building.
6. The time between project conceptualization and execution often results in difficulties. There is a need to constantly revise the understanding of the situation, the objectives, and the constraints. This is best done by the project manager in the field.
7. Mapping is a fundamental building block for property reforms, for government processes such as land use planning and land management, and for development of private sector market activities. The problem is that it is often expensive and time consuming. However, while development agencies should always look for ways to maximize the short-term benefits of their assistance, they should not forget that mapping will have to be done and the quicker it is done, then the greater the benefits can be derived from it. The Sida mapping support in Estonia is a case example of providing the necessary foundation for sustainable economic development.

Appendix A

Terms of Reference

for the evaluation of Sida's support to the Land Reform related activities in Estonia, Latvia, Lithuania and Poland

Description of Sida

The Swedish International Development Cooperation Agency, Sida, is responsible for Swedish bilateral development and disaster aid. Sida also handles most of the co-operation with countries in Africa, Asia, Latin America as well as Central and Eastern Europe. Sida has approximately 650 employees - including expertise (of whom approx. 100 in the field) in economics, technology, agriculture, healthcare, education and environmental protection.

For more information, please see Sida's homepage: www.sida.se

1. BACKGROUND

Aims and objectives of the Swedish co-operation with Central and Eastern Europe

The overall objective of the Swedish co-operation with Central and Eastern Europe is to support the transformation towards democracy and market economy. The Swedish Parliament has defined four goals for this assistance and co-operation:

- Promote common security
- Deepen the culture of democracy
- Support socially sustainable economic transition
- Support environmentally sustainable development

To guide the directions of the Swedish development co-operation with Estonia, Latvia, Lithuania and Poland, the Swedish Government has approved the establishment of a country strategy. (See Country Strategies for Estonia, Latvia, Lithuania and Poland, Annex E).

EU integration is an overall objective for the Swedish co-operation programme. The emphasis should be on supporting efforts to comply with the obligations stipulated by EU legislation and regulations, the *acquis*. Therefore the support to the land reforms also mean adjustments to one of the EU criteria, the one for a functioning market economy. The support should according to the strategy and Sida's policy primarily be provided in the form of technical co-operation, transfer of Swedish knowledge focusing on strategic measures chiefly designed to enhance the development of expertise and institutions.

Moreover, Swedish programmes of development co-operation shall be permeated by a perspective of equality between women and men.

Support to the land reform in Estonia, Latvia, Lithuania and Poland

Sweden has provided support to activities related to the land reform in the Baltic States and Poland since 1992, mostly through Swedesurvey AB. So far within this field, approximately MSEK 21,5 have been allocated to projects in Estonia, MSEK 24 to projects in Latvia, MSEK 20,7 to projects in Lithuania and MSEK 4,1 to projects in Poland. The projects have mainly concerned to develop and implement the Land Information System, orthophoto mapping and to develop the Land

Administrations in the Baltic States into modern land surveying administrations. With the new PHARE guidelines EU has considerably decreased its support in this field. A complete list of Sida financed projects is found below. In view of the relatively extensive support in this field, Sida has decided to undertake an evaluation of the achievements to date and to review the needs for and relevance of possible further support in this field to the Baltic Countries and Poland. To undertake this evaluation, Sida intends to procure an independent consultant team (the Consultants). These Terms of Reference will guide the work to be done by the Consultants.

Evaluations regarding land reforms in Estonia, Latvia and Lithuania was previously undertaken in 1996 (See Annex D for further information).

2. PURPOSE

The purpose of the evaluation is to briefly describe the present situation and evaluate the relevance, effects, impact, cost-effectiveness and sustainability of the Swedish support so far provided by Swedesurvey in activities related to the land reform process in Estonia, Latvia, Lithuania and Poland. The purpose is also to review the capacity of the institutions, institutional development, satisfaction of stakeholders and the needs for and relevance of possible further support.

Furthermore the Consultant shall assess the relevance of one new project proposal in the field of Land Market Development in Lithuania. It is expected that the evaluation will provide background information for decisions on further support to this sector in Lithuania.

3. SCOPE OF WORK (ISSUES TO BE COVERED IN THE EVALUATION)

The consultant shall:

3.1 Institutions

Make an overall assessment of the current situation in each country and briefly describe the present capacity of the four administrations and their interaction with major actors and stakeholders considering both central and local level as well as relevant legislation.

The assessment shall i.a. include:

- responsibility between central, regional and local level
- present status of the land registration system including land book
- Clients satisfaction i.e. to which extent can the system be used when banks need collateral's, selling and buying of real estate, municipal planning needs etc.
- The administrations' relations and support by their respective Governments enabling them to fulfil their tasks, coherence with other authorities, resources etc.
- financing possibilities in addition to government allocations
- brief description of other major donors and their activities

Assess the institutions according to the "staircase model" and its three indicators:

- "the organisation delivers expected output"
- "the organisation carries out internal changes on its own"
- "the organisation works actively with its clients"

Which are the main remaining weaknesses of the administrations?

3.2 Evaluation of Sida's projects

The consultant shall:

Evaluate the performance and results attained by the Sida supported projects, listed on pages 5–6, in the field of aerial photography, mapping, transfer of know-how and technology and the development of land information systems. Its relevance, effects, impact, cost-effectiveness and sustainability shall be evaluated.

- Have objectives and goals of the projects been achieved? Reasons for low or high achievement as per organisational, administrative, technological factors both related to recipient organisation and Swedish support.
- Do the Administrations have capacity enough with sufficient quality to further process aerial photos to good and adequate product for end-users within a reasonable period of time?
- Performance as to project implementation by the respective Administrations as well as by Swedesurvey
- Have the reporting routines and reports been satisfactory?
- Have the projects been cost-effective? Could the same results have been achieved with less resources?

Discuss the project effects on both women and men in planning and implementation of the projects.

3.3 Specific project proposal on continued support to Lithuania

The consultant shall:

- Assess the new project proposal as to its relevance, development effects, cost effectiveness and relation to other external support and give recommendation to Sida.

4. METHODOLOGY, EVALUATION TEAM AND TIME SCHEDULE

Method of work

A suggested method of work could be as follows:

- Study project related and other relevant documentation at Sida. Make a visit to Swedesurvey before and after the field trips to Estonia, Latvia, Lithuania and Poland.
- The Consultant should visit relevant institutions including the counterparts, the National Land Board in Estonia, the State Land Service in Latvia (SLS), the State Land Cadastre and Register in Lithuania (SLCR) and the Head Office of Geodesy and Cartography in Poland (GuGiK). The Consultants should also make a selection of main users of material and services furnished by the Land Surveying Administrations and select local offices of the land administration authorities for interviews.

Undertakings

The Consultant will be responsible for practical arrangements in conjunction with missions to Estonia, Latvia, Lithuania and Poland and other visits. Sida will make available or cause to make available all written material (reports, project preparation documents, project completion reports, etc.) deemed to be of relevance to the evaluation by the Consultants and Sida. Respective Area Manager at Sida will inform the counterparts of the forth-coming evaluation. Responsible officer for the evaluation at Sida will inform Swedesurvey.

Evaluation team

At least one of the members of the evaluation team should have skills and experience in the area of land administration and land management. Knowledge in real estate economics, banking and land code issue is also needed. It is preferable that the project co-ordinator is a senior economist. The members of the evaluation team are expected not to have been involved in previous projects or in other way impartial.

A binding list of staff (including signed CV's) should be part of the tender (see Instructions to Tenders)

5. REPORTING

All reports should be written in English. The reports should be outlined in accordance with Sida Evaluation Report – A Standardised Format (see Annex A) The final report shall be written separately for Estonia, Latvia, Lithuania and Poland.

After the visits to Estonia, Latvia, Lithuania and Poland, the Consultant will submit first draft report to the Estonian, Latvian, Lithuanian and Polish counterparts concerned and Swedesurvey for their review. After having received the counterparts' and Swedesurvey's comments, 5 copies of final reports for each country separately, will be submitted to Sida. Within two weeks after receiving Sidas comments on the draft report, a final version in 5 copies and on diskette shall be submitted to Sida. Subject to decision by Sida, the report will be published and distributed as a publication within Sida Evaluation series. The evaluation report shall be written in Word 6.0 for Windows (or compatible format) and should be presented in a way that enables publication without further editing.

The following enclosures shall be attached to the final report:

- Terms of Reference
- List of persons interviewed
- List of documentation

The evaluation assignment includes the production of a Newsletter following the guidelines in *Sida Evaluations Newsletter – Guidelines for Evaluation Managers and Consultants* (Annex B) and also the completion of *Sida Evaluation Data Worksheet* (Annex C). The separate summary and a completed Data Work Sheet shall be submitted to Sida along with the (final) draft report.

6. LIST OF PROJECTS TO BE EVALUATED

- (R) = Requested project
- (C) = Completed project
- (O) = Ongoing project
- (I) = interrupted project

Estonia:

Öst-1996-235	SEK 2 911 000	Decision 1996-09-11	(I)
Öst-1996-280	SEK 5 000 000	Decision 1996-11-06	(C)
Öst-1998-227	SEK 3 745 500	Decision 1998-05-06	(O)
Öst-1999-180	SEK 798 699	Decision 1999-04-20	(O)
Öst-1996-214	SEK 395 000	Decision 1996-08-19	(C)
Öst-1996-138	SEK 664 000	Decision 1999-03-23	(C)

Projects reviewed in the previous evaluation:

Latvia:

Öst-1997-177	SEK 5 860 000	Decision 1997-06-11	(O)
Öst-1999-179	SEK 4 133 608	Decision 1999-04-09	(O)
LVA-0691	SEK 5 314 000	Decision 1994-05-27	(C)
Öst-1995-008	SEK 1 690 400	Decision 1995-07-18	(C)

Projects reviewed in the previous evaluation:

LVA0531	SEK 1 100 000	Decision 1992-01-20	(C)
LVA0151	SEK 134 000	Decision 1991-09-30	(C)
LVA0531	SEK 2 202 000	Decision 1993-02-04	(C)
LVA0532	SEK 3 776 000	Decision 1995-03-31	(C)
LVA0691	SEK 5 314 000	Decision 1995-07-18	(C)
LVA0692	SEK 1 690 400	Decision 1995-07-18	(C)

Lithuania:

Öst-2000	SEK	—	(R)
Öst-1997-217	SEK 2 550 000	Decision 1997-07-10	(C)
Öst-1998-465	SEK 3 800 000	Decision 1998-10-09	(C)*
Öst-1998-45	SEK 1 400 000	Decision 1998-02-16	(C)
Öst-1998-186	SEK 2 900 000	Decision 1998-04-29	(C)

Projects reviewed in the previous evaluation:

LTU0161	SEK 1 050 000	Decision 1992-01-20	(C)
LTU0162	SEK 2 996 000	Decision 1993-01-21	(C)
LTU0163	SEK 2 816 000	Decision 1995-02-24	(C)
LTU0164	SEK 3 163 000	Decision 1995-02-24	(C)

Poland:

Öst-1995-150516	SEK 3 969 000	Decision 1995-04-05	(C)*
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* Under completion. At present Sida has not received the final report

7. SPECIFICATION OF QUALIFICATIONS

7.1 The following compulsory qualifications shall be met by the tenderer:

Quality in performance of the Assignment

- The tenderer shall account for his/her understanding of the assignment in his/her own words.
- The tenderer shall clearly and concretely specify and motivate the *approach and methods* to be applied in performing the assignment, including those employed in the various task of the assignment.
- The tenderer shall provide a detailed *time and work plan* for fulfilment the assignment, including
 - a) a manning schedule that specifies the tasks performed by and the time allocated to each of the team members, and
 - b) estimates of the time required for the different tasks of the

assignment. Account for how the team plans to organise the work to be carried out at the Sida headquarters in Stockholm and the amount of time the team wants to allocate to it.

- Final reports including findings and conclusive assessments shall be presented to Sida. (see also Reporting, page 5).
- The tenderer shall account for how the team wants to *organise the co-operation* with both UTV and the reference group.

Staff Resources for Performance of the Service

- The tenderer shall possess *documented knowledge, relevant professional background and experience* of similar assignments in a suitable combination within the requested areas of expertise, in addition to the analytical, linguistic and other skills. The tenderer shall further specify the qualifications of each member of the team and attach their signed individual Curricula Vitae (including name, address, education, professional experience, experience of work abroad and in developing and/or transition countries), and shall state reference persons with telephone numbers and e-mail addresses.

Price and Other Commercial Conditions

- The tenderer shall present a budget, which differentiates between and proposes ceilings for *fees and reimbursable costs*, specified for the different elements of the assignment and for the different staff categories. *Total cost/price* shall be stated. All fees shall be stated hourly. All costs shall be stated in SEK, exclusive of Swedish VAT, but including all other taxes and levies. Individuals however shall state their fee exclusive of Swedish social contributions
- The tenderer shall state and specify any minor reservations as to the draft contract and Sida's General Conditions and propose alternative wordings, which shall however not lead to material changes of the present draft contract and conditions.

7.2 Preferred Qualifications

- At least one of the members of the evaluation team should have skills and experience in the area of land administration and land management. Knowledge in real estate economics, banking and land code issue is also needed. It is preferable that the project co-ordinator is a senior economist.

Annex A: Sida Evaluation Report – A Standardised Format

Annex B: Sida Evaluation Newsletter – Guidelines For Evaluation Managers and Consultants

Annex C: Evaluation Data Worksheet

Annex D: Earlier Evaluations on Estonian, Latvian, Lithuanian – Swedish land reform co-operation

Annex E: Country Strategy for Development Cooperation with Estonia, Latvia, Lithuania and Poland 1999–2001

Appendix B

List of persons interviewed

Name	Title	Address
Mr. Kalev Kangur,	Director General	Estonian National Land Board
Mr. Raivo Vallner	Vice Director General	Estonian National Land Board
Ms. Maila Marka	Head of International Affairs	Estonian National Land Board
Mr. Kalev Partna	Head of Department of Geodesy and Geographic Information	Estonian National Land Board
Mr. Kristian Teiter	Head, Bureau of Geoinformatics	Estonian National Land Board
Ms. Kirra Moisja	Head of Bureau of Cartography	Estonian National Land Board based in Tartu
Mr. Rein Lehtveer	Head, Bureau of Real Estate Valuation	Estonian National Land Board
Mr. Anders Haas	Bureau of Real Estate Valuation	Estonian National Land Board
Mr. Kalju Janson	Head, Lääne Cadastral Office	Municipality of Haapsalu
Mr. Avo Sulgar	Managing Director Estonian Map Centre	Tallinn
Mr. Tauno Saks	Head, Mapping Division Estonian Map Centre,	Tallinn
Mr. Margus Vinkel	Member of the Board EOMAP Company	Tallinn
Mr. Heiti Hallikma	Head of Development Group EOMAP Company	Tallinn
Mr. Urmas Sukles	Mayor	Municipal Government of Haapsalu
Mr. Heino Tamm	Deputy-Mayor	Municipal Government of Haapsalu
Ms. Anu Ulm		Municipal Government of Haapsalu

Appendix C

List of Documentation

“Aerial Photography in Estonia 1999. 20/09/99”

“Agreement Between Swedesurvey and Estonian National Land Board in Technical Assistance Within the Land Reform. 16/12/96”

“Agreement between the Estonian National Land Board and Swedesurvey AB.”

Ågren, Håkan. Report on production of Digital Line Maps – Haapsalu – Estonia 1998. 29/12/98”

Brook, Ian. “Cadastral and Mapping Support to the Land Reform Programme in Estonia”

“Estonia: Support in the Field of Land Reform. Appendix A”

“European Parliament, Briefing No 8, Estonia and the Enlargement of the European Union. 02/03/00”

“Final Report on the production of digital orthophotos and digital line mapping of areas in Estonia based on aerial images acquired during 1995. 18/13/98”

Finnström, Åke. “Agreement. 13/05/98”

Finnström, Åke. “Progress Report – Aerial Photography in Estonia 1998. 11/12/98”

Finnström, Åke. “Report on procurement and installation of a dodging contact printing machine (EDM 83 B) at the Estonian Map Center (EMC), Project EST 1401, ÖST-280-96, DNR. ÖST-1995-0378. 11-09/97”

Kangur, Kalev. “Letter. 16/02/98”

Lindberg, Ulrika. “Assistance to the Estonian Land Board – Aerial Photography for 1998 and 1999 (Sida decision no. Öst 227/98). 11/05/98”

Örtengren, Kari. “Additional Aerial Photography for 25 urban areas (417 km²). 27/04/99”

Örtengren, Kari. “(letter) Co-operation with Sweden / Follow up of meeting. 11/11/98”

Östberg, Torbjörn. “Support to the land reform in Estonia (Est 1381). 20/02/98”

Pöder, Martin. “(letter) Swedish-Estonian co-operation project. 16/03/98”

Pöder, Martin. “Swedish-Estonian co-operation project. 17/04/98”

Rehlen, Christina. “(letter) Support in the field of land reform, EST 1381. 13/09/96”

Rehlen, Christina. “(letter) Support in the field of land reform: Map production EST 1401. 13/11/96”

Reiljan, Villu. “(letter). 03/04/96”

Segemark, Rutger. “Final Report - Aerial Photography Campaign in Estonia 2000. 06/11/00”

“Strengthening the photo / repro laboratory at the Estonian Map Center in Tallinn, Estonia – Final Report. 03/05/97”

Vallner, Raivo. “Addendum Agreement. 15/12/00”

Vallner, Raivo. “Request for extension of project “Aerial Photography 1999.”. 04/03/99”

Vallner, Raivo. “Request for extension of project “Aerial Photography for Estonian Land Board 1998 and 1999.”. 02/02/99

Vallner, Raivo. “(letter) Ref: Strengthening the photo / repro laboratory at the Estonian National Land Board (ENLB) / Estonian Map Center (EMC)”

“Work Plan for 1997 for the Institutional Development Project at the Estonian National Land Board / Estonian Map Center State Enterprise. 14/02/97”

Recent Sida Evaluations

- 01/24** **Formative Evaluation of Uganda Land Management Project.** Jan Erikson, James Reinier Scheele, Sebina Nalwanda
Department for Natural Resources and the Environment
- 01/25** **Sida Support to the Social Rehabilitation Project in Bosnia and Herzegovina (SweBiH).** Nils Öström
Department for Central and Eastern Europe
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