

Twinning cooperation between Kaunas Water Company, Lithuania and Stockholm Water Company

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**Department for Central and
Eastern Europe**

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**Department for Central and
Eastern Europe**

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Foreword

This report is based on a review of the twinning agreement between Stockholm Water Company and Kaunas Water Company. The twinning is a part of the Kaunas Environment Project, one of several investment projects in the water sector in the Baltic Sea region that Sida co-finances.

Routinely, Sida commissions independent evaluation specialists, to review support to projects, draw conclusions and present recommendations. When planning and initiating new efforts, a review of existing activities is one of several inputs.

The authors, Martti Lariola and Birgitta Danielsson, reviewed the results from activities of the twinning partners. Further, they provided Sida with ideas on how to plan and implement twinning co-operation in future projects. The views and interpretations expressed in the report are those of the authors, and should not be attributed to Sida.

Stockholm in September, 1998

Staffan Herrström

Head of Department for Central and Eastern Europe

CONTENTS

	Page
1. Introduction	1
1.1 Background and Implementation	1
1.2 Overview of Sida's Twinning Activities in the Baltic Area	2
1.3 Overview of Stockholm Water's Technical Assistance Activities	3
1.4 Kaunas Water and Environment Project	4
2. Alternative Approaches to Water Utility Restructuring	5
2.1 Efficiency of Public Service	5
2.2 Twinning	5
2.3 Consultancy	6
2.4 Private Sector Participation	6
3. The Setting of Twinning Co-operation	8
3.1 Project History	8
3.2 Loan Agreements, Project Support and Guarantee Agreements	9
3.3 Service Supply Agreement	10
3.4 Selection of Twinning Partner	10
3.5 Twinning Agreement and Terms of Reference	11
3.6 Organisation of Twinning	12
3.7 Performance Objectives and Indicators	13
3.8 Responsibilities of Stakeholders	15
4. Track Record of Kaunas Twinning Arrangement	17
4.1 Municipality Relations	17
4.2 Kaunas Water Governance	17
4.3 Organisation and Management of Twinning	17
4.4 Studies and Plans	18
4.5 Implementation of Investments	19
4.6 Financial and Operational Performance	20
4.7 Environmental Performance	20
4.8 Impact of Twinning	20
4.9 Cost-Effectiveness	22
4.10 Gender Issues	23
4.11 EBRD and World Bank Twinning Approaches	23
4.12 Sustainability	24
4.13 Conclusions	24
5. Towards Cost-Effective Twinning	28
5.1 The Concept of Twinning	28
5.2 The Twinning Process	28
5.3 Cost-Effective, Performance-Oriented Twinning	29
6. Recommendations to Stakeholders	32

ANNEXES

LIST OF ABBREVIATIONS

BITS	Swedish Technical Assistance Agency
BOD	Biological Oxygen Demand
EBRD	European Bank for Reconstruction and Development
ECU	European Currency Unit
EU/Phare	Technical Assistance Programme of the European Union
FIM	Finnish Markka
HELCOM	Helsinki Commission for Baltic Sea Environmental Management
IBRD	International Bank for Reconstruction and Development
IFC	International Finance Corporation
KWC	Kaunas Water Company
LTL	Lithuanian Lita
NEFCO	Nordic Environment Finance Corporation
NIB	Nordic Investment Bank
PIU	Project Implementation Unit
SEK	Swedish Krona
SS	Suspended Solids
Sida	Swedish International Development Cooperation Agency
SWC	Stockholm Water Company
TA	Technical Assistance
USD	United States Dollar

1. INTRODUCTION

1.1 Background and Implementation

Swedish International Development Cooperation Agency (Sida) supports institutional strengthening through twinning in seven Baltic water and wastewater projects. Five of them are World Bank-financed projects (Daugavpils, Haapsalu, Klaipeda, Liepaja and Siauliai) and two are EBRD-financed projects (Kaunas and Riga).

The overall goal of twinning is to support the Baltic water utilities in the process of transforming them into independent, well-managed, financially self-sustaining municipal companies through twinning co-operation with Nordic water utilities, and thus promote sustainable environmental management around the Baltic Sea.

Sida/BITS has supported the development of the water and wastewater sector in Kaunas since 1990 through various studies and training programmes. Stockholm Water Company (SWC) has been involved in institutional strengthening and project implementation of Kaunas Water Company (KWC) since 1994 as a twinning partner.

The first phase of twinning co-operation between SWC and KWC started in October 1994 and was completed in December 1995. It was essentially directed to the preparation of a large investment project to be financed by The European Bank for Reconstruction and Development (EBRD), The Nordic Environment Finance Corporation (NEFCO), EU/Phare, Finnish and Swedish Governments, as well as local Kaunas and Lithuanian sources. It was also aimed at transforming KWC into a joint venture between Kaunas Municipality, Nefco, KWC and SWC.

The agreement for the second phase of twinning was signed in December 1995 to cover twinning co-operation from 1996 through 1999. The principal goal of the second phase was institutional strengthening as well as support to the PIU in the implementation of the investment project. The budget of the first phase of twinning amounted to 4.1 million SEK, and of the second phase to 12.3 million SEK.

Sida decided to undertake a review of the experience gained so far in the twinning arrangement between KWC and SWC to review the results and to see if changes and improvement should be made to the objectives, work plans, and to the allocation of resources. Sida would also like to compare alternative approaches to twinning to increase the overall cost-effectiveness of institutional strengthening.

Sida commissioned Mr. Martti Lariola of LarCon Oy (Team Leader) and Ms. Birgitta Danielsson of OF-Swedish Management Group to carry out the review. The assignment was commenced in mid-March 1998. During the course of the review the consultants collected relevant documents from Sida, KWC and SWC, and utilised other sources of written information. The consultants also reviewed selected correspondence between Sida, SWC and KWC. The consultants visited KWC from March 30 to April 2, 1998, and also conducted interviews at Sida and at SWC. The Draft Final Report was submitted to Sida in mid-May 1998, and the Draft Final Report in mid-June 1998, and the Final Report in August 1998.

The Terms of Reference of this assignment is included as Annex 1. A complete list of interviewees is included as Annex 2.

1.2 Overview of Sida's Twinning Activities in the Baltic Area

Most of the twinning activities supported by Sida in the Baltic region are support to the water works development. Apart from Kaunas, Sida supports the development of the Klaipeda Water Works and the Siauliai Water Works in Lithuania, the Environmental Project of Haapsalu and Matsalu Bays in Estonia, and the development of the waterworks of Riga, Liepaja and Daugapils in Latvia. The sizes of the projects vary, but all of them are implemented as collaboration between local authorities and international financial institutions and Nordic donors. The projects consist of technical and investment components, and of an institution building component.

The twinning arrangements in the Baltic regions follow the same basic pattern. There are variations to the organisation and methods of twinning co-operation. The EBRD-financed projects in Kaunas and Riga are implemented with bigger budgets and with a more intensive hands-on participation of Swedish twinning partners in day-to-day management. In the World Bank-supported projects the resources allocated for twinning are less (also the size of the cities and investments is smaller). The World Bank is more active in twinning supervision than the European Bank.

Lithuania¹

Klaipeda is the only port in Lithuania situated at the Curonian Lagoon and the end of the river Nemunas. The area is beautiful with long beaches and there are plans to develop the area into a tourist spot. That demands a substantial improvement of the environment, especially the water. The Klaipeda project started in 1995 and is planned to end in 1999. Its total budget is 22 million USD and it is financed by the World Bank, the Government of Finland, Sida, the Government of Lithuania and the City of Klaipeda.

To ensure the knowledge transfer and the institution development a twinning agreement is signed between the Waterworks of Klaipeda and the Waterworks of the City of Malmö. The total budget for the twinning co-operation is 5,5 million SEK and is covered by Sida.

Siauliai is the forth-biggest city in Lithuania. It is situated at the river Kulpe, a tributary of Lielupe. The city empties all its municipal and industrial discharge in the river. The river Lielupe ends in the Bay of Riga in the Baltic.

The Siauliai project started in 1996 and is planned to end in 1999. It is financed by the World Bank, the Finnish Government, the Norwegian Government, Sida, The Government of Lithuania and the City of Siauliai. The total budget is 21 million USD. There is a twinning agreement with the Waterworks in Kristianstad in Sweden and the Waterworks in Trondheim in Norway. Sida supports the twinning arrangement with 2,2 million SEK.

¹ See description of Kaunas Water and Environment Project in section 1.4

Estonia

The small town of Haapsalu is situated on a peninsula in the Bay of Haapsalu. The area is an old tourist resort of great value. South of Haapsalu is the Bay of Matsalu with a big ecological interest for e.g. ornithologists. The effluents from the municipalities and the industry threaten the environmental value of the area.

The environment project started in 1996 and is planned to end in 1999. Its total budget is 8,3 million USD and is financed by the World Bank, the Government of Finland, Sida, the Government of Estonia and the Municipality of Haapsalu. A twinning agreement is signed between Haapsalu Water Works and the Water Works of Haninge in Sweden and sponsored by Sida with 3 million SEK.

Latvia

Liepaja is an old port in Latvia, with heavy industries and with a former naval base for the Soviet fleet. The area is heavily polluted both from the municipality, the industries and the former military base.

The environment project started in 1995 and is scheduled to finish in 1999. The total budget is 20 million USD, financed by the World Bank, the Government of Finland, Sida, NEFCO, the Government of Latvia and the Municipality of Liepaja. A twinning agreement is signed with the Water Works of Norrköping and supported by Sida with 4,6 million SEK.

Daugavpils is the second-biggest city in Latvia and situated by the river Daugava that flows into the Baltic. The municipality discharges all its water into the river. The project started in 1996 and will be completed in 2000. The total budget is 22,3 million USD and the financiers are: The World Bank, EU/Phare, NEFCO, Sida, the Government of Denmark, the Government of Finland, the Government of Latvia and the Municipality of Daugavpils. A twinning agreement is signed with Tampere Water Works of Finland, and paid by the Finnish Government with 3,5 million SEK.

1.3 Overview of Stockholm Water's Technical Assistance Activities

The international engagement of Stockholm Water is a very important part of its activities. It has grown considerably the last few years and covers now broad spectra of different activities. Stockholm Water Symposium has become a well-known annual meeting point for the entire world's leading experts on water. Stockholm Water Prize emphasises the importance of Water issues in an international perspective. Stockholm Water Foundation is the economic basis for Stockholm Water to contribute to the improvement of the environment in the Baltic Sea.

In 1992 a co-operation started between the four Nordic and the three Baltic capitals with the aim of improving the environmental situation in the Baltic Sea. The Nordic Capitals had each a sister city on the eastern side of the Baltic. Upon request of EBRD and with the support of Sida a twinning arrangement between SWC and KWC started in October 1994.

Twinning between Riga Water and SWC commenced in September 1995. Contacts between the Baltic utilities and SWC had taken place since 1989.

The two twinning agreements have many similarities. They have both an institution building component and a technical investment component. They have a resident advisor to the General Director and a financial advisor included in the agreement and a number of subject-matter specialists.

After the flooding of the lowlands of Poland in the summer 1997 Stockholm Water was asked by Sida to assist in the restructuring of a number of waterworks. This assistance is purely technical assistance, not twinning.

The Kaunas and the Riga project are the only twinning projects that SWC is currently involved in. The Board of SWC has decided that all future technical co-operation outside Sweden will be channelled through the newly established Swedish Water Development, a joint venture between the waterworks of the three biggest cities in Sweden and the Swedish Water and Wastewater Association, VAV.

1.4 Kaunas Water and Environment Project

Kaunas is the second largest city in Lithuania with a population of 430,000. There is no wastewater treatment, and Kaunas represents about 90 % of the collected, untreated sewage in Lithuania. It has been classified as one of the five priority Hot-Spots in Lithuania by HELCOM.

The priority investment project to address the environmental issues is a result of the co-operative effort of the Lithuanian Government, Kaunas City, KWC, EBRD, NEFCO, EU/Phare, Sida, Finnish Ministry of Environment and SWC. The investment comprises a new wastewater treatment plant, new and upgraded wastewater pumping stations, improved groundwater intakes and booster pumping stations, network rehabilitation as well as water conservation and energy saving.

The total investment budget of the project is estimated at USD 101 million². About 80 % of the investment costs are connected with wastewater treatment and 20 % with water supply. The share of foreign grant financing is about 14 % of total project costs. Sida's total grant contribution to the project is USD 3.8 million (SEK 27.5 million) to cover costs of project engineering, supervision, project management and institutional strengthening (twinning). The budget for the twinning (Phases I and II) component alone is SEK 16.4 million.

² Original budget of 1995; the changes in the exchange rates have affected the budget figures.

2. ALTERNATIVE APPROACHES TO WATER UTILITY RESTRUCTURING

2.1 Efficiency of Public Services³

With the exception of a few countries with strong public service traditions (like Sweden and the other Nordic countries), public water utilities have performed poorly in terms of service reliability, productivity, customer service, financial management, and the planning and implementation of investment projects. These problems are particularly visible and acute in Central and Eastern Europe, as legacies of the former socialist system.

There are two options to rectify the observed deficiencies:

1. Improve the services within the public sector
2. Open water utilities for private sector participation

In general, the state has not succeeded very well in improving the efficiency of public services. The public sector is often a weak owner, and a civil servant a poor manager. However, business management concepts, like corporatisation, full cost-recovery, identification of core vs. non-core services, out-sourcing, and delegation of authority, have had increasingly visible, positive impact on the public utilities.

At the same time, private sector services have made successful inroads into public infrastructure services and released scarce public funds for other purposes. The constraints for private sector participation are predominantly political.

2.2 Twinning

Twinning is an old concept for providing technical assistance in connection with investments or institutional development projects. There is no universally accepted definition for organisational twinning⁴. It has been experimented with mixed results in development co-operation, and more recently in the eastern European transition process. It is intellectually appealing, and usually acceptable to all stakeholders.

Institutional change is overwhelmingly incremental. Societies and organisations react differently to the same institutional constraints due to the different evolutionary paths and cultural backgrounds. Common set of rules does not necessarily lead to common behaviour. The political process and informal constraints influence the creation of efficient institutions and, ultimately, growth and development.

The realisation of the deeper cultural connections and practical limitations of institutional change on one hand, and the often disappointing results of twinning on the other, have prompted its sponsors to look for more efficient ways to implement organisational and institutional change through twinning. Twinning often remains the preferred choice by

³ Sergei Popov: Management, Privatisation and Restructuring of Water Supply and Sewage Services, The World Bank, 1995

⁴ Encyclopaedia Britannica defines twinning as "to bring together in close association"

stakeholders, particularly as it normally includes financial support from the donor community.

2.3 Consultancy

Twinning is often presented as an alternative to hiring consultants. In practice, twinning partners seldom possess and are able to make available required resources for all the detailed tasks of institutional and management development. They end up employing management and engineering consultants for specific tasks.

Management or engineering consultancy is not an alternative to twinning or privatisation. It provides expert services at short notice and supports both twinning and privatisation operations at water utilities. The international financial institutions are experienced users of consulting services. They can provide good models of fruitful client-consultant relationships.

2.4 Private Sector Participation

Various forms of private sector participation have become increasingly popular in the development of water and wastewater services. The public sector has realised that it alone cannot meet the huge cost of providing clean water and necessary sanitation services. The private sector can help the public sector leverage financial resources, and it can take care of operation and maintenance of utilities, and many support services related to the planning and implementation of investments and system rehabilitation.

The principal forms of private sector participation are the following:

Service contracts

The public sector remains the owner of assets and takes the investment responsibility and risk. The private operator wins a short-term, renewable service contract for plant operation and maintenance, leak detection and repair, meter reading, billing, collection etc.

Management contracts

A management contract is more comprehensive than a service contract and the private sector contractor takes over key management positions with full decision making powers. The commercial risk (related to tariff decisions etc.) normally remains with the public sector. The contract often precedes more complete privatisation. It may include a performance-related fee. The public sector remains the owner of assets.

Lease

The public sector owns the assets, but lets a private contractor rent the facilities and take full responsibility for operations and maintenance, revenue collection and other administrative tasks. The contractor takes the commercial risk, but does not take responsibility for investments, other than small repairs and replacements.

Concession

In this alternative, the investor may own, or only operate the assets during the concession period, and is fully responsible for the operation, including specified new investments and financing. The contract is made for 15-30 years, after which the assets return to the public sector, unless the concession contract is extended. A good contractual and regulatory framework is required to protect the public interest. BOT (Build-Operate-Transfer) and BOOT (Build-Own-Operate-Transfer) are common forms of a concession contract.

Divestiture

A complete, permanent privatisation means asset sale to the private sector. The private contractor takes the commercial and operating risks, and is responsible for all investments. It relies on tariff incomes as revenue, and must follow the rules of the regulator.

Privatisation of water utilities in Eastern Europe has been limited. There are no privatisation cases in the Baltic countries, although the attitudes of the Baltic Governments are cautiously supporting the idea.

3. THE SETTING OF TWINNING CO-OPERATION

3.1 Project History

The Kaunas Water and Environment Project is based on a feasibility study initiated by EBRD and BITS in April 1993.

Phase 1 of the twinning agreement was established between KWC and SWC in October 1994 in order to prepare the investment project for financing and to prepare ground for the proposed joint venture. Sida financed the agreement and the budget frame was SEK 4.1 million. Phase 1 ended 31 December 1995, followed by a new agreement for Phase II.

The main objectives during the first Phase of twinning were:

- To prepare the project for financing and implementation
- To prepare KWC for a future Joint Venture with NEFCO and SWC
- To initiate an Institutional Development of KWC

A priority Investment Programme with Procurement Plan and Implementation Schedule was established. A comprehensive project description and Loan Guarantee Application was produced and approved by the Lithuanian Government, the Kaunas City Council, its six Committees and the financiers.

Term Sheets, Loan Agreements, project Support Agreements and State Guarantee Agreements were prepared and negotiated between the financiers and KWC.

The agreements were eventually signed in September 1995 and expected to be effective three months later. However political indecisiveness made it impossible to fulfil all financial conditions of loan effectiveness in time, and the agreements only became effective in September 1996. The locally financed part of the project did not materialise according to plan.

The envisaged Joint Venture was not established due to political disapproval:

- 1) Kaunas City did not agree to the connection between loan financing and Joint Venture establishment
- 2) Political opinion against privatisation of public entities
- 3) BITS-Sida informed that they could not finance a twinning arrangement with SWC in a Joint Venture constellation

The institutional development of KWC was initiated successfully. The company changed status several times during 1995 and new company statutes were drafted and approved in September 1996 after intensive lobbying at the municipality. This influenced the possibilities of establishing a new Board and of developing the management team.

The project implementation unit was established in August 1995.

Phase II of the twinning agreement started in January 1996 with the aim of supporting project implementation during 1996-1999. Sida agreed to finance phase II of the twinning agreement, and the budget for the four-year term is 12,3 million SEK.

The transformation of KWC from state enterprise to Joint Stock Company was accelerated during 1996 including improved financial management, more effective bill collection and enhanced administration and operation. A comprehensive know-how transfer programme was launched.

The city had problems organising the Company Board and political indecisiveness related to tariff setting and other matters made it impossible to fulfil all financial covenants of the loans up to the end of 1996. As a result the loan agreement only became effective in October 1996 delaying certain project activities with up to one year.

KWCs management went through considerable development during the first years. The company adopted many of the ideas and management philosophies, introduced under the twinning programme.

In March 1997 a new Company Board was appointed consisting of seven.⁷ An extensive Human Resource Development plan was presented in April and a Change Manager was appointed to responsible for the implementation of this plan. Development work with the aim of dividing the tasks of the organisation into core and non-core business started. Organisational changes resulted in a new organisational chart, a substantial decrease in staff, changed positions for managers, organisational development at several of the departments and units i.a. in the Consumers Department.

3.2 Loan Agreements, Project Support and Guarantee Agreements

The principal foreign loan agreements for the Kaunas project were with EBRD and with NEFCO. The essential parts (loan covenants) of both agreements are largely the same. Both agreements are complemented with (1) a Project Support Agreement with the municipality of Kaunas and (2) a Guarantee Agreement with the Republic of Lithuania.

The Loan Agreements include detailed operational targets in addition to presenting the terms of the loan. There are about 15 pages of loan covenants related to project execution, financial and operational management, reporting, and loan effectiveness. Some of the covenants are general statements of good management, some of them are very detailed operational standards, for example:

- Establish a Financial Management Department operating according to IAS
- Internal funds to be generated for network rehabilitation each Fiscal Year
- Minimum balances on Enterprise Account
- Minimum balances on the Debt Service Reserve Account
- Level of Debt Service Coverage Ratio
- Level of Current Ratio
- Accounts receivable standards expressed in terms of number of days
- Schedule for the reduction of bad debt
- Operational cost reduction targets
- Tariff increases

All these standards and targets are expressed in a measurable form and deadlines are given. Also instructions about reporting frequency and contents of reports are specific and detailed.

The Loan Agreement also lists the studies to be prepared (with deadlines). These include studies on:

- Water consumption, supply and distribution
- Water savings
- Leakage controls and network rehabilitation
- Business plan
- Organisation and human resources
- Industrial effluent load resolution
- Sewerage sludge utilisation

All the studies should be discussed with and accepted by the lenders.

The twinning partners adopted the loan agreement requirements and designed the twinning work programmes around the covenants. The loan agreement thus became a de facto terms of reference for the twinning arrangement.

3.3 Service Supply Agreement

As a precondition for its equity participation NEFCO typically requires a separate agreement to be signed between the utility and the municipality about service standards and mutual responsibilities. This agreement has proven to be difficult to process in the municipality, because of its novelty and detailed nature. Few people understand why it is necessary at this stage of utility transformation. The key items of the Service Supply Agreement are stipulated in the loan agreements, and the rest can be managed within the corporate governance framework, as long as the municipality remains the principal shareholder. Such an agreement would be necessary in the case of privatisation.

3.4 Selection of Twinning Partner

The City of Stockholm has made a strong commitment to international development activities in the Baltic Sea region. Both the City politicians and the Corporate Board of Public Enterprises of the City of Stockholm have made it very clear that the public enterprises as well as the administrations of the City should get involved in development activities in the Baltic States. The Board of SWC has developed policy and guidelines for international co-operation and assigned the General Director to develop regional assistance policies. SWC was consequently very interested both at the management level and the Board level to develop a twinning agreement with at least one of the Baltic cities. Within the context of the 1992 Baltic Sea Environmental Programme Riga and Kaunas were identified as some of the most important hot-spots with point source pollution. Contacts between KWC and the Swedish consultant K-Konsult had already been taken in 1989, when representatives from KWC visited Stockholm in order to find out what kind of assistance KWC could get. K-Konsult and EBRD visited Kaunas as well, and EBRD requested a feasibility study. The Project was thus based on the feasibility study initiated in

June 1993, financed by EBRD and BITS, and made by K-Konsult. The study was finished in February 1994. It suggested a Joint Venture between KWC, NEFCO and SWC. SWC was asked directly by EBRD to become the twinning partner of KWC and a future party to the proposed Joint Venture.

3.5 Twinning Agreement and Terms of Reference

The first twinning agreement was signed in October 1994 between SWC and KWC and was based on the assumption that SWC would take part in a joint venture with KWC and NEFCO. The purpose of the first twinning agreement was to prepare the project to a stage where it was ready for implementation and to prepare KWC for the future joint venture.

The twinning agreement should be seen as the first phase of a long-term relationship providing advice to KWC in company development and project management.

The main objectives of the twinning agreement (Phase II) were specified as follows:

- To transform KWC into an autonomous, efficient, self-financing and self-managed enterprise, to improve KWC's overall performance and to assist KWC to fulfil its obligations under the project agreements through changes in operational, financial and management practices and organisational development and streamlining.
- To assist in the efficient implementation of the project investment programme through support to KWC in the establishment and operation of the Project Implementation Unit (PIU) established within the KWC to oversee the implementation of the project.
- To develop within the company a commercial attitude and a sense of service directed at providing the best possible service to its consumers at an affordable cost without municipal or government subsidies in the future.

Scope of work according to twinning agreement

Management and administrative procedures and systems

- Accounting and cost control system, MIS
- Reporting system for the follow up of capital investments
- Budgeting and budget control system
- Transfer of responsibility for the collection of tariffs to KWC including billing and collection system
- Appropriate IT strategy
- Systems and procedures of reporting to financiers

Institutional and Organisational Development

- A new Finance Department
- A short, medium and long term Business Plan
- Organisational and Human Resources Development Plan
- Service and Supply Agreement With the City of Kaunas

Operational Enhancement

- Improve operations and maintenance practices
- A priority Investment Programme for the water supply
- Maintenance Management Programme for networks
- Water savings programme
- Improved operational efficiency
- Provide general advice to KWC in all key areas of day-to-day operation and management including operation of the new WWTP.
- Programme for Industrial Effluent Load Reduction
- Programme for Sewerage Sludge Utilisation

Project Implementation Unit Support. The main activities of the PIU are

- Project management and monitoring
- Procurement
- Training
- Reporting

The PIU shall secure the correct completion of the priority investment programme within the stated financial frames and time limits and with the specified quality. Staffing of the PIU will in principle comprise individuals from KWC assisted by advisors from SWC.

The twinning agreement (Phase II) states clearly the roles and responsibilities of the twinning partners. KWC has the sole responsibility to fulfil its obligations and to ensure the overall success of the project. SWC has only an advisory role and it is the responsibility of KWC to make best possible use of the twinning programme.

3.6 Organisation of Twinning

In accordance with the Terms of Reference, full-time and part-time advisors were appointed to support the KWC. These included a resident assistant to the General Director, a resident financial advisor, plus a number of qualified experts resident or visiting to assist in the institutional development of the company and the Project Implementation Unit.

The integration of SWC personnel into the KWC has been very intensive and fruitful for the collaboration and for the project.

The home office at SWC was at the beginning rather limited in its scope - mainly due to lack of resources. An important principle for the SWC when organising the twinning at its side was that the Baltic projects should be treated as other projects at the SWC. They should be part of the ordinary structure and well integrated into the day-to-day running of operations. The two twinning agreements that SWC entered in 1994 were new experiences to SWC. At that time the management and the staff at SWC had little experience about international development co-operation and issues in the transition economies. The two twinning agreements brought a considerable strain on the organisation.

Both SWC and KWC took the twinning agreement very seriously. Stockholm Water takes a great pride in its international assignments and in its possibility on a wider range to contribute to the improvement of the environment of the Baltic. The vision behind SWC's involvement in international projects is the firm belief that SWC is successful in running an efficient waterworks and that its knowledge and experience can be transferred to other waterworks. This vision seems to be shared by most of the staff at SWC.

There has been an exchange of knowledge and experiences on all levels – between the Boards, between the trade unions, the management teams and of course between all kinds of specialists.

3.7 Performance Objectives and Indicators

Performance objectives are specific, measurable milestones of development, understood and accepted by all stakeholders. They can be quantitative figures or specific outputs by given dates etc. They are tools for management in the internal effort to improve efficiency. Performance indicators, derived from performance objectives facilitate performance comparisons between utilities.

The performance indicators⁵ can be used for:

Strategic planning. For any program or activity, from a development project to a sales plan, incorporating performance measurement into the design forces greater consideration of the critical assumptions that underline that program's relationships and causal paths. Thus performance indicators help clarify the objectives and logic of the program.

Performance accounting. Performance indicators can help inform resource allocation decision if they are used to direct resources to the most successful activities and thereby promote the most efficient use of resources.

Forecasting and early warning during program implementation. Measuring progress against indicators may point forward future performance, providing feedback that can be used for planning, identifying areas needing improvement, and suggesting what can be done.

Measuring program results. Good performance indicators measure what a program has archived relative to its objectives, not just what it has completed; thus they promote accountability.

Program marketing and public relations. Performance indicators can be used to demonstrate program results to satisfy an external audience. Performance data can be used to communicate the value of a program or project to elected officials and the public.

Benchmarking. Performance indicators can generate data against which to measure other projects or programs. They also provide a way to improve programs by learning from success, identifying good performers, and learning from their experience to improve the performance to others.

⁵ Performance Monitoring Indicators, A Handbook for Task Managers, The World Bank, 1996

Quality management. Performance indicators can be used to measure customer (beneficiary) satisfaction, and thereby assess whether and how the program is improving their lives.

Performance indicators are useful tools to measure activity in technical, financial, environmental and other areas in order to compare performance with other utilities and to set objectives for change. The indicators must be measurable to allow consistency in comparisons. The following are examples of quantitative performance indicators in water and wastewater utilities:

<i>Technical/Operational</i>	<i>Environmental</i>	<i>Financial</i>
• People served/ utility employee • Staff/ km of network • Unaccounted for water (l/km/year) • Energy consumption/water produced (Kwh/m³) • Metering rate (%)	• Removal rates for selected compounds • Wastewater treated/capita • Kg of BOD/m³ of wastewater • Kg of BOD/capita • Kg of SS/capita	• Net profit (%) • Operating margin (%) • Water and wastewater tariff (LTL/m³) • Return on Capital • Bill collection rate • Accounts receivable turnaround (days)

In Kaunas, the objectives of twinning have been expressed as a hierarchical structure of general objectives, detailed objectives, activities, and tasks. The tasks (largely reflecting the loan covenants) cover a perplexing multitude of plans, studies, programmes and agreements, including:

- Twinning agreements I and II
- Work programmes and budgets
- KWC statutes
- Organisational and human resources development plan
- Business plan
- Billing and collection plan
- Computerisation strategy
- Training and know-how transfer programme
- Networks rehabilitation strategy
- Water supply study
- Water savings programme
- Report on environmental and workers' health and safety
- Industrial effluent load reduction programme
- Sewage sludge utilisation programme
- Leakage control and networks rehabilitation programme
- Goal formulation programme
- Annual budgets
- Annual reports
- Quarterly reports
- Project implementation plan
- Procurement plan

- Disbursement plan
- Many presentations, information materials and training materials
- A large number of Terms of References, procurement documents and contracts

This is an impressive, but confusing list. The amount of paperwork required has fully employed the resources of KWC and SWC. The studies, plans and programmes have remained somewhat fragmented, because they are not connected to overall performance targets of the utility. The desired impact on technical and financial performance is not specified. The performance objectives in Kaunas have not been expressed within the framework of systematic business planning.

3.8 Responsibilities of Stakeholders

The Kaunas investment project and the supporting twinning arrangement should be evaluated against the unique circumstances of the early and mid-1990's. The political leaders of the Nordic countries and the Baltic countries found a strong common interest in promoting transformation of the Baltic countries in general, and environmental projects in particular. The Convention on the Protection of the Marine Environment of the Baltic Sea Area, governed by the Helsinki Commission (HELCOM) is a success story in regional environmental management.

Existing financial institutions, particularly the World Bank, EBRD and the Nordic institutions were mobilised for the implementation of environmental investments. The Nordic governments supported the investments with generous grant support for investments and for technical assistance. Due to the urgency of the investment programme, and to the unstable political circumstances in the Baltic countries, all the investment projects have met with delays and other difficulties, primarily due to local political decision making. This is understandable, because the new rules of the game were largely dictated from abroad, and the local population was not properly informed. The local decision-makers felt outsiders in the process. Also the frequent changes of municipality political leaders complicated decision-making.

This also characterised developments in Kaunas, and caused delays to implementation of investments. KWC's success was achieved in spite of considerable obstacles placed in its way by local political decisions. While local political issues are almost always cause delays to any municipal utility project, Kaunas was exceptional in the extent of the issues and the resulting long delays.

The European Bank for Reconstruction and Development is the lead financier in Kaunas. The extensive, detailed loan covenants largely directed institutional and management development at KWC. Sida agreed to provide the necessary technical assistance in the form of twinning.

Prior to the projects in Kaunas and Riga, SWC had little exposure to technical assistance in the water utilities of central and eastern Europe. It was technically strong, but weak in institutional and management development. It was not geared for international project management. It had to hire the key resources from outside, and its home office support unit failed to do the necessary planning, co-ordination and reporting.

KWC faced an enormous pressure to prepare and implement the biggest investment project in its history and, at the same time, transform profoundly its legal status, governance and organisation structure, management systems and practices, customer relations, financial management and information systems. It has succeeded amazingly well, largely due to SWC assistance.

The Municipality of Kaunas was instructed by the Government of Lithuania to implement the investment project, to fulfil Lithuania's international commitments. The financing package was generous, but it included loan conditions, which were not well understood, and which left little scope for local decision-making. The frequent changes in Kaunas municipal governance, not observed in the same scale in other municipalities, caused additional friction in KWC relations with the municipality.

4. TRACK RECORD OF KAUNAS TWINNING ARRANGEMENT

4.1 Municipality Relations

The idea of twinning as a tool to achieve the institutional strengthening objectives was chosen, because a more direct private sector participation by foreign companies was neither acceptable to the local and national politicians nor to the Nordic donors.

The investment project and the twinning arrangement was essentially imposed on a suspicious, reluctant municipality, characterised by frequent political changes (6 mayors in Kaunas since 1995), and fighting with the formidable financial problems of post-Soviet rebuilding. The decisive benefits of the foreign loan and grant package were evidently not fully understood by the local population and politicians. This created delays and friction for the implementation of investments, and for twinning. Much time was spent on persuasion of municipality politicians to follow the contractual commitments.

The bottleneck in decision making was not inside KWC, but on the political level of the municipality. The process of explaining the project concept to the politicians, and to make them take the required tariff and other important decisions for project implementation according to the project agreements has required substantial twinning resources. It has taken much time to have the new approach to utility management and pricing principles of public goods accepted.

4.2 Kaunas Water Governance

The Board of KWC was created in April 1997 as a result of corporatisation, and much lobbying by NEFCO, EBRD and SWC. It is composed of seven non-executive members, representing the ruling political parties (three members), City Administration, the Kaunas Region, the local energy utility and university. This composition reflects modern governance understanding and is a commendable achievement. There seems to be an acceptance in principle that political representation on the Board should be extended to cover the leading opposition party.

4.3 Organisation and Management of Twinning

Relations with Sida

Many of the key reports (Work Plans and Budgets, Annual Twinning Reports) have been delayed or returned to SWC/KWC for clarifications and improvement. There is a lack of understanding at SWC about standards of good reporting in general and about Sida's reporting requirements in particular.

The Twinning Work Plan and Budget

There is no Work Plan that would give the objectives, scope of work, resource allocation and budget in the same document.

The budget for 1998 is well presented. About 42 % of the 1998 twinning costs (SEK 2,611,000) are Resident Adviser costs.

KWC Quarterly Reports

The general quality of budgeting and reporting at KWC is good. The budgets and periodic reports are clear, well designed and they are based on computerised data.

The KWC Quarterly Reports are clearly structured and well presented. The project information is comprehensive and detailed. Utility financial information could be better presented and deviations from budget explained.

Change Management

KWC has successfully introduced major - often painful - organisational changes with the support of SWC. An organisational innovation was to appoint the former Labour Union leader as Change Manager. He proved to be very competent and skilful in designing and implementing organisational changes. He quickly adopted modern management concepts, like the following:

- Division of KWC activities into core and non-core functions
- The necessity of cost savings to improve efficiency
- Redundancy support packages for voluntary leavers
- Decentralisation of decision making

The psychological climate at KWC is conducive to change and continuous improvement of cost-effectiveness. SWC's presence was important especially in the beginning to help design concrete measures for organisational change.

Mobilisation of experts

Although SWC did not have much in-house resources to be released for twinning, it successfully recruited good experts from outside. In addition to its widely acknowledged technical competence, SWC's team in Kaunas seems to have been strongest in organisational restructuring, human resource and personnel development and business planning. Financial management systems are weaker parts of business planning and need to be strengthened.

4.4 Studies and Plans

The following studies and plans were reviewed:

- Business Plan for 1997 - 2001 and Budget for 1997
- Kaunas Water and Environment Project Organisational and Human Resource Development Plan
- Kaunas Water and Environment Project Billing and Collection Plan
- KWC Information Technology (IT) Strategy

A good Business Plan is the most important guideline for the strategic restructuring of operations, investment planning and operational management. It should be the umbrella under which other, more detailed plans are placed. It should create a unified

understanding about the direction and objectives of future development in a clear, consistent format.

The KWC Business Plan only partly fulfils the requirements of a good business plan. The process of putting together the plan was evidently very much SWC-centred, as is stated in the Business Plan itself (Page 4):

"This Business Plan was compiled by Steen Bjerggaard (section 1, 5, 6 and 10), Jon Gudelis (section 2, 3, 4 and 7) and Bengt-Erik Olsson (section 8 and 9) from SWC and approved by Vytautas Ceringis of KWC and his management team."

The business planning process has not been installed at KWC in such a way that it would become an automatic part of the annual planning and budgeting procedures, with participatory input from all key business units.

The Plan itself covers most of the standard aspects of business planning. The following aspects deserve additional comments:

- The time frame of the plan is somewhat short (5 years) considering the major investment period. It could be increased to 10 - 15 years to cover the current investment and loan repayment period.
- The Plan should separate clearly short-term budget planning from strategic planning, and the investment project from the utility
- The Plan lacks specific objectives and performance targets
- The financial information is detailed, but difficult to read, and needs further processing
- Inflation accounting is confusing
- Affordability aspect is not adequately covered in financial projections

It would be critically important to adopt the Business Plan as the central management and planning tool, and ensure the consistency of all other plans and investment projects with the Business Plan. The General Manager must lead the preparation of the Plan. The process must be decentralised to the business units, and co-ordinated from the top.

It is understood the revision of the original business plan has been under preparation for some time. The updated business plan had not been approved by the Board by the end of March, 1998.

The other plans on billing and collection, organisational and human resource development and IT strategy are all solid, well prepared plans. The financial implications part of the various plans is generally missing or weak, and the plans are not linked to the KWC Business Plan in a consistent way.

4.5 Implementation of Investments

The various components of the investment project are 3 - 18 months delayed from the original schedule. The principal investment in the new wastewater treatment plant is 6 - 8 months delayed, start-up expected by mid-1999. The delays are mainly due to municipal decision making and shortage of local funding.

It is evident that the twinning arrangement has had a decisive, positive impact on the investment project. The SWC Resident Adviser (Assistant General Manager of KWC) has spent much time in interpreting the loan conditions, interpreting them to the local municipal leaders and explaining the rationale and necessity of sensitive decisions (tariffs in particular). This is widely acknowledged by KWC management and by municipal leaders.

The Project Implementation Unit (PIU) is now competent and well staffed. Its initial inexperience caused significant delays in loan disbursements. The PIU is now capable of managing the remaining bidding and procurement processes without a resident procurement specialist from abroad. The PIU operation was set up and staff trained within the twinning framework. The foreign advisers to support PIU were contracted with the help of SWC.

4.6 Financial and Operational Performance

According to the latest Quarterly Report (4th quarter of 1997) KWC has fulfilled all the financial and operational loan covenants. However the financial result of 1997 was unsatisfactory (Operating Profit LTL -2.9 million). The poor financial performance is largely due to political factors outside KWC's control. Without the support of SWC the company would have been in a far worse financial condition.

There are important national and municipal decisions that have had a direct negative impact on KWC's financial performance. The first one relates to the new national decree to base billing on apartment metering of water and making the water utility responsible for in-house piping. This decree has created a lot of confusion and is currently being reassessed by the Government. Secondly, Kaunas City Council has given new instructions on billing of non-metered customers, which is expected to generate a substantial loss to KWC (in terms of unbilled water).

The local and national decrees and decisions, which are essentially beyond KWC's control, may jeopardise fulfilment of certain loan covenants in 1998. Also availability of local funding for the project continues to be a problem.

4.7 Environmental Performance

When the new wastewater treatment plant is completed, it can be expected that all effluents will comply with the Helcom and EU standards and there will be a major positive impact on pollution in the Nemunas River and the adjacent area of the Baltic Sea. The twinning arrangement has created preconditions for good management and competent operations at the WWTP through training and advice.

4.8 Impact of Twinning

It is recognised that there is no widely accepted impact assessment methodology for project preparation, implementation and supervision consultancy. The impact is embodied in project quality, policy change, institutional development, training and similar outputs. It is not possible to compare with/without scenarios of individual project components, especially in the transition economies. Therefore, the chosen evaluation methodology in

this report is essentially qualitative, based on in-depth interviews with primary sources of information, the management of KWC and the management of SWC.

The KWC Board highly values the twinning arrangement. The Board training in Kaunas and in Stockholm for five Board members was considered crucially important to give direction to the new Board. The Board of KWC does not find the Service Agreement between the utility and the City necessary.

The management of KWC is convinced that without the twinning arrangement with SWC they would not have been able to prepare the project locally, nationally, or internationally.

The twinning arrangement had a decisive impact in the following areas:

- Optimal location of the new wastewater treatment plant
- Reorganisation of maintenance and network rehabilitation
- Preparation of the City politicians for tariff decisions
- Decentralised management concept and psychological change of staff attitudes
- Revised planning and budgeting decisions
- Core business and sub-contracting strategies
- Sustainability of change

More specifically, the Board and the management of KWC see the favourable impact of twinning in the following areas:

- SWC influence on Kaunas politicians at critical junctures of the project was decisive. As representatives of an internationally acknowledged water utility, SWC advisers evidently had an important impact on the local opinion in managing the complex investment project with new rules. KWC management considers it essential that the twinning partner is a water utility (not e.g. a consulting company). This utility-to-utility relationship increases the credibility and impact of foreign advisers. The magnitude of intensive interaction between the politicians and SWC was not anticipated in advance. This, however, was a critical impact of twinning. If SWC hadn't done it, it would have remained undone and delayed the project even more.
- The number of employees has been reduced by almost 20 % from 1022 in December 1994 to 841 in March 1998. Significant energy savings have resulted from careful analysis of energy consumption and related action plans. KWC's cost savings activities cover all main cost items.
- Billing collection has gone through a drastic change. KWC is in the process of bypassing the Municipal Housing Organisations (MUS) and establishing direct billing relations with flat-owners. SWC example, study tours to Sweden and assistance in creating the customer data-base have proven to be particularly useful results of twinning.
- SWC helped KWC to create the position of Financial Director and to get the new department organised. SWC provided training for the new Financial Director and his staff. Also the persons in the Municipality administration, formerly responsible for the company finances, received some training in IAS.

- The computer department at KWC is very active and competent. It has clearly benefited from SWC know-how. In some areas it is more advanced than SWC itself. The computer specialists of KWC are currently installing with confidence the financial management software, Scala, that has created much trouble elsewhere in the Baltic water utilities.
- Procurement and contract management is part of twinning in Kaunas (unlike in the World Bank projects). SWC has provided support for the PIU. This expertise has been partly contracted from outside SWC.

The connection between the project team in Kaunas and SWC was quite loose in the beginning. The key experts were recruited from outside SWC, and the home office support was inadequately organised. Better home office support would have improved the impact of twinning and it would have eased the relations between Sida and SWC.

4.9 Cost-Effectiveness

Twinning should be understood as an investment in management and training with a high return. It should be justified on commercial terms, and in principle KWC should be ready to pay the market price for it. In practice, all water and wastewater projects in the Baltic countries have benefited from grants from the Nordic countries to pay for the cost of twinning (and much of the cost of studies and engineering). If the Baltic utilities had been given the choice and asked to pay the market price for twinning, very little, if any, twinning in the present form would have taken place.

The budget for the second phase of Kaunas twinning is 12,3 million SEK. This is considerably more than the cost of twinning in the World Bank projects. However, if investment costs and city sizes are considered, KWC twinning is roughly in line with the other arrangements⁶. The question still remains, whether money could have been better spent.

One way of checking the cost effectiveness is to see if someone else could have done the same quality service at a lower cost. We therefore asked three senior consultants from two different companies (one technical consultant and two management consultants) to make a budget estimate for the project, based on the twinning agreement. Their estimates of the costs for implementing the twinning agreement varied between 15 and 18,5 million SEK. The reliability of this estimate is limited by the general nature of the twinning agreement.

Another approach would be to ask, whether it would have been possible to achieve the same results with less cost, which in practice means less involvement by foreign advisers? There is a general feeling that the presence of foreign advisers is important, but the timing and length of stay should be planned more carefully. Resident advisers must be highly qualified professionals, as is the case in Kaunas.

⁶ For quantitative comparisons, see Annex 3 (compiled by SWC)

The twinning input in terms of foreign specialist presence at KWC may not have been fully utilised due to three reasons:

1. Delays due to municipal decision making
2. Absorptive capacity of KWC organisation
3. Lack of proper liaison/backstopping at SWC home office

The twinning partners did not anticipate all the delays in the municipal decision making. The twinning arrangement was somewhat too rigid, and the work plans and resident expert commitments could not be changed at short notice. The timing of resident expert inputs was not necessarily ideal.

In 1996 - 97, there were 2-3 full time advisers at KWC (including PIU support)⁷. Although the Management of KWC is exceptionally competent and change-oriented, there is limit to the pace of individual and organisational change. Adding the number of experts does not always speed up the development proportionately. New ideas and management approaches require ample time for digestion. The situation would be somewhat different, if the foreign experts had actual management responsibility, as is the case in a Management Contract or in various forms of privatisation (a joint venture was proposed, but rejected in Kaunas).

4.10 Gender Issues

The gender distribution at KWC is not too bad for a technical institution. 43 % of the engineers are women and quite a few of the middle management. Not many workers are women – only 16 %. There are no women in the Top Management.

Lithuania seems to have a stronger tradition of female students at technical universities than the Western world. The younger female engineers at KWC reported that at their classes at the Technical Institute of Kaunas there had been very few male students – if any.

The interviewed women of KWC had experienced very little discrimination based on sex. To look at the working situation from a gender perspective was a new concept to the women. There is very little gender awareness at the KWC. There has been no development of strategies or policies to ensure equal opportunities for women.

The impact of the twinning agreement on the gender issues is difficult to estimate. The gender policy of SWC has recently been translated and brought to KWC to form a basis for discussions. The distribution between men and women participating in training, study tours and other parts of the twinning seems to have been fairly equal.

4.11 EBRD and World Bank Twinning Approaches

The EBRD and World Bank approaches to twinning are very much parallel. There are three main differences:

1. Bigger projects and twinning budgets in EBRD projects

⁷ See Annex 4 for details of SWC expert assignments

In Kaunas and in Riga, the twinning partners have operated with essentially bigger budgets than in the five World Bank projects (see Annex 3). But the budgets are, roughly speaking, proportionate to the size of cities and investment projects (the EBRD projects also include funds for PIU). The bigger budgets in Kaunas and in Riga have allowed a continuous presence of several foreign experts, which has not been possible in the World Bank projects.

2. Twinning has included PIU support in EBRD projects

In the World Bank projects PIU support has been organised and financed outside twinning, but supported with resident advisers. The difference is primarily administrative.

3. The World Bank has been more active in twinning supervision

The World Bank monitors the progress of its twinning projects within the framework of its semi-annual Supervision Missions. EBRD has left the systematic monitoring of twinning to the donor organisation (Sida).

The World Bank has taken a more active role in the supervision of twinning than planned. It has occasionally assisted the twinning partners in the critical areas of strategic planning, organisational restructuring and financial management. The issues and problems in the implementation of twinning have, however, been largely similar in all the seven Baltic utilities.

4.12 Sustainability

There is all reason to believe that the institutional and management changes observed at KWC are permanent and sustainable. The top management has initiated a major physical and mental turnaround process, and is committed to its completion.

The major threats of sustainability relate to the ability of KWC to keep its key top and middle managers and specialists motivated, and to provide the necessary financial and other incentives. The momentum of change must be maintained beyond the twinning arrangement and the completion of the investment project. The Company Board should pay special attention to the personnel issues, and secure good motivation through flexible pay policies and other incentives.

The other threats are largely external. The recent controversial Government decree to introduce apartment metering, and related municipal decisions, threaten to cause much confusion and frustration. This will inevitably lead to pressures for the best people to look for alternative employment.

4.13 Conclusions

Overall Impact

The overall impact of the twinning arrangement between KWC and SWC is overwhelmingly positive. With SWC's assistance, KWC has fulfilled EBRD's loan

covenants and fundamentally transformed its governance and management systems. The KWC management has adopted modern management approaches and practices faster than most - if not all - other Baltic utilities. The competence and style of the General Director and his key people deserve high marks. KWC is clearly among the best managed water utilities in the Baltic countries. It is successfully implementing one of the biggest water and wastewater investment projects in the Baltic countries. SWC's supporting role in the change process has been decisive.

EBRD's Role

The developmental objectives of EBRD's loan agreement (closely followed by NEFCO), expressed in the form of loan covenants, largely dictated the technical, financial and institutional objectives of KWC to the other stakeholders. It also laid down the scope and content of twinning. This was necessary and fruitful because of the inexperience of KWC and the local municipality. The covenants became the de facto work programme for twinning and for utility management. The twinning arrangement was the principal tool of the lenders and donors to support KWC to implement the loan covenants.

In spite of the many favourable effects of the "management by loan covenants", it didn't provide an adequate overall management framework for utility development. The list of loan covenants was long, and their implementation almost exhausted the resources of the twinning partners. The covenants covered many - maybe too many - important areas of institutional development, governance, financial, operational and environmental management, but in a fragmented way. They reflected legal and financial rather than business management approach to utility operations. They did not form a consistent business plan framework. The twinning arrangement failed to create its distinct identity, approach and work programme.

On the other hand, the specific nature of the loan agreements, and reference to measurable performance standards had the great advantage of providing specific, measurable benchmarks for KWC, and of directing the work of all stakeholders towards concrete objectives and milestones.

Sida's Role

The twinning process could have been better structured (by Sida) from the beginning. This would have improved the cost-efficiency and positive impact of twinning. After the first phase of twinning, Sida should have requested a detailed proposal and work plan for the second phase from SWC (and possibly from other utilities), before signing the twinning agreement. SWC's proposal should have gone beyond EBRD loan covenants and presented a "holistic" business approach, under the Business Plan umbrella. The objectives of twinning should have been connected with KWC's performance targets (productivity, environmental and financial). This would have created the measurable indicators, time schedules and cost allocations, which would have allowed smooth monitoring of progress. In Kaunas, SWC moved to concrete hands-on work to assist KWC management in project implementation and institutional development - and did a very good job at that.

Public Information

The local instability of transition was largely beyond the control of the international financial institutions and donors like Sida. However, the international community should have spent more effort on public information before signing of the loan agreements, to get broad-based public support for the project. In this context, also the twinning proposal should have been presented to public scrutiny and debate.

SWC's Project Management and Reporting

SWC is not used to Sida's reporting practices, which are customary, standard features of professional project business and of management and engineering consultancy. It is a typical home office support activity in an international project. Sida is accountable to the taxpayer and cannot authorise substantial expenditures without proper documentation. Good quality planning and reporting to client specifications should be a self-evident starting point for any organisation or individual, interested in working with Sida.

The SWC home office was not up to its task. This created a negative impression of SWC/KWC twinning at Sida. The flaws in planning reporting also raised doubts about the quality of overall management of the twinning process. SWC responded to Sida's criticism by writing longer twinning reports - a fundamentally wrong interpretation of Sida's requirements.

Twinning Objectives

Most twinning objectives in Kaunas are too general to guide concrete work. They can be interpreted - and are being interpreted - in various ways. As a result of the vaguely formulated objectives, it is often impossible to establish to what extent the objectives have been reached. This leaves too much scope for subjective interpretation.

Lack of specific objectives does not mean that favourable development couldn't take place. If the results are good, as is the case in Kaunas, it may be due to the correct interpretation of poorly formulated objectives.

Business Plan

Two central management tools, the Business Plan and the annual Budget, should create the frame and consistency for all planning activities. The operational plans should fit under the umbrella of a solid Business Plan. Unfortunately this has not happened in Kaunas. The first version of the Business Plan, produced in September 1996 was reasonably good, but it has not been properly updated. Therefore, KWC now has a pile of fragmented plans of varying quality (some of them are quite good), but they have not been processed and crystallised into a consistent, up-to-date Business Plan (partly due to delays at Board level).

Kaunas Twinning Refocused

The loan covenants of the lenders have now been fulfilled, and the KWC management team has the competence to manage day-to-day business in a professional manner. The remaining twinning period (until the end of 1999) should be refocused on a few priority

issues instead of long lists of fragmented activities and tasks. The priority issues include proper installation of the KWC business planning process, supporting the adoption of the computerised financial management system, WWTP commissioning, and the consolidation of twinning achievements. This would require a solid work plan and budget, which do not exist at the moment.

5. TOWARDS COST-EFFECTIVE TWINNING

5.1 The Concept of Twinning

A process of redefining the roles of the public and private sectors started in the early 1980's and has gained momentum ever since. This process has profoundly affected both the transition countries of Central and Eastern Europe and the western market economies, including the Nordic countries. Some countries prefer straight privatisation of productive activities, including the public utilities. The Nordic approach is more gradual, maintaining the core services of utilities in public hands. Many support services are subjected to private sector competition. The Nordic approach is preferred by the Baltic countries, although in some areas (e.g. corporatisation and utility governance) the Baltic countries are moving faster towards private sector concepts than the Nordic countries. Ultimately, also the Nordic twinning concept will be judged on the basis of its cost-efficiency vis-à-vis other alternatives of providing technical assistance for institutional development.

Twinning is a generic word for co-operation between two organisations with different backgrounds to foster institutional change. Some people interpret it as some form of "friendship city" activity, others expect high-impact professional services. There is no uniform definition for it. Also the issues and the solutions vary from country to country and from sector to sector. It would be important to clarify the key features of the twinning concept in advance (before entering into twinning agreements), and specify the roles and expectations of all participating stakeholders.

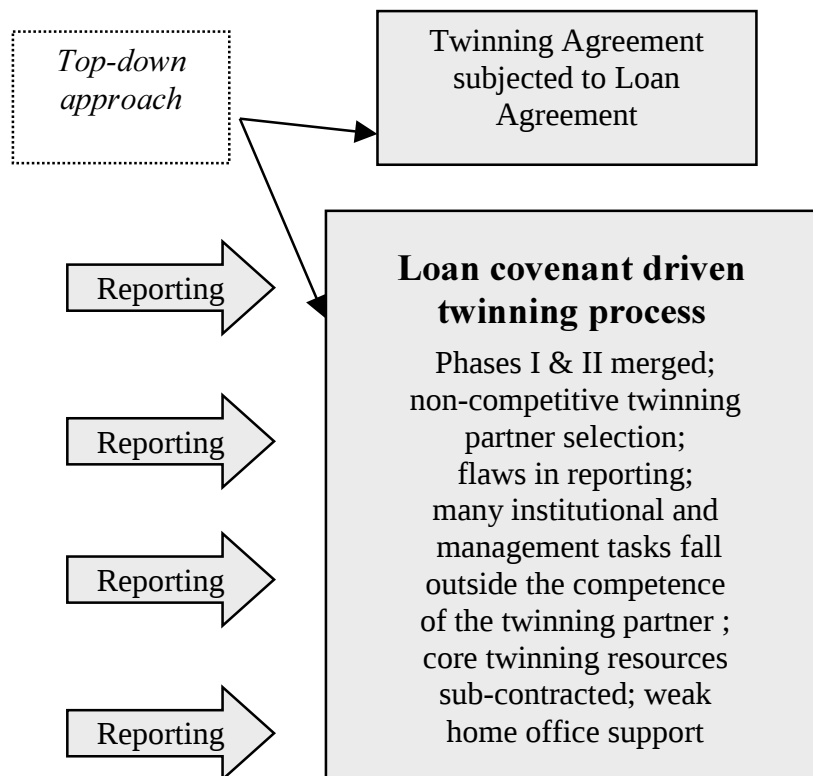
5.2 The Twinning Process

The twinning partners have not normally been selected by project sponsors on the basis of bidding; instead, they have often been selected on the basis of earlier contacts and suitability considerations - which has its advantages. The preparatory phase of twinning has not produced a twinning work programme, based on documented diagnosis of target utility operations with specific, measurable, consistent performance objectives, independent from and in addition to the loan covenants.

Figure 1 below illustrates the main elements of Kaunas twinning process, observed also in some other twinning projects in the Baltic countries:

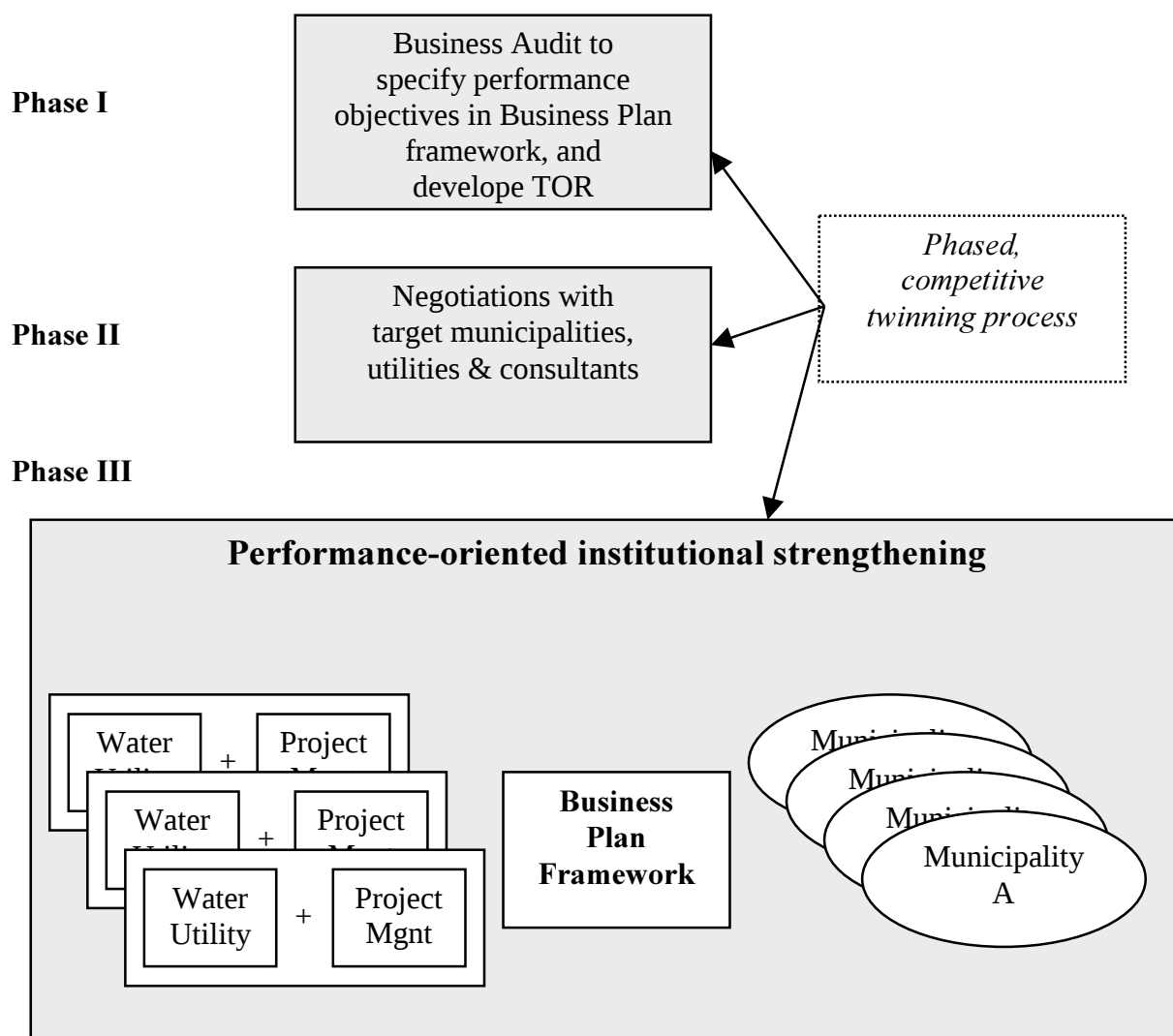
Figure 1

Kaunas Twinning Process



5.3 Cost-Effective, Performance-Oriented Twinning

The twinning process could be divided into three distinct phases, as illustrated in Figure 2. It would be important to carry out a diagnostic institutional analysis as a first step of twinning. It would lead to a focused Business Plan, which would cover the key performance targets (financial, operational, commercial and environmental) of the utility and the investment project. It would also detail the responsibilities of each of the stakeholders in the implementation process. The Business plan would be Sida's key document for the negotiations with the target municipalities and the TA consultants. The Phase I consultant should be different from Phase II consultant. The process should enter Phase III only after all stakeholders (including the general public in the target municipalities) are fully committed and understand the nature of the process and its implications on environment, service quality, tariffs, employment etc.

Figure 2**Proposed Twinning Process**

Public information about the investment project and twinning should be actively spread to avoid a feeling of forced conditions and requirements that do not leave much scope for local decision making.

The consultants for Phase II should be professionals of international project management and institutional development of water utilities in transition economies, and they should associate themselves with water utilities as twinning partners. The utility-to-utility co-operation is essential in the technical areas of twinning. It also enhances the overall credibility of foreign advisers.

One full-time resident advisor essentially facilitates twinning co-operation. The rest of twinning work should be based on well-planned short-term expert inputs with project focus. Increasing the number of resident advisers easily leads to reduced cost-effectiveness, as the absorptive capacity of the utility management easily becomes the limiting factor.

The selection of key persons is critically important for twinning: the Resident Adviser should be a senior person from the partner water utility. He would ideally have two roles: (1) An experienced water utility professional capable of giving advice on practical issues, and (2) a liaison officer, channelling short-term (technical) resources to twinning.

As the water utilities are normally quite weak in institutional strengthening and management development, the main technical assistance contract should be with an experienced management consultant with references in institutional and organisational restructuring, corporatisation and governance, management systems, and hands-on management in transition economy environment.

Competition and bidding should be applied in all phases of the process: selection of consultants, target municipalities and twinning partners. The target municipalities should participate in the selection of twinning consultants and utility partners.

There is a definite need for more training for the Swedish consultants and utility experts in the principles of twinning in general, and in the specific performance issues of the target utilities in particular. The training should be organised before the twinning activity starts, and it should be based on the Business Plan prepared in Phase I.

The present twinning concept gives a challenging opportunity for Swedish utility experts to widen their horizons and apply their knowledge and experience to new operating conditions. Often they are required to work hard in difficult conditions (in addition to their duties in the Swedish home base) and to solve problems in a time consuming manner.

For Swedish utility employees (vs. sub-contracted experts) there are no financial incentives to accept the extra responsibilities on individual level. The participating experts normally have to extend the working hours to cope with both home utility and twinning arrangement responsibilities without additional compensation. This often leads to sub-contracted resources, which contradicts the original twinning idea.

The law forbids the Swedish water utilities to make profit. They do not have a financial incentive to improve the cost-efficiency of twinning. After initial enthusiasm, the twinning co-operation often becomes a second priority for the management and staff of the utilities.

The explicitly stated, measurable performance targets for twinning co-operation, tied to the implementation of investments and to the utility operations, make regular (twice a year) supervision necessary and possible. As the relative role of the international financial institutions (EBRD and the World Bank) diminishes in the Baltic countries and in the smaller water utilities, the donors like Sida need to pay more attention to supervision. It would be natural to employ the Phase I consultant for supervision of twinning implementation in Phase III.

6. RECOMMENDATIONS TO STAKEHOLDERS

Swedish International Development Cooperation Agency (Sida)

- Should clarify what it means by twinning and specify its expectations
- Should carefully evaluate the resources and capabilities of twinning partners and key twinning advisers before making long-term, multi-million SEK commitments
- Should carefully select target utilities to secure full commitment to twinning objectives
- Sida should specify required planning and reporting routines from twinning partners and request professional home office support
- Should encourage management consultants and water utilities to join resources and bid together for twinning projects
- Should enforce cost-efficiency of twinning through careful project preparation and selection of twinning partners, phased implementation of twinning, and tying twinning objectives to utility performance objectives
- Should adopt the utility Business Plan as the key management tool
- Should provide project-focused training for twinning stakeholders
- Should include utility governance into twinning: installation and training of a non-executive Board
- Should organise twinning supervision to secure expected results and to provide immediate reaction to deviations
- Should request a revised Work Plan from SWC and KWC for the remaining twinning period

Stockholm Water Company

- Should revise its Work Plan and refocus its twinning operation in Kaunas on a limited number of key issues with the aim of consolidating the new management approach and securing the frictionless commissioning of the new wastewater treatment plant
- Should express performance objectives within the framework of a consistent Business Plan
- Should provide professionally managed home office support.

Kaunas Water Company

- Should install the strategic/business planning in such a way that it becomes an automatic part of annual planning and budgeting processes, with participatory input from all key business units and co-ordination from the top
- Should make Business Plan the central planning and management tool, and ensure the consistency of all other plans and investment projects with the Business Plan
- Provide incentives for the personnel to motivate key people to remain at KWC

Kaunas Municipality

- Should secure local funding for the project in a timely manner
- Should adopt owner's role and delegate tariff and other operational decisions to the Board of KWC
- Should include representation of the political opposition on the Board

- Should strictly follow the contractual obligations with international financial institutions and donors
- Should refrain from implementing local and national decrees, particularly about water metering and billing, which may jeopardise KWC's financial health and fulfilment of loan covenants

Lithuanian Government

- Should reconsider its decree on apartment-level water metering, and provide a sustainable legal and administrative solution to the issue of apartment building ownership and governance
- Should allow water utility privatisation on experimental basis, following the rules of the international financial institutions, and encourage efficiency-enhancing reforms in the water utilities

Financial Institutions

- Should continue to require institutional reforms and efficiency improvement as loan conditionality, and introduce strategic management by Business Plan instead of management by loan covenants

ANNEXES

- 1. Terms of Reference**
- 2. List of Interviews**
- 3. Cost-Effectiveness of Twinning in Selected Baltic Cities**
- 4. SWC Twinning Experts at KWC**

Annex 1: Terms of Reference

Sida/Dept for Central and Eastern Europe/MAT 980202 (revised)

TERMS OF REFERENCE for review of twinning cooperation between Kaunas Water, Lithuania and Stockholm Water

Background

Sida finances twinning cooperation in six water and wastewater projects, four of them are World Bank financed projects and two are EBRD financed projects.

The overall objective of the twinning is a sustainable water and wastewater management to achieve long term environmental effects of the investment projects. To achieve this local water companies need to be strengthened to become independant municipal companies, financially self-sustaining and to be able to initiate changes in the organisation by themselves. The method to strengthen these local water utilites has been through twinning cooperation with Nordic water works. However, the organisation and methods of the twinning cooperation to achieve the objective vary. In EBRD financed projects more resources is allocated for twinning, e g in Kaunas Stockholm Water has 3-4 permanent advisors, i a vice Managing Director, vice Financial Director, as well as support to the Project Implementation Unit. In the World Bank supported projects in i e Klaipeda and Liepaja the resources allocated is about 1/3 and here the twinning partners meet at regular intervals in working groups and the support to PIU is separated from the twinning.

Most of these twinning cooperations have now been going on for about 1,5 - 3 years. The twinning includes new management and administrative procedures and systems and organisational development, improved operation and maintenance practices and policy for external relationships (with owner - the municipality - and with the customers).

The progress of the work and the results achieved so far vary. In Kaunas a lot of resources have been dedicated to political issues i e to explain the project concept to the municipality in order to make the politicians decide on tariff increases according to project agreements. But the work has so far also resulted in business plan, billing and collection plan, computer strategy etc. The involvement of the people in Kaunas water in these plans is not clear or to what extent they will be able to implement the plans. In Klaipeda, Liepaja and other projects the start of the twinning cooperation has developed promising but slow and the acheived results not always in relation to expectations, in particularly with regard to management and organisational issues.

Thus, Sida has gained some experience of twinning cooperation and of the results achieved so far. The two approaches of twinning cooperation have different advantages. With more money and consultants permanently present the EBRD-model certainly has good prerequisites to achieve good results within the specified time, but there is also a risk that results are achieved at the expense of a real transfer of knowledge to the organisation and that the work will not continue once the foreign consultants have returned home. The other approach is less costly, but here progress have been slow.

Apart from the institutional development of a specific organization, another aspect of interest is the more general effect of the twinning cooperations i.e. on municipalities as owners of municipal companies and also how other municipal water companies could gain from this experience and cooperation i.e. smaller municipalities.

Sida plans to undertake a review of the experience gained so far in order to see if changes and improvement can be made in the ongoing twinning cooperation with regard to the objectives, the expectations, the allocated resources, etc but also to draw conclusions for future institutional strengthening projects and the role of Swedish water utilities. The twinning cooperation in the World Bank supported projects are closely monitored by an independent management consultant, whereas the EBRD projects do not have a similar monitoring of the twinning.

As an input to Sidas review of the twinning cooperation in general a specific review of the Kaunas twinning cooperation would be useful as a comparison to the other twinning approach in terms of cost-effectiveness. To this end Sida plans to assign an independent consultant to review the twinning cooperation between Stockholm Water and Kaunas Water.

Kaunas

Sida/BITS has supported the development of the water and wastewater sector in Kaunas since 1990 through various studies and training programmes. Since 1994 Stockholm Water has been involved in institutional strengthening of Kaunas Water as a twinning partner. The first twinning cooperation between Stockholm Water and Kaunas Water started in August 1994 and was completed in December 1995. It was essentially directed to prepare for a large investment project to be financed by EBRD, NEFCO, Finland, Sweden etc but it also included tasks aiming at institutional strengthening. The second phase of the twinning is institutional strengthening as well as support to the PIU as part of the investment project. The first phase of the twinning amounted to 4.1 million SEK and the second phase to 12.3 million SEK over a 3-4 year period.

Twinning Agreements, terms of reference as well as work plans and budgets constitute the basic documents for the work, the results can partly be seen in reports and the various plans presented.

Purpose of assignment

The purpose of the review is to evaluate the cost-effectiveness of the twinning cooperation in Kaunas i.e. will the twinning cooperation lead to an independent municipal company, financially self-sustained and develop the organisation's ability to change within the time frame given and the resources allocated? The relevance of the Swedish water utilities competence to fulfill the objectives and the tasks should be reviewed. The method should be evaluated in comparison to the other twinning method using less resources and without the permanent advisors. (This comparison is reciprocal and should also aim at drawing relevant conclusions for improvement in the other twinning cooperations.) A second purpose is to suggest how the institutional strengthening could be improved in general in the ongoing twinning cooperation and present ideas on how it can be structured in the future, the role of Swedish water utilities, etc in institutional strengthening components/project. Finally, a purpose is to evaluate and draw conclusions on the general effects of the twinning on municipal development and how other municipal water companies could gain from this experience.

Scope of assignment

In his task the consultants shall:

- review the documentation forming the basis for the work i.e. Terms of References, Twinning Agreement, Work plans and budgets.
- review the reports, quarterly reports, the business plan, collection and billing plan etc.
- visit Kaunas and conduct interviews with Kaunas Water company, its board and municipal representatives, permanent advisors as well as relevant staff at Stockholm Water home office.
- assess and describe the results achieved so far in relation to the objectives and the costs.
- discuss and compare the method used in the Kaunas twinning with the method used in the other projects (Liepaja).
- assess the relevance of competence provided by Stockholm water to accomplish the various tasks included in the twinning
- suggest improvements of work plans, budgets and the structure of the cooperation.
- suggest steps in the cooperation to make the institution aware of gender issues in its organisation
- suggest relevant indicators to measure and monitor the results of the twinning cooperation.
- suggest any modifications to the on-going twinning programmes in Kaunas and in other cities (Klaipeda, Liepaja etc) as a result of the review.

- describe general effects on society of the institutional strengthening ie on municipal development and discuss possible effects of this experience on other water utilities in the country.
- present ideas on how institutional strengthening components could be structured in the future, the role of Swedish water utilities in this context. Of special interest is the organization of institutional strengthening in small and medium sized municipalities.

Implementation and reporting

The work shall be carried out by an experienced management consultant (and an organisational expert) involving a maximum work load of 3 (4) weeks.

The assignment is expected to start in March 1998 and it should be completed by 8 April. A visit to Kaunas is foreseen in March during 3-4 days.

A final report in English shall be submitted to Sida at the latest by 8 April, Before finalisation and submission of the report the consultant shall discuss conclusions and recommendations with Sida.

Annex 2: List of Interviews

Conducted by Martti Lariola and Birgitta Danielsson

SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY (SIDA), STOCKHOLM, SWEDEN

Mr. Lars Eklund	Division Chief
Mr. Torbjörn Ramberg	Programme Manager
Mr. Mikael Svingby	Project Manager
Mr. Marianne Tegman	Programme Manager

KAUNAS WATER COMPANY AND KAUNAS MUNICIPALITY KAUNAS, LITHUANIA

Mr. Ricardas Barasnevicius	Construction Director
Mr. Vytautas Ceringis	General Manager
Mr. Alydas Dipartas	Technical Director
Mr. Dainius Gudavicius	Director, Water Supply Department
Mr. V. Jurgaitis	Personnel Director
Mr. R. Kalvaitis	Change Manager
Mr. V. Navickas	Director, Wastewater Department
Mr Vytautas Petrauskas	Manager, Computer Technology Department
Mr. Darius Stonis	Financial Director
Ms. Elena Svaziene	Manager, Consumer Services
Mr. Valdimaras Pavilionis	Chairman of the Board, KWC
Dr. Juozas Kameneckas	Deputy of the City Council

STOCKHOLM WATER COMPANY, STOCKHOLM, SWEDEN

Mr. Lennart Berglund	Home Office Coordinator
Mr. Steen Bjerggaard	Baltic Sea Manager of SWC
Mr. Stig Björsten	Assistant General Manager of KWC
Mr. Åke Jonsson	Technical Director, O & M Department
Ms. Ingvor Lindqvist	Internal Consultant
Mr. Sven-Erik Skogsfors	Managing Director of SWC

Annex 3: Cost-Effectiveness of Twinning in Selected Baltic Cities

Town	Inhabitants	Total Project mUSD	Number of employees	Phase of TA	Sida's TA-part mSEK	Duration years	TA in % of total project cost	TA in SEK per mUSD project cost	Project in USD per inhabitant	TA in SEK per inhabitant	TA in SEK per employee	TA in mSEK per year
Klaipeda	206000	22.0	472		5.5	4.0	3.6	250000	107	27	11653	1.4
Siauliai	148000	21.0	483		2.2	4.0	1.5	104762	142	15	4555	0.6
Haapsalu	15000	8.3	?		3.0	4.0	5.2	361446	553	200	?	0.8
Liepaja	114900	20.0	270		4.4	4.0	3.1	220000	174	38	16296	1.1
Daugavpils	128200	22.3	368		3.5	4.0	2.2	156951	174	27	9511	0.9
Average	122420	18.7	398		3.7	4.0	3.1	218632	230	61	10504	0.9
All five	612100	93.6	1593		18.6	20.0	2.8	198718	153	30	11676	0.9
Kaunas	430000	104.3	1022	TA I	4.1	1.0	0.6	39310		10	4012	4.1
				TA II	12.3	4.0	1.7	117929		29	12035	3.1
				TA total	16.4	5.0	2.2	157239	243	38	16047	3.3
Riga	916500	115.0	1596	TA I	2.9	0.5	0.4	25217		3	1817	5.8
				TA I delay	2.9	0.5	0.4	25217		3	1817	5.8
				TA II	15.1	4.0	1.9	131304		16	9461	3.8
				TA total	20.9	5.0	2.6	181739	125	23	13095	4.2
Average	673250	109.7	1309		18.7	5.0	2.4	169489		30	14571	3.7
Both	1346500	219.3	2618		37.3	10.0	2.4	170087		28	14248	3.7

Note: Exchange rate SEK/USD=7

Source: SWC

Annex 4: SWC Twinning Experts at KWC

	Year	94	95				96				97				98	
	Quarter	1	1	2	3	4	1	2	3	4	1	2	3	4	1	2
LONG-TERM																
S. Bjerggaard (1)	**	***	***	*	*	*	***	***	*	*	*	-	-	-	-	-
S. Björsten										*	***	***	***	***	***	***
B-E Olsson					**	***	***	***	***	***	***	**		**	*	
B. Lundström										**	***	***	***			
SHORT-TERM																
J. Gudelis					**	***	*	**	*	*	*	*	*		-	
P. Hådel	***	***	**													
B. Moreau									**	*		-	-			
U. Öberg					**	**	*	*								
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HOME-OFFICE																
I. Möllersten					-	-	-	-								
M. Tendai									-	-						
L. Berglund												-	-	-	-	-

Note: (1): Second half of '95 and '96 in Riga part of time

Source: SWC

Sida Evaluations - 1998

- 98/6 Sustainability and Partnership. Sida supported cooperation between Swedish and Baltic Non-governmental Organisations. Peter Winai
Department for Cooperation with Non-Governmental Organisations and Humanitarian Assistance
- 98/7 Sewerage and Water Sector Projects in Egypt. Nigel Nicholson, Nemat Guenena
Department for Infrastructure and Economic Cooperation
- 98/8 Sida Support to ten Projects at the Geological Surveys of Estonia, Latvia and Lithuania. Torsten Toksvad, Janis Prols.
Department for Central and Eastern Europe
- 98/9 Programas de MCED/DERECHOS del Niño de UNICEF en América y en el Centro Internacional para el Desarrollo del Niño de UNICEF(ICDC). Benno Glauser, Eva Lithman, Riccardo Lucchini
Department for Latin America
- 98/10 Swedish Support to the Power Sector in Vietnam. Bo Sedin
Department for Infrastructure and Economic Cooperation
- 98/11 Public Auditing in Southern Africa. Kathy M Higgins, Matsobane Putsoa
Department for Democracy and Social Development
- 98/12 The Asian Regional Research Programme in Energy, Environment and Climate. J M Christensen, G A Mackenzie
Department for Research Cooperation SAREC
- 98/13 Selected Aspects on the University System of Nicaragua. Yolanda Rojas, Jörgen Dahlgren
Department for Research Cooperation SAREC
- 98/14 Expanded Programme on Immunization in Zimbabwe. Per Anders Björkman, Davies Gordon Dhlakama, Birger Carl Forsberg
Department for Democracy and Social Development
- 98/15 Community-based Rehabilitation Programme in Zimbabwe. S Chidyausiku, J Munandi, M Marasha, D Mbadzo, F Mhuri, H Oppelstrup, C Nleya
Department for Democracy and Social Development
- 98/16 SAREC Supported Dryland Research Programmes in East Africa. David Gibbon, Bruce Campbell
Department for Research Cooperation SAREC
- 98/17 Environment-friendly District Heating in China: Five Investment Projects Supported by Concessionary Credits from Sweden. Karlis Goppers
Department for Infrastructure and Economic Cooperation
- 98/18 Sida Supported Development Cooperation with Thailand 1986-1998. Contract Financed Technical Assistance and Concessionary Credits in Energy, Environment, Transport, Public Administration and Finance. Leif Grahm, Ann Charlotte Bauer, Gösta Eléhn, Nils-Gunnar Hasselberg, Lars-Olof Eliasson, Roland Duberg, Göran Levin, Ulf Weilding
Department for Infrastructure and Economic Cooperation
- 98/19 Twinning cooperation between Kaunas Water Company, Lithuania and Stockholm Water Company. Martti Lariola, Birgitta Danielsson
Department for Central and Eastern Europe

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