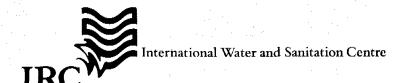
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#### The Socialist Republic of Vietnam

#### The Republic of Finland

**Haiphong Peoples Committee** 

Ministry for Foreign Affairs Department for International Development Cooperation

# Haiphong Water Supply and Sanitation Programme, Phase IV

**Volume IV Sub-project Construction Management Support** 

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# Haiphong Water Supply and Sanitation Programme, Phase IV

## (VOLUME I

Programme Phase IV Outline Document)

#### (VOLUME II

Sub-project Technical Assistance, Training and Studies)

#### (VOLUME III

Sub-project Financing Support to Households)

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# Abbreviations and Acronyms

B - billion

CA - Construction management adviser
 CMA - Corporate management adviser
 CPA - Community participation adviser

DIDC - Department for International Development Cooperation (formerly

FINNIDA)

DOSTE - Department of Science, Technology and Environment

DPI - Department of Planning and Investment

ESA - External Support Agency FMA - Financial management adviser

FIM - Finnish markka

GIS - Geographic information system

GOF - Government of Finland GOV - Government of Vietnam GPS - Global positioning system

HH - Household HP - Haiphong

HPPC - Haiphong People's Committee

HPWSSP - Haiphong water supply and sanitation programme

HRD - Human resources development

IDA - International Development Association

JFG - Japanese Government Fund

JICA - Japan International Cooperation Agency

M - Million

MEIP - Metropolitan Environmental Improvement Program (of WB)

MIS - Management information system
MOC - Ministry of Construction of Vietnam

MOSTE - Ministry of Science, Technology and Environment of Vietnam

MMI - Ministry of Mines and Industry of VietnamMOWR - Ministry of Water Resources of Vietnam

MPI - Ministry of Planning and Investments of Vietnam

MSW - Municipal Solid Waste

NA - Network Adviser

NGO - Non-governmental Organisation

NWR - Non-revenue water / unaccounted for water

O&M - Operation and Maintenance

PD - Project document

Phuong - City ward (size varies; approximately 2,200 households, or about 10,000

people, on average in the 1B Project phuongs)

PMU - Project Management Unit (of Haiphong SADCO, unless specified

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othervise)

PSE - Public Service Enterprises

RF - Revolving Fund

SADCO - Haiphong Sewerage and Drainage Company Company (of Haiphong,

unless specified otherwise)

SANDEC - Department of Sanitation for Developing Countries, Swiss Federal

Institute for Environmental Science & Technology

UNDP - United Nations Development Programme

USD - United States Dollar TA - Technical assistance

To - Sub-division of a *phuong*, typically around 20 households

TOR - Terms of Reference

TUPWS - Haiphong Transport and Urban Public Works Services

URENCO - Haiphong Urban Environment Company

VND - Vietnamese Dong WB - the World Bank

WSCO - Water Supply Company (of Haiphong, unless specified otherwise)

WU - Womens Union WWA - Water works adviser

1B Project Haiphong component of the World Bank-assisted Three Cities

**Sanitation Project** 

Contract A 1B Project contract for cleaning and evaluating the sewerage

and drainage system in Haiphong

Contract B 1B Project contract for rehabilitating and extending the

sewerage and drainage system in Haiphong

# 1. Summary

A reference is made to the Volume I of the Project Document for Phase IV for background information

This document is a part of the Project Document for the HPWSSP covering years 2000 to 2004. The sub-project Construction Management Support, discussed in this VOLUME IV, is directed to SADCO as the organisation entering into a major investment project. The boundaries of this sub-project are governed by the boundaries of the WB/IDA project 1B.

# The two other sub-projects are both discussed in separate volumes of the PHWSSP, Phase IV Project Document. The five volumes are:

- Volume I: Programme Phase IV outline Document
- Volume II: Sub-project Technical Assistance, Training and Studies
- Volume III: Sub-project Financing Support to Households
- Volume IV: Construction Management Support
- Volume V: Annexes and Abbreviations

All three sub-projects are functionally separate entities, which can be contractually regarded as separate projects inside the Programme, if so decided.

The ultimate beneficiaries of the sub-project Construction Management Support are the people of Haiphong, whose supply of water and waste water collection and drainage will improve, and their environment will become better due to improvements in solid waste management. The people will also, through their participation in the planning and implementation of these improvements, gain advocacy skills and become more effective in ensuring that sustainable and affordable services are provided to the truly needy.

The immediate beneficiaries of sub-project Construction Management Support will be SADCO, which through the Sub-project will receive support and technical assistance in managing the investment project 1B funded by the WB/IMF. Besides improving their current operations, this support will also help them better to plan for future expansion, and to attract and effectively utilise investment funds.

The overall objective of the Programme is:

Good water supply, sewerage and drainage, and sanitation service for the people and customers in Haiphong as well as improved quality of the environment.

The purpose of the Programme is:

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Improved performance of the water supply, sewerage and drainage, and sanitation organisations towards well functioning and financially self-sustaining public enterprises

The purpose of the Sub-project Construction Management Support is:

Professional contract supervision of contracted construction works in the Haiphong sewer network

This purpose is fully consistent with, and supports, the National policies for urban water supply and urban wastewater collection and sanitation.

The results expected from this Sub-project is:

• Construction of WB/IDA funded investment project is 1B professionally well managed

There are a number of assumptions and risks. They are presented in chapter 4.

The support will be support to construction management. The details of the physical and non-physical inputs will be defined in the annual Work Plans and agreed on Supervisory Board meeting.

The construction management support team will consist of few, mainly long-term advisers, with expertise on construction management and acting as the "Engineer" of the construction project 1B funded by the WB/IDA, Haiphong component. The estimated foreign component costs, covered by the Government of Finland, are summarised as follows:

FIM in thousands

Construction management: SADCO 17,000

Total 17,000

The local component costs estimate is presented in Volume I

# 2. Background

## 2.1 Sector policy

The developments in political, social and economic life, which started already during the latter half of the 1980's, have continued steadily. The "Doi Moi", renovation has marked a new period in the development of the country. The transfer from a socialist centrally led economy to a market oriented one is continuing. However, difficulties are met and the speed of the transition appears slower than expected. This applies especially to the public service provision. The necessary independent decision making inside the "public-private-enterprises" still meet political interference and lack of authorization.

In relation to the water supply and sanitation the present policy is based on the "National Urban Water Supply Strategy". It stipulates that the long-term objective is to establish provincial water supply companies as autonomous, self-sufficient undertakings. The same principle applies also to the sewerage and solid waste management. It is based on the "National Urban Waste Water Collection and Sanitation Strategy". It includes also the principle: "polluter pays" which means gradual cost recovery.

# 2.2 Connection to WB/IDA financed investment project 1B

The Government of Vietnam has received a credit from the International Development Association (IDA) towards the cost of Vietnam Three Cities Sanitation Project, which will rehabilitate and expand the sewerage and drainage systems in Haiphong city, in Halong city and Cam Pha in Quang Ninh Province, and in Da Nang city. The Environmental or Sewerage and Drainage Company (SDCO) in each city/province will implement its respective Sub-Project, including the employment of contractors to supply and install equipment and construct works, and employment of consulting engineers as the Construction Management Consultant (CMC) to manage the contracts. In Haiphong the Haiphong Sanitation and Drainage Company (SADCO) will be the Employer.

Procurement of the works and goods financed by the credit will be conducted as international competitive bidding through the procedures specified in the World Bank's Guidelines: Procurement under IBRD Loans and IDA Credits dated January 1995, revised in January and August 1996, September 1979 and January 1999, and is open to all bidders from eligible source countries as defined in the Guidelines

The Construction Management Support (CMS) will be financed by a grant of Government of Finland. The consultant will be selected in accordance with the

procedures and guidelines of the Ministry of Foreign Affairs of Finland. Further the qualifications and experience of the consultant shall be satisfactory to IDA.

# 2.3 Present situation in Haiphong.

A reference is made to the Volume I of the Project Document for Phase IV for background information on the present situation in Haiphong.

# 2.4. Beneficiaries and parties involved

#### 2.4.1 Beneficiaries

The ultimate beneficiaries of the sub-project Construction Management Support are the people of Haiphong, whose supply of water and waste water collection and drainage will improve, and their environment will become better due to improvements in solid waste management. The people will also, through their participation in the planning and implementation of these improvements, gain advocacy skills and become more effective in ensuring that sustainable and affordable services are provided to the truly needy.

The immediate beneficiary of the sub-project Construction Management Support will be SADCO, which through the Sub-component will receive support and technical assistance in managing the investment project 1B funded by the WB/IDA. Besides improving their current operations, this support will also help them better to plan for future expansion, and to attract and effectively utilise investment funds.

#### 2.4.2. Parties involved

The focus of this Sub-project will be SADCO because of its incoming large investment project, which requires capacity that has not been possible for SADCO to develop because of the inadequate funding base for investments and sufficient O&M.

#### 2.5. Problems to be addressed

#### **Problems**

A number of improvements, physical and non-physical, have taken place during the implementation of the HPWSSP. The work, however, is not nearly done, and probably will never be a task-completed-and-never-in-need-of attention. Over time the degree of external support will decrease, and before that the relative importance of individual problems to be addressed will vary. The basic nature of problems has not necessarily been changing, but the environment in which they are addressed has changed. Because of this the problem analysis in this document has been based on the work carried out during the previous project preparation cycles, besides the preparation mission's own observations as well as discussions with the parties concerned. The present-day problems to be addressed may be presented as follows:

- (a) SADCO lacks the experience needed to manage large-scale operations and investments. Because of continuously inadequate funding and other resources SADCO has not been able to gather experience to manage operations exceeding every-day emergency measures.
- (b) Surface water and canals in the city are polluted. Untreated sewage is discharged directly or through overflows to canals, open-surface watercourses and coastal waters in or adjacent to the city.
- (c) Flooding of living areas cause health hazards. The poorly functioning combined sewer system results in frequent flooding during the rainy season. The flood water mixed with raw sewage can easily enter underground water storage tanks and inundates houses, causing serious health problems, very unsatisfactory living conditions, and a decrease of property value.

The reasons for the above shortcomings are economical, institutional, managerial and technical.

#### Underlying reasons

Underlying these problems are a number of factors which together create an environment where there is little incentive to improve organisational performance, and where it is too easy for staff to lose motivation because the resources available are too small, the scope for innovation is limited, and the rewards for extraordinary effort are minimal. These factors are inter-linked; they need to be addressed simultaneously if the situation is to improve. Some of them, for example, inadequate investment funding, will be largely resolved by the B Project, but there is a risk that unless the others are also solved the investments will not be properly operated and maintained and will be of limited long-term value. Some of the problems, for example inadequate tariffs and O&M funds, can only be resolved through action by HPPC Some of these underlying causes are the following:

- 1. **Inappropriate policies.** Despite the conversion to public service enterprises (PSEs) there still are some remaining problems during this transitional period that make it difficult for SADCO to become self-sustaining. ITS limited autonomy in key areas such as tariffs, staffing and salaries limits its ability and incentive to operate as efficiently as possible (at the same time it must be admitted that the company may not yet be in a position to operate satisfactorily on a fully autonomous basis).
- 2. **Poor organisational performance.** Many of the problems mentioned above are attributable to poor organisational performance by the company. The main causes for this are considered to be low salaries, overstaffing and obsolete vacancies, weak skills and poor motivation of many of the personnel, and corporate philosophy which is still old-fashioned (for example, a production orientation instead of a service orientation, and a lack of delegation of powers). These lead to inefficient use of time of the management and lack of motivation of the staff.

3. **Poor and undersized sewerage and drainage system.** The 1B Project is only a first step in correcting the effects of a long period of deferred maintenance. It will only provide full rehabilitation (including the tertiary system) in about one quarter of the urban phuongs (10 out of 37). Most of the sewer network is very old and in poor condition due to the inadequate maintenance and repair, and has insufficient capacity to drain the storm runoff in the rainy season. Even after the 1B Project is completed, SADCO will still have a massive task to complete rehabilitation in the other phuongs and to extend the system to other areas of the growing city, while at the same time trying to keep the systems rehabilitated under 1B in good working order.

#### 2.6. Other interventions

A reference is made to the Volume I of the Project Document for Phase IV for information on other interventions, which may have an impact on this Sub-project.

# 2.7. Documentation available and used

The documentation made available and used by the PD preparation team is listed in VOLUME V, ANNEX 1.

# 3. Intervention

The intervention logic of the phase IV of the Programme is presented in VOLUME V, ANNEX 2.

## 3.1. Overall objective

The overall objective of the Programme is:

To achieve a good water supply and sanitation service for the people and customers in Haiphong and an improved quality of the environment.

The objective is in line with the development objectives stated in the "Socio-Economic Stabilisation and Development Strategy to the year 2000" adopted by the Seventh National Congress of the Communist Party in June 1991. It also supports the development objective of the "Urban Waste Water Collection and Sanitation Policy" which aims at "...provision of sewerage and drainage with good service level in an economically and environmentally sustainable way".

## 3.2. Programme purpose

The purpose of the Programme is

Improved performance of the water supply, sewerage and drainage, and sanitation organisations towards well functioning and financially self-sustaining public enterprises

This purpose is fully consistent with, and supports, the National policies for urban water supply and urban wastewater collection and sanitation.

# 3.3. Sub-project purpose

The purpose of the sub-project Construction Management Support is:

Professional contract supervision of contracted construction works in the Haiphong sewer network

This purpose is fully consistent with, and supports, the National policies for urban water supply and urban wastewater collection and sanitation. This Sub-project supports the two other sub-projects, and has to be seen in its context. They are: Technical Assistance,

Training and Studies, and Financing Support to Households. They are discussed in volumes II and III.

## 3.4. Programme strategy

The general strategy for achieving the above Programme purpose is to improve the operational efficiency and the management capabilities of the companies responsible for the service delivery. This will be done through improvement of the management systems and procedures, advisory support to the management, and through training. The implementation arrangements and the project organisation support this general strategy.

The programme is directed to the three PSEs of the city. Their geographic area of responsibility forms the boundaries of the Programme except for Financing Support to Households and Construction Management sub-projects, in which the boundaries are governed by the boundaries of the WB/IDA project 1B.

In this document Phase IV of the Programme is called the Project. It consists of three sub-projects: Technical Assistance (TA), Financing Support to the Households (FS) and Construction Management of the investment project of the WB/IDA project 1B (CMS). These components are functionally separate entities, which can be contractually regarded as separate projects inside the Programme, if so decided.

During the Project (HPWSSP Phase IV), the emphasis of the intervention will be on the sanitation sub-sector, in particular on wastewater collection and drainage. The approach and strategy will both support and get support from the parallel World Bank/IDA financed 1B Project. 1B Project will improve and rehabilitate the wastewater infrastructure, thus enabling SADCO to extend its services and to improve the service level. Technical assistance to SADCO, which is also a component of the 1B Project, is included in the Programme and forms an integral part of it. The Programme will include other components as well. They are essential to ensure the smooth implementation and desired impact of the 1B Project: consultancy for construction management; general capacity-building assistance to SADCO; and provision of a financial mechanism to enable households to upgrade their sanitary facilities.

Technical assistance to WSCO will continue, however, at a smaller scale than before. Focus will be on strengthening the company's management capacity and financial position: developing a corporate strategy and business plan, improving accounting and revenue collection, reducing unaccounted-for water, and capacity-building. Less emphasis will be placed on technical matters as WSCO has already considerable experience in the physical aspects of system rehabilitation and upgrading, and construction management due to 1A Project. A greater attention will be given to use of Vietnamese consultants and on outsourcing.

Support to the Haiphong Urban Environment Company consists of improvement required in the process to become a self sustaining public service enterprise (PSE). The assistance will be given by expatriate advisors sharing their time with the other companies.

The support will be provided in five forms:

- Studies, which will study the issues and propose systems and procedures for implementation;
- Technical assistance which will provide long term support to the management and will assist in the implementation of the proposed systems and the expected externally funded large scale investment programme;
- Training to respond to the identified priority training needs;
- Equipment and materials; and
- Financing to support the selected households to upgrade their sanitary facilities.
- An independent consultant will be employed to act as an independent "engineer" for the WB/IDA financed investment project 1B

# 3.5. Sub-project Strategy

An independent consultant will be employed to act as the "Engineer of the project" The selected consultant shall set up a suitable supervision organisation in Haiphong to ensure that the goods are supplied and the works under the contracts are completed in accordance with the Contract Documents of the investment project 1B.

#### 3.6. Results

The key result of this activity is that the construction management undertaken by the consultant (the Engineer of the 1B Project, funded through the HPWSSP, Phase IV SADCO support package), on behalf of SADCO (the Client), ensures that the contracts funded through the WB/IDA Project 1B are implemented on time and in accordance with the requirements of the contract documents.

The objectively verifiable indicators are:

- 1 Construction schedule adhered to, or prompt and satisfactory explanations given for deviations.
- 2 Quality of works conforms with required standards.
- 3 Accurate current records maintained of all works.
- 4 Accurate interim monthly payment certificates submitted promptly to Client.
- 5 Variations of works promptly identified and agreed with contractors.
- 6 Decisions on claims submitted by the contractor (or against the contractor) given promptly to Client.
- Final "as-built" drawings produced on time, and accurate.

#### 3.7. Activities

- a) Assume the duties of "the Engineer" as set out and specified in the contract documents;
- b) Provide such information as is necessary for the Contractors to set out the works and check that the setting out is correct;
- c) Review the Contractors' work proposals, working drawings for permanent and temporary works, etc. to the extend required in the contracts, advise modifications where necessary and approve these proposals;
- d) Review the Contractors' work programs and, where necessary, request revisions of these to account the current status of the works and ensure adherence to the construction schedule:
- e) Review, approve and ensure adherence to the Contractors' quality assurance plans;
- f) Review and approve the sewer inspection reports and other inspection documentation prepared by the Contractor for contract C1A, review the detailed designs for sewer rehabilitation and replacement to be prepared by the said Contractor. Co-ordinate the submission of the Contractor's detailed design documents for the approval of the World Bank and the Vietnamese authorities. Liase with the Detailed Design Consultants on detailed design related matters.
- g) Agree with the Contractors on measurement for interim certificates and carry out the necessary measurements and calculations for such certificates;
- h) Make recommendations to the Client on the Contractors' claims for additional payments, extension of time and other matters, based on the Consultant's interpretation of Contract Documents, the relevant site conditions and the Contractor's detailed submissions:
- i) In the event of variations to the works being required, prepare the necessary documents, negotiate these with the Contractor(s) and the Client, and submit the agreed variation order(s) to the Client and the World Bank for approval as set out in the contract(s);
- j) Through the inspectors of works and other site staff as may be required, supervise the day-to-day operations of the Contractors to ensure quality of workmanship and compliance with the contracts;
- k) Maintain detailed, daily site diaries, photographs and other documents concerning relevant events and activities; call and keep minutes of routine site meetings and other meetings between the parties to the contracts;
- Specify type and frequency of test requirements for materials on site, test and inspect equipment (including shop inspections and witness tests at the Contractors' workshops in Vietnam or abroad) to be used or installed in the works prior to incorporation, test completed parts of the works for compliance with the

- contracts and generally ensure that the final structures and facilities are in accordance with the intent of the contracts;
- m) Set up and maintain correspondence and document storage and retrieval systems to record all relevant communications between the parties to the contracts, all measurement and quality control details and variations to the works as they occur;
- n) Supervise the keeping of records for, and preparation of as-built drawings and documents including the approval of the documents prepared by the Contractors, approve the manuals for operation and maintenance of the completed facilities and equipment to be supplied as set out in the contracts, advise on training of staff identified for the operation of the completed facilities;
- o) Prepare weekly site reports and monthly progress reports in a form acceptable to the Client;
- p) Prepare quarterly and annual progress reports to DIDC and Client in a form acceptable to DIDC and the Client. Prepare reports to Supervisory Board and other meetings between the Ministry of Foreign Affairs of Finland and Vietnamese competent authorities;
- q) Prepare semi-annual progress reports for each contract in a form acceptable to WB/IDA and the Client. These reports shall include as the minimum details of the physical and financial status of each contract, details of delays and the budgetary effect of particular problems with suggested solutions. Assist the Client in preparation of the mid term report for each contract as set out in Schedule 1, subclause A.5 of the Project Agreement between WB/IDA and SDCos;
- r) Assist the Client to prepare, in a format acceptable to WB/IDA, the annual project implementation plans for the next calendar year;
- s) Carry out final inspections of the works, supervise the completion of outstanding work and remedying defects and recommend the issue of completion certificates;
- t) Check the Contractor's final accounts and certify them correct for payment;
- u) Prepare completion reports in a form acceptable to WB/IDA and the Client;
- v) Prepare a completion report to DIDC in an acceptable form;
- w) Advise the Client with respect to carrying out the works following the appeal to arbitration or litigation related to the works; and
- x) Provide any other specialised services as may be necessary and agreed upon in writing.

# 4. Assumptions and risks

The assumptions and risks presented below are valid for all the three sup-projects.

# 4.1. Assumptions

The project design is based on the assumption that following issues not directly under control of the programme are implemented and resources secured by responsible stakeholders:

- (i) The authorities responsible for policy matters will take prompt actions to approve and further enforce policy changes and regulations affecting issues beyond the mandate of the three PSEs, such as protection of water sources, consumer policies including water tariffs and sewerage charges, enforcement of environmental regulations, and personnel policies, to provide an enabling environment for Programme implementation.
- (ii) The relevant three Public Service Enterprises are committed to the adoption and prompt implementation of management principles and mechanisms developed by the Programme, including delegation of powers and duties to appropriate levels.
- (iii) The WB/IDA-financed Haiphong Sewerage and Drainage project (1B) is started, and it and the Haiphong Water Supply Project (1A) are implemented as planned, and the changes becoming necessary in them during the implementation are implemented in an organised and appropriate manner
- (iv) Necessary decisions during 1B implementation will not be delayed in order to avoid cost and time overruns.
- (v) The present Phase III is adapted to support a smooth transition to the Programme.
- (vi) Necessary agreements between the consultant and the Government of Finland can be approved and signed in time to enable the seamless commencement of activities on time.
- (vii) Both parties the Finnish and the Vietnamese side fulfil their obligations regarding the required inputs, including the nomination of Vietnamese staff to the three PSEs to conduct the necessary tasks (a vital condition for providing technical assistance on a particular topic should be that a counterpart has been appointed to have operational or managerial line responsibility for that subject).
- (viii) The Programme personnel local and their advisers have access to higher authorities in matters related to the Programme implementation.
- (ix) The office and other facilities and equipment, including transportation, procured and used by the previous Phases of the Programme will continue to be available to be used for the implementation of the Programme.

### 4.2. Risks

The following risks should be avoided by proper planning and commitment:

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- (a) The funding of the Programme, particularly the local funding will not be sufficient and/or on time. This will slow down the implementation and cause also a risk to the implementation of the WB/IDA-projects 1A and 1B, and also delay the disbursement of the foreign component.
- (b) Necessary funding is not made available to support the normal capital programme and the O&M budget of the PSEs, leading to neglect of activities other than 1A and 1B, and in particular affecting SADCO maintenance of the sewers where 1B is not active and parts of its system which will not have been rehabilitated.
- (c) The financing support mechanism for household sanitation improvement can prove to be beyond the bearing capacity of the poorest segment of the population, or there is lack of commitment amongst a part of the population.
- (d) Cross pollution from industrial wastes inhibit improvement of the environment

# 5. Implementation

The details of the physical and non-physical inputs will be defined in the sub-project documents and annual Work Plans.

## 5.1 Physical and non physical means

#### 5.1.1. Non-physical inputs

The support will be given through employing an independent consultant who will establish a suitable organisation to Haiphong to act as the "engineer" of the WB/IDA financed investment project 1B.

#### 5.1.2. Physical inputs

The foreign component does not include physical inputs, as the major investment projects 1A and 1B, funded by WB/IDA will provide the planned physical inputs.

## 5.2. Organisation and implementation procedures

#### 5.2.1. Organisational arrangement

The Client of the selected consultant will be the Haiphong Sewerage and Drainage Company (SADCO) represented by the Director. For day-to-day activities the Director will delegate his responsibilities to the Project Manager, who will head the Project Management Unit (PMU) within the SADCO. The SADCO and Haiphong Peoples Committee (HPPC) will jointly establish the Haiphong Component Implementation Committee (HPCIC) to assist the SADCO to implement the Project and to facilitate various administrative actions required during the implementation. The Consultant will serve as the secretariat to HPCIC and report on implementation progress at HPCIC regular meetings.

#### 5.2.2. Implementation practices

It has proved to be impossible, in the course of the 1B Project design, to obtain an accurate picture of the condition and potential capacity of the sewerage and drainage network. The extent of silting is too great to permit proper inspection, and so the design consultants have been able to make only an approximate estimate of the lengths of pipe that can be rehabilitated, those that should be replaced, and those that need to be increased in size. To respond to this situation, civil works implementation has been split between 3 contracts (in addition there will be one contract for procurement of vehicles and equipment):

- ♦ Contract A, implemented between July 2001 and April 2002, covers mainly the cleaning and inspection of e existing main sewers and phuong sewers, together with construction of various facilities at the Trang Cat landfill, in particular provision for handling the dredged sludge and septage. The estimated base cost is US\$3.0 million.
- ◆ Contract B, implemented between November 2002 and May 2004, covers rehabilitation or construction of some major combined sewers, construction of some collector sewers and pumping stations, and rehabilitation of phuong sewers. The estimated base cost is US\$10.0 million.
- ♦ Contract C, implemented from July 2001 to January 2004, mainly covers the rehabilitation of the main drainage channels, the lakes in the city, and the tidal gates. The estimated base cost is US\$8.5 million.

Assistance to SADCO in construction management of these three contracts is essential, since SADCO has no experience of contracts of this magnitude, or of working with international contracting companies.

#### 5.3. Timetable

The tentative timetable for the HPWSSP, Phase IV is January 2000 - December 2003. The construction management sub-project will start first. It will start in December 2000. A separate issue to be decided is, how to continue with this Sub-project until November 2005, when the defects liability period of 12 months of the WB/IDA financed investment project last contract is completed

## 5.4. Cost estimate and financing plan

The total costs of the Programme are estimated to be FIM 64.4 million, equivalent to approximately VND 159.5 billion (USD 1 = FIM 5.65 = VND 14.000). Out of this, the foreign component costs, to be covered by the Government of Finland, are estimated to total FIM 53.1 million, and the local component costs VND 27.9 billion.

The estimated foreign component costs of the Sub-project Construction Management Support, covered by the Government of Finland, is summarised as follows:

Construction management: SADCO FIM in thousands 17,000 Total 17,000 (USD 3 million)

The local component, to supplement the foreign component, consists of the costs of the local staff, office accommodation, housing of expatriates (but not their electricity, water and communication charges) and the costs of investments.

# 6. Factors ensuring sustainability

The factors ensuring sustainability of sub-project Construction Management Support will materialise through the organisational arrangement of SADCO acting as the client of the investment project, through the day-to-day contacts with the "engineer's" team, and the reporting practice to the decision making structure in Haiphong, which all will transfer the know-how of management of a major contracted construction project to SADCO, TUPWS, as well as the HPPC.

# 7. Monitoring and evaluation

## 7.1. Monitoring indicators

The monitoring indicators, which should comply with the OVIs, shall be defined in the Project Document and Annual Work Plans. The required reports will be the sources of verification. They are assumed to be based on actual operational and financial data and records of both this Sub-component and the WB/IDA financed investment project 1B. This implies that the data must be readily available (transparency) when these reports are prepared.

#### 7.2. Reviews and evaluations

The monitoring of the Sub-project Construction Management Support, as a part of the HPWSSP, Phase IV, shall be based on monthly, quarterly progress and financial reports. Quarterly reports shall be reviewed in the Steering Committee meetings.

Annual reports shall be prepared within two months after the end of each year, and presented to the Government of Finland, the Government of Vietnam and the World Bank. The World Bank shall define the manner in which it requires reporting on the components directly linked with the projects 1A and 1B

In addition, the MPI, HPPC and Ministry for Foreign Affairs of Finland may carry out their own reviews and evaluations from time to time as they deem necessary. The World Bank shall also be entitled to review and evaluate the implementation and results of the components, which are directly, linked with their own projects 1A and 1B.

It is envisaged that the performance of the Programme will be externally reviewed and evaluated twice during the implementation period – the first time in the middle of 2002 (mid-term review), and the second time towards the end of the phase (mid 2004).

A project completion report shall be prepared within three months after the end of the Programme.