

**Guidance Pack**

**Private sector participation  
in municipal solid waste management**

**Part I**

**Executive Overview**

**By Sandra Cointreau-Levine  
and Adrian Coad**

**An introduction to the concept and contents of  
this Guidance Pack and a brief review of some  
of the key points**

Authors: Sandra Cointreau-Levine and Adrian Coad

ISBN: 3-908001-90-0

Copyright: © SKAT, 2000

Copyright waiver: Permission is granted to use the material found in this volume for educational and development purposes.

Acknowledgement is requested

First edition: 2000, 1200 copies

Published by: SKAT  
Swiss Centre for Development Cooperation in Technology and Management  
Vadianstrasse 42  
CH - 9000 St.Gallen, Switzerland  
Tel: +41 71 228 54 54  
Fax: +41 71 228 54 55  
e-mail: [info@skat.ch](mailto:info@skat.ch)  
url: [www.skat.ch](http://www.skat.ch)

Distributed by: Intermediate Technology Publications, Ltd.  
103 - 105 Southampton Row  
London WC1B 4HH, UK  
Tel: +44 171 436 97 61  
Fax: +44 171 436 20 13  
e-mail: [orders@itpubs.org.uk](mailto:orders@itpubs.org.uk)  
url: [www.itpubs.org.uk](http://www.itpubs.org.uk)

## Foreword

---

The provision of municipal solid waste services is a costly and vexing problem for local authorities everywhere. In developing country cities, service coverage is low, resources are insufficient, and uncontrolled dumping is widespread, with resulting environmental problems. Moreover, substantial inefficiencies are typically observed. One solution commonly proposed is to contract service provision with the private sector in the belief that service efficiency and coverage can be improved, and environmental protection enhanced.

There are three important roles for the private sector in the solid waste management field. First, where existing public service delivery is either too costly or inadequate, private sector participation offers a means of enhancing efficiency and lowering costs through the introduction of commercial principles and greater attention to customer satisfaction. Second, in situations where local public funds for investment are in chronically short supply, the private sector may be able to mobilize needed investment funds. Third, the private sector is well situated to draw on local and international experience in the waste management field and introduce proven and cost effective technologies along with management expertise.

Field studies conducted by the World Bank and others tend to substantiate these claims that the private delivery of municipal solid waste services can be successful in terms of greater efficiency, coverage and quality of service. Keys to successful private sector involvement in municipal solid waste management include creating contestable markets, establishing an appropriate regulatory framework and operations standards for contractors, and strengthening local government capacity to negotiate contracts and monitor performance. In the simplest terms, the focus must be on competition, transparency, and accountability.

Nonetheless, private sector participation should be viewed as a possible opportunity - not a panacea. Important questions are *whether* and *how* to involve the private sector in the provision of municipal solid waste services. These questions have been given priority attention by a joint initiative of the Swiss Agency for Development and Cooperation (SDC), the Urban Management Programme (UMP), the World Bank, and the Swiss Centre for Development Cooperation in Technology and Management (SKAT), along with a host of other collaborating external support agencies, professional associations,

and non-governmental organizations. In February 1996, SDC and the World Bank sponsored a workshop in Washington DC on private sector participation for the provision of municipal solid waste services, with the participation of SKAT, the Inter-American Development Bank, the Solid Waste Association of North America, and leading solid waste specialists. The contributions of the participants provided valuable impetus and direction to this project. Subsequent efforts have been focused on promoting effective public-private partnerships, understanding and developing the role of informal private sector groups (waste pickers, micro- and small enterprises, and community groups), and developing guides for the preparation of contract and bidding documents. This *Guidance Pack* - the latest in a series of publications sponsored by the joint initiative - focuses specifically on the latter objective.

In preparing this *Guidance Pack*, Sandra Cointreau-Levine provides a framework and a set of tools to assist local authorities in deciding whether to engage the private sector in the delivery of municipal solid waste services. This *Pack* also presents tools and examples of how to prepare bidding documents, contracts, and franchise and concession agreements to effectively engage private operators. The author draws on her substantial experience in the field as well as that of the staff of supporting agencies, and the findings and recommendations of a number of international workshops held on the topic, to provide concrete, practical guidance and tools. We hope that they will be widely studied and applied.

Carl R. Bartone  
Principal Environmental Engineer  
Transport, Water & Urban Department  
The World Bank

Françoise Lieberherr  
Senior Programme Officer  
Urban Development  
Swiss Agency for Development and Cooperation

## (i) Introduction of this Overview

Welcome to Part I of a *Guidance Pack* that consists of five parts.

This part is called the “Executive Overview” because it is written for busy people. It aims to provide links to the rest of the *Guidance Pack* so that decision-makers can determine whether this document is relevant to their needs and, if so, which parts are of particular interest.

This booklet should also prove useful to the reader who wishes to study the whole *Pack* in more detail, since it provides an introduction to the material found within this *Pack* and an explanation of the concept and organization of the whole publication.

The main part of this *Overview* is devoted to introducing **Part II** of the *Pack*, briefly focusing on some of the key

points and indicating where a more detailed discussion can be found in the other Parts of the *Pack*.

The remaining three Parts are:

	Introduced on
■ Part III Tools for Preparing for Private Sector Participation	page 10
■ Part IV List of Terms and Definitions	page 10
■ Part V Sample Contracts and Other Documents	page 10

This overview provides a brief introduction to these other Parts and closes with acknowledgements of the many and varied contributions to the preparation of this *Guidance Pack* (page 11).

## (ii) Introduction to Part II: THE GUIDANCE NOTE

### (ii)-1 What is the subject of the *Guidance Note* ?

The focus is on services related to municipal solid waste (also known as garbage or refuse), and the provision of these services by private companies (and other organizations which are outside local government or municipal administrations). Some examples are drawn from industrialized countries, but this publication is written for readers who are concerned with improving waste management standards in Africa, Latin America and the Caribbean, and the less prosperous economies of Asia.

For the purposes of this publication, the term “municipal solid waste” refers to wastes from domestic, commercial, institutional, municipal and industrial sources, but excluding excreta, except when it is mixed with solid waste. Some reference is made to hazardous wastes from hospitals and industry, but wastes from mining and agriculture are not referred to.

The *Guidance Note* views privatization processes principally from the local government perspective. It provides detailed and practical guidance for municipalities that wish to involve the private sector in the provision of waste management services, or improve the way in which they currently manage such participation.

### Some of the issues that are discussed in this Pack

Privatization	Commercialization	Competition	Segregated accounts	Hidden subsidies
Open competition	Institutional reform	Franchises	Level playing field	Contract period
Private sector participation	Private enterprise	Transparency	Contestability	Bonds
Competitive tendering	Public accountability	Co-opetition	Accountability	Service zones
Divesting	Municipal responsibility	Collusion	Capacity building	Microenterprises
Public/private partnerships	Monopolies	Concession	Licensing	Economies of contiguity
Contracting	Corruption	Private subscription	Public consultation	Labor redundancy

**(ii)-2 Who is responsible for public services ?**

Reference\*  
for further  
information

Whether the service is provided by private companies or local government, government (local, state or national) retains responsibility for the collection and disposal of solid wastes. Government remains responsible to ensure that a service is provided, and that it meets required standards in terms of reliability, efficiency, customer relations and environmental protection. These fundamental responsibilities are not diminished by any privatization process. The role of the City government changes as the private sector becomes more involved. Resources are concentrated towards monitoring and enforcement, but it is still government that is responsible.

Part II: 6.1

**(ii)-3 Why involve the private sector ?  
What are the advantages of private sector participation ?**

- The private sector has shown that it can provide a more efficient or cost-effective service.
- The private sector often has better access to capital financing and so it is able to use more efficient equipment.
- The private sector may have easier access to specialist skills. For example companies can form joint ventures with international specialist firms.

Part II: 2.3

Part II: 5.15

Part II: 3.1

**(ii)-4 Why can the private sector be more efficient ?**

Private sector operators are motivated by accountability and competition, and by the need to fulfil certain specific requirements as set out in contractual agreements.

Part II: 2.4

Private sector managers generally have more control over who is in their workforce and how they should work.

Part II: 2.4

Private sector companies are less restricted by bureaucratic procedures and more able to concentrate resources where they are needed.

Part II: 2.4



*Photograph 1*

*The private sector should be given as much freedom as possible to use the type of technology that will enable the most cost-effective and reliable service. This photograph shows waste being brought to a transfer station in a donkey cart, and loaded into an open truck. Lahore (Pakistan) 1995*



*Photograph 2*

*Here a franchise collection service is using a rear-loading compactor truck, Accra (Ghana) 1996. This can be an efficient method where the waste has a low density, where the roads are large enough and strong enough for heavy vehicles and where good maintenance can be guaranteed.*



*Photograph 3*

*Educating children about waste collection in Accra (Ghana) 1997. Public education may be retained as a responsibility of local government or taken over by the private sector.*

\* Beside the text are some references to other parts of the Guidance Pack where further information on the particular topic can be found. For example, "Part II: 3.4.1" means Part II, Chapter 3 and Section 3.4.1.

## (ii)-5 Common misconceptions concerning private sector participation

Reference for further information

This section lists some commonly held opinions that are not always accurate.

### a) *The private sector is always cheaper and more efficient.*

Private companies will be cost-effective and efficient only if they have a reason to be so. If the involvement of the private sector is well managed by local government, there is competition, both at the tendering stage and during operations, and such competition produces efficiency. Conversely, if there is no competition and monitoring is poor, a private sector service may be inefficient and expensive.

Very often cost comparisons between the private and the public sectors are unfair because not all of the actual expenditures are included in estimates of public sector costs.

It is not uncommon for municipal administrations to be unaware of the actual costs of their waste collection and disposal operations because their accounting systems do not provide information on all the costs related to waste management.

### b) *The private sector is always more reliable.*

Whilst it is true that private companies generally provide reliable and good quality services, this is not always or automatically the case. Private companies can generally achieve better vehicle maintenance and their workforces are more flexible to cope with unforeseen circumstances, but well-written agreements and good enforcement are important in ensuring good operational performance.

### c) *The private sector does not care for the environment, and so will cause serious pollution.*

There are certainly cases where private sector operators have shown no concern for the environment, and have dumped piles of waste illegally, in order to save time and travel, and to avoid paying disposal fees. Private operators of disposal sites are capable of negligence that leads to serious pollution.

Whilst these accusations may be true in particular cases, there are two incentives that encourage private companies to demonstrate a care for the environment.

The first is reputation or public image, especially where the general public is aware of

environmental issues and concerned to reduce pollution. In such cases companies want to avoid gaining a bad reputation and thereby earning public opposition, and so for this reason private sector managers are keen to operate according to high environmental standards. Waste management companies require planning and operating permits, and a bad reputation can make obtaining of these permits very difficult.

The second incentive to encourage good environmental standards is the monitoring by government inspectors. If contractual agreements are well written and effectively enforced, private companies can expect to be penalized for any action which causes environmental pollution. Service providers that do not have contractual agreements with government should be required to hold a license which can be revoked in the case of unacceptable performance. Information in Parts II, III and V shows how this can be done.

## (ii)-6 A brief comment on the historical context

Before the 1980s there were private sector enterprises of a various sizes and styles involved in waste collection – from small enterprises operating informally to large companies. However, it was during the 1980s that national governments and development agencies began to vigorously promote the private sector as a provider of municipal services.

In some industrialized countries local government was forced to compete with the private sector for contracts in solid waste management. Mistakes were made, and lessons learned, but in general costs were reduced without sacrificing standards.

In low- and middle-income countries there have been successes and failures. The Guidance Note (Part II) refers extensively to both positive and negative experiences, and draws many useful lessons from them.

## (ii)-7 Different ways in which the private sector can become involved

a) *Activities* The ranges of activities and scales of operations are very large – from pre-collection of domestic waste from a small urban area to the operation of a large sanitary landfill. Methods may be labor-intensive or capital intensive.

b) *Extent* There are many forms of private sector involvement, varying from reduced government control to complete private sector ownership. Part II: 4.2

c) *Arrangements* Basically there are four options: contracting, franchise, public subscription (or open competition) and concession. The table below is not complete, but shows some of the major differences between the options. Part II: 4.2.3 to Part II: 4.5

Arrangement	Source of income	Monopoly in service area?	Type of work
Contract	Government	Yes	Service
Franchise	Customers	Yes	Service
Private subscription	Customers	No	Service
Concession	Government and user fees	Yes	Construction and operation



*Photograph 4*  
A workshop for determining the collection zones for each refuse collection contract. Accra (Ghana) 1997

**(ii)-8 Problems and fears – and some solutions**

Reference for further information

*Municipal managers may worry that there will be a lack of real competition because only a few companies are interested in tendering for the work. As a result prices may be high and an inadequate company may be awarded the work.*

■ The sizes of the collection zones should be appropriate to the capabilities of prospective bidders. (Photograph 4 shows a workshop in which the sizes of zones for waste collection were discussed.) Part II: 5.8, 5.9

■ The tendering and monitoring procedures should be transparent and fair, and effective so that unscrupulous companies are not able to cut corners. Part II: 5.13, 5.17

■ Arrangements and estimates should allow sufficient freedom to the company to develop its own methods, and a sufficient profit margin.

■ Currency restrictions and other legislation should not discourage joint ventures with foreign specialist companies.

*Private companies may be reluctant to participate in a contract because they fear that local government will not pay regularly and on time.*

■ A franchise agreement allows the company to collect its own fees directly from its customers. Part II: 4.3  
Part II: 5.7, 5.15, 5.16

*Bid prices may be excessive and there may be collusion between bidders to fix high prices.*

- If the municipal administration knows accurately its own costs for providing the service, it has a yardstick for judging bids. Part II: 5.18  
Part II: 6.2, 6.7.2
- If local government either joins the bidding process or retains some areas for its own service, high bids can be rejected. Part II: 3.6.3

*Municipal administrations may fear opposition to privatization from labor unions and the workforce.*

■ Such problems have been overcome in many cities. Several strategies are presented in the Guidance Note. Part II: 5.3

*Private sector companies may exploit their workers in terms of low pay or unacceptable working conditions.*

■ There is no doubt that this has occurred in some places. Requirements should be written into contracts and rigorously enforced. Part II: 5.6

*Private sector working standards may be low or decline, resulting in environmental degradation and many complaints.*

■ Contracts and agreements should clearly specify the standards that should be attained, and prescribe penalties for failures. In the even of serious failures government should be able to take over. Part II: 3.6.2  
Part II: 5.10, 5.11

Reference for further information

*The private sector may use unsuitable equipment*

- Companies providing services by private subscription are required to have licenses. The license can be revoked if performance is unsatisfactory. Part II: 5.17

- There are certainly cases where the private sector uses very unsuitable vehicles. This is either because the duration of the agreements is too short to allow the companies to take out and repay loans for the purchase of suitable vehicles, or because the agreements do not specify requirements, or the requirements are not enforced. Part II: 3.5, 5.4

*There is the risk of commercial failure of the company providing the service, resulting in a breakdown of the service.*

- Very low bids may be rejected at the tender stage. Part II: 6.7.3
- Performance bonds provide resources for maintaining the service by government or other private sector companies. Part III: A5, A10
- Flow control agreements should guarantee revenues for recycling and disposal operations. Part II: 5.5

**(ii)-9 Three important words**

These words appear and reappear throughout the guidance note, and are in many ways the three vital ingredients for successful private sector participation. Part II: 5.1, 5.20

*The municipal administration may lose control of prices and standards if all the work is done by one company. Privatization is a "one-way street".*

- Regulations may set limits to the proportion of the work that can be taken by one company. Part II: 5.2
- The public sector should continue to be involved in service provision so that it can take over from unsatisfactory companies and prevent a monopoly situation. Part II: 1.2

*Competition*

There should be competition between different private sector companies, and also, if possible, between the private and public sectors. Competition provides motivation to maintain effort. It provides a standard against which performance is compared or assessed. Furthermore it provides a continual reminder that there are others engaged in the same activity who could take the place of a competitor who is performing poorly. Part II: 1.2, 3.6, 5.2, 5.11

This element of competition is illustrated in the cartoon below, in which the fulfilling of an agreement for providing a solid waste management service is represented as running a race.

*Political changes cause uncertainty and changes in contractual arrangements.*

- Central government should provide some guarantees of stability. Part II: 5.5, 5.19
- Longer contract durations and restrictions regarding terminations of contracts help to maintain service arrangements through political turbulence. Part II: 5.12

*Accountability*

Private sector service providers should sense that they are accountable to the people whose waste they collect and to the local government agency that has engaged or licensed them. The companies know that if they fail to provide the required service in the required way, there will be consequences. They are not free to do as they please. Such accountability results from a well prepared contractual agreement, from effective enforcement of the terms of the agreement, and from the understanding that there will be financial penalties if expectations are not met. Part II: 5.11, 5.16

*The legislation framework may not allow private sector participation or may severely limit the possible arrangements.*

- It may be necessary to change some laws to allow the private sector to provide services that have previously been provided by local government, and to collect fees for these services. Examples are given of countries that have made the necessary changes and developed very satisfactory arrangements with the private sector. Part II: 5.18, 5.19

Microenterprises which draw their workforces from the communities that are served benefit from the accountability that the laborers feel towards their neighbors who expect a fair and satisfactory service. Part II: Box 4.3

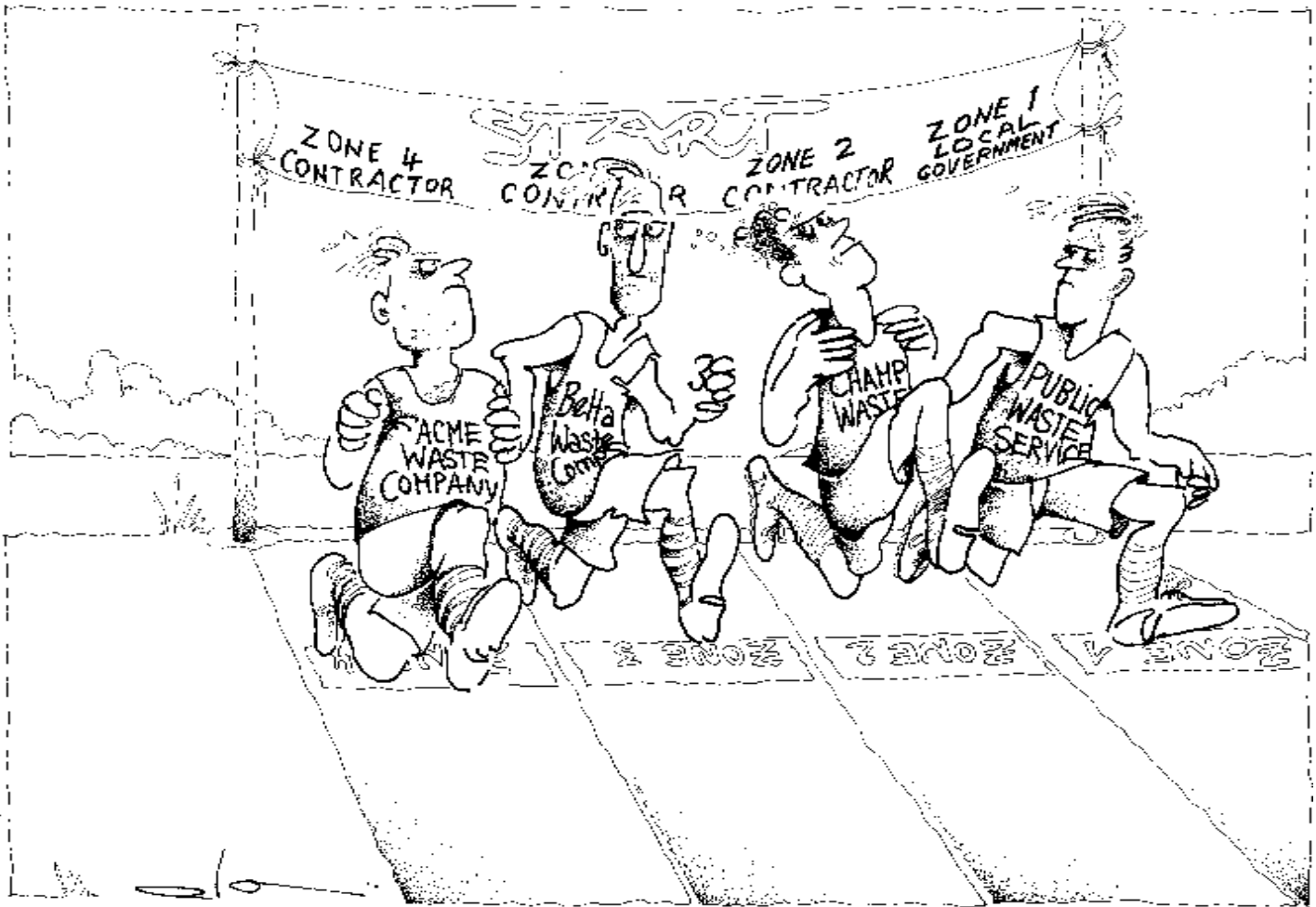


The public sector agency (whether municipal or regional government) that is responsible for the service should also feel accountable to both the public and the elected representatives for the way it oversees the service. Often capacity building will be needed if government is to effectively discharge its responsibilities.

*Transparency*

There is a growing concern about the crippling effects of corruption and favoritism or “cronyism”. More and more emphasis is being placed on “good governance” at city, regional and national

levels. Financial dealings and decision-making should be transparent. The reasons for decisions – especially the selection of private sector service providers – and the management of public funds should be open before the public. In this way the service can enjoy the support of the public and competition is encouraged, since the competitors are reassured that they will have the opportunity of competing on fair and equitable terms. Public support can be expected to result in more widespread payment of charges or taxes, and fair competition to result in lower costs and better services.



*Fair competition is one key to the provision of good waste management services. The runners represent service providers – both public and private sector. They are closely watching each other's performance. They are motivated!*

### (iii) Introduction to Part III: TOOLS FOR PREPARING FOR PRIVATE SECTOR PARTICIPATION

---

Part III has been bound separately because it contains tools which will be needed for implementation of decisions made on the basis of Part II.

It contains checklists, sample documents and questionnaire forms that are related to the issues discussed in Part II. Annex 10 is a comprehensive, annotated checklist of issues

that must be considered in the preparation of contractual agreements for waste collection, transfer stations and landfills. The last Annex is a short list of reference literature and web sites.

Some of these tools are also provided in electronic format in Part V so that they can be modified and used by the reader.

### (iv) Introduction to Part IV: LIST OF TERMS AND DEFINITIONS

---

This includes a wide range of words for which dictionaries may not be a suitable source of help, because

- some of the words are technical terms which may not be found in most dictionaries;
- some words have several meanings, and this list explains how the words are used in this Pack;
- some words are used in different ways by different writers or in different countries, and this list explains the meaning given to particular words in this publication. (An example is the term “Public/private partnership”, which many people use in a general way, but which has a more precise meaning in this Pack.)

It is anticipated that the readers of this *Pack* will come from many backgrounds – both in terms of formal education and mother tongue. No reader will need to refer to all definitions, but it is expected that most will benefit by consulting some.

The first time a word that features in Part IV is mentioned in each chapter, it is written in *italics*, so that the reader knows that a definition is available.

This word list is provided as a separate document so that it can be used conveniently with either Part II or Part III.

### (v) Introduction to Part V: SAMPLE CONTRACTS AND OTHER DOCUMENTS

---

These documents – some of them very long – are presented in electronic format for two reasons. Firstly, if printed, they would greatly add to the bulk of this *Pack*. Secondly, they can be loaded into readers’ computers and modified for use. It is not recommended that contracts be copied and used without careful modification – by legal experts, to suit the local legislation framework, and by municipal managers

to suit local conditions. However, the questionnaire forms and terms of reference may be useful with only minor amendments.

The material is presented in WORD for WINDOWS 6.0/95 format.

A brief printed introduction to each file is provided in Part V.

## Acknowledgements

---

The preparation and printing of this Guidance Pack has been financed by the Swiss Agency for Development and Cooperation, SDC, and by some additional support from the World Bank.

This publication is the result of many years of research and application by its author, Sandra Cointreau-Levine. During a large number of consultancy assignments she has patiently recorded and collected information and observed situations and solutions. A vast amount of experience and expertise has been distilled into this publication.

All of the photographs have been provided by Mrs Cointreau-Levine.

Prasad Gopalan has made a very valuable contribution in the form of a detailed checklist and commentary on contractual agreements - Annex A10 in Part III. This Annex should be regarded as essential reading for anyone involved in the preparation or amendment of contracts and other agreements. The assistance of SITA in reviewing this Annex is acknowledged.

Carl Bartone has provided invaluable support throughout the duration of the project, providing vision, guidance and encouragement, and thoroughly reviewing the text. The World Bank has organized two workshops that have had major impacts on this publication. The first was in February 1996 as part of the UMP/SDC Collaborative Programme on MSWM in Low-income Countries, and the contributions of the participants provided valuable impetus and direction to this project. The second workshop was held in February 1999 to review the draft and decide matters of presentation. The contributions of World Bank and IFC staff (including Carl Bartone, Prasad Gopalan, Penelope Brook-Cowen, Jerry Esmay, Gabrielle Boyer, Paola Riddolfi and Dirk Sommer) are also acknowledged.

The inclusion of sample contract documents in Part V has significantly enhanced the value of this Pack. The support and

help of the following in providing these documents are gratefully acknowledged:

- Alison King-Joseph, General Manager, St Lucia Solid Waste Management Authority
- Allen Blakey, Director, Public Affairs, National Solid Wastes Management Association,
- John F. Miniclier, Jr., P.E., Director of Public Works, County of Charles City, Virginia
- Tim Kirby, Solid Waste Specialist, City of Sunnyvale, California
- N C Vasuki, P.E., D.E.E., Chief Executive Officer, Delaware Solid Waste Authority,

Dorsi Germann created the cartoons.

Many in the SKAT team played an important part in this project, particularly Jürg Christen, Head of the Urban Development Department, who managed the project from beginning to end. The contributions of Gisela Giorgi and Ato Brown (now with the World Bank), and of Martin Läng of the Publications Department are also acknowledged.

Thanks are also due to a large number of unnamed municipal officials and private sector managers who provided information to Mrs Cointreau-Levine during her many consultancy missions.

SKAT is grateful to each one for their contributions to this document, and is confident that their efforts will be further appreciated by readers and users of this Pack.

Adrian Coad  
SKAT, St.Gallen  
September 1999

## Addresses

---

The Swiss Agency for Development and Cooperation, SDC,  
Freiburgstrasse 130,  
3003 Bern, Switzerland  
Tel: + 41 31 322 3475  
E-mail: info@deza.admin.ch

SKAT,  
The Swiss Centre for Development Cooperation  
in Technology and Management,  
Vadianstrasse 42,  
9000 St.Gallen, Switzerland  
Tel: +41 71 228 5454,  
E-mail: Info@skat.ch

Dr Carl Bartone,  
Principal Environmental Engineer  
Transport, Water & Urban Department  
The World Bank  
1818 H Street N. W., Washington D.C. 20433, USA

Sandra Cointreau-Levine,  
Solid Waste Management Consulting Services,  
P O Box 241, 12 Church Street,  
Roxbury, CT, 06783, USA

Prasad Gopalan,  
Investment Officer,  
International Finance Corporation,  
1818 H Street N.W.,  
Washington, D.C. 20433, USA