Is the grass greener…?
Learning from international innovations
in urban green space management

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Cover image: View over Wellington, New Zealand
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Foreword

I welcome this new research from CABE Space which brings together the experiences of 11 international cities, from Zurich to Melbourne in aspiring towards excellence in their green spaces and seeks lessons for practice here.

It is clear that the managers of parks and urban green spaces all over the world face numerous challenges. Although their circumstances may seem different, this research demonstrates that these cities face many issues common to English local authorities in terms of managing and maintaining green spaces.

Like us, these cities have recognised that good quality green spaces contribute to a higher quality of life amongst their residents. The priority given to green space and the lessons from these case studies demonstrates that a clear vision, a commitment to the benefits of good quality green space and dedicated leadership can deliver impressive results.

These findings reinforce the recommendations of the Urban Green Spaces Taskforce in May 2002, which we are taking forward through initiatives with CABE Space and others. The report demonstrates what can be achieved and how the principles we are pursuing will lead to a transformation of towns and cities through the quality of their green spaces.

I commend the research to you and hope that the stimulating and transferable lessons in this report will provide a valuable reference tool for all those with a responsibility for parks and urban green space quality.

Yvette Cooper MP, Parliamentary under Secretary,
Office of the Deputy Prime Minister

Opposite: *Melbourne seen from Royal Botanic Gardens*

Introduction

The need for this report

The work of the Urban Green Spaces Taskforce highlighted the issue that public parks and urban green spaces in England's towns and cities have suffered a widespread decline and neglect in recent years. The result has been a poor public perception of urban parks and green spaces, and a gradual loss of civic pride. Recognising these concerns, the Government announced at the Urban Summit in 2002 a range of initiatives to address this decline, including a programme of research led by CABE Space to establish how urban green space can be given a higher priority, both now and in the future.

This project is one of the first outputs from the CABE Space research programme. Using 11 case study towns and cities from countries across the world, including Japan, Australia, USA and Europe, the research builds up a convincing comparative study examining urban green space practice overseas, focusing in particular on aspects of management and maintenance practice. Most significantly, it assesses the transferability of the lessons learnt to current English practice, providing a series of challenging and inspiring solutions to what are surprisingly common issues.

By beginning the process of learning from international good practice this research presents:

- A better understanding of exemplary green space management and maintenance practice abroad
- Transferable lessons for improving the practice of those with national and local responsibility for parks and urban green space in England
- A series of inspiring and innovative solutions to issues currently challenging English practice

Population density in Curitiba demands good access to parks and urban green space

Maschpark, Hanover's first Municipal Park

Who should read it?

The findings of this research should be of great interest and relevance to all of those with a responsibility for parks and urban green spaces, including local politicians, policy makers and practitioners.

The lessons learnt from the international experiences (see chapter 08) will be of specific interest to parks and urban green space managers, as well as all managers of local authority services whose activities impact on the quality of urban green space in England. By relating the lessons directly to English practice, it is hoped that they will be directly transferable by readers to their own experience and practice, providing a series of challenging and inspiring solutions to common issues.

How should it be used?

It is intended that this report can be read in its entirety, or 'dipped into' on a chapter-by-chapter basis to extract ideas on a particular subject area.

The report consists of eight chapters. Following this introduction to the research and to the approach taken, the problems and challenges in England are addressed in chapter 01.

We then present a comparative discussion of the international experiences extracted from the 11 case studies. This discussion extends over seven chapters, each of which deals in turn with a particular aspect of the green space management process that is presenting challenges in England.

The following chapters each run to a common structure. Discussion begins with a short reminder of the issues facing practice in England, and what therefore needs to be addressed

by looking overseas. After that, the international experiences are discussed and compared, establishing how they have been grappling with the same issues. And finally, at the end of each chapter we present the key approaches of relevance to English practice.

The discussion is illustrated throughout by short case studies of the international experiences, to highlight particularly valuable approaches, and to give a more coherent flavour of the cities in question.

The final chapter brings the findings from the international case studies together and reflects on them in relation to the English context and will be of particular relevance to green space managers.

An appendix is included, containing more detailed discussion of the research methodology, and details of the published sources of research, policy and advice in the UK reviewed for the project.

The research approach

A simple research methodology was used, consisting of three stages, the detail of which is discussed in the appendix. The approach involved:

Stage 1
Devising a framework for analysis Drawing from a quick-fire review of published sources of research, policy and advice in England, to create an appropriate framework for analysis through which to undertake a comparative review of carefully selected international experiences.

Stage 2
Commissioning the international project partners With the framework for analysis as a basis, a network of international partners was sought out and commissioned to directly

participate in the research. They prepared expert reports on good practice in 11 cities, across five continents. The reports were commissioned from local experts in the countries concerned, reflecting a range of cultural and political contexts and different city scales.

In order to focus the research in this report, and to maximise the eventual utility of the findings, a simple, three-part typology was adopted as the basis for the international partner reports. The typology focused exclusively on urban green space, and largely within that on space in municipal ownership – and therefore under local government responsibility. It comprised:

01 **Urban parks and gardens (formal and informal)**
02 **Sports fields and recreational (play) areas**
03 **Green squares and spaces**

The approach was broadly based on a scale of green spaces, with green spaces of different types established along a continuum from small, green, urban squares to large, open parks all within an urban context.

Stage 3

The comparative analysis – On completion of the expert papers, the international partner experiences were assessed, using the framework for analysis devised during Stage 1 of the research. Because in turn this reflected the range of management issues raised in the English literature, it was possible to draw out key lessons for English practice. In selecting and commissioning international experts on urban green space management practice in 11 cities, it is recognised that the research reflects just the tip of the iceberg as regards international green space management experience and practice. It also reflects the interpretation of particular authors, which may or may not reflect the totality of local views on the experiences reported. The research team did not visit the case studies, and therefore perceptions of quality were not independently and comparatively verified in the field.

In this regard, the work should represent just the start of a long-term learning process, rather than a definitive, once-only assessment of international practice. English practice clearly has much to learn from good practice overseas – so further research in the future will undoubtedly be appropriate.

The selection criteria for the cities are discussed in more detail in the appendix. The key criterion, however, was the reputation of each city for its high quality green space, and/or for innovative green space management practices.

The cities and countries were:

- **Melbourne** Australia
- **Curitiba** Brazil
- **Aarhus** Denmark
- **Paris** France
- **Hanover** Germany
- **Tokyo** Japan
- **Groningen** Netherlands
- **Wellington** New Zealand
- **Malmo** Sweden
- **Zurich** Switzerland
- **Minneapolis** USA

Developing a framework for analysis

An important feature of comparative research work is the ability to take outputs from a wide range of sources, including from practitioners working in often very different institutional, legal and day-to-day management contexts (in this case, practice around the world) and to reformulate them in a way that makes comparison possible. To do this, a framework is required which gives clarity and structure to the evaluation.

Devising this framework was the objective of the first part of the research, a process which drew directly from the findings of the review of research, policy and advice by using the seven fundamental issues as a means to structure the analytical framework and thereby interrogate international practice. The framework summarised on page 11 established the international partner pro-forma around which the international partners compiled their reports.

View southwest from above Wellington's CBD. Dense built development on the flat land gives way to larger tracts of open space on the hills

01 Why take an international view?

The problem in England

As soon as they are created, landscapes start to adapt and change. Even well conceived and delivered parks and urban green spaces can quickly show signs of decay and dereliction if adequate and continuous management and maintenance regimes are not put in place. Similarly, urban parks and green spaces, which have historically performed well, can have their quality and value undermined by periods of uncoordinated and incremental changes, and by the adoption of inappropriate maintenance practices.

In his foreword to the Office of the Deputy Prime Minister's policy statement, 'Living Places: Greener, Safer, Cleaner', John Prescott argued that, 'Successful, thriving and prosperous communities are characterised by streets, parks and open spaces that are clean, safe, attractive – areas that local people are proud of and want to spend their time in'. Unfortunately, the reality in many places is very different, and despite their importance to us, our public spaces, and in particular our urban green spaces, are often taken for granted and neglected. Certainly in the last few decades of the 20th century, the amount of money invested in the provision and upkeep of urban green spaces failed to reflect the vital role they play in people's lives. As a society we continue to undervalue public spaces in all their guises – streets, squares, parks, gardens and the wide variety of open spaces found in our towns and cities.

The Urban Green Spaces Taskforce recognised that urban parks and green spaces in English towns and cities are often criticised on a range of grounds:

- **For being poorly maintained** suffering from layer upon layer of minor, uncoordinated development and maintenance activities
- **For being insecure** because of perceived high crime rates in some areas and the generally inhospitable and even hostile nature of many green spaces

01

The city of Paris has always been proud of the quality of its parks

- **For lacking a coherent approach to their management** with uncoordinated and often conflicting interventions by a multitude of agencies, without clear, overall responsibility
- **For offering little to their users** with a general lack of facilities and amenities, and being a haven for anti-social behaviour
- **For being poorly designed** proving unwelcoming to people, created with poor quality materials, and featuring uncoordinated or sometimes over-elaborate landscape design

These problems can lead to severe adverse impacts on the quality of life of urban communities, especially to those already disadvantaged in other ways. They emphasise that the quality of parks and urban green space does not rely solely on their initial planning and design, but depends to a very large extent on how that initial quality is managed and maintained, over time.

As research in 'Living Places: Caring for Quality' published by ODPM 2004, further highlighted the issue of long term quality management and maintenance is compounded by the impression that there are too many hands all trying to do their best with limited and declining resources, with little co-ordination between efforts and with few attempts to question the rulebooks which guide key public services.

So, it is clear that if we are to rise to the challenge of improving the quality of England's public space, in particular England's parks and urban green spaces, a major shift in thinking is required. The establishment of CABE Space as England's champion for high quality urban green spaces provides a timely opportunity for change. By working with such organisations as CABE Space, the challenge now is to marry a strong central policy, and awareness of the issues, to getting it right more often on the ground.

The value of taking an international view

However, for practitioners at the 'coalface', the constant pressures to deliver targets and efficiencies, often within a context of considerable under-resourcing, may lead many to be sceptical about the value of this research.

Similarly, for local politicians, the day-to-day pressures imposed by other policy areas may lead many to dismiss research on international green space management as being beyond their immediate realm of concern. Moreover, time to sit back and think critically about current practice is often a luxury that many can ill afford. This, however, would be to miss a great opportunity.

The research establishes that, not only has the investment in green space management delivered clear and consistent benefits to all the cities which were examined – and thereby to their local populations, political representatives and to green space managers – but these lessons are highly transferable to practice in England. Indeed, the cities were deliberately chosen to illustrate a variety of contexts, which would be directly comparable to the range of contexts found at home. The issues dealt with, and the problems encountered, are therefore – more often than not – exactly the same.

Many of the cities chosen are in similar situations to towns and cities in England. They illustrate places where the politicians, practitioners and people have taken the collective decision that urban green space is important and worthy of their collective vision and energies. The benefits are clear for all to see.

By beginning the process of understanding and learning from the international perspective, we hope that all those with a responsibility for parks and urban green space in England will be inspired to challenge the rulebook.

Now is the time to understand that the management of parks and urban green spaces has to substantially change and improve if the general practice in England is to compete with the best practice often found overseas. Given the right aspirations, political will and understanding, it is within the grasp of every local authority in England to also be among the very best in the world.

The English experience so far

The fundamental issues challenging current English practice

In order to identify the 'big' issues that are challenging practice in England, a review of the current key sources of urban green space research, policy and advice was undertaken. Reference was made in particular to the work and findings of the Urban Green Spaces Taskforce.

This was done in order that suitable comparative approaches could be sought overseas that address these issues, and so that lessons learnt could be related to the English experience. Thirteen sets of issues emerged that can be grouped under seven headings, representing seven fundamental issues challenging current practice in England:

Understanding urban green space

Types and needs By failing to understand the nature and purpose of urban green space, it is difficult to appreciate the needs and values that are attached to them by different stakeholders.

This problem is exacerbated by the lack of information about different types of urban green space, and about the different problems and opportunities they present for green space managers. It extends to a lack of clarity about where responsibilities lie. It also relates to more fundamental concerns about what spaces exist, how large they are, what they are used for, what qualities they have (including ecological), what needs different spaces have, and how they should be cared for.

Aspirations for high quality urban green space

Political The quality of parks and urban green spaces is often low on the list of local government priorities, an issue compounded by a lack of local political support and commitment to the provision of quality urban green space.

This trend is reflected in local policy frameworks which are often poorly formulated (if at all) and rarely provide either: effective strategic guidance, vision and leadership; or clear relationships to other, related public policy frameworks.

Community The general lack of local community engagement in urban green space provision and management has resulted in low demand and aspirations for quality urban green space from local residents, local interest groups and businesses.

This issue is compounded by local authorities struggling to grapple with the changing demands and needs of an increasingly diverse urban population, and often failing to engage the range of 'excluded' social groups in urban green space policy formulation, implementation and funding issues.

Urban parks and green spaces in England have suffered severe decline over the last 20 years

Responsibilities for urban green space management

Powers In part because of their low political priority, the status and influence of the parks and urban green space services within local authorities have been greatly reduced in relation to other public service areas.

What appears to exacerbate this problem is the lack of clearly defined statutory powers and duties. The absence of local political 'champions' who are aware of the value of high quality parks and urban green spaces compounds the problem further.

Skills The low status of the parks and urban green space services within local authorities has led to difficulties in recruiting and retaining high calibre staff who are able to meet the challenge of providing and maintaining quality urban green space.

The result has been increasingly poorly motivated, low calibre staff, and an increased reliance on the out-sourcing of work and contracts, which continues to erode the often poor skills base amongst those who are recruited, both at management and operational levels. Currently, there are few education and training opportunities to address this situation.

The coordination and resourcing of management responsibilities

Organisation The low profile and status of parks and urban green space services provision has also led to a situation where local government splits up the responsibility for managing urban green space between different departments and agencies.

This results in a confused and poorly integrated organisational structure and a lack of co-ordination of activities, services and responsibilities, including the work of private contractors. This lack of coordination extends to a geographic context as well, with a tendency to impose top-down management solutions, rather than empowering staff to act at site-specific and neighbourhood scales.

Funding sources The ability to imaginatively maximise the potential of all funding sources for urban green spaces has

been hindered by uncoordinated organisational structures and activities.

This includes the exploitation of core funding streams and alternative sources of funding through partnerships, sponsorship, trusts, local charges/taxes, national lottery grants etc. Neither has the recovery of costs for enforcement and remedial action been a priority, either undermining already meagre budgets, or leading to a lack of such activities.

Delivery of urban green space maintenance and reinvestment

Standards of maintenance delivery The setting, implementation and monitoring of desired standards of provision and maintenance is under developed due to the continuously low priority given to urban green spaces in England.

The basic provision of facilities and amenities has also been poor, and they have tended to be poorly designed for subsequent maintenance. Neglect and long-term decline has occurred mainly because of a low priority given to urban green spaces in England.

Reinvestment The decline in local authority leisure services spending over the past 20 years has been particularly dramatic in its impact on urban green spaces, which have been targeted for cuts.

Funding has been increasingly unable to support the desired levels of provision, staffing and maintenance. Where new funding streams have become available, the emphasis has tended to be on capital rather than revenue funding, leading to new and refurbished urban green spaces being created, with little regard for securing the resources to ensure their long term maintenance.

The application of management practices to local contexts

Regulation The regulatory framework reflects the inadequate strategic policy context for protecting green space and green space heritage assets.

When it comes to individual urban green spaces, key powers have either been under-utilised (eg community policing) or do not exist (eg local bye-laws). The connection with broader policy and regulatory frameworks and local contexts (socio-economic, health and well-being, education, environmental quality, urban regeneration, and so forth) is also rarely made.

Monitoring Data collection systems are generally poorly developed, as are systems of monitoring systems and mechanisms for auditing urban green space.

The result has been broad-brush management approaches, rather than approaches informed by specific local problems and contexts.

Under-investment in parks and urban green spaces in England has taken its toll

The outcomes from urban green space management practices

Perceptions As public space quality has declined, so has its perception in the eyes of the public, with real and perceived problems of vandalism, insecurity and crime colouring people's opinions.

Other negative factors high on public agendas are the need to address dog-related problems, littering, and the general dereliction of urban green space. So far, few attempts have been made to give green space a positive marketing spin, or to add significant value through green space management practices *per se*.

Learning the lessons As other public sector activities have increasingly adopted sophisticated management processes and means to spread and absorb good practice, in the green space management sector the adoption of reflective management systems has remained limited.

The requirements of sustainable management processes – for example, ISO 1401 – give this an added urgency.

The framework for analysis

An analytical framework was developed by bringing together and juxtaposing the key issues challenging current English practice, summarised above. This framework provided the basis on which to interrogate international practice in a way that enabled meaningful comparison between individual international experiences, as well as current English practice (further details can be found in the Introduction – the research approach).

Significantly, the framework reflects the 'process nature' of green space management, moving through understanding context, to defining a vision, to combining and coordinating actions to deliver change on the ground, and finally to review what has worked, and what has not.

GREEN SPACE

Types →	1 Understanding ← Needs
Political →	2 Aspirations ← Community
Powers →	3 Responsibilities ← Skills
Resources →	4 Coordination ← Organisation
Maintenance →	5 Delivery ← Reinvestment
Regulation →	6 Application ← Monitoring

7 Outcome
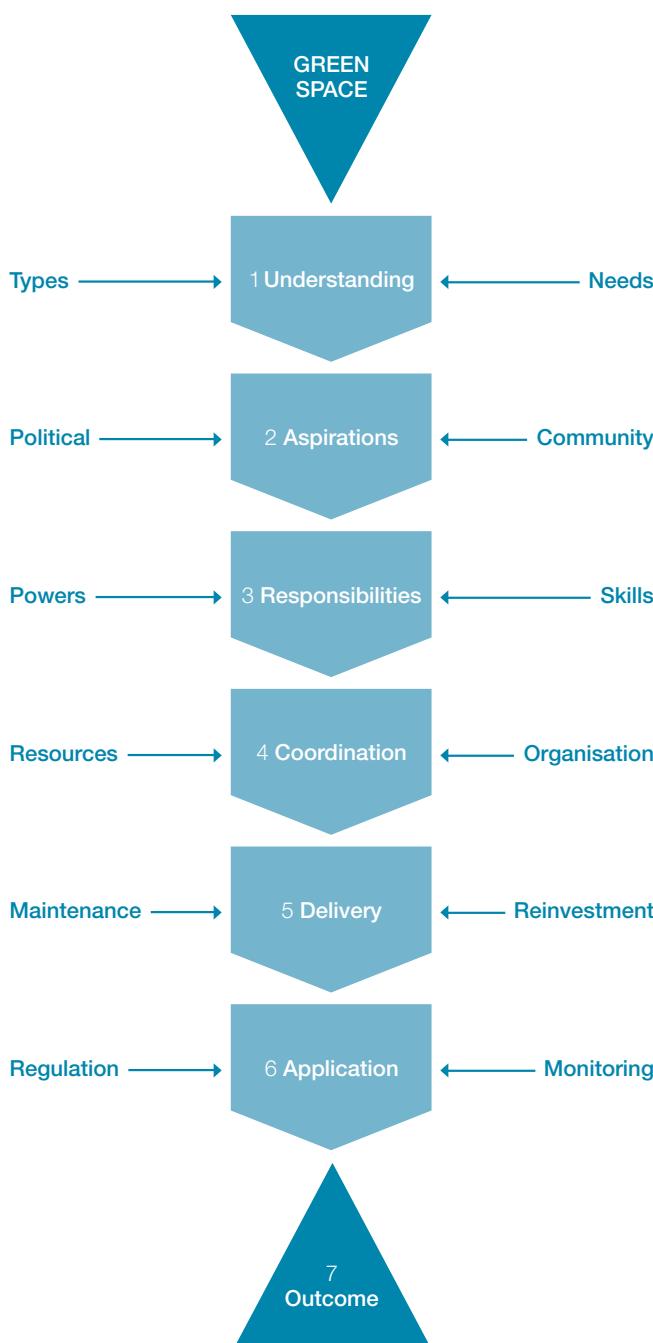
What should we ask?   01

The totality of factors challenging current English practice was reflected in the bleak outlook presented in the 2001 Public Parks Assessment. In it, only 18 per cent – under one fifth – of park stocks were reported by local authorities to be in 'good' condition, 69 per cent 'fair' and 13 per cent 'poor'. What is more, the condition of 39 per cent of parks – over one in three – was reported to be 'declining' by their local authorities. These alarming figures further emphasise the need to urgently address this decline in quality and therefore the value of English urban parks and green spaces to the communities they should serve.

Despite the extent of the problem in England, by taking a positive view, the fundamental issues could be seen instead as a series of challenges; challenges which need to be met if we are to improve the quality of urban green space provision and management in England.

If we turn the sets of issues into a series of fundamental questions to be addressed by those with a responsibility for the provision and management of urban parks and green space, including politicians and practitioners, we should ask:

Seven fundamental questions

01 How well is the nature and purpose of your local authority's urban green space understood?
02 What are your aspirations for urban green space, and how are they defined?
03 Who is responsible for your urban green space, and are they equipped for the role?
04 How are you coordinating the organisation and resourcing of these responsibilities?
05 How are you delivering your maintenance and reinvestment processes?
06 Are your day-to-day management processes responsive to different local contexts?
07 What outcomes are you achieving – and can they be better?

Taking this approach, these fundamental questions provide the structure for the comparative analysis of international practice with the key lessons of relevance to English practice extracted as a means to address the overarching question:

What can we learn...?

02 How well is urban green space understood?

The English context

How attempts to classify urban green space have been devised in England

Logically, the process of green space management should begin by understanding the nature of that space. That is, among other issues:

- What spaces exist and of what types?
- What condition are they in?
- What pressures and opportunities are they subject to?
- How is the urban green space in question currently used and managed?

In this regard, it is important to understand the subject of urban green space management before an effective management regime can be put in place. However, the Urban Green Space Taskforce noted that there is a lack of reliable data on green spaces in England, and a poor understanding of the changing demands and pressures put upon green spaces by urban populations. The consequence is that a general decline in quality, including the loss of features, character and important ecology can too easily go unnoticed and unchecked.

Similarly, the Green Space Investigative Committee of the Greater London Authority noted that the care of green spaces and their status in planning decisions is undermined by the lack of comprehensive information on quantity and condition. As a result, space is continually being lost to encroaching development. Moreover, they noted, ownership and consequent management responsibilities for green spaces are immensely varied and there is little effective sharing of vision and good practice.

Different types of urban green space will inevitably be subject to different pressures, as well as (ideally) to different aspirations and management regimes. Therefore, it is important to know what

02

types of green space exist in what places, and to be able to categorise them.

A useful typology of urban green space was published in 'Green Spaces, Better Places', which was adapted and adopted in 'PPG17: Planning for Open Space, Sport and Recreation'. These classifications are comprehensive, with, nine and 10 primary green space types identified respectively, and numerous sub-classifications. The classifications integrate public and privately managed space, range in scale from large rural and semi-rural tracts of land to domestic gardens, and include incidental greenery in otherwise hard urban spaces – such as along road and other transport corridors.

Informed by the first set of issues from current English practice which merited exploration on the international stage (see chapter 01), and flowing from an understanding of the scope and limitations established for this piece of the research the international partners were asked a series of questions:

- How are urban green spaces classified for management purposes, and why?
- Who owns the different types of urban green space?
- Where does the responsibility lie for different types of urban green space?
- Are there particular management problems associated with different types of urban green spaces?
- Are there particular types of urban green space which have presented opportunities for more innovative or effective management?
- How have the requirements of different types of urban green space been addressed in policy and practice?

The answers to these questions are explored in the following comparative discussion.

The international experiences

Green space typologies

The types of public green space for which local authorities are responsible varies considerably, from the smallest green squares to large expanses of open land. Many of the cities examined were actively involved in managing large areas of natural or semi-natural landscape that had been incorporated into the urban context because of topographical constraints (eg Wellington), by historical accident (eg Groningen), or sometimes by design (eg Curitiba). Increasingly, these green lungs were being used as positive means to achieve a better integration of the natural and human worlds, adding immeasurably to the latter through the distinct quality of life benefits that it was believed they could bring.

Nearly all the cities used public space typologies as part of their approach to urban green space management, most often classifying spaces by size and function, but variously also by:

Parks and green spaces in the greater Melbourne area

- Their location in relation to the urban context (eg Wellington's city open spaces, suburban open spaces, inner green belt, the bays, outer green belt)
- Environmental criteria and natural value
- Potential uses, as well as existing ones
- Ownership
- Relative protection from development (eg as a planning tool)
- Heritage value
- Management responsibility
- Professional responsibility (eg gardeners or foresters)
- Their required maintenance approaches and tasks
- Special equipment requirements

In Malmo and Tokyo, the classifications also had a long-term planning function, as a tool to try and ensure an even distribution of green spaces according to their function, across these cities.

The exceptions were Paris and Minneapolis. In the former, there is no official typology of urban green space for management purposes, and although there are clearly differences between the city's spaces in terms of their management needs, apart from the large urban forests, all urban green spaces are classified as gardens. In Minneapolis, almost all urban green spaces are classified as local parks and, rather than a hierarchy of green spaces, the Minneapolis park system is based around a system of trails, paths and roadways encircling the city in a 50-mile loop which incorporates several lakes, parks and both banks of the Mississippi.

Most typologies represented non-statutory, locally-derived systems inspired by local contexts and green space types, and often by management convenience. Occasionally, however, systems were nationally derived to meet particular objectives. In Curitiba, for example, the urban green spaces classification was revised through municipal legislation in 2000, and in line with federal legislation of the same year, in order to better control the development of unsuitable land and to protect existing green spaces – particular problems in a city subject to squatter settlements.

Legend:
- green space
- forest
- agriculture
- allotment gardens
- cemetery
- special area
- water
- open air bath
- sports fields
- – – – limits of the City of Hanover
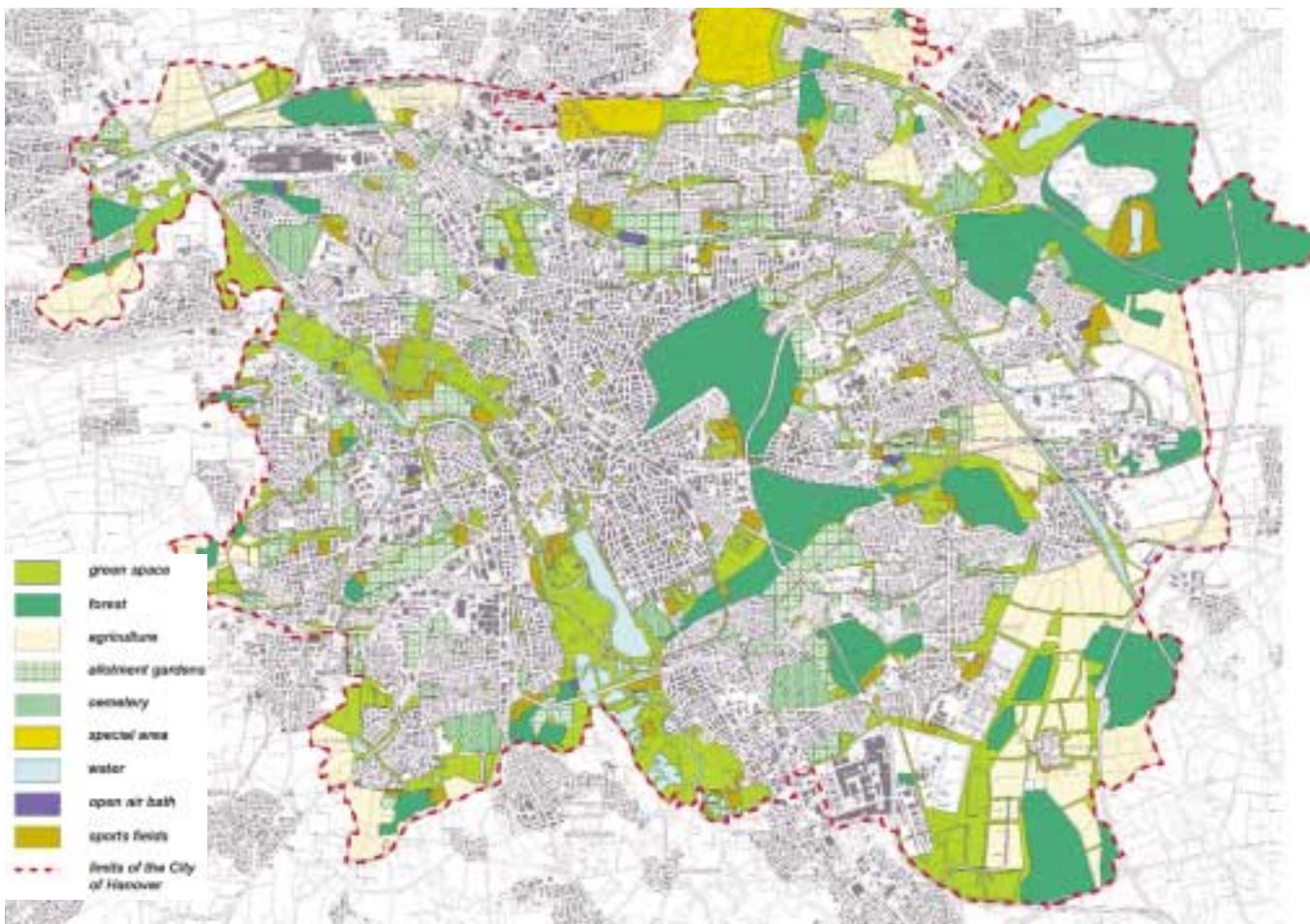
Open space typologies in Hanover

In Japan, the green space typology is defined nationally on the basis of size, location and function as part of a policy to provide various kinds of green space within walking distance of residential areas. In New Zealand, The Reserves Act of 1972 requires all reserves to be classified for: recreation, historic, scenic, natural, scientific, governmental, or local purposes. However, under this broad classification, most local authorities have their own, more detailed breakdown of types, determined mainly for operational management purposes.

Ownership and responsibility

In relation to different types of urban green space

It seems that with relatively few exceptions, urban green space is owned and managed in the 11 cities by the state. In the main, this ownership is exercised through local government in various guises, although there were exceptions. These included:

- Green space which is managed by national government, because of its strategic nature. Green space along major roads, riverbanks, canals, and other waterways often seems to fall into this category.
- Culturally and/or historically important parks and gardens are often managed by the state, frequently by historic accident, as is the case with a number of key Parisian parks.
- Green space within post-war housing estates. In Groningen, this is owned and managed by local housing corporations,

which also manage the neighbourhood parks. In Malmo, the Public Housing Company manages green areas in public housing estates.
- Small cemeteries, which are often owned and managed by local churches. This is the case in Malmo, where the cemeteries are owned and managed by the Church of Sweden.
- Occasional spaces managed directly by communities themselves. In Minneapolis, for example, a number of community gardens are owned and managed by a coalition of not-for-profit organisations. Meanwhile in Tokyo, the management of small green spaces has recently been taken on board by voluntary organisations.

A number of innovative approaches to the issue of ownership and responsibility were also highlighted by the international experiences:

Split responsibility

Ownership and management can be split, as is the case in Hanover, where the banks of the Mittellandkanal are owned by the state but managed by the city, as are a number of privately owned forests with public access in the city. This arrangement brings with it distinct benefits by allowing the management of these spaces to be coordinated with that of other local green spaces. In Groningen, all nationally-owned space is managed locally by the municipality, offering similar benefits.

Temporary use

In Tokyo, the provision was made in 2003 through a revision to the Urban Park Act to allow temporary green spaces to be created on unused private land and even on private structures, in the form of roof gardens, for example. In essence, the legislation establishes a right of use separate from ownership, and the resulting spaces will be managed by local government on the basis of flexible contracts established for specified periods of time between the local authority and the owner. The contracts also deal with the question of investments made by the public sector during the period of occupation.

An independent board

In the case of Minneapolis, the management of urban parks, along with the larger regional parks, parkways, boulevards and trails, falls under the authority of the Minneapolis Park and Recreation Board (MPRB). This is an independent, elected board with law-making and tax-raising powers, established by state legislation in 1883. It manages 30 regional and 140 neighbourhood parks, plus 49 recreation centres and 43 miles of bike trails in Minnesota and a neighbouring county. Some smaller open spaces along rights-of-ways and adjacent to buildings are owned and managed by the City of Minneapolis, but in essence the Board represents an independent form of local government, dedicated to the provision and management of urban green space.

Government agencies

The use of focused, arms-length, local government agencies, set up specifically to manage urban green space on behalf of local government. In Tokyo, for example, the Tokyo Park Association, a public corporation with a dedicated remit, manages the majority of parks. In Melbourne, all open space is crown land, but Parks Victoria manages much of it, amounting to a network of 37 metropolitan parks, the recreational aspects of Melbourne's major waterways, Port Philip Bay and the trails network throughout the city. By contrast, the City of Melbourne is responsible for a much smaller amount of open space in and around the city's Central Business District.

Parks Victoria was created in 1966 from the amalgamation of state and municipal agencies, and in 1998 was given legal status as a statutory authority, providing services to the state and its agencies for the management of parks, reserves and waterways on public land. In addition to urban parkland, Parks Victoria manages national and state parks around the metropolitan fringe, and, like the Tokyo Park Association and MPRB, is able to focus on this task alone.

Pressures and opportunities

Particular to different types of urban green space

The international partners reported a number of pressures particular to the different types of urban green space. These focused on the demands of an urban context, the demands of different expectations for green space and the need to recognise the diversity of urban green space types and provide responsive management approaches.

Urban context Many of the problems related to the intensity of management responses required in highly urban areas, where green spaces and green features are coming under pressure for a variety of reasons:

- The intense use of city centre parks, requires intensive management regimes, often exacerbated by the original (often highly particular) design solutions adopted.
- Conflicts arise between occasional events and everyday leisure use, the former bringing with them problems of littering, noise, drug use and vandalism.
- Conflicts occur between green and built features in urban areas, often leading to deliberate damage to street trees.
- Difficulties are felt in controlling development pressures in areas of high land values in order to keep existing green space and to provide new spaces where none exist.
- There are challenges associated with the replacement of ageing street trees and green landscape features without undermining visual qualities in often sensitive areas.

Different expectations for green space Some problems related to the lack of coordination between different agencies, particularly as regards their expectations and priorities:

- Differences occurred in management and maintenance expectations and therefore the quality expected between different organisations responsible for urban green space eg the municipality and housing corporations in Groningen.
- Standardised and insensitive legal duties towards traffic safety, tended to shape the management systems for the spaces to which these duties applied.
- Political decisions are made which were insensitive to context. For example, in Paris, the recent management problems associated with the political commitment to introduce play areas into all parks, with children causing damage to plants and lawns, may lead to a significant change in the character of the city's green spaces.

Recognising the diversity of green space needs Another pressure, highlighted by the need to conserve the sensitive ecology of New Zealand, related to the provision of responsive management approaches and systems. Specifically tailored management plans can explicitly acknowledge differences in green space needs.

In Hanover, the cemetery sector was the first to adopt more innovative and effective management systems tied to legislation in the 1970s. The legislation determined that cemeteries should be financially self-sustainable, and that cost should be covered by income. This led to new, decentralised management practices which were later adopted in other parts of the green space management service.

In a number of the case studies, new opportunities were being seized around a water theme, with recent developments or collaborations in Aarhus, Groningen and Malmo leading to the creation of new water-based spaces. In Malmo, for example, collaboration between the city and the water authority has led to the integration of drainage ponds and canals into the park system.

Case study: Tokyo

Tokyo (population 12 million within Tokyo Prefecture, 8 million in inner Tokyo) is the capital of Japan. Inner Tokyo is divided into 23 relatively autonomous special wards with their own elected mayors and assemblies. Population density in inner Tokyo averages more than 13,000 per km². Added to the ever-present risk of earthquakes, this has made open space provision a key policy objective.

Meeting national aims

There has been a shift in the approach to urban green space management since the Japanese economy went into recession in the early 1990s: from the historic interest to increase provision to current goals concerned with achieving better quality. This resulted in attempts to develop parks as public amenities suited to diverse social needs rather than provide standardised urban green spaces.

Tokyo suffers from an endemic shortfall of green open space ($6.1m^2$/person – $8.5m^2$/person in Japan – compared to $26.9m^2$/person in London) and it has been a long-standing goal to increase this figure. The Urban Park Act 1956 sets national standards for provision and the framework for local open space policies. Tokyo's Green Space Plan 2000 aims to develop 400 hectares of green space by 2015.

Four goals are especially important for the development of urban green space at the national level:

- To serve as refuges for evacuation in the case of disasters such as earthquakes
- To alleviate the effects of the heat-island phenomenon associated with densely built-up areas through the introduction of soft landscape
- To promote tourism as a contributor to the national economy and regional development, in particular historic urban parks
- To provide recreation spaces and facilities to an increasing elderly population

Traditionally, political power has been highly centralised in policy and budgetary terms, but recently greater independence of local government has been encouraged. When land is procured for open space, central government bears one third of the acquisition costs and half the cost of constructing facilities. About 80% of central government's urban green spaces budget subsidises the provision of facilities.

Private sector involvement

After 1998, when income from national and local taxes declined with the subsequent reduction in funds for green space management, Japan started looking at partnerships with the private sector, including open space provision in the context of limited land resources. Proposed revisions to the Act address this collaboration with the private sector:

- Underused space provides opportunities for green space irrespective of ownership, eg rooftop parks
- Temporary use of vacant land: allows local government to relax regulations in and enter agreements with private owners in order to establish urban green spaces for limited periods on unused land owned by corporations
- Extension of the Private Finance Initiative (PFI) approach to urban green space management
- Introduction of more competitive practices by contracting out maintenance work by 2006 across Tokyo metropolitan government green space services

Clockwise from left:
Hibiya Park, central Tokyo; Wedding ceremony in Hibiya Park as part of centennial celebration; Proposal for rooftop parks; Historic park in Central Tokyo; Tree planting by volunteers

The PFI has proved useful in directing investment and expertise for a limited period to a specific project: in 2003, Tokyo's Department of Park Development organised the Hibiya Park centennial celebration in collaboration with businesses based around the park. The events were funded by the private sector whilst the local authority retained responsibility for managing the park and supervising the events.

Community participation

The Act revisions also foster greater community participation in the management of green spaces:

• Relaxation of conditions for approval enabling National Government Organisations (NGOs) and community groups to establish and manage facilities in public spaces. This assists the recent trend of local resident involvement in the planning and management of urban green space (in particular senior citizens contributing their knowledge and skills).

NGOs Local government retains overall responsibility, but can entrust management to other organisations (especially 'city-wide' parks) such as the Park Preservation Society, Aigo-kai, whose members contribute on a voluntary basis. The Cleaning Committee, Seisou-kai, assists the Society with maintenance work whilst the Neighbourhood Committee, Chyounai-kai, organises events, such as summer festivals or light exercise activities.

Residents Local people get involved in the maintenance of smaller community parks, which tend to be used by senior citizens daily and require more care to keep them in good condition.

The Inquiry Commission of City and Regional Planning, established by central government, has proposed three kinds of action to improve the involvement of active local groups:

• Better support for existing local groups through more formal contracts between the local authority and the groups relating to specific items in the maintenance routine, including encouraging exchange of information between local groups.
• A comprehensive system for training volunteers to maintain skill levels and establish standards throughout the green spaces.
• Relaxation of restrictions under the Urban Park Act to allow the construction of park centres as bases for these local volunteers.

02

The lessons for English practice

Green space typologies

The experience of the 11 cities confirmed the view that the good management of green spaces depends upon a correct understanding of the nature and needs of different types of green spaces, and that one-size-fits-all, standardised approaches will rarely be appropriate. Therefore, a typology to differentiate amongst green spaces can be a useful management tool to establish common management regimes within categories of green space.

Experiences also suggested, however, that this should not be primarily a matter for standardised national classifications to which local green space managers have to conform. Instead, they should be the result of locally-generated criteria, shaped by history, geography and ecology, as well as by national standards where they exist. In the international cases where formally defined typologies had been particularly beneficial (eg Wellington, Curitiba, Groningen and Malmo), clear linkages were also found between green space typologies and active management strategies, explicitly connected to clear, but differentiated, public space quality aspirations.

Typologies also offered the opportunity in several cases to explicitly establish a link between the green space classification and broader local government policy objectives, especially as regards issues of sustainability. Taking this broader policy context on board not only helped to deliver overarching policy objectives, but also reinforced the position of green space management and its needs and priorities within other areas of the local government remit.

Ownership and responsibility

The ideal green space management scenario appears to be one where one organisation both owns and manages all key green spaces across a city, from the small to the large. Minneapolis is perhaps the closest to this ideal, with MPRB being almost the sole agency in charge of deciding on management policies for the city's urban green spaces – a set of responsibilities aided greatly by the conflation in one organisation of the financial and legal means to implement its own policies. However, this case is unique. Most of the other cities had to operate within a historical legacy of different types of green spaces being owned by different agencies and levels of government.

The key lesson that emerges from the experiences of these cities is therefore the need to establish a coherent management strategy to cope with the diversity of green spaces, integrating and unifying management regimes, preferably under the auspices of one organisation.
The dissociation between ownership and management responsibility evidenced in many of the cases seems to be the key to achieving that unification, with, for example, green spaces owned by multiple organisations, but managed collectively by one. How this was done, to what extent green space owners transferred power and control to management

agencies, whether this involved setting up new organisations or using existing ones, and so forth, was a function of the institutional, legal and political context of each of the cases. Overall, no one 'right approach' was apparent.

The benefits of a dedicated urban green space (or perhaps urban space, green or otherwise) agency/authority, was nevertheless readily apparent. Removing ownership rights (even if temporarily and by negotiation, as in Tokyo) from under-utilised spaces in areas with green space deficiencies, so that they can be utilised as public green space, also carried obvious benefits.

Pressures and opportunities

As reported by the international partners, the nature of, and the pressures on, green spaces can vary either as a function of their location in the urban fabric, the uses they have, or the expectations of the different agencies with a say in their management. The natural dynamics of changes in society also add to the variation, as exemplified by the new demand for play areas in the historic parks of Paris.

Very often, these pressures lead to real threats to the quality of the green spaces concerned. However, the international cases suggested that whereas these problems cannot be avoided, they can be dealt with quite successfully if they are openly acknowledged by management strategies. Thus, in many of the 11 cities, special management regimes were set up to tackle types of green space where particular problems were more acute (eg Zurich lakeside parks, neighbourhood parks in Tokyo, city centre parks in Groningen). In some cases, this involved more intense maintenance routines, in others a closer involvement of park users in management decisions, in others still, the introduction of more sophisticated monitoring tools.

The key message is therefore the following: that the diversity of problems as well as opportunities needs to be acknowledged – and most significantly dealt with.

In Minneapolis, one organisation both owns and manages all key green spaces across the city

What can we learn?

02

- The successful management of green spaces depends upon a correct understanding of the nature and needs of different types of green spaces.

- Locally-derived green space typologies are valuable to differentiate between green space types and their appropriate aspirations and management regimes.

- A coherent management strategy is required to cope with the diversity of green spaces, and to integrate management regimes, preferably under the auspices of one organisation.

- A clear distinction between ownership and management responsibilities for urban green space can help to establish a unified and integrated management regime.

- The benefits of a dedicated urban green space agency/authority was readily apparent.

- Diversity in the problems associated with different types of green spaces needs to be acknowledged and dealt with.

- Dedicated management regimes set up to tackle particular types of green space or green space problems can be effective.

03 What are the aspirations for urban green space?

In this chapter

- **The English context**
  Establishing a set of aspirations for the different types of urban green space in England

- **The international experiences**
  Establishing aspirations within a policy context
  Political determination and influence
  Engaging the public

- *Case study: Malmo, Sweden*

- *Case study: Aarhus, Denmark*

- **The lessons for English practice**

- **What can we learn?**

The English context

Establishing a set of aspirations for the different types of urban green space in England

Defining a clear set of aspirations for the different types of urban green space is likely to be an important stage in developing and implementing a green space management strategy. For individual spaces, these are likely to be quite specific, but should also reflect the different forms of value added by green space.

The Urban Green Spaces Taskforce emphasised three particular aspirations. They argued that urban green space should be:

- High in quality (in terms of diversity, presentation and appearance, facilities, etc)
- Accessible to all
- Adequate in quantity

More recently, the ODPM report on managing external public space, 'Living Places – Caring for Quality' suggested that it is possible to identify a common set of aspirations for public space.

Public space should be:
01 **Clean:** a clean and well cared-for place
02 **Accessible:** a place that is easy to get to and move through
03 **Attractive:** a visually pleasing place
04 **Comfortable:** somewhere that is pleasant to spend time in
05 **Inclusive:** a place that is welcoming to all
06 **Vital and viable:** a place that is well used in relation to its predominant function(s)
07 **Functional:** a place that functions well at all times
08 **Distinctive:** somewhere that makes the most of its character
09 **Safe and secure:** somewhere that feels safe from harm
10 **Robust:** a place that stands up well to the pressures of everyday use

By contrast, reporting on the green space management experiences of the Round Three Beacon Councils, 'Improving Green Urban', argues that green space management should be built around three forms of value:

- **Delight:** the contribution of green spaces to the aesthetic quality of an areas, and to the quality of urban life
- **Community:** the contribution of green spaces to the social and economic well-being of urban communities
- **Ecology:** the contribution of green spaces to the promotion of biodiversity

Just as the problems associated with particular urban green spaces vary, as discussed in chapter 02, so aspirations are also likely to vary. This depends on who is defining them, the nature of the space being considered and the functions that a space needs to cater for. However, as the Urban Green Spaces Taskforce revealed, few authorities have clearly-defined aspirations for their urban green space in the form of a coherent vision and strategy for future action, and there has been little political or community engagement with these issues. For its part, the Government in 'Living Places: Cleaner, Safer, Greener', established that the key components of attempts to re-engage in these issues would have three elements:

01 **Strong local leadership** focused on improving parks and green spaces services
02 **Strategies for identifying and achieving improvements to local green spaces** linked to corporate objectives and broader strategies and priorities
03 **Consultative approaches** reflecting a commitment to address the needs of all sections of the community

Therefore, the research needed to address who exactly defines the aspirations for urban green space and attempts to establish the extent of their influence. It needed to highlight the significance of the political process at different spatial scales and the influence of the wider community in defining aspirations.

Informed by the above aims, the following questions were asked of the international partners:

- How are aspirations for urban green space defined, how are they transformed into policy, and who is responsible?
- What policy instruments are used, how are they used, and how effective are they?
- How do the different public sector stakeholders participate?
- How do these aspirations relate to other policy priorities?
- How are aspirations supported within government?
- How important are green spaces and their management in relation to other public services?
- How are green space issues championed in local government?
- How do community interests participate in establishing green space policies and priorities and in the day-to-day maintenance of green space?
- How are the needs of the socially excluded and of particular user groups addressed?
- How are community aspirations changing?

The answers to these questions are explored in the following comparative discussion.

The international experiences

Establishing aspirations within a policy context

03

National policy

The extent to which urban green space represented a national interest varied between cities. This went from no national interest at all, as was the case in the US and Australia, to green space policy being almost entirely established at the national level.

Tokyo was the clearest example of the latter approach, where an aspiration to increase the area of green space per capita has been a long-standing national goal for urban areas. In this case, government has seen green space policy as an opportunity to: create refuges from the effects of natural disasters such as earthquakes (a policy since the 1920s that which is strongly supported by the police and fire brigade); alleviate the effects of the heat island phenomenon (a particular problem in dense Japanese cities); develop the tourist potential of Japanese cities; and to provide for the leisure needs of children and the increasing numbers of elderly, close to their homes.

Sometimes, however, particular forms of green space are subject to their own legislation, over and above general green space policy provided elsewhere. In Denmark, for example, allotment gardens were recently preserved by legislation, and can only be abolished for national purposes.

Overarching spatial planning policy

In cities with a strong national policy context, the development of green space policy usually links back to spatial planning policies established through national statutory planning regimes, such as those established nationally in Sweden. The link to spatial planning policy can bring with it distinct advantages:

- **Long-term certainty** In Groningen, the city's municipal structure plan has included policies on hard and soft landscaping from the late 1980s onwards, and now outlines ambitions for green space development and management in the city for the next 10 years (policies reviewed every 5 years).
- **Green space protection** The Danish Planning Act makes green space a formal land use category. As a result, because changing land use designation is a time-consuming process which includes public consultation, there are few changes from green space to developable land use categories.
- **Flexible interpretation locally** In Germany, the main statutory instruments for urban green space policy generation are the federal planning and construction laws. However, the ability of cities to interpret these locally still offers a strong position for policy formulation at the local level.

Elsewhere, other broader environmental legislation establishes a similar framework. In New Zealand, for example, there are three main statutory mechanisms defining the aspirations for green spaces and their transformation into policy: the Reserves Act 1977 sets out powers and responsibilities for creating and managing specific reserves, whilst providing statutory protection

imposes management obligations on the reserve administrator. The Resource Management Act 1991 is a tool aimed at achieving the sustainable development of New Zealand's land and physical resources and applied at local level through regional and district land use plans (tree listing and protection is part of this process). The Local Government Act 2002 empowers local government to use various statutory and non-statutory tools for fund-raising, spending, managing the environment and providing services and facilities for the community.

Green plans

For a number of the cities examined, a green space policy hierarchy begins at the national or state level, but then cascades down to lower tiers of government, and sometimes vice-versa, in a two-way process.

In Melbourne, for example, Parks Victoria works within a number of state government policies and strategies, from the overall vision for Victoria ('fair, sustainable and prosperous'), through environmental policies, and to a public sector management reform programme addressing resource management practices to achieve improvements in service delivery. In 2002, after two years of public consultation, Parks Victoria produced its own strategy for Melbourne's open space network, with a vision focused on six principles:

01 equity
02 sustainability
03 diversity
04 flexibility
05 responsiveness
06 partnerships (within and outside government organisations, including the community and volunteers)

Following the exercise, the principles were incorporated into the state's overall metropolitan strategy around the vision statement of 'a linked network of open space for all to enjoy as part of everyday life, preserved and enhanced into the future'. Parks Victoria is also required by statute to produce a Corporate Plan each year which includes a 10 year vision, complemented by a series of three-year strategies for progressively achieving the vision, and a one-year business plan, detailing programmes and activities.

Significantly, many of the study cities' 'green plans' varied in their spatial scale and level of detail. In Denmark, Municipal Green Structure Plans are requested under the Planning Act, whilst in Aarhus they are used as tools for planning and to enable public debate on the strategic urban green spaces policy.

In Groningen, the municipal structure plan serves as a framework for sectoral plans and the zoning plan (the only physical planning instrument directly binding on citizens). The former includes the 1990 policy plan, 'Giving Colour to Green', which formulated a vision for each park, attributing each a theme linked to its use, with the purpose of enhancing the quality of all existing green spaces. Three municipal structure plans dealing respectively with trees, ecology and the linkage between the overall green spaces vision and the Groningen public spaces

management system (the BORG – see page 84) have also been prepared. To add to this already comprehensive policy framework, the council is now working on a green spaces structure plan, linking the various instruments to the structure plan and thereby creating greater coherence.

The cities collectively demonstrated the function and value of green planning for:

- Ensuring that there is an adequate provision of green space in urban areas
- Securing the strategic planning of green space (eg the provision of green corridors in Malmo, linking the city centre to the periphery via cycling and walking paths)
- Establishing guidelines for day-to-day park and green space management
- Establishing a shared vision – in Malmo the departments of Streets and Parks, Recreation and Leisure, Real Estate, and the City Planning Office worked together to prepare the plan, with ample consultation with residents and politicians
- Mapping recreational possibilities and ecological values, both existing and potential, as well as types of public and private space (eg parks, sports grounds, schoolyards) that can contribute to a citywide strategy for green spaces
- Making connections to other policy frameworks and responsibilities
- Establishing and protecting green heritage assets and defining the natural features which characterise urban areas
- Establishing coherent approaches to balance recreational, ecological, and heritage concerns, as attempted by the Wellington 1998 strategy for managing open space
- Assisting in decision-making priorities about land acquisition for green space and disposal for other purposes

In the development of Zurich's 1999 'Open Space Concept', and following dialogue between different municipal departments and external experts, a series of qualitative and quantitative goals were established around the broad aims for green space planning and urban development within the city. These goals encompass the general aim of the city council to create a sustainable Zurich. The document goes on to establish, amongst other things, a range of quantitative standards for development in the form of catchment areas for different types of green spaces (refined to suit different parts of the city), which guide the implementation of new green spaces. The requirements set an amount of green space per working place, an overall amount of green space per inhabitant and an amount of undeveloped land that should be acquired per square metre of built floorspace. The qualitative aspirations and quantitative standards have been both readily accepted by politicians and citizens.

The absence of a 'green plan' Only in Minneapolis was there no comprehensive planning with which to marshal resources and provide a vision for the future of the city's green spaces. The nine elected commissioners of the Minneapolis Park and Recreation Board (MPRB) instead set the short-term, overarching goals for the park system. The commissioners, aided by the superintendent and senior staff, seek consensus on a direction for the board's activities for the coming year. The ideas are subsequently distilled into four or five narrowly focused

03

goals, which are subsequently used for evaluating the board's performance. The latest approved goals include enhancing connectivity within the parks system, and acquiring more land along the banks of the Mississippi.

Recently, however, the lack of planning has impaired the agency's ability to react to changing user needs or to adopt the sorts of innovative park practices that are common elsewhere, such as separate pet-friendly areas or teenage skating zones. Recognising this failure, the board is now updating its internal masterplan, which has not been revised since 1967.

Political determination and influence

Local vision and leadership

Given the long-term success of the parks system in Minneapolis, the laissez-faire attitude of MPRB towards planning is surprising, its success has been put down to strength of leadership and the professional skills of its staff. Of course, being an elected board with one responsibility – managing the parks system – and guaranteed income through its own tax-raising powers has been of considerable assistance in maintaining the board's single-minded determination to manage the city's parks system in an exemplary fashion (see Minneapolis case study page 42).

These advantages were not shared by the other 10 cities included in the study. However, in different ways each confirmed the importance of political vision to delivering well managed urban green spaces.

A local responsibility and commitment The experience across the 11 cities has generally been that the commitment and performance of individual local administrations is more important for the quality and quantity of urban green spaces than the national legislation, largely reflecting the very devolved nature of powers and responsibilities in these areas in most of the administrations.

Paris, where policy for green spaces is defined exclusively by the Mayor of Paris, and by the Deputy Mayor for Green Spaces subject to approval by the city council, provided perhaps the most obvious demonstration of this local political dimension. Because there are no other stakeholders statutorily involved in deciding on green space strategies and policies, lines of political accountability and responsibility are very clear and helped by the fact that green spaces, together with public transportation, have consistently been the main priorities of the municipality. This commitment to green space is demonstrated by the current Mayor, who, when elected in 2000, made a key commitment from his administration. By the end of his term he pledged to have planted 100,000 trees along the streets of Paris and increased the number of green spaces so that no one would live more than 500m from such a space. The Mayor of Paris has also effectively instructed the mayors of the lower-tier Paris Districts to create new green spaces wherever possible. Thus, although the latter have no policy powers of their own, they can present propositions to the Department of Gardens and Green Spaces of the city, based on local discussions.

The vision for Aarhus is a city surrounded by forest

Linking green space quality to wider political agendas
Linking local green space agendas to broader national policies and priorities can also be important in raising the profile of green space management. In Aarhus, politicians have long given priority to environmental issues, reflecting such concerns in the plans and practices of the municipality, in the adoption of eco-accounting, for example. This has influenced green spaces management in the city and provided its emphasis on sustainability, including the strong emphasis on green space management issues in the Agenda 21 strategy for 2002–05. It has also meant that green space management issues themselves have been a political priority, with the Aarhus 'Green Structure Plan' benefiting from a wide, cross-political consensus. The plan itself can be summed up by the slogan, 'Aarhus Surrounded by Forest', which underpins the shared vision for the city (see Aarhus case study page 26).

Cross-political consensus In Curitiba, the green space vision dates back to the 1940s. Since that time, green spaces in the city have been conceived as places not only for leisure, but for the protection of native forests, waterways and flood control, and have become a major political priority. There has therefore been a continued effort by the city administration to convince citizens in general and businesses in particular of the importance of investment in green spaces. This green consciousness has now become a part of the city's self image (see Curitiba case study page 40).

Likewise, in Hanover, green space policies rank high amongst city council policies, even if they are not included in the statutory duties of the council. The main vision for green spaces is summarised in the slogan 'Hanover – City of Gardens', which underpins the political vision and physical strategies of the city council, whilst the constituent dimensions of green space policy in the city have been:

- Green space management as part of a comprehensive programme of sustainable development, linked to Local Agenda 21 initiatives
- Regional linkage of green space policies through regional government
- Green space planning covering the whole of the city area, including its fringes
- All legal planning instruments used as effectively as possible (eg although not a legal requirement, the 1990 Landschaftsrahmenplan was formally adopted for the whole city)

All the political parties see green spaces and their management as important to the image of Hanover, and therefore the political consensus on this issue has emerged.

Marketing green space In Malmo and Melbourne, the green space managers themselves have successfully taken the initiative to raise green space issues up the local political agenda. The Malmo Streets and Parks Department, for example, has been very successful in marketing the benefits of parks and green spaces to its local politicians, by ensuring that every opportunity is taken for securing positive headlines for its work, and by inviting politicians to launch events arranged to mark the opening of new or refurbished local spaces. In this way, they argue, urban green space is not seen as a drain on resources. Instead, it is perceived as a way of actively improving the quality of life of local citizens (see Malmo case study page 28).

Parks Victoria, on the other hand, has tried to demonstrate and quantify the wider benefits which accrue from parks (environmental, cultural, economic, health benefits and benefits in community cohesion) as a means to influence government funding priorities and to increase community support. Its report, 'Healthy Parks/Healthy People', was commissioned and launched as part of a marketing campaign to demonstrate the cardiovascular and mental health benefits of interacting with nature, which successfully partnered the agency with the National Heart Foundation, Asthma Victoria, Arthritis Victoria and the Royal Australian College of General Practitioners.

Engaging the public

Means of community involvement

The issue of community involvement in the management of urban green spaces was taken extremely seriously by most of the 11 cities, not least as a means to garner public support for green space and thereby raise the issue up the local political agenda. Issues of course vary from place to place, but amongst recent concerns have been social topics such as the question of safety and security in Malmo, a demand for more and better play spaces in Paris, and the issue of improving accessibility to the widest possible section of the public in Curitiba, including for children and those with impairments.

In Hanover, where public involvement in green space planning is taken extremely seriously, managers note that, although public aspirations do not change much, the influence throughout the 1980s and 1990s of the nature conservation lobbies and their support for more wildlife in green spaces has waned, to be replaced by more prosaic concerns for green spaces which are regularly cleaned and mown.

A number of mechanisms are being used across the 11 cities to encourage community involvement. These range from one-off initiatives or consultations (eg on green space-related spatial planning policy), to the direct involvement of communities in the management process, or indeed across the range of green space-related activities. In Melbourne, for example, the community is consulted in the development of the metropolitan open space strategy, the organisation of recreational activities, and in specific park planning processes, the approach being to

involve as early as possible and to encourage the airing and discussion of all views.

In Wellington, several key statutes affecting urban green spaces require formal public consultation. These include preliminary input of ideas to help policy formulation, followed by formal written submission and hearings on draft plans, with recourse to higher levels. The benefits are thought to be the gathering of community support for processes, and the consequential reduction of adverse criticism, although only when the council uses a range of methods to communicate effectively. The city council in Hanover also has a statutory duty to ensure the participation of the community in the planning process and has to respond to formal complaints. In Hanover, whenever a new park is planned, an existing one is refurbished or even a task such as tree-cutting undertaken, the council seeks to involve the community.

Specific proactive initiatives to involve and communicate with communities include:

Voluntary neighbourhood boards These have been introduced in Aarhus, made up of local residents and businesses. There is now an obligation to involve these local boards in all matters concerning local areas.

Local partnerships An example is the three-way partnership which forms the basis of a new 'collaborative model' being introduced in Curitiba to involve the city government, the community and the private sector in green space planning. The initiative represents an attempt to overcome the previous, highly centralised decision-making processes.

Involvement in green space appraisal The BORG management system used in Groningen (see Groningen case study page 84) which gives residents a role in assessing green space quality as a means to raise their awareness of their surroundings.

Participation through design In Malmo this happens on an *ad hoc* basis when parks are being renovated, and in Zurich where the former industrial areas of the city are being converted into parks, with the direct participation of local residents, business and key local organisations. In Minneapolis, Park Planning Citizen Advisory Committees are utilised for new capital improvement projects and consist of volunteers or citizens appointed by the commissioners. In 2003, there were 26 such meetings.

Park activity councils These are also utilised in Minneapolis, and are intended to bring together park users, local residents and MPRB staff to develop and run recreation and sports programmes and other park services.

Volunteer rangers These are a particularly successful initiative in Wellington, assisting with patrolling and inspection of green spaces, especially the larger areas. They become the councils' 'eyes and ears'. There is now a fully-paid volunteer coordinator working for the council to coordinate the activities of the rangers, who have helped to establish better lines of communication between the council and the community.

Local open space administrators These are employed in each district of the city of Zurich with a direct responsibility for public space management. Because they are usually well known to the local population, they act as a direct conduit through which residents can contact the city council.

Special events The Federal Garden Shows, organised in Hanover to promote the importance of green space management in the city. These high-profile events attract significant financial support and are used to discuss city development issues and to promote better quality private gardens in the city.

Means of communication Both in Paris and Hanover, the lower-tier district councils are used as conduits for organised community participation on green space matters, and as a means to disseminate policy. Effective communication to local populations is often supplemented by publications and specifically organised events.

Issues with community involvement

Two types of problems had been encountered by the cities, problems broadly associated with too little participation, or at least an unwillingness of groups to get involved; and, conversely, less frequent problems associated with too much involvement:

Too little This was not usually associated with a lack of effort on behalf of a particular city to involve their citizens, but more often with a lack of interest amongst citizens. In Aarhus, for example, despite provision for public participation in municipal planning, the actual levels of participation mean that most decisions on the strategic management of green spaces are taken on an administrative or political basis (see Aarhus case study page 26). Local citizens, for their part, are more concerned with influencing the quality of their own local green spaces, and seem content to leave more strategic decisions to those with direct responsibility for such matters.

The city has found it particularly difficult to involve the business community and minority ethnic groups in decision-making. The latter, it is argued, find participation an alien concept due to cultural differences, lack of experience in democratic participation and a distrust of the state.

Too much This was a problem in Groningen and Minneapolis, for different reasons. In Groningen, the Dutch tradition of high levels of public participation has led to a situation where public works (including green space management) have sometimes been demand-led rather than planned. The implication has been *ad hoc* city management approaches and a tendency for those who shout the loudest to get the most out of the system. To resolve the problem, project development (including major repair works) is now the only aspect of green spaces management in which there is direct public participation, according to nationally established frameworks. The inputs are then formulated into an overall plan by a neighbourhood coordinator.

In Minneapolis, though, there are around 20 adopt-a-park agreements in place between the MPRB and community groups. But the city's highly unionised workforce has resisted allowing citizens any major role in the day-to-day management of parks. Inevitably, this has restricted the extent to which communities can become directly involved.

Involving minority groups

The difficulties in involving minority groups in green space management were being tackled head-on by a number of the cities in a number of ways:

Minority group involvement In Aarhus, recent immigrants often occupy the less desirable 1950s housing estates, with their poorly defined public/private space relationships, making their lack of interest in green space issues a particular problem. In an attempt to reverse the situation, Aarhus is trying new approaches through an EU-funded URBAN initiative, which aims to enable excluded and deprived communities to influence changes in their own environments. The approach is aiming to involve these groups directly in the ambitious Hasle Hills project (see Aarhus case study page 26), not least through the direct employment of these groups on the operational staff.

Minority group management plans Although there is little specifically done to address other minority ethic groups in Wellington, The Treaty of Waitangi forms part of the original constitutional settlement between the indigenous Maori peoples and the Crown, which is based on the principle of autonomy for the Maori and of mutual consultation. Thus, consultation with the Maori is obligatory when formulating green space management policy. Iwi Management Plans are now produced as a vehicle for local Maori (Iwi) to articulate their aspirations, including the protection of Maori heritage sites, a constraint on approaches to green space management.

Identified group representatives In Hanover, the council works with identified representatives of the disabled and immigrant communities, elderly and women's groups, who are informed about any proposal which might affect them before any decision is made and who have the opportunity thereafter to help to shape the proposals.

Community access strategy To ensure that multicultural involvement becomes a feature of the annual works programme in Melbourne, and to encourage the use of parks by different cultural communities, a community access strategy is being prepared. The principles are reflected in the Melbourne Open Space Strategy, which encourages design practices which improve the use of parks by people with diverse cultural backgrounds and varying levels of mobility.

Direct involvement in management In Tokyo, residents are increasingly being directly involved in various stages of green space management, from local to large scale parks, from planning to operation. The initiative is particularly focused on the increasing numbers of elderly residents as a means to tap into their knowledge and skills. Some 30 community groups are now directly involved in restoration projects.

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Case study: Aarhus

Aarhus (population 292,000) is the second largest city in Denmark and was founded as a coastal trading area in the Viking age in an attractive landscape of hills and river valleys, lakes and forests. Dense for Danish standards, with the exception of the old city centre, the rest is a garden city.

The Green Plan

The priority given by politicians over many years to environmental issues, and the ability of management to seize every opportunity, has turned Aarhus into a 'green city'. Green space provision and the quality of management are considered close to optimal.

The Green Structure Plan was prepared as part of the planning reforms of the 1970s. The political vision of 'Aarhus surrounded by forest', had strong public support. It is used to control urban growth and to set standards: no dwelling should be more than 500 metres from a green area of at least 6,000m^2.

The physical consequences of the widespread acceptance of the plan's green policies are best appreciated in the public support for various projects, such as the transformation of the Aarhus river valley from a sewage and waste outlet into a major recreational amenity through the creation of a continuous, publicly accessible path.

An important part of this project has been the re-opening of a section of the river spanned by a bridge in the 1960s to provide for the growing number of cars in the inner city. When major repairs to the bridge were needed, the road bridge was instead removed, realising the plan's vision to reconnect the river valley west of Aarhus with its outlet into the Bay of Aarhus. Today, the well-designed urban space along the banks of the re-opened river is one of the most popular inner city recreational areas.

Similarly, on suggestion that a motorway was to be built further to the west, a change of land use was adopted, averting the inevitable pressure from developers on the political leadership, and the former motorway reservation became a new green belt which now connects two major green wedges of the Aarhus green structure.

Meeting environmental and social objectives

Environmental concern is one of the main driving forces of the Plan and extends to maintenance practices; a more natural appearance for parks has been adopted and has become very popular, achieving greater visual variety and maintenance savings. An innovative, environment-friendly, though costly, approach is the irrigation of sports grounds with water collected from their own drainage systems, reducing water pollution from excess fertilizers.

At Braband Lake, one of the most popular recreational areas in Aarhus, former meadows were flooded to create a new lake, and a similar project is planned north of the city. The special requirements of these new nature areas are successfully handled through the biological knowledge of the municipal staff and with the cooperation of local nature organisations.

Another environmental project in the Hasle Hill area (part of the new green belt created on the former motorway reservation) also offered an opportunity to involve local contractors in municipal green space work. The land was

earmarked for green space but finance for recreational development could not be raised. Landfills in the vicinity of Aarhus had reached capacity and could not receive excess soil from building activities so that more distant depositories became the only alternative. By allowing the dumping of soil on green belt land, a recreational hill-scape was created, with economic benefits for the haulage industry and the developer, whilst the local authority shared in the considerable net earnings from the deposit fees.

Social objectives can also be met through green space management: the introduction of golf courses in parks, in cooperation with an association of elderly citizens is believed to reduce the cost of health care to society and improves the recreational amenities offered by parks.

Staff performance

The skill of some long-standing staff to manoeuvre in the political environment and in identifying/ following up opportunities proved crucial to the successful management of green spaces. By not using seasonal workers, operational staff members are encouraged to train during the low workload periods. A profit-sharing scheme has been adopted as an incentive for operational staff coping with difficult maintenance tasks: savings are shared according to hours worked or invested in the district's equipment.

Complaints are a good indication of the success of green space management and a 'balanced scorecard' is used to

measure staff performance. Management is assessed by the local council every year and by external experts every three years. This regular feedback allows the administration to react swiftly to changes in residents' attitudes and needs, to their own operational practices and to new knowledge about green space management.

Clockwise from left: Views over Aarhus from the new Hasle Hills; Forestation of part of the motorway greenbelt, for recreational purposes; The Green Structure Plan has become the back-drop of all thematic maps of the Municipal Plan; The popularity of the Aarhus River area demands special maintenance attention; Summer in an inner city park in Aarhus

Case study: Malmo

Malmo (population 250,000), on the coast and largely surrounded by farmland, is Sweden's third largest city. An industrial centre until the 1990s, the city has experienced an increase in immigration over the last decade, resulting, for the first time, in a housing shortage that places new development pressures on the city.

The green plan

Malmo's Streets and Parks Department, one of the most successful in Sweden, has received a number of national awards, and parks are a major component in the city's marketing. A 2003 study of the standard of living in the city revealed that the high quality of the urban environment is its most important positive characteristic.

As part of the process of preparing the General (land use) Plan, Malmo produced a Green Plan, providing guidelines for future requirements for all green areas within the city. Starting as a pilot project in 1996, it was rolled out citywide and, following a strong political input, approved in 2003. It is founded on an ambitious mapping of recreational possibilities and ecological values, both existing and potential, and includes public as well as privately owned land.

The Green Plan aims to ensure adequate provision and distribution of urban parks (including the creation of green corridors for walking or cycling) and to protect existing green spaces from development. Previously there were national standards regarding the area of land required for parks in new developments. Today the local authorities take decisions on green space provision through the Green Plan.

The city has powers to acquire land and to negotiate and agree with other landowners to develop areas for public recreation. In Sweden, all natural areas are publicly accessible, irrespective of ownership, but agreements can improve accessibility and provide facilities for visitors. One such agreement with the Water Authority allowed the integration of ponds and canals in parks, increasing water-based recreation and biological diversity. Costs were borne by the Water Authority, which benefited from a less expensive option for managing storm water.

The Green Plan is not legally binding but serves as guide in decision-making. Its impact relies on its acceptance by the key stakeholders and the relevant departments' commitment to its implementation. Communicating effectively is therefore an important aspect of the Department's work and it has been very successful in marketing the value of parks as a way of improving the quality of life in the city.

Persuading politicians has been particularly important, as over the last two decades, budget deficits have led to expenditure cuts, particularly for non-statutory services such as park management. As green spaces only receive 1% of the municipal budget, cutting down on this activity would not result in major savings.

Clockwise from left:
Views of Kungsparken, a city centre park; The Augustenborgfparken, a city sector park, has been designed to *reduce maintenance requirements; Involving children in park management is an important issue in Sweden*

Contracting out maintenance

Maintenance operations are financed entirely by the city. As a non-statutory function, local authorities are not required to provide a high standard of maintenance in existing parks; the bottom line is that there is no health and safety risk to the public. The Streets and Parks Department employs both private and municipal contractors; over the years it has progressively increased the demands on the contractors' expertise and as a consequence, they have shouldered increasing responsibility for delivering quality. Using different contractors in the different geographical areas has created a competitive environment which delivers quality maintenance at a reasonable cost.

The Department sets the standards and the contractors are responsible for their implementation and the coordination of operations. For the last decade, there has been a gradual move from the issuing of specific instructions to contractors towards a more flexible system based on them achieving the Department's broadly defined key goals. This demands skilled contractors and good communications between the commissioning body and the contractor, and should lead to mutual learning.

In Sweden, decision-making is delegated to the lowest possible level, aimed at faster decisions and better use of knowledge and information from people on the ground. Contractors are encouraged to take initiatives to deliver continuous improvement, which should improve their chances to be awarded

future contracts. To create a competitive market for potential contractors, the city has been divided into geographical areas with boundaries redrawn with every purchase so that no contractor can be sure of being awarded a contract next time.

Although each maintenance zone of the city has a manager who is the contact for the area's contractors and acts as a supervisor, it is the responsibility of the contractor to oversee his or her own activities and to report any problems to the City Council. The Streets and Parks Department has a Customer Services Division which deals with complaints and comments from residents, which are taken into account when the performance of each contractor is evaluated at the end of the contracting period – so they are under pressure to keep standards high. Contracts are awarded for three years, with an option to extend for another two.

03

The lessons for English practice

Establishing aspirations within a policy context

The international cases cover examples where there is a strong national policy framework shaping green space aspirations, and examples where green space policy and strategy are entirely a local affair. No matter how different these contexts might be, a common thread was the ability to link closely their visions for green spaces to broader national, regional or local economic, social and environmental aspirations through effective use of the available policy instruments.

In many of the cases, the spatial planning system provided the instruments for that linkage, with particular success when green space was at risk from development pressures and/or there was a pressing need for an expanded network of green spaces. Thus, often the simple inclusion of green space issues within powerful statutory spatial planning documents – even when this was not a legal requirement – helped to raise the profile of those issues. In some cases, this linkage with the spatial planning policy came together with an equally effective connection with environmental sustainability policy instruments, such as through Local Agenda 21 initiatives.

A key lesson was therefore that green space aspirations need to be considered within the broader context of other relevant policy areas if they are to have resonance beyond specific green spaces interests. An important means to achieve this was the positioning of green space policy in a hierarchy of policy instruments ranging from the national to the local, and incorporating detailed green space plans reflecting both a spatial vision and day-to-day management policies. The example of Denmark, where the requirement for municipalities to prepare Green Plans is established in national legislation, has potentially important lessons to offer.

Political determination and influence

Significantly, in most of the cities, the commitment and performance of local administrations seemed to be a much greater determinant of the quality of green spaces and their management than the national and regional legislative framework. This was not only a reflection of the devolved nature of most responsibilities and powers for the management of green spaces, but also because, no matter how decisive national green space policy frameworks are, most of the concerns which define the quality of green spaces and their management can only be effectively tackled at the local level. This seems to be equally the case where the formal power is concentrated locally, such as in Paris (with no national role), or where state or federal authorities have delegated their formal powers to the local level, as in Melbourne or Hanover.

Strong local leadership is therefore a key determinant of success. **Another key lesson emerging from most of the cases was that successful green space management depends upon a long-term commitment to a vision for green spaces that, by its nature cannot be restricted to a single party agenda.** All the cases achieved results only through a sustained commitment to green spaces over many years, often through changing political administrations and priorities, and through different economic and social contexts. Only a level of consensus on the relevance of green spaces and the importance of adequate management across the political spectrum can secure that commitment.

Experiences in a number of the cities (eg Curitiba, Hanover, Aarhus and Groningen) also suggest that shared aspirations for green spaces need to go beyond the political spectrum to be incorporated by the citizenry in the image they have of their own city. The cities where this was the case suggested that this collective 'green' image of the city contributes to convincing politicians to maintain a high level of support for green urban space management.

In some cases, this commitment by politicians and citizens was the result of the efforts of technical staff in the relevant green space agency; in others of a few visionary politicians. Rarely, however, was it simply a result of formal policy-making procedures. In this regard, marketing green spaces, both internally and externally, appears to be an important task of the green space management agencies. Agencies across the 11 cities have devoted considerable effort to persuading local politicians and citizens of the importance of well-maintained green spaces in social, economic and environmental terms.

Engaging the public

All the international cases illustrated a proactive attitude towards the involvement of the community in green space management. Although there was no one common approach to how this should be done, or to what extent communities should participate in green space management, a key dimension of successful green space management seems to be a willingness to engage local communities in the task, and to use creative means to make this happen.

The challenges faced by each of the 11 cities to create a framework for community involvement where none existed already varied considerably, from the complete restructuring of management systems, so that they are not simply reactive, to developing better direct channels of communication with local communities. In some places, the resulting participation was mostly at the level of statutory consultation about new capital investment in the neighbourhood (eg Paris), whereas in others, an actual transfer of management responsibilities to volunteers and neighbourhoods was achieved (eg Tokyo).

Despite this variety, some common themes emerged which can provide the basis for useful lessons for practice. First, in all cases, there have been clear benefits from sharing with the community the responsibility for managing green spaces.

The most obvious benefit has been the harnessing of active support for green space issues that is vital if those issues are to remain on the top of local, regional and national political agendas. The power of neighbourhood-level organisations to influence higher level resource allocation decisions in, say, Aarhus, was a clear example of this. In some places, technical staff members at the municipal green space department have been very skilled in using this pressure from below to shape decisions from above.

Second, in cases where community involvement is well established, even if just on a consultation basis, it provides a ready means of assessing changes in the needs and preferences of users of green spaces. These can subsequently be factored into green space management systems and either provided for, or their impacts ameliorated.

A further key lesson was that, whatever its form, effective community participation needs an information system to facilitate the dialogue between green space managers and the community. The BORG system in Groningen, with its visualised scenarios, is perhaps the most sophisticated example of this (see case study page 84), but much simpler processes of discussion and exchange of information between municipal staff and the community seem to work equally well.

Lastly, the cases suggested that, whereas increasing community involvement in green space management adds to the quality of both management processes and the green spaces themselves, this is not without its problems. Active communities can skew priorities towards their immediate concerns and leave other, equally important issues and sectors of the community without the necessary resources. In this context, green space management can too easily become primarily reactive, whilst long-term or strategic objectives can be neglected. Paris and Groningen provide examples where this actually happened.

The lesson here seems to be that community participation in green space management is immensely beneficial. It needs to happen within a framework which gives weight to different voices within the community and takes into account immediate and localised demands as well as long-term aspirations and city and region-wide objectives. Equally, in some circumstances, too much involvement can be as damaging as too little; green space managers need to get the balance right.

What can we learn?

- There is a need to link green space aspirations to broader national, regional and local policy areas and aspirations through the effective use of the available policy instruments eg in spatial planning.

- Detailed green space strategies should be prepared, reflecting both a spatial vision for public green space, and day-to-day management policies.

- Successful green space management depends upon a long-term, cross-political commitment to green spaces; strong local leadership is the key determinant of success.

- Marketing the value of green spaces and local successes is an important task for green space managers, both to internal and external audiences.

- A key dimension of successful green space management is a willingness to engage local communities in the task, and to think creatively about means to make this happen.

- Active community support for green space issues is vital if green space is to remain a political priority, and if changing needs and preferences is to be reflected.

- Effective community participation requires an information system to facilitate the dialogue between green space managers and the community.

- Community participation needs to happen within a framework which gives weight to different voices within the community, and that is not un-duly influenced by sectional interests.

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04 Who is responsible for urban green space management?

The English context

The problem of fragmented responsibilities

Many stakeholders have parts to play in delivering urban green space aspirations. Key distinctions can be made between management and operational roles and between the input (if any) of the private sector and different forms of partnership arrangements.

Ten broad categories of stakeholder responsibilities can be identified at the local level, each with a potentially important role to play in managing urban green space:

01 Local politicians
02 Local government departments (sports and leisure, parks and landscape, spatial planning, environmental management, housing, and direct services departments eg in-house contractors)
03 Regeneration agencies
04 Conservation agencies
05 The police
06 Private contractors
07 Development – and other trusts
08 Community groups
09 Business groups
10 Partnerships (both formal and informal)

However, as 'Improving Urban Parks, Play Areas and Open Spaces' argues, the fragmentation of responsibilities for different aspects of urban green space management has been a major hindrance to efficient and effective management in England. This has been exacerbated, the Urban Green Space Taskforce argued, by a breakdown of unified parks services into units under different management regimes. This has led to a wasting away of the skills base in green space management, resulting in low skilled and poorly motivated staff. In parallel, there has been loss of vision and focus from the professions.

This situation, which 'Improving Green Urban Space' revealed, has been made worse by years of Compulsory Competitive Tendering (CCT). CCT has favoured the simplification of procedures, rather than the complex and nuance response to conditions required by the diversity of urban green space types and needs.

Additional problems have resulted from the unclear, fragmented and poorly-utilised range of powers and responsibilities, a problem revealed in 'Living Places: Powers, Rights and Responsibilities'. The document outlined three principal powers, which must be in place for local authorities to play a strategic role in public space management:

01 The power to enforce all other relevant bodies to meet their respective duties
02 The power to intervene and take remedial action when the other bodies fail to meet their duties
03 The power to recover any costs incurred during intervention

However, the fact that there is no statutory duty to provide or maintain open space has left little incentive for many local authorities to seek new powers, or indeed to take the powers available to them seriously.

Within the different international contexts, there is a need to understand the different roles and responsibilities of stakeholders involved, and to examine how and by whom their different responsibilities are defined. It is also vital to identify the associated powers that stakeholders assume in pursuance of their roles and the skills and training that allow them to meet their responsibilities.

Informed by the above aims, the following questions were therefore asked of the international partners:

- How is responsibility for implementing green space policies distributed amongst key public sector stakeholders?
- How is the private sector involved in managing public green space?
- Do different forms of trusts (eg development trusts) have a role?
- How are these players accountable, and to whom?
- Who has statutory powers over green space?
- What kind of legal instruments establish legal responsibilities?
- How are these powers used, and what are their limitations?
- What kinds of relevant skills are brought to green space management by the various stakeholders?
- What kind of training is available, and how is it accessed at management and operational levels?
- How does the geographical extent of staff responsibilities affect their ability to manage green space?

The answers to these questions are explored in the following comparative discussion.

The international experiences

Roles and responsibilities of the key stakeholders

A range of stakeholders

Both within and outside of local government, a wide range of stakeholders have an interest in urban green space management, or are directly involved in its delivery. These ranged considerably amongst the 11 cities, and sometimes revealed a fragmented network of responsibilities. In Groningen, for example:

- Post-war housing estates under housing corporation ownership are managed separately, despite almost always adjoining council property
- The water board manages the banks of canals and waterways
- The Dutch equivalent of the National Trust owns and manages nature reserves in and around the city
- Green spaces around public facilities (eg schools and hospitals) are managed by their respective departments
- The government manages the green space along the national trunk road network

Yet, despite this seeming fragmentation, the city has managed to maintain high quality urban green space. This suggests that the mechanisms for, and coordination of, management responsibilities may be more important than the particular structure of responsibilities (see chapter 05).

The public sector

Local government responsibility Universally, local government carries the primary responsibility for managing urban green space. In Paris, this approach is most clearly evident, where all green space decision-making powers are vested in the Paris municipality, which is responsible for all green space policy, provision and management functions.

In other cities, the delivery of services involves a broader range of stakeholders which may also be responsible for certain discrete categories of space. Aarhus is typical: the municipality is responsible for managing the landscape, forest areas, parks and other urban green spaces. The Royal grounds are also managed by the municipality, in return for public use, whilst garden allotments and golf courses are managed by user organisations. The council is also in charge of developing green policy for the city, which is presented as a chapter in the Municipal Plan (revised every 4 years), and for funding the various local government departments, including for green space matters.

In Curitiba, the majority of urban green space is council property, and the Municipal Secretariat of the Environment (SMMA) has overall responsibility for its management (see Curitiba case study page 40). SMMA is directly involved in planning and maintaining urban green spaces, in licensing land uses and land division of protected private land, as well as in the felling of trees on public and private land. Its status is significantly enhanced by its role as a statutory consultee for other local and state government

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bodies when the environment or conservation of natural resources becomes an issue in the city. This single point of contact emerged from the restructuring of the city's administration in 1986, when activities previously performed by the state government and other municipal departments (eg the cemetery management, street cleaning, refuse collection, air and water pollution monitoring and control) were merged. This merger led to a significant concentration of resources in one place – raising the significance of green space management in corporate priorities. SMMA is now a highly influential agency within local government.

Local and national shared responsibility In other cities eg Tokyo, although local government has the major responsibility for day-to-day urban green space development and management, this activity takes place within a comprehensive national policy framework, effectively creating a dual responsibility.

Hanover falls into this latter camp. In principle, local authorities are responsible for green spaces and their management, but important exceptions are found in nature conservation and the protection of garden monuments, which are duties of the state government. Thus, although these responsibilities can be delegated to local authorities, they remain under state control. In Hanover, nature conservation has been delegated from the state to the region, whereas protection of garden monuments has been delegated to a special office within the city government, creating a network of responsibilities and actual means of delivery. In the city there is a special political committee that supervises all affairs connected to green spaces (the Committee for Environmental Protection and Green Spaces). And this committee discusses each planning project, each new green space, changes to existing space or important management issues.

Day to day management versus long-term development
A clear distinction emerged in the case studies between day-to-day management and long-term development responsibilities, usually through the division of responsibilities within one overarching department. Coexistence in the same department had the distinct advantage that different sections could more readily coordinate their aspirations and priorities, and learn from each other.

In Aarhus, overall responsibility for green space management is set in a clear hierarchy, involving politicians, the municipal administration and other stakeholders. The councillor in charge of the Department of Technical Affairs and ultimately the city council carry statutory responsibility. Within the municipal administration, the key players are the Nature Environment Division (NED) and the City Architect's Office, both in the Department of Technical Affairs. Thus, the City Architect's Office is responsible for comprehensive urban planning and special capital projects, whereas NED is responsible for green space management, from planning green spaces to the daily management of green spaces and trees.

In Groningen, the management of green spaces owned by the municipality falls under the responsibility of various divisions of a single department, the Department of Physical Planning and Economic Affairs (ROEZ). Within this department, green space

management is the responsibility of the Urban Management Division, whereas green space development is undertaken by the Physical Development Division. The former is responsible for green space upkeep and replacement, the latter for the expansion of the park system, reconstruction, and other, large-scale changes. The arrangements are complicated by the facts that cleaning responsibilities for green spaces (including litter disposal) is carried out by Environmental Services. The city architect, meanwhile, plays a pivotal role in the relationship between management and new developments through the strong emphasis placed by the architect on sustainable, long-term approaches to green space quality.

The role of other local government departments Even where the majority of responsibilities for green space management were coordinated through one local government department, other departments also retained an involvement to a greater or lesser extent. Most common amongst these were:

- Spatial planning departments
- Highways departments
- Environment departments
- Sports and leisure departments
- Real estate departments
- Health agencies

In Zurich, for example, Grün Stadt Zürich (GSZ) is part of the city council's Infrastructure Department and has separate planning and maintenance units. As the parks/environment agency for the City of Zurich, GSZ is legally responsible for managing all urban green spaces. However, these responsibilities cease when open spaces have either large areas of hard surfaces or significant levels of traffic, in which case they are managed by the Traffic and Civil Engineering office. Public sports grounds and swimming pools, by contrast, are owned by GSZ but managed by the Environment and Health Agency. In Malmo, the Streets and Parks department collaborates with the City Planning Office, the Recreation and Leisure Department and the Real Estate Department on the range of policy issues affecting green spaces.

The role of localised governmental tiers In some cities, a further, very local tier of government has a role to play. In Germany, large cities have had district councils for the last 20 years, and Hanover has 13 of them. This arrangement has the advantage that, even if the city council does not regard green spaces as a priority, the district councils certainly do, and although their formal power is limited, their political influence is considerable. Political decisions regarding green spaces are first debated in the district councils before a political committee advises the city council on which directions to take.

In Paris, the relationship is largely consultative. Thus, city districts are consulted on policy initiatives, but the final decision lies with the City Mayor and only the Mayor or deputy Mayor in charge of Green Spaces can give official orders. However, although local mayors of the 20 Parisian districts have few powers, as in Hanover, their role is to influence politicians at the higher level.

Some cities are influenced at the more strategic level by regional policy.

In Paris, green space quality is one of the main political priorities of the Mayor

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At this level, for example, the Metropolitan Parks and Open Space Commission sets general green space strategies for the metropolitan area of Minneapolis-Saint Paul through its Regional Parks Master Plan. This is revised every five years, and is the most influential parks planning document. All municipal parks planning organisations, including the Minneapolis Parks Board, participate in drawing it up. The influence of strategic parks planning is also felt particularly strongly in the Melbourne area. This is through the work of Parks Victoria, which directly manages the urban open space network around Melbourne, whereas the City of Melbourne manages a much smaller area of open spaces in and around the Central Business District. Inner and outer suburban municipalities also manage smaller open spaces within their town centres. As the main open space manager for the state of Victoria, Parks Victoria is also responsible for coordinating open space network planning across municipal boundaries.

The decisive role of local politicians

In Paris, for example, power resides in the hands of the elected City Mayor, who has ultimate decision-making responsibility for the Department of Gardens and Green Spaces; one of several that makes up the city's administration, and which has been organised since Napoleon III to manage both the landscaped parks and urban squares. Thus, policies regarding green spaces, small and large, are decided by the Mayor, usually after consultation with residents in the local district and after

discussions with the district Mayor. Implementation is exclusively through the city administration's Department of Gardens and Green Spaces, with no other public sector stakeholders involved (see Paris case study page 82).

In Hanover, the Mayor and the directors of the municipal administration are all politicians, and one of the latter is directly responsible for green spaces. Therefore, whilst a conference of directors decides about all the key issues connected with running the council, the Mayor is charged to prepare and execute the decisions of the council. All municipal responsibilities for green space management are gathered in the Environment and Green Spaces Division (FUS), currently headed by a Green Party politician. FUS policy has nevertheless also been used by the Greens to influence policy in other areas of responsibility of the city, particularly spatial planning, which is in a separate directorate. At the state level, the influence of politics on public space can be seen in the emphasis of the current conservative government of Lower Saxony to involve the police (a state-controlled institution) in the management of green space by enforcing tidiness and better behaviour. In the past, there was little direct involvement of the police in this way.

Ultimately, responsibility for green spaces rests in the vast majority of cases with local politicians to approve policy and funding – the significance of their role was highlighted in all but one of the international experiences (see Minneapolis case study page 42). Predictably, therefore, politicians can influence outcomes of green space management by championing or opposing initiatives, and are thus the first stakeholders to convince.

An alternative approach The exception to this general rule was Minneapolis, which is unique amongst large US cities in having an independent park board, separate from the mayor or the city council (Chicago and Kansas City have a similar arrangement, but their boards are appointed by the mayor and thus are not entirely independent). Within the board, management responsibility lies with nine elected Park Commissioners, the Board Superintendent and MPRB's employees. Six of the commissioners represent the six geographical districts of the city, whilst the other three represent citywide interests. Although the commissioners are elected, they are not politicians in the conventional sense, because their remit is highly focused on developing general park policies and delivering green space management.

Smaller open spaces adjacent to buildings and along streets are managed by the Public Works department in the city municipality. Recently, as a cost-cutting efficiency measure, the city mayor tried to persuade MPRB to assume the management of all of Minneapolis' open spaces. The board used their independence to resist the pressure, on the grounds that their resources would be unduly stretched.

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The private sector

As well as the multiplicity of public sector roles and responsibilities apparent in the 11 cases, a range of private and third sector stakeholders were also involved in urban green space management.

Private stakeholders The extent of private sector involvement varies considerably from one extreme to another. There is the situation of almost no private involvement in Minneapolis – where the highly-unionised labour force has successfully resisted widespread contracting out through a strategy of job specialisation that cannot be matched by external contractors. And then there is Groningen, where 80 per cent of maintenance work is carried out by external contractors. (The remaining 20 per cent there, consisting mostly of minor duties, is carried out by neighbourhood teams). In between these two extremes, the general approach seemed to be one of using the private sector in a positive partnership to deliver more efficient green space management:

In Hanover, most new construction work within urban green space is undertaken by private contractors. However, although most cities in Germany have a mixed system for maintenance work, with both private contractors and public sector employees, in Hanover only 10 per cent of the maintenance work is contracted out. This reflects the city council's employment policies, which encourage the unemployed to sell their services to the city. These recruits are not allowed to do routine, day-to-day maintenance work, but can bid for construction work and one-off special maintenance tasks, such as repairing gravel paths. City-owned sports fields have also now been transferred to private sports clubs, which receive a grant from the council to fund maintenance work.

In Malmo, the Streets and Parks department is responsible for managing all urban green spaces, but it in turn contracts out much construction and maintenance work to a mix of public and private contractors. In Paris, the private sector is involved in a number of ways. All works are undertaken by private contractors under the system of public bidding. The private sector supplies trees and other planting, and private architects and landscape architects are used to design major new parks, again through the public bidding system. The latter involvement has often led to innovative design solutions, which are nevertheless expensive to deliver, and which do not have management priorities as their first concern.

In Tokyo, local government sometimes manages green spaces directly, and in other instances management is contracted out to external organisations; either in the form of voluntary groups made up of local residents that manage community parks, or as private contractors for larger parks.

In Wellington, the private sector has been involved in the management of green spaces in a more comprehensive series of ways, through:

- **Providing contracted services** such as design and management consultancy, weed spraying, and so forth.
- **Providing sponsorship** including for the visitor centre in the Botanic Gardens.

- **Negotiated development rights** as was used in the 1980s and 1990s, when older buildings in the Central Business District were replaced with new ones and extra height was allowed, in exchange for open space provision at ground floor level. The results overall were not good, resulting in sites that were not ideal for open spaces, public tenure which was not secured at the time of negotiation, and damage to the environment from the height of the tall buildings which resulted. The practice has now fallen out of favour.
- **Establishing council-controlled trusts and companies** which have been set up to manage certain facilities, or areas suitable to be run as business enterprises, such as the regional stadium.

Collectively, few problems were reported by cities about the use of private contractors, as long as work is carefully specified, properly integrated with other operations, and carefully monitored, although the potential inflexibility of private contractors was recognised in Melbourne. There, the use of in-house or contracted out maintenance services has varied over the years, depending on state government attitudes, corporate policies and market availability. Currently, decisions on whether to use external contractors or internal staff are largely based on customer satisfaction. Thus, in parks where stakeholder satisfaction is of particular importance, the flexibility provided by internal staff has proved to be a better solution.

The voluntary sector

The use of the voluntary sector in urban green space management was not widespread in the 11 cities, although a number of innovative initiatives were reported. A particularly concerted effort is now being made in Japan, where in 2003 the national government proposed to change the legislation in order to promote greater involvement of the community and voluntary organisations in the management of green spaces. By these means, the government plans to revitalise existing local groups currently involved in green spaces management through expanding their remit, and through making specific formal provision for them within the hierarchy of management organisations.

Other initiatives included:

- **Friends' Groups** In Melbourne, there are 50 such groups, voluntary organisations which contribute on regular programmes and projects, and which reflect Parks Victoria's objective of supporting voluntary assistance as a way of building a constituency of stakeholders in the park system. Sustained voluntary participation is therefore encouraged through providing technical and resource support, praise and responsiveness.
- **Voluntary neighbourhood boards** In Aarhus these are given direct support by the municipality, and are involved in decisions about green space management in their areas. These councils also monitor flora and fauna, in cooperation with the municipality.
- **Elderly citizen involvement** This has been a feature in Tokyo (see Tokyo case study page 16), but also in Aarhus, where the city is now managing its golf courses in cooperation with associations of elderly citizens. The associations are

responsible for the greens, and the council for the fairways.

- **Parents' groups** As part of a more sensitive approach towards residents and other interest groups, the management of playground areas and green spaces close to residential buildings has sometimes been contracted out to voluntary parents' groups in Zurich.
- **Community gardens** These have been created in Minneapolis, and are now managed by a coalition of not-for-profit organisations.
- **Local charitable trusts** The Karori Wildlife Sanctuary Charitable Trust (1995) was an unprecedented initiative to create a wildlife sanctuary within Wellington on a site owned by the city council and implemented and run by an independent community trust. The arrangement has proved very effective in forging relations with the community (through trust board membership and representation) with business interests (through sponsorship) and with experts and special interest groups.
- **Nationally constituted trusts and environmental groups** These have a role in many countries. In New Zealand's Wellington, for example, the National Trust and Historic Places Trust, show their influence through advocacy and regulation, related to their specific areas of interest. In Aarhus, environmental groups play an important role in the management of nature reserves.
- **Partnerships** Although few public/private partnerships were reported in the 11 cities, one such partnership for Slottsrädgården Park in Malmo exists where a registered charity carries out management in collaboration with the Malmo Streets and Parks Department.

The evidence shows potential for voluntary involvement in green space management. But, even in the 11 cities, it represents the exception, rather than the norm.

Available powers

Statutory and non-statutory powers

Cities rely on a range of powers to deliver their urban green space objectives, and rarely are these powers neatly packaged from one source. Nevertheless, most cities have a clear, statutory basis for at least some of their green space management activities.

In Hanover, the federal construction law and the federal nature protection law form the legal framework for green space management, together with the federal and state planning legislation – which define green space as an important land use category. City councils in Germany also have a statutory responsibility to ensure safety in public areas, including in green spaces. Similarly, the Urban Park Act of 1956 establishes that local governments in Japan have specific statutory responsibilities over the development and maintenance of green spaces within their boundaries, and sets basic rules which local governments should follow, including the types, sizes and functions for new green spaces.

In New Zealand, government acts establish a comprehensive green space management framework. Under the Resource Management Act, city councils can require developers to set

In New Zealand, government Acts help to establish an open space concept for Wellington

aside land as a reserve, or pay a levy towards a reserve acquisition fund (the latter has tended to be the preferred option). Under the Reserves Act, land designated as a reserve is vested in an appointed administrator (usually the city council) to manage on behalf of the public. A management plan for every reserve is required under the Act. Finally, the new Local Government Act requires the preparation of long-term council community plans describing key strategic objectives and long-term planning for funding, financing, investment and spending; all of which applies to green spaces.

The management body Sometimes, powers apply specifically to organisations set up with the specific purpose of managing urban green space, as for example the State legislature did in the 1880s to establish the Minneapolis Parks and Recreation Board.

Parks Victoria was also created in such a fashion from an amalgamation of the state's National Parks Service and Melbourne Parks and Waterways. Parks Victoria was established to specifically manage the state's national, state, regional and recreational parks, totalling 4 million hectares, and was given statutory status in 1998 by legislation which requires Parks Victoria to provide services to the state or its agencies for the management of parks, reserves and waterways on public land (see Melbourne case study page 70). Under its statute:

- Overall arrangements for the provision of management services are set down in a management agreement between Parks Victoria and the appropriate state ministers.
- Agreed management services are subject to state policy, contractual arrangements and the specific powers and responsibilities of the state ministries.
- Parks Victoria is accountable for its activities through the submission of a corporate plan each year to the Minister for Sustainability and the Environment.

Conservation powers These were widely reported across the 11 cities and offer amongst the most robust powers available to authorities:

In Aarhus, for example, 33 per cent of the municipality is affected by landscape protection legislation, which imposes specific obligations and restrictions on green space management. The legislation also requires the preparation and implementation of

management plans, which necessitate the employment of municipal biologists, and sometimes collaboration with environmental organisations and community groups.

In Paris, if green space is classified under national heritage legislation, or is attached to, or indirectly connected with, a protected building or landscape, then the Architect of Historical Monuments has a role. The architect is appointed by the Ministry of Cultural Affairs – any decisions made by these means are final.

Spatial planning powers These were available in all of the case study cities under the guise of planning legislation. In Zurich, for example, the key legal instruments framing the management of green spaces are the city's Zoning Plans. In Wellington, under the planning legislation, the city council is also responsible for providing consent for tree removal and substantial pruning. These powers are poorly enforced in the city, however, because of the opposition from property owners and the scale of regulation that would be required to fully implement the provisions.

In Japan, the 1956 Urban Park Act also establishes what uses and activities are and are not allowed in green spaces, and which of these require local government permission. As a result of the act, each local government has set up a department of parks development to manage green spaces. Some have also developed local regulations extending those in the act.

Local municipal powers Many local management agencies were able to establish local municipal powers themselves, through powers devolved down to them from state or national governments:

The key pieces of legislation for green spaces management in Curitiba are of this nature, although they have to comply with federal and state legislation. The power to propose local legislation lies with the mayor, and then with the city council, which has to approve it. Local legislation of this nature includes the city's Zoning and Land Use Plan (green spaces are defined as a specific land use), the transfer of development rights, and law giving protection to green areas through a 'Conservation Unit System'. The city government now has the power to include private and public land in the green spaces system in the form of Conservation Units. This might involve the expropriation of private land or the transfer of development rights, agreed through negotiations with landowner and facilitated by fiscal incentives (see Curitiba case study page 40).

Similarly, as an independent law-making authority, the Minneapolis Parks Board can enact ordinances addressing the use of parks, planting policies, standards for construction, and so forth, provided that they comply with US and state laws and with city ordinances.

In some countries, however, green spaces management has largely remained a non-statutory activity for local authorities. In France, for example, every local community has all the powers they require to manage or change urban green space, but no statutory duty to do so. Similarly, the city of Malmo is not required to be responsible for delivering high standards of maintenance in existing parks, and is only required by law to

ensure that parks do not pose a health and safety risk to the public. A further statutory duty concerns green space in new developments. Previously, there were national standards regarding the amount of land set aside for open space in new developments. Now, however, local authorities in Denmark have to specify themselves how large these new green spaces should be.

The fact that these cities still maintain their urban green spaces to a high standard is testament to the political priority and commitment given to the green space agenda.

The range of skills required

Skills development and deficiencies

Although the range and type of powers differed greatly between the 11 cities, a strong theme running though the international exemplars was the emphasis placed on skills and skills development.

The range of skills Cities are generally quite specific about the range of skills they expect in their employees, both at professional/administrative and operational levels:

In Paris, 'The Grid of Jobs' carefully defines all administrative positions and the qualifications and practice-based experience required for each. A particular feature of the system that did not crop up elsewhere is that professional and operations jobs are clearly distinguished, and it is difficult to move from one to the other.

The Natural Environment Division (NED) of Aarhus City Council features a strong body of professionals, ranging from landscape architects, to foresters, botanists and trained gardeners, who work in both the administrative and operational sections of the division. These skills are also supplemented by those of architects and engineers who work in other parts of the organisation. A change in the skills profile of the organisation in the 1980s and 1990s through the appointment of biologists, together with a new focus on ecology, led to a change in management practices towards the creation of more natural green spaces. Many members of the councils also have professional backgrounds and their skills are used in initiating, implementing and managing projects.

Following a long German tradition, most of the leading staff at the Environment and Green Space Division in Hanover have a professional background in horticulture or landscape architecture, and managers in the division are trained in new management methods (personnel leading and development, health provision, business control, costs and monitoring processes). At lower levels, most managers have gone through technical colleges. Specific skills are also sought at the operational levels: cemetery gardeners, perennial gardeners, foresters, and so forth, and usually a skilled worker leads a team of unskilled ones.

In Malmo, the overall planning of parks is carried out by architects and landscape architects at the Streets and Parks Department and the City Planning Office. Landscape engineers at the Streets and Parks department are in charge of

commissioning construction and maintenance work from external contractors, most of which have landscape engineers as project leaders and managers. At the operational level, many park keepers have gone through horticultural sciences courses at further education level. In Zurich, trained landscape architects are employed by the Green Planning Office of the City Council, for planning and management, whilst at the operational level, trained gardeners and other specialists are used, many having graduated from the council's own apprenticeship scheme. Continuing education for their employees is a priority of the city.

Continuing education and training As in Zurich, the ongoing training of employees was a priority for many of the cities. In Tokyo, the approach has been that workers pick up their skills in park management through doing the job, aided by regular surveys on how specific parks are actually being used in order to refine practices. Nevertheless, because differential skill levels have been a problem, the government plans to provide a comprehensive training system which will ensure similar skill standards across the park system.

In Melbourne, operational staff already undergo a training regime covering core competencies, plus education skills and personal effectiveness. Middle management, by contrast, are participants in a 'Focused Manager' programme, whilst Parks Victoria has initiated a degree course in park management at Deakin University. It actively supports the programme through curriculum input, lecturing and a scholarship scheme.

In Curitiba, the municipality has been even more radical. As a tool for improving wider environmental management practices – including the management of urban green space – it has created the Free University of the Environment (Unilivre). The university disseminates the most recent theories and practices in green spaces management within the municipality and to the general public, whilst its Reference Centre for the Management of the Urban Environment has helped to improve the knowledge of municipal professionals and acts as a reference point for the exchange of experiences and research.

The benefits of a positive approach to skills and training
The number of long-serving staff members, both in Minneapolis and Aarhus, demonstrates the benefits of investing in staff skills and training. In Aarhus, for example, a recent study on the skills of long-serving staff showed that a major reason for the success of The Natural Environment Division (NED) has been the acquired skills of its employees to manoeuvre in the political environment. It is argued that detailed knowledge of the key people, places and funding possibilities helps to ensure that the right decisions are made, at the right times.

Similarly, one of the reasons for success of the Parks Board in Minneapolis is the cadre of its long-standing senior employees, who between them have a vast knowledge of the board's historic practices. Indeed, there are now efforts to record and systematise the knowledge of long-serving staff so that it will not disappear when individuals retire. This low turnover of employees and the permanence of skills has in part resulted from the high levels of unionisation of the board's workforce, including seasonal maintenance employees. This has created good work conditions, job security and competitive salaries.

The importance of gaining experience on the job

Time, permanence and geographical specialisation brings a sense of responsibility and pride from the park keeper, particularly towards the parks specifically under his/her control. (see Minneapolis case study page 42).

Skills problems Only Curitiba and Malmo recorded serious skills-related issues, which were affecting their ability to successfully manage green space, although in the latter case, the Parks Department was actively investing in a range of extension courses for its staff to help overcome the problems:

In Curitiba, despite the existence of Unilivre in the city, there have not been clearly defined policies on skills matters. Therefore, although senior posts at SMMA are occupied by professionals with postgraduate qualifications, there are no incentives for lower level staff to upgrade their skills. The problem has so far been dealt with by contracting out a large part of the Secretariat's activities, from the design of new parks to maintenance operations.

In Sweden, there is no such shortage of essential skills at management levels. The main problem is that, for a long time, manual labour in parks maintenance has had a very low status, and unskilled, unmotivated people were put to work in the public park departments, often on a temporary basis. Over time, this led to low expectations, and low performance. Although these practices are now in the past, many municipal parks organisations still suffer from the aftermath of that approach. A related skills problem concerns the issue of communication skills, because although there is a growing demand in society for skilled workers and professionals working in parks to communicate with the public, education at most levels still does not emphasise these skills.

Case study: Curitiba

Curitiba (population 1.7 million), is one of Brazil's large regional cities. Since the 1950s, following the coffee boom, it experienced substantial population growth due to rural and small town migration to the city. This escalated during the 1970s, resulting in a proliferation of squatter settlements in Curitiba's low-lying areas which have been historically prone to serious flooding.

Achieving planning/ environmental objectives

Curitiba, known as the 'Ecological Capital' of the 1990s, is recognised in Brazil and internationally as a model for urban management largely based on environmental achievements, including its integrated transport system. The success is attributed to political will and leadership and efficient communication, marketing and environmental education, which ensured the population's support for the protection and development of the city's green areas.

In 1966, the Curitiba Master Plan's designation of 'Environmental Protection Areas' created a framework for the creation of large parks along the main rivers as places for recreation, reserves for native vegetation, protection of water resources and watercourses, and flood control. When the population reached one million in the 1970s, causing serious damage to the environment and reducing urban green space to $1m^2$/person, it became a priority to increase green space provision.

This was used as a planning tool to control Curitiba's fast expansion, encouraging population build-up along the main transportation axes (new road structure plan) thereby alleviating the pressure on the low-lying areas, which were prone to regular flooding. These areas have been successfully reclaimed as green open space, which increased to $51.5m^2$/person.

In 1986, responsibility for all environmental matters was handed to the newly-created Municipal Secretariat of the Environment (SMMA), including functions previously within the remit of the state and the federal government. It became Curitiba's most influential local government agency thanks to its autonomy (legislative powers and financial resources) and its broad remit.

The SMMA's annual budget for the implementation of public green space policies is over 4% of the total municipal budget, a third of which is allocated to green space maintenance. Additional funds (but not significant) may come from income, sponsorship or subsidies from the federal state and the outsourcing of park maintenance has helped by cutting the previous cost of these services by 50%. Through its budget controls, the SMMA can coordinate different budgets to deliver particular priorities.

The SMMA continues to identify locations for transformation into green areas and has the powers to appropriate privately owned land or negotiate land exchange with the owners. In 2002 the exchange of conservation guarantees for the right to build outside the protected areas led to the preservation of around $9500m^2$ of green open space. Fiscal incentives and other mechanisms also encourage conservation.

With the city's continued expansion and land clearances, the future challenge will be maintaining the current ratio of green area per person. In 2000, 70% of squatter settlements were located on the banks of watercourses and within permanent preservation areas. Lack of monitoring

Clockwise from left:
Population density in Curitiba demands good access to parks and urban green space; German Immigration Memorial Park, Curitiba; Tangua Park, Curitiba; Opera de Arame, Curitiba

capacity within the SMMA means that the occupation of designated green spaces only becomes apparent after the event and could jeopardise the long-term achievements.

Effective communication and environmental education

When the implementation programme started in the early 1970s, acts of vandalism made the authorities aware that the population was not adequately prepared. By effectively communicating the city's green policies, people began to support the implementation programmes. As a result, politicians of all parties subscribed to the environmental objectives, endorsing the work of the administration and guaranteeing long-term continuity for Curitiba's open space programmes.

Successful in 'selling' their policies to the city's inhabitants, the administration is now looking to move from marketing to improving participation and is currently developing a methodology for a community participatory framework, the Collaborative Model, based on the concept of a partnership between government, private enterprise and civic society.

Environmental education was also used to win support for the city's objectives, having been introduced in 1989 into the curriculum of all municipal schools. It has now extended to the community, reaching people of all ages and social backgrounds, comprising a variety of educational activities and fostering

community participation in the protection of natural resources. A social program, 'Pia Ambiental', promotes extra-curricular activities in low-income neighbourhood schools, including training in gardening, leading to employment in green space maintenance.

Environmental education was bolstered in 1991 when the Free University of the Environment was created in Curitiba. In addition to receiving and disseminating the most recent ideas on urban environmental management, it has helped to improve the knowledge of professionals at the SMMA and acts as a meeting point for researchers on green space management issues.
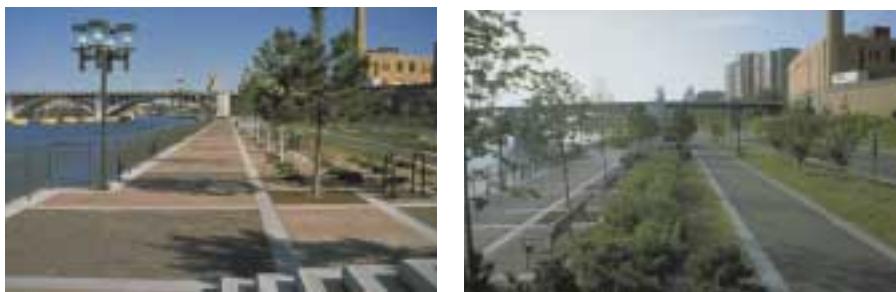
Minneapolis (population 380,000) in north-central USA, began as a mill town on the Mississippi surrounded by a semi-wilderness containing thousands of lakes to the north and tall-grass prairie to the south. The lakes are still there and the city's natural parklands of today are part of an interconnected system of parks encircling the city

The Minneapolis Park and Recreation Board (MPRB)

The Minneapolis Park and Recreation Board is a much admired model for other park management agencies for its blend of public accountability, financial independence and the expertise of its long serving staff.

In 1883, the Minnesota State legislature authorised a referendum establishing a Park Board for the city. Whilst in other cities wetlands were filled to create more land for building, Minneapolis took the long-term view of park management, transforming them into a chain of natural and manmade lakes and setting aside 1000 acres of waterways and parkways. Protecting land from development added value to adjacent properties, increasing the city's tax base whilst maintaining a network of natural public spaces.

The Board is now responsible for local and regional parks, forming a system of well-planned and interconnected parks, lakes and greenways, the 'Grand Rounds' that almost encircle the city in a 50-mile loop.

The Board consists of nine democratically elected Park Commissioners and can hold legal title to property and develop and administer land for use as parks or parkways. Elected members set the overarching goals and new aspirations are set during the Board's annual planning retreat, attended by the superintendent and senior staff. These goals are very practical (completing missing links, acquiring land), they drive the Board's

agenda and serve to evaluate the agency's accomplishments at the end of the year.

Unusually for the United States, Minneapolis has a regional authority, the Metropolitan Council, responsible for the planning functions and establishing guidelines for the regional parks system. The Board makes sure that Minneapolis's park priorities are enshrined in the regional plan.

The MPRB enacts its own laws governing all aspects of the park system, (provided they comply with national and state laws and the ordinances of the City of Minneapolis), giving the Board the statutory authority to define and regulate the use of all its landholdings. Regulations are enforced by the resident park-keepers and by the Minneapolis Park Police Department, a law enforcement agency created to protect park users and park property

Authority to levy taxes

To pay for its parks, the Minneapolis city charter gives the MPRB the authority to levy a tax on residential property. The Board of Estimate and Taxation sets the tax rate, allocating about 9% to the parks system. The rest of the MPRB's budget comes from the State of Minnesota aid program (27%) and a small amount from revenue income (user fees, facilities rental).

Unlike most cities, this income from independent taxes makes Minneapolis's green spaces immune from budget

Clockwise from left:
Pedestrian concourse along the Mississippi River with paved trails for cyclists and joggers; Parkway connecting the city to the banks of the Mississippi River; The Stone Arch Bridge is an old railroad bridge spanning the river that has been converted for use by cyclists and pedestrians; View of downtown across Lake Calhoun; Public golf course near Lake Hiawatha

shortfalls. Nevertheless, the agency seeks reliable, long-term funding to supplement its tax-based income through the Minneapolis Parks Foundation, a non-profit group. And through revenue-generating public-private partnerships, as in the case of an indoor skate park complex, publicly owned and privately managed, with a portion of the revenue going to the MPRB. The Board is also contemplating increasing income through fees and charges for services, such as parking in some of the regional parks.

Staff expertise

Park administrators from across the United States come to Minneapolis for advice on how to improve their local systems. Part of the success of Minneapolis's parks is its cadre of long-serving employees with extraordinary seniority and expertise and near encyclopaedic knowledge of the Board's historic practices. While these employees are critical to park operations, the challenge is to record and systematise this expertise to make it available to future generations when current employees retire.

Staff loyalty is largely due to a strong union that guarantees good working conditions, good benefits, job security and competitive salaries. Full-time and seasonal maintenance workers are required to be union members. The job specialisation imposed by union rules allows staff to develop knowledge and experience that no contractor or part-time employee could match. Union employees

take ownership of their parks and pride in their maintenance activities.

Labour agreements mean that contractors can only be used exceptionally, on a project specific basis, to provide skills or manpower unavailable within the Agency. The unionised workforce also resists allowing citizens any major role in the park's management, despite several 'adopt-a-park' agreements between the Board and community groups.

Any flexibility in maintenance routines and responsibilities requires negotiation with the union or arbitration but there have been no strikes in recent memory. Higher pay results in higher operational costs, $120 per resident, the second highest level after Seattle.

The lessons for English practice

04

Roles and responsibilities of the key stakeholders

The first significant lesson that emerges from the case studies is that green space management is primarily a local government responsibility, with the involvement of regional or state authorities, where relevant. This means that, more often than not, local decision-makers, and especially local politicians, hold the ultimate responsibility for the management of green space. However, fragmentation of these responsibilities is not just an English phenomenon. Indeed, with the notable exception of Minneapolis (although even there that issue is not totally absent), it seems that the history of the evolution of green space-related services in different contexts has had as its counterpart a degree of fragmentation.

In only a few cities has this been substantially reversed, through a relatively recent amalgamation of responsibilities (eg Victoria and Curitiba). Therefore, in the majority of the cities, formal responsibilities for green space management remain dispersed among divisions within a municipal department, between different levels of government, and between mainstream public services and special purpose agencies. **The lesson that can be derived from these findings is that the way different management responsibilities are coordinated is probably more important for the quality of management and green space than the formal distribution of those responsibilities.** The cities provided several examples of effective delegation arrangements, multi-divisional strategic plans, and service agreements between departments and so forth, to corroborate the point.

A trend could be detected in a number of the cases to integrate green space-related services. At the same time, however, both conceptually and practically, a trend was apparent to separate responsibility for capital investment and the long-term expansion of green space networks from the day-to-day management of the existing spaces. Aarhus, Groningen and Malmo provide good examples of places where those two sets of activities have been separated within a single municipal department. **If well coordinated, the lesson here seems to be that these separate activities can pursue their own objectives and follow their own dynamics, while still being able to coordinate activities and learn from each other.**

The cities indicated no single approach to the involvement of private sector players in the management of green spaces, although by far the dominant relationship was as private contractors. The 11 cities have adopted different attitudes towards how much private sector involvement they allow, and this has been a function of political preferences, trade union attitudes and cost minimisation/service rationalisation policies.

The general trend, however, has been towards increasingly contracting out some management tasks to private agents –

although the extent to which this happens varies considerably from case to case. Where this has been more effective in terms of maintaining or enhancing the quality of green space management it is because there are clear structures to manage the relationship between public bodies and private contractors (eg Aarhus, Malmo, Groningen). It seems that an explicit concern to strike a balance between quality outputs and a competitive environment is the key to success, together with adequate monitoring of standards and the vetting of contractors.

It is also clear from the cases that there are advantages and disadvantages in involving the private sector in green space management. Nearly all the cities were conscious of the cost benefits of contracting out management tasks, and some have explored them extensively. However, others have acted more cautiously in order to retain the benefits of an experienced and often more responsive (to quality) in-house service. In these cases, the objective has been to recognise the contexts and tasks in which the private sector can add value (both qualitative and economic) over and above that of the public sector, and vice versa. Thus, for example, Melbourne has tried to separate contexts in which private contractors should be used from those where in-house services are more appropriate. In a few cases, the solution has been to transform in-house service providers themselves into competitive contractors, with good results.

Similarly, the participation of voluntary sector stakeholders in green space management across the cases is highly variable. What this means in terms of defining aspirations and policies was discussed in chapter 03, although again the emerging trend has been towards the transfer of some management responsibilities to voluntary stakeholders. More often than not, this has been in relation to small neighbourhood spaces (eg Tokyo), but also in more remote regional parks (eg Melbourne). What is impressive is the variety of arrangements with voluntary parties found among the cities, together with the impression that this is still an underused management resource.

Available powers

Rather than neatly packaged legal instruments, the 11 cities used a wide range of powers to build up a legal framework for the management of green spaces. At a strategic level, these come from national, regional and local laws, and are often linked to other areas of policy, most commonly land use planning, environment protection and heritage conservation. At an operational level, they are part of criminal law and local bye-laws and regulations.

In this context, from the experience of places like Wellington, Zurich and Aarhus, it is possible to say that the availability of a coherent, green space-friendly regulatory framework at the strategic level can help (eg national legislation on the protection of environmentally sensitive areas, or statutory city- or region-wide green space management plans). However,

other cases suggest that, as in Malmo or Curitiba, when such a framework is not available, it can be replaced by political will and commitment.

The second point is that, irrespective of the quality of the regulatory framework available, a common trend across all the cities has been a capacity to skillfully combine the available powers to their most effective use.

The use of the land use planning system, for example, to put green space issues onto a statutory footing in Malmo or Groningen, or the use of health and environmental legislation in Melbourne, are good examples of this.

The overarching finding is therefore that although a clear statutory basis for green space management can be a significant boon to clearly define powers and to ensure at least a statutory minimum quality is reached, it is more important to have the political will to use the powers, or to creatively find other means to deliver high quality urban green space management.

The range of skills required

Across the 11 cities, there was an explicit concern with the skills necessary for good green space management and its development. However, the nature of the skills relevant for each case, as well as their distribution within management structures, varied widely. History, organisational arrangements and styles of service, as well as the nature of main green space aspirations, explain that variation.

It is therefore difficult to generalise in terms of the appropriate nature and distribution of technical skills and their presence or absence. **However, one common trend that comes across strongly is the importance of experience on the job, from the strategic to the operational level.** This is given considerable emphasis in cases as diverse as Minneapolis and Zurich, and brings to the fore the issues of personnel turnover and job loyalty. The cases do not suggest ready answers for the problem of how to retain skilled personnel, but they do indicate that this is a key element in delivering the skills to do the job. It is likely to require an emphasis upon ongoing training across all management and operational levels, and a continual investment in staff and prioritisation of their role as a means to raise the general prestige of green space management services, and thereby the job satisfaction of employees.

What can we learn?

04

- The way different management responsibilities are coordinated is more important than the formal distribution of those responsibilities.

- Although not ideal, institutionally separating capital investment responsibilities from day-to-day management responsibilities need not be a problem, as long as communication and coordination is good.

- Clear structures are required to manage the relationship between public bodies and private contractors, the need is to strike a balance between quality outputs and a competitive environment, together with adequate monitoring of standards and vetting of contractors.

- It is important to recognise the contexts and tasks in which the private sector can add value (both qualitative and economic) over and above that of the public sector, and vice versa.

- Involving the voluntary sector in urban green space management can tap an under-utilised resource.

- The availability of a coherent, green space-friendly regulatory framework at the strategic level can be important, but a capacity is required to skillfully combine any available powers to their most effective use, as well as a political will to use them.

- The importance of experienced staff, from the strategic to the operational level, is clear, requiring an emphasis on ongoing training across all management and operational levels, and a continual investment in staff resources.

05 How are management responsibilities coordinated and resourced?

The English context

The problems of a marginalised and under-resourced parks service

The different responsibilities for urban space need resourcing and coordinating, most often through the organisational structure of elected local government. Evidence gathered in 'Living Places – Caring for Quality', published by ODPM, 2004, revealed that the better coordination of urban space responsibilities represents perhaps the fundamental factor in the better management of external green space.

'Green Spaces, Better Places', for example, identified both a breakdown of unified parks services into units under different management regimes and a decline in local authority leisure services spending over the past 20 years. In doing so, it accepted arguments made in 'Improving Urban Parks, Play Areas and Open Spaces' that the widespread decline in the quality of care for urban green spaces was linked to declining local authority green space budgets.

That decline has forced local authorities to take hard choices about how to spend their reduced budgets, with lower maintenance standards and failing infrastructure being the result. In addition to the decline in recurrent revenue expenditure, there was a major problem: the lack of resources for capital spending.

The other side of the coin was the fragmentation of responsibilities for different aspects of urban green space management, creating a major hindrance to efficiency and community involvement. The report concluded that urban green space management fared better when service delivery was coordinated under an Environmental Directorate, rather than a Leisure and Education Directorate. And, that unified divisional structures bringing all aspects of green space service delivery together appear to overcome the problems of fragmentation of responsibilities and ownership and the lack of community involvement.

Whilst the lessons from the Beacon Council experiences published in 'Improving Green Urban Spaces' confirmed the widespread lack of information about appropriate management approaches for the provision and use of green spaces, the 2001 'Public Parks Assessment' provided hard evidence about the decline in expenditure. It concluded that, compared to the annual revenue expenditure of 1979/80, in 2001/2002 there was a deficit of £126 million a year (a decline of around 20 per cent over 20 years). Rectifying this deficit would mean each authority would have to spend an extra £265,000 each year. Moreover, the cumulative under-spend on parks since 1979/80 was in the region of £1.3 billion.

The report suggested that the most dramatic budget reductions occurred during the period 1979/80 – 1984/85, and later during the period 1989/90 – 1994/5, coinciding with the introduction and implementation of Compulsory Competitive Tendering legislation. It concluded that parks in the most deprived areas were generally in a worse condition – and that their decline was still continuing.

The following questions were asked of the international partners around the two themes of organisation of management efforts and the coordination of resources:

- What is the overall institutional structure for green space management?
- How are the different activities/services involved in green space management coordinated at: policy levels, management levels, and operational levels?
- Are management plans or other tools used to coordinate approaches?
- How are responsibilities across different levels of government coordinated?
- What are the key leadership roles and lines of responsibility?
- What is the relationship between urban green space policies and funding?
- How are green space-related budgets from different stakeholders coordinated?
- How is capital and revenue funding coordinated?
- What is the role of earnings from green spaces in resourcing their management (ie from advertising, events, sponsorship, etc)?
- What is the role of private and community resources, and how are they raised and deployed?
- What use is made of alternative funding sources eg supplementary local taxes/charges?

The international experiences

The organisation of urban green space management

Management reform across the public sector

A number of the case study cities were, or had recently been, engaged in management reforms across the public sector as a means of delivering more effective public services. Green space management was often directly affected by these changes. Generally, these were inspired by the global 'New Public Management' approaches, including the streamlining of responsibilities, the introduction of cross-service community planning mechanisms and a focus on outcomes, as well as processes.

New public management influences In Hanover, during the 1990s, a national initiative to reformulate local government management approaches emphasised decentralisation of responsibilities, considering citizens as customers and understanding local authority services as products. Hanover was greatly influenced by the new approaches, and green space management was chosen as a pilot sector for several of the new management initiatives, including the better coordination of responsibilities through a dedicated division of the city administration (see Hanover case study page 54).

The state of Victoria is also a few years into a management reform programme for public services, focusing on outputs from service delivery activities, rather than on service processes. Departments are now accountable to the state government for their outputs, and key output groups are identified for each service, against which performance is measured. In the case of Parks Victoria, these are: Natural Values Management, Cultural Values Management, Visitor Services Management, and Wildfire and Other Emergencies Management. To support the outputs, a range of support activities has been identified, with a focus on the efficient and effective delivery of outputs, improving the long-term sustainability of the organisation, and ensuring the organisation is well positioned within the community.

Debates concerning methods of managing green spaces have been held since the mid-1990s in Japan through the auspices of the Parks and Green Spaces Committee, set up by central government. The outcomes from this work were reflected in revisions to the Urban Park Act, scheduled for 2004, including taking legal mechanisms to create new green spaces in built-up areas, the promotion of community involvement in green space management and the better enforcement of green space regulations. In Tokyo, an Inquiry Committee for Urban Green Spaces was established in 2002 by the metropolitan government to look at the design and management of the city's open spaces. It reported in 2003, and concluded that a reform of green space planning, maintenance and operations was necessary, incorporating business-inspired management practices.

In New Zealand and Brazil, an emphasis on cross-service planning has been introduced. The 2002 Local Government Act

in New Zealand requires every local authority to prepare long-term Council Community Plans, which describe key strategies and policies, and plans for funding, financing, investment and spending. One aim is the better coordination of strategic and regulatory policy. In Curitiba, the establishment of the Municipal Institute for Public Administration (IMAP) has allowed a similar focus on cross-departmental planning. The body formulates and oversees management strategies throughout the municipal administration to ensure that departments coordinate their actions. Since 2000, IMAP has been in charge of the municipal management plan, which is now used as a reference for planning, running and evaluating the management of public organisations at city level.

The 11 cities stressed three key organisational objectives:

01 good day-to-day personal working relationships
02 inter-departmental cooperation
03 the integration of green space responsibilities

The value of good working relationships

The emphasis on good day-to-day personal working relationships was stressed most directly in Aarhus, where the continuity provided by long-serving senior staff was believed to make an important contribution to successful green space management. In particular, the close personal contact between the four senior officers made for smooth cooperation between the Natural Environment Division (NED) and the City Architect's Office (the key players in green space management), and the Roads Office and Mayor's Office. These working relationships allow consensus to be reached before issues are passed on to councillors and the City Board. A unified front, therefore, is presented in the political arena.

The benefits of these working relationships are tangible. For example, reflecting the strategic priorities and interests of the NED leadership, the City Architect's Office agreed to include the green structure in all thematic maps of the Municipal Plan, even though this was not a requirement of the plan preparation process. The move ensures that structural green space elements are included in all decisions on development. On another front, the emphasis on investing in working relationships has extended between NED staff and district councillors, helping in the long run to smooth potential conflicts with local residents.

The importance of inter-departmental cooperation

Beyond personal working relationships, the cities showed a commitment to overcome organisational barriers thrown up by the different departmental/organisational responsibilities for different dimensions of the green space management remit. A number of approaches were adopted to achieve this:

Coordination through higher government tiers Such as through the offices of the Metropolitan Council (regional government), which coordinates planning and development activity in the Minneapolis metropolitan area. As such, it is both a planning agency and service provider (transport, housing, sewage) and is in charge of managing the Metropolitan Regional Park System. Thus, the Minneapolis Parks and Recreation

Board (MPRB) is one of 11 park agencies which cooperate with one another under the auspices of the Metropolitan Council. In so doing, the Metropolitan Council operates primarily as a planning agency for the regional parks system, leaving most of the implementation and day-to-day management to the local parks agencies, whilst helping to coordinate across jurisdictions and between areas of responsibility eg between MPRB and the municipal authority in Minneapolis.

Resolving 'grey' areas Although there is a clear structure of local, regional and national government in New Zealand with clear and distinct jurisdictions, 'grey' areas inevitably emerge between green space jurisdictions, leading to funding tensions between regional and local councils. Typically, adopting Memoranda of Understanding or partnership agreements between authorities solves these issues.

Unified political responsibility At city level, green space management is organised in Wellington into several management teams, involving various aspects of policy and operation, all under the Built and Natural Environment Committee. This helps to coordinate responsibilities at the political level.

Internal consultation and protocols Within Wellington City Council, a key difficulty is in-house communication, where responsibilities overlap (eg conflict between the needs of roads, cabling and drainage, and those of green infrastructure in the CBD, where space is limited). This has improved in the case of large, one-off projects, where procedures are now in place for internal consultation between all the departments affected by a proposal. Unfortunately, the problem is still common for small-scale works. To improve the situation, protocols and standards are being developed for routine tasks as well.

Prioritising internal and external links In Zurich, the Green Planning Office (GSZ) routinely works together with other departments in the city administration, such as the Civil Engineering, City Planning, City Development, Transport Planning, Health, and Environment departments. External links are also prioritised, including at the operational level where weekly contact meetings between the maintenance crew of parks and local police are now commonplace. The initiative builds on a project called 'Security and Cleanliness', which, in order to raise the image of the city and its green space, has put together a team with representatives of GSZ, the police, PR professionals and council members. The team is responsible for garnering community support for decisions regarding green space management, and thereby to help deliver safer and cleaner green spaces.

Unfortunately, however, not all attempts at intra- and inter-organisational coordination have been successful. In Wellington, for example, a recent restructuring of the council has improved clarity in the division of responsibilities and funding, including the separation of regular maintenance responsibilities from one-off capital projects. But in doing so, it has negatively affected green space management – through the loss of institutional knowledge as a result of staff transfers and changed lines of communication within the council and with external stakeholders.

In both Groningen and Malmo, attempts to combine the maintenance of urban green spaces with those belonging to public housing providers proved unsuccessful. In both cities, the housing corporations and the Public Housing Company, respectively, worked to much higher standards and to a more intensive management programme than the municipalities could hope to meet.

The experiences show that it is important to understand both the pros and cons of integrating service delivery, and also highlights the benefits of organisational stability and focus.

The benefits of integrating responsibilities

Significantly, the good practice exhibited by the majority of the 11 cities was built upon a move towards unifying responsibilities for urban green space in more integrated green space management organisational structures.

In Malmo, for example, park management is part of the Streets and Parks Department, and is coordinated with the management of streets, bridges and squares. The planning of new parks and the management and maintenance of those which already exist, is coordinated with the same functions for all types of public spaces. A number of principles were adopted for the internal organisation of these integrated structures:

Linking to a wider environmental agenda In Curitiba, the Municipal Secretariat of the Environment (SMMA) is responsible for all activities related to green space management and is coordinated with all other environmental concerns of the city through a unified management structure. The SMMA itself is divided into two departments – Environmental Control (EC), and Public Works and Services (PWS) – each of which is further divided into three divisions. Thus, street cleaning and refuse collection are under one division in EC. And green spaces planning, implementation and maintenance are under another in PWS, together with the division responsible for tree planting. The head of the SMMA (with a seat in the Municipal Cabinet) coordinates green space strategies at the political and policy levels, the heads of the departments at a managerial level and the heads of the divisions at the operational level. SMMA also coordinates the actions of other public institutions, which occupy and manage green spaces around their buildings.

Planning/operational split The Aarhus Natural Environment Division (NED) has traditionally been split into three internal groups responsible for different types of green spaces – green space planning and design, forests, and parks and other recreational spaces. These groups worked as separate sections, but the latter two were merged in 2004 along with cemeteries management, and their work was rearranged. Today, one group looks after policy, investment and maintenance planning, while the other focuses on operational issues, but both are under the unified management of the head of the NED.

Structuring by task specialisation In Hanover, the Environment and Green Spaces Division (FUS) of the city administration concentrates responsibilities for planning, development and maintenance of all the different types of green spaces in one place, avoiding the need to coordinate between different green

space services. FUS is structured into cross–sectional tasks and special tasks; the first group includes planning, design and environmental protection activities that apply to all areas, whilst the second manages operational tasks for particular kinds of green space. Each section has an annual working plan and regular meetings and special conferences with the heads of other sections to secure internal coordination. When sections cannot agree about priorities, the municipal cabinet makes decisions.

Operations/administrative split In Paris, the Mayor and deputy Mayor in charge of green spaces have the ultimate decision-making powers on all programmes, acquisitions, designs, and maintenance routines associated with green urban space. Only administrative issues fall under the responsibility of the General Manager of Administrative Services of Paris, whilst all other issues depend on decisions from the Head of the Department of Parks and Gardens, who ultimately expresses the wishes of the Mayor.

Each structure brings with it clear lines of responsibility, and, although internally divided, they offer a single point of contact for green space management to the external audience.

In Groningen, the development and management of green spaces has been the preserve of a single organisation – Municipal Services. This was organised by sector, was internally orientated, and it tended to emphasise technical knowledge and production. Changes in the 1990s led to a more integrated and devolved neighbourhood management model which was also more outward-looking and focused on results (see Groningen case study page 54). Today, the distribution of responsibilities within the various divisions of the Department of Physical Planning and Economic Affairs (ROEZ) aims to ensure that interventions in green spaces should be approached in a more integrated fashion. So, for example, the project-based replacement of a green space falls under the division responsible for neighbourhood-level maintenance. Therefore, work to a new road or square will also automatically consider the interaction with any neighbouring green space.

This final experience shows that coordination through a single management structure is not enough by itself to deliver integrated management. What is more important is the integration of planning, expertise, and day-to-day operations at the local level, and the degree to which the organisational structure allows this to happen or, conversely, militates against it.

The resourcing of urban green space management

Core and supplementary funding

The wise use of resources is likely to relate both to the total resources available for urban green space management, but also to the extent to which different sources of funding are utilised and coordinated to deliver results. Two basic forms of funding were available to the cities:

01 Core funding, which more often than not was biased towards revenue expenditure
02 Supplementary funding, which often has a capital bias

Most cities utilised both sources of funding for green spaces management (the second to a much lesser degree) – although not all. In Paris, for example, both revenue and capital funding for the city's green spaces represents about one per cent of the city's annual budget, a proportion which has remained stable over many years. However, although some revenue is generated through granting licenses to private businesses to run sports facilities, restaurants, cafés and events in the city's green space (revenue fixed at 8 per cent of the annual turnover of the business), French law forbids the ring-fencing of revenue streams. As a consequence, this revenue is collected directly by the general tax office of the city and goes into the city budget as a whole. All resources for green spaces management therefore come from the city budget, voted on annually, undermining any entrepreneurial spirit which may otherwise exist in the green space management team.

Sources of core funding

The primary sources of core funding for the provision and management of urban green space are through local tax revenues and recurrent central/state government grants. Although most of the cities professed themselves happy at the level of this funding, few could achieve all they wished through their core funding, with investment and reinvestment in capital works often the chief casualty. In addition, in recent years, budgetary cut-backs, tied to the general state of public finances across the world, seem to have resulted in budgetary cuts that in turn have placed a squeeze on maintenance activities.

A general revenue pot The common approach across the 11 case study cities is to receive core funding in the form of an allocation from a general revenue pot. With this approach, the management of green space is forced to make its case for funding alongside a multitude of other calls on the same source of financing. As – usually – a non–statutory activity, this model inevitably puts sources of funding under pressure.

In Aarhus, the management of green spaces is funded through municipal tax revenue, whilst the city council (Municipal Board) is responsible for allocating funding for the various departments and divisions. Funding for green spaces management has so far been adequate for the maintenance of existing green spaces. Funding for capital projects (renovation and new parks), however, is more difficult to come by. It also has to be applied for by NED to the city council, and is not always forthcoming.

In Paris, funding for the city's green spaces represents 1% of the citys overall annual budget. This proportion has remained stable over many years

Most of the resources for urban green space management in Curitiba come from the municipal budget, made up of municipal taxes and federal and state transfers, with the SMMA receiving about five per cent of the total. Within SMMA, allocation to the different divisions is undertaken by the head of the agency according to the administration's priorities, although usually there is not enough for all priorities. Recently, however, the outsourcing of park maintenance has dramatically cut the costs of the service, liberating resources for green space initiatives.

In Groningen, finance for green spaces is provided by the city council, whose budget is funded from a number of sources, much of which, however, is from national taxation in the form of central government allocations. The costs of the green space management programme are subsequently paid for out of the annual municipal budget, which has been relatively stable, overall. However, the high annual expenditure on green space management has tended to make it a popular target for budget cuts. Because there is no tradition of private investment in urban green space management to fill the gap, in recent years there has been very little scope for new investment in existing or new green spaces.

The cabinet is responsible for the budgetary allocation between the different departments in Hanover, and nearly all expenditure in maintenance is borne by the city itself. Within FUS, the Central Tasks Division is responsible for financial coordination, but in principle each division gets its own budget. Unfortunately, new tax laws, which are affecting the entire local government sector in Germany, have made the financial situation for urban green space management increasingly tough.

Similarly, in Malmo, the city council decides on budget allocations for the different departments which are distributed internally in the Streets and Parks Department by the Technical Board and largely funded by the municipal budget. Over the last two decades there have been severe budget cuts in Swedish municipalities. The non-statutory municipal services like park management have been the most affected. Currently, urban green space management only takes one per cent of the municipal budget and therefore savings here are largely insignificant to the entire municipal budget.

As a general principle, in Wellington, the majority of funding for green spaces comes from general rates, since green spaces are considered a public good. This funding is distributed according to the council's decision on how to allocate the overall budget according to policy objectives.

Unfortunately, funding sources and levels for green spaces are difficult to identify in Wellington because funding is allocated variously under Built Environment, Natural Environment and Recreation & Leisure budgetary headings, all of which cover other functions as well. The same applies in Paris, where the Department of Parks and Gardens has no analytical accounting methodology, as is the case for all administrative bodies in France. This makes it difficult to determine what is spent on specific green space maintenance activities, and where. Moreover, capital expenditure and on-going maintenance are bundled together in the budget. These approaches make external (community) evaluation of expenditure difficult, and thereby cloud judgements of effectiveness.

'Pledged' funding A less frequent approach to funding is where funding is gathered specifically for the management of urban green space, and is therefore pledged for that purpose. Although such models do not provide a guarantee that adequate funding will be forthcoming (the level of any tax is inevitably a political decision determined by the perceived willingness of the community to pay), they nevertheless provide a more transparent collection. Furthermore, expenditure process and decisions about funding are not played off to the same extent against other calls on the public purse. Two such examples were found:

The Minneapolis city charter gives the Parks Board the authority to levy a tax on residential property. The rate is established by the municipal Board of Estimate and Taxation, composed of the Mayor, the president of the city council, a commissioner of the MPRB, other heads of services, and elected citizens. On average, nearly nine per cent of residential property tax is allocated to the board, although this generous budget is in the process of being cut back. These hypothecated tax revenues are supplemented by state allocations under the Local Government Aid programme (see Minneapolis case study page 42).

The primary source of funding for Parks Victoria is in revenue received from a Parks Charge, levied on all residential, commercial and industrial property in the Melbourne metropolitan area. The rate and the revenue collected are subsequently administered by the State Government's Department of Sustainability and the Environment, and are therefore not available in their entirety to Parks Victoria. The main objective of establishing Parks Victoria was to maximise declining funds by directing resources across the total system and eliminating duplication between government organisations. Pressure is therefore always on to spend the parks allocation wisely.

Utilising sources of supplementary funding

Supplementary funding came from a wide variety of sources. Although generally much smaller in quantity than core funding, these resources were particularly welcomed for the ability they provided to enhance the level of the general service, to fund capital investments, and establish better connections to the community of green space beneficiaries – including the business community.

Playing the environmental card Aarhus has proved particularly successful in supplementing its budget through utilising the local and national interest in the protection of water resources to lever EU funds for forestation schemes. An extra 2 million Euros have been raised over the last five years, and the ability to raise such sums has become an increasingly important role of NED staff.

Carrots and sticks Thanks to a hefty input of resources, including loans from international agencies, the SMMA has become the most influential secretariat in the municipal administration in Curitiba. Pollution-related fines have been

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used to fund capital projects, while subsidies from federal and state governments and tax incentives have also been used to attract private money. So far, though, the amounts have been small.

Urban regeneration A number of the cities were able to fund capital works through regeneration schemes. These included capital investment in the green spaces of older urban areas in Groningen, or the significant government resources used for improving living conditions in urban areas, including the renovation of parks in deprived areas around high-rise estates in Malmo.

Planning 'gain' In its various guises, planning 'gain' was a source of funding in Groningen, Wellington and Zurich. In Groningen, all infrastructure associated with new residential developments, including green spaces, must be paid for from revenues generated from the sale of the houses. New green spaces are then included in the urban green space maintenance budgets on the basis of key indicators. In Groningen this happens through inclusion in the district maintenance plan, ensuring that new areas are included in the budgetary cycle. In Wellington, Land Development Levies are used in a similar fashion, whilst in Zurich as part of a cooperative planning process, the city develops contracts with the developers whereby developers donate the land and pay for the implementation of new green spaces in exchange for zoning bonuses. The city administration subsequently takes over the management of these areas, following the appointment of a special projects manager to ensure that new spaces are implemented as agreed in the contract (see Zurich case study page 56).

Private sponsors Sponsors of space were found in Hanover, Malmo and Curitiba, usually for special projects. Although totals are not financially significant, they are often important politically and help to strengthen connections with communities. In Malmo, private sponsorship of green spaces is usually limited to tree-planting.

User fees In Minneapolis, Wellington and Melbourne, user fees played a role. In Minneapolis, such fees amounted to 13 per cent of the operating budget of MPRB, and, because other sources are declining, there are plans to increase this. In Melbourne and Wellington, entry charges are levied in some metropolitan parks, usually because of the special attractions available within them. Unfortunately, the revenue is small, with little opportunity for growth in the foreseeable future.

Rental charges In the search for reliable, long-term, non-tax streams to supplement its income, MPRB has been looking at private fundraising and enterprise funds (the fees and charges for services) as means to raise income. For private fundraising, the board has worked with the Minneapolis Park Foundation, a charity whose aim is to solicit private funds for the development and maintenance of Minneapolis's parks. Revenue-generating public-private partnerships are also being explored (eg a skate park owned by MPRB but built and operated by a private firm, with a proportion of the income being returned). In Melbourne, Wellington and Curitiba, income is also derived from rents and licenses to private operators, but the total is again low, and

The MFO park in Zurich. The cooperative planning process encourages local developers to provide new urban parks

limited in the case of Melbourne by government policy restricting the introduction of market rates.

One-off grants In a number of the cities, one-off grants were available for particular purposes. In Melbourne, for example, funding for major capital works is subject to an annual bidding process, in competition with all other state-funded works. In Hanover, some funding is available from the Region of Hanover and from the state, but largely for the state parks and for historical monuments within green spaces. In Wellington, some funding is available from regional councils where responsibilities overlap, as well as national funding for specific initiatives, sometimes including green space.

Private Finance Initiatives (PFIs) In Tokyo, following a general reduction in resources available from central government for the management of green spaces, a Private Finance Initiative-type scheme has been introduced as a means to fill the gap. The monies generally only relate to new capital projects and their subsequent management.

Charitable giving Contributions from charitable trusts were also cited in Wellington as useful sources of additional funding, usually regarded as 'extras' for special projects.

Innovative accounting methods

Both sources of funding (core and supplementary) had to be managed by the cities, usually through standard municipal accounting methods.

In Tokyo, capital investment in green spaces is split equally between central and local government. Central government funds are granted to local government either as 'joint assistance' or as 'specific assistance'. In the first case, the location and details of the capital project may be determined by local government through its own planning; in the second, the

destination of the money is predetermined by agreement between city and state. The trend is that the first of these is now becoming dominant, following government policy to give more power to local government by reducing the heavy state involvement in managing local affairs. If it continues, the trend should give the city far greater autonomy to establish its own priorities and to direct resources towards achieving them.

In Groningen, prior consideration of the annual maintenance costs of new green space investments financed through urban regeneration monies or through planning gain agreements has been achieved through the inclusion of green space managers in the development process. In this position, they have full advisory powers and the ability to test proposed designs. The tests provide a means to project the long-term financial consequences of proposed new spaces and to consider the likely impact on public resources. Since this mechanism was adopted, new green spaces have proved to be more manageable and less costly to maintain.

Whilst, in Zurich, as part of new public management practices, GSZ has introduced a cost transparency method which arranges services into five groups: Nature Enhancement; Open spaces; Management; Nature Products; and Services. All services at GSZ belong to a product group and every product has a manager, a specific budget, and a set cost linked to specified quality levels. The aim is to encourage internal competition and greater transparency of service costs as a means to achieve efficiency gains that are then split between GSZ and the city administration. Thus, all costs are prepared against citywide comparisons, taking into account the intensity with which parks are used (less intense means less cost). District parks managers have to thereby sell their services and those of their workforce to the product manager at a specified cost/quality, before they are given the resources to proceed. The system is two years old, and so far is delivering on its potential (see Zurich case study page 56).

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In Tokyo capital investment in green spaces is spilt between central and local government equally

Case study: Hanover

Hanover (population 500,000), the capital of Lower Saxony, benefits from a rich heritage of urban green spaces, ranging from the historic gardens of the stately homes to the extended meadows of the river Leine and the Eilenreide, a forest on former clay pits on the eastern edge of town.

Concentrating on maintenance

Hanover, like other German cities, has experienced a decrease in population. To address this problem, the authorities focused on making urban living more attractive, including efforts to maintain the quality of its green spaces. Compared with other cities, Hanover's green spaces are highly appreciated and have earned Hanover the label 'City of Gardens'. This success is attributed to the rich quality of existing parks as well as the decentralised management approach of the authorities.

Due to the demographic trends, the city needed no new provision and was able to concentrate on maintenance. Budget cuts and outmoded management practices led to new initiatives to re-focus the maintenance of green areas. In the past, safety and cost considerations based on legal requirements had driven the green space management agenda (priority given to dangerous trees or unsafe playground equipment). Decisions were based on unit costs and frequency of maintenance tasks. Over time, an optimised system was developed to fulfil the safety requirements, whilst optimal results had to be reached with the minimum financial outlay.

The cuts in the municipal budget, which had to be implemented following the federal government's new tax laws, contributed to the need for modernisation. Although Hanover's budget still is high by German cities' standards, expenditure had to be reduced by 10%. Following the cuts, the local authority even considered the disposal of some of its green spaces, together with reducing maintenance expenditure.

Improving maintenance through decentralisation

In the 1980s, the KGST, an institution under the German Cities Federation, engaged consultants to improve efficiency in local government. A fundamental reform programme was proposed in the 1990s, decentralising responsibilities for resources and results. Hanover, like most German cities influenced by the KGST initiative, adopted a more business-oriented management style based on the new principles of citizens being treated as 'customers'.

When the green space sector became one of the pilots, the previous management approach was reversed and outcome rather than cost became the measure of efficiency. The need to improve communication with the public on green space matters also redirected the focus of the administration's work towards outputs and costumer satisfaction.

All employees of the Environment and Green Space Division (FUS), responsible for managing Hanover's green spaces, receive ongoing training in innovative management practices through the city's association with the Faculty of Landscape Architecture (University of Hanover). Recently the KGST added another initiative, IKO Network, a forum to compare management efficiency in different cities using key indicators. Hanover also participates in the Standing Conference for Green Space (GALK), which brings together local urban parks and green space administrations

throughout Germany for the exchange of information and experiences and the discussion of management problems.

FUS (part of the Environmental Services Department) coordinates all management tasks (planning, construction work, maintenance) and is responsible for the overall financial coordination, although each section has its own budget and can reinvest any income from charges. Maintenance tasks are fixed in working plans with responsibilities clearly defined geographically so that each group feels responsible for an individual site or group of sites. About 90% of maintenance work is carried out by the city's own workforce.

Departing from previous standardised maintenance practice, decentralisation has permitted maintenance activities to be determined individually, taking into account the special character and function of a green space. Different regimes can now be applied to historic gardens, to the highly used 'promenades', or the wildlife parks.

Management can therefore cultivate the special 'garden quality' of Hanover by being more responsive to the local context:

- In socio-economic terms all green spaces of importance for the city's image are prioritised (eg historic gardens)
- In particular physical contexts, the characteristic elements of the natural environment are cultivated carefully (eg River Leine meadows, Eilenriede urban forest)

- In land use terms, each district to have a special 'garden character' to enhance its sense of place
- In cultural/historic terms, famous historic gardens will receive more financial resources than others

Hanover's green space objectives also address the need to communicate with and educate the public. Stakeholders must be convinced that green space management is not a burden, but contributes to high quality living conditions and the region's future economic success. FUS staff members are encouraged to take responsibility towards park users, aiming to not only achieve effective maintenance but also to ensure that all citizens are satisfied with 'their' urban green spaces.

Clockwise from left:
The Great Gardens, Herrenhausen Gardens; The Georgengarten Gardens, Herrenhausen Gardens; The Stadtpark; Former gravel gravel pits in the Southern Leinevalley, now recreational sites; The municipal town forest of Eilenriede

Case study: Zurich

Zurich (population 361,000), Switzerland's largest city, situated at the northern end of Lake Zurich on the banks of the Limmat, is surrounded by wooded hills that have been protected since the 19th century. Following the destruction of the city walls, part of the moat became a recreation area and in the 1880s a new waterfront promenade was built on artificial ground gained to the lake, representing today the main recreation area of the city.

Grun Stadt Zurich (GSZ)

Compared with other cities, Zurich is always rated very highly for the quality of life it offers, enabling the business community to attract employees. When citizens are surveyed every two years on issues that define quality of life, results indicate that green areas and parks rate, together with public transport, as the main reasons for this high quality.

This success is attributed to the combined efforts of the administration and the politicians, although it is acknowledged that high standards of education in the population and prevailing social controls contribute to the respect for urban green spaces. GSZ, which has been in existence for over 100 years, is part of the City's Infrastructure Department and responsible, in cooperation with other agencies, for the planning and management of green open spaces

Provision of green space

The main problem facing the administration is the unequal distribution of green spaces within Zurich. In 1999, it developed the Open Space Concept, which established green open spaces in all districts, no more than 10-15 minutes walk (400 metres) from every household. Specific targets about provision supplement the distribution requirements:

- An allocation of $5m^2$ unbuilt space for every workplace
- There should be $8m^2$ of green space per inhabitant

- Acquisition of $50m^2$ of undeveloped land for every developed floor area

GSZ's planning activities also focus on the redevelopment of former industrial sites or problem estates to ensure a sustainable development. Zurich North is an example of former industrial land for which guidelines for mixed-use development were prepared in 1991. It preserved an existing park and created new green spaces, three of which opened by 2003 (competitions for the design of further two have been held in 2001-02). By agreement with the city, the local landowners provide these new urban parks as they are seen as positive identification factors that add value to the development. Ownership and future management are subsequently transferred to the city. Turbinenplatz and Oerlikerpark are two of the completed new parks in Zurich North.

The agency also seeks greening opportunities within the built up area with two initiatives: 'Nature in the Neighbourhood' and 'Nature around Schools', the latter undertaken as a joint project between the schools and GSZ, involving children, teachers and parents.

Security and cleanliness project

Lakeside parks are heavily used, especially in summer, when a variety of activities take place and the ensuing conflict between events and passive recreation has given rise to complaints with demands for more policing and increased maintenance. GSZ responded with the 'Security and Cleanliness' initiative, creating a project team consisting of GSZ officers, police, communication specialists, etc. Its head is in direct contact with council members.

The team decided early on that for improvements to work they have to be understood and supported by park users. At the start of the project, a workshop with all stakeholders identified the problems and defined three main areas for improvement:

• Infrastructure
• Wide communication of rules
• More police control

Amongst others, an important short-term measure was the cleansing of the park in the late afternoon when many people use the park and can appreciate the effort to clean up the litter they produce. Communication was improved through leaflets explaining what was/was not allowed in the park and large posters supported this campaign. Both the project team and park users considered this project as a step in the right direction.

Cost transparency calculation

GSZ introduced a cost transparency calculation as a management tool to determine the costs and effects for every 'product'. GSZ services are divided into five product groups (for example 'open spaces' and 'nature areas') each with a manager responsible who also manages the budget. Individual district managers have to 'sell' their workforce to the 'product' manager to achieve the high level maintenance to which they aspire. This system seeks to achieve internal competition and transparency and is expected to lead to cost efficiency.

As GSZ relies on a fixed budget, any efficiency savings are split between the city of Zurich and GSZ, additional costs, however, are borne by GSZ. Reports are prepared twice a year for each 'product' group to give a financial overview. Besides assisting management to stay within the limits of the overall budget, the system is designed to make the administration more service-oriented. Although it was only introduced two years ago and the experiences are limited, there are early indications that the system works.

Clockwise from left:
Urban parks and green spaces rate as one of the main reasons for the high quality of life Zurich offers; Park users in the Lindenhof, the oldest part of Zurich; MFO Park; Turbinenplatz, was developed by Sulzer Escher Wyss and given to the City of Zurich for maintenance

05

The lessons for English practice

The organisation of urban green space management

Although a few of the cities have single-purpose, unified and integrated organisations in charge of all aspects of green space management, most have to cope with some degree of fragmentation of responsibilities and resources and still manage to achieve good results in complex institutional environments. In the vast majority of the 11 cities, green space management is carried out by a municipal parks/green spaces department, often part of a larger directorate, which is responsible for most but not all management tasks and has to liaise with other bodies within and outside the municipal administration to carry out its duties.

The key message is that, although it would be ideal to have a management structure that replicated the integration and independence found in Minneapolis, Paris and to some extent Melbourne, for most English municipalities, it is the other cases which demonstrate the most direct lessons. In this regard, three points are of particular relevance. **First, it is the quality of the working relationships between those with responsibility for green space management that is the most important variable in influencing the better coordination of separate green space responsibilities and interventions**. Having all key players under the same organisational structure does help, but good coordination can be achieved where this is not the case – as in Zurich, Malmo and Wellington. Thus, organisational structure is less important than the integration of activities that it should give rise to.

Second, in nearly all of the cities, there were conscious efforts to remove organisational barriers to inter-departmental cooperation. This ranged from merging departments to drafting protocols, delegating responsibilities, setting up forums or using higher-level authorities to smooth out conflicts and secure coordinated actions. How these changes are being implemented also varies, with some cities radically restructuring green space management organisations and their practices (eg Zurich), and others incrementally changing practices without significantly altering organisational structures (eg Aarhus). The kinds of responses to removing the barriers to coordination depend on historical accidents, the adaptability of existing structures, political will and calculations of the advantages and disadvantages of adopting different courses of action. The key lesson is that there is no one right way, but instead a number of alternative paths to better integration and coordination of services, each with its own costs and benefits. All of these need to be weighed up in the light of local circumstances.

Third, the most successful cases suggest that coordination is at its most effective when key responsibilities are unified under clear lines of management responsibility, and externally through a single point of contact for green space services.

Thus, whereas different players can perform many green space management tasks under a coordinated arrangement, there are key tasks that need more than that. What those tasks are varied from case to case and seem to be related to strategic views about the role of green spaces in each city. In Curitiba, for example, the environmental agenda has determined the essential tasks and services. In Aarhus and in Hanover it is the internal requirements of efficient maintenance; in Minneapolis and Melbourne it is the requirements of the system of green spaces, rather than the needs of individual units within the organisational structure.

The resourcing of urban green space management

In common with the UK, all 11 cities have faced budgetary constraints over recent years, although for most of them, current levels of funding are still satisfactory. Contrary to UK experience, however, it was capital expenditure budgets which suffered the most, demonstrating a simple lesson – that protecting revenue expenditure streams (if necessary, over and above capital budgets) must be the priority of urban green space governance, if generalised perceptions about green space quality are to be positive.

As in the UK, nine out of 11 cities depended on allocation from a general municipal revenue pot for their green space core funding. Only Minneapolis and Melbourne benefited from pledged funding from dedicated land and property taxation, making green space resource allocation relatively free from the bargaining and uncertainty typical of the other cases. Of these two systems, hypothecated funding from land and property tax seems favourable as it is more likely to secure adequate levels of resources, as well as ensuring that green spaces benefit from potential increases in property values that they help to generate. However, the fact that most cases did not have such a system suggests that political and legal obstacles to such a solution should not be underestimated in existing municipalities. Nevertheless, in areas of major new development, such a model may be appropriate, helping to ensure that green space benefits as land values rise.

For most circumstances, however, the key message that emerges is that adequate funding for green spaces is likely to remain dependent on the skills and political clout of green space managers and committed politicians to make the case for green space investment, and to bargain with providers of other services for a larger slice of a limited cake. In this regard, many of the cases suggest that innovative accounting methods which link more explicitly green space expenditure to other environmental benefits, as in Aarhus, or that are more transparent in the relationship between the costs and the benefits they provide, as in Zurich, can be powerful tools to promote the cause of green spaces. The greater use of transparent accounting processes might also be made by publishing inflation-adjusted trends in the annualised budgets available for green space management purposes (separately from other related public service

responsibilities), and within this (and again separately) the trends in green space capital spend and green space revenue spend.

A further lesson is that there is much potential in exploring supplementary sources of funding. Although these are only likely to contribute a small proportion of the total green space management budget, their political benefits and the quality improvements they bring about in particular locations made them extremely popular means to raise revenue across almost all of the cities examined. Particularly promising was the use of planning gain for capital expenditure on green space, as in Zurich, Groningen, Wellington and Curitiba; revenue-generating public private partnerships and PFIs as in Minneapolis and Tokyo respectively; as well as the use of voluntary sector and community resources, such as in Melbourne and Tokyo.

An important pre-requisite, however, is that of maintaining the entrepreneurial spirit to raise such funds. Resources raised in this way should be returned in full to the departments responsible for their generation as 'additional' funding, over and above core allocations. Increasingly, it seems, a key skill of the urban green space manager is likely to become that of the fundraiser.

What can we learn?

- The quality of working relationships between those with separate responsibilities for green space is the most important variable in delivering better coordination.

- Exact organisational structure is less important than the integration of activities it should give rise to, but conscious efforts should always be made to remove organisational barriers to inter-departmental cooperation.

- Coordination is most effective when key responsibilities are unified under clear lines of management responsibility, and externally through a single point of contact for green space services.

- Protecting revenue expenditure streams (if necessary over and above capital budgets) must be the priority of green space governance.

- 'Pledged' funding specifically for green space should be explored in areas of major new development.

- Elsewhere, adequate funding for green spaces will be dependent on the skills and political clout of green space managers and committed politicians.

- Innovative accounting methods which explicitly link green space expenditure to other environmental benefits, or which are more transparent in the relationship between the costs and the benefits they provide, can be powerful tools to promote the cause of green spaces.

- Supplementary funding sources are important for the political benefits they offer and for the quality improvements they bring in particular locations; as long as resources raised in this way are returned in full as 'additional' income to the departments responsible for their generation.

05

06 How is urban green space maintenance delivered?

In this chapter

- **The English context**
  The need for periodic reinvestment and high-quality day-to-day maintenance
- **The international experiences**
  Maintenance processes
  Reinvestment processes
- *Case study: Wellington, New Zealand*
- *Case study: Melbourne, Australia*
- **The lessons for English practice**
- **What can we learn?**

The English context

The need for periodic reinvestment and high-quality day-to-day maintenance

However coordinated, the impact of different policy aspirations and responsibilities eventually makes itself felt on the ground through a series of delivery processes. In the process of managing urban green spaces, these boil down to day-to-day maintenance and periodic reinvestment.

Maintenance processes relate to the ongoing care of urban green spaces to maintain their quality, and in particular to:

- The everyday processes of cleaning and repair
- Planting and seasonal care
- Refuse collection and disposal

Reinvestment processes relate to the far less frequent decisions to renew urban green space infrastructure, and their success relates in particular to:

- Patterns and standards of provision
- The quality of the original design
- The establishment of new or renewed facilities within green spaces
- The robustness of landscaping and materials

Unfortunately, the 2003 survey of green space use – 'The Use of Public Parks in England' – revealed that the poor condition of green spaces in England appeared to be a major barrier to their use, a finding which reflects the poor quality of the day-to-day maintenance and a failure to periodically reinvest in existing parks and green spaces.

'Green Places, Better Spaces', confirmed the finding, and identified a weak policy framework for provision which has not evolved to respond to backlogs in maintenance and upkeep

issues, and which has encouraged stock increases without addressing issues of its long-term management. Thus, of the five main barriers deterring people from using urban green spaces identified in 'Improving Urban Parks, Play Areas and Open Spaces', three related to basic issues of condition and provision. These were: the lack of – or poor condition of – facilities (including play facilities for children); concerns about dog mess; and environmental quality issues (litter, graffiti, vandalism, etc). The report argued for better maintenance, and for a reinvestment in new and better facilities to encourage the increased use of urban green spaces. Improvements people want to see in urban green spaces, it was argued, relate to good design and to better management.

Alongside the lack of resources for day-to-day maintenance, 'Improving Urban Parks, Play Areas and Open Spaces' identified the lack of resources for capital spending as a major problem for local authorities. 'Improving Green Urban Spaces', meanwhile, concluded that at the same time as a deterioration in general maintenance budgets, local authorities had been taking on responsibility for additional areas of open space, often as a result of new housing developments or the rehabilitation of derelict land. The spreading of already reduced maintenance budgets has in turn led to a further reduction in maintenance standards.

Significantly, the international case studies revealed that, although budgets were generally being squeezed, finding capital monies rather than monies for maintenance seemed to present the greatest problems (see chapter 05). However, in England in recent years, that situation has been reversed, primarily due to the impact of National Lottery grants. The research nevertheless needed to examine sets of delivery process – maintenance and reinvestment – and both their provision and inter-relationships. The relative status and priority given to each was also examined and the means to raise the profile of the more run-of-the-mill aspects of the agenda was explored.

The following questions were asked of the international partners:

- How are maintenance routines defined, organised and implemented?
- At what level are decisions taken?
- How are different maintenance activities (cleaning, repair, planting, seasonal care, refuse collection, etc) coordinated on the ground?
- Are sustainable management approaches adopted (eg ISO 1401)?
- How do the specific problems/conditions of particular green spaces determine maintenance activities?
- How are issues of efficiency and effectiveness balanced?
- How are decisions about the need for new investment in existing green spaces taken?
- How are decisions on the design quality of green spaces and their facilities/equipment taken, and on what grounds?
- How are issues of management and maintenance reflected in decisions taken about new investment?
- How is the balance between cost and quality/durability decided upon?

The international experiences

Maintenance processes

A large majority of the time, resources, and expertise of the 11 cities' urban green space managers was spent on maintenance work, which, because of its very widespread impact, has a potentially much greater contribution to make to environmental quality than comparatively rare reinvestment activities.

The cases revealed a number of important dimensions of maintenance processes, about which lessons can be learnt. Most importantly, the experiences suggested that, although efficiency is an important objective to ensure the wise and careful use of public money, more important is the ratio of the quality delivered for the investment made. Thus, in all of the case studies, quality was a paramount and complementary objective.

Planning for better maintenance As well as the use of strategic green plans (see chapter 03), a number of the cities prepared specific maintenance plans to guide the operational delivery of urban green space management, including in Hanover and Groningen. In Aarhus, maintenance is undertaken on the basis of four maintenance districts and a general park maintenance plan, in combination with detailed maps of each locality. They provide the basis for operational work. In Paris, maintenance plans are prepared, based on the natural agendas of gardens and plants and on reports by caretakers and park security staff.

Such plans allow long-term maintenance priorities to be established and properly resourced, and for key policy priorities (eg sustainable management approaches) to be interpreted in the context of everyday responsibilities. The most sophisticated maintenance planning approaches were found in Melbourne, Wellington and Groningen:

Levels of Service (LOS) framework This is a key management tool used by Parks Victoria to establish the 'optimum' quantity and mix of visitor services, given forecasts of user demand and the availability of resources. It uses data on visitors, on the park assets and on available resources to:

- Define clear service standards across the different park settings
- Ensure that resourcing decisions match visitors' demands and to balance those against the capacity of Parks Victoria to meet them
- Identify metropolitan, area-wide, optimum scenarios in terms of service availability, range and mix

The framework adopts five steps to develop optimum approaches for the city's parks, and in so doing quantifies the gap between desired and actual levels of service. The steps are:

01 Establish model levels of service for the customer profile that the park fits into – there are five such profiles – from very basic to very high park standards, based on intensity of use
02 Quantify existing levels of service (condition and functionality)
03 Assess the gap between existing and proposed levels of service through standardised scores

06

04 Determine relative site importance through standardised scores
05 Establish the appropriate level of services

Through the process, the system defines the kinds of maintenance services applicable to each park. Key elements in defining these levels include the level of visitation and the location within the metropolitan area. Thus, remote, low-visitation sites will attract only very basic standards of maintenance, whereas centrally-located, highly-visited parks will be intensely managed. The 'Visitors Facilities Manual' complements LOS as a tool for operational staff to select equipment, designs and activities appropriate to each kind of park, so helping to streamline decision-making processes (see Melbourne case study page 70).

Asset management software The Asset Management section of the Wellington Parks and Gardens Unit uses asset management software to programme maintenance, inspections, replacement and funding under a number of asset management plans (see Wellington case study page 68). These plans have now come online, and, apart from providing documented justification for securing funding, they have improved the ability to recognise trends in the performance of green space facilities and equipment.

Links between the council's GIS database and the asset management database have proved particularly useful in helping to locate and check overlapping areas of responsibility. However, while it has been relatively straightforward to assess and programme built assets, site furniture and paving, it has not been so easy to do so for green assets and special design elements. Quantifying and assessing their condition to predict replacement is something that still needs more refining.

Operational delivery Each city organised the routine delivery of urban green space maintenance in its own way. Collectively, a range of key lessons was apparent from the experiences:

01 **The value of self-sufficiency** In Aarhus, operational staff members are subdivided into four district groups, each of which is fully equipped for the green space tasks required in their respective areas. Within each district group, smaller groups are responsible for specific geographic areas, and their work is coordinated by a district gardener, who liaises with the district manager.

02 **Prioritising communication between levels** The district groups in Aarhus are led by an administrative member of the Natural Environment Directorate's (NED) staff, ensuring that good communication is maintained between the managerial and operational levels of the department. Annual meetings between district staff help to link site-level action to overall city-wide plans and policies.

03 **Coordinating actions through a common inspection regime** Although the Parks and Environment Secretariat (SMMA) is directly responsible for green space maintenance in Curitiba, the task is shared with the Public Works Secretariat (SMOP) and the service units of the eight regional administrations. These agencies have specialised teams to look after streets and squares and are contracted by SMMA to do so, whilst SMMA directly maintains the larger parks and woods. The arrangement means that, on the ground, maintenance routines are not determined by SMMA, emphasising the importance of the overarching SMMA inspection regime to ensure consistency of approach and to maintain standards.

04 **Clarifying standards of delivery** The responsibility for day-to-day management programmes in Groningen lies with the Public Green Space Team. Its job is to ensure that aspirations laid down in the management quality plan are fulfilled, through proper specifications, monitoring contractors' work, and supervising jobs. Target specifications conforming to national standards are formulated locally on the basis of three-yearly technical BORG inspections (see chapter 07) and the expertise of municipal staff.

05 **Delegating responsibility to operational levels** In Malmo, the procedures and the coordination of maintenance operations are dealt with by contractors, following the principle adopted by the city to delegate decision-making power to the lowest level. This is, a common managerial practice throughout Sweden. The effectiveness of this approach lies with the knowledge, skills and sense of responsibility it gives to individuals at the operational level. It has also delivered faster decision-making, based on first-hand knowledge and information (see Minneapolis case study page 42).

06 **Clarifying lines of responsibility** The complex range of green space maintenance responsibilities requires a clear managerial structure to establish priorities and coordinate actions. In Minneapolis, the Operations Division of the Minneapolis Parks and Recreation Board (MPRB) performs all upkeep functions, including routine repairs to park buildings, facilities and grounds. A Director of Park Operations has overall responsibility for the work, and is assisted by two park maintenance supervisors responsible for budgeting, resource allocation and human resources. A separate, dedicated Recreation Division oversees recreational facilities within the city's parks, and sponsors cultural and environmental events.

07 **The value of park keepers** To facilitate maintenance in a large and diverse park system, Minneapolis was divided into four maintenance districts, each with a foreman and three crew leaders. Maintenance at the level of individual parks is carried out by park keepers assigned to specific geographical areas (large parks may have more than one park keeper, and a single park keeper may be assigned to more than one small park). The foremen and crew leaders make sure that all their park keepers have a similar workload. Upkeep procedures for specific parks are therefore finally the result of a cooperative effort by the foremen, crew leaders and park keepers. Park keepers are also the public face of the board, serving a valuable function as *de facto* community liaison.

08 **Maintaining flexibility** In Paris, approaches to maintenance are decided at a more strategic level by staff managers in the Department of Parks and Gardens. Much of the work is based on routine patterns, but the strategic approach means

In Paris, approaches to maintenance are decided at a strategic level within the Department of Parks and Gardens.

that the department is also able to react promptly to emergencies, quickly re-design routines and practices and re-deploy staff.

09 **The importance of an in-house design capability** The Green Planning Office (GSZ) in Zurich uses standard maintenance processes, and the responsibility for maintenance tasks lies with the green space managers in the various districts of the city. However, if design issues are involved, then green space managers are able to call on the expertise of landscape architects employed by the GSZ, helping to ensure that design quality remains a fact, even in routine maintenance tasks.

Striving for efficiency by contracting out In the context of the ubiquitous, increasing pressures on resources on what typically remain non-statutory urban green space services, each of the international exemplars were in different ways striving to deliver more efficient maintenance services. More service, in other words, for less resource. A key means to achieve this was the contracting-out of previously in-house maintenance operations. Curitiba, Groningen, Malmo and Tokyo have all gone successfully down this path.

Many of the operational activities of the SMMA in Curitiba are outsourced, including the maintenance of green spaces. The initiative has proved very cost-effective for the city, leading to overall cost reductions of up to 50 per cent in some circumstances. In the case of larger parks and woods, maintenance procedures and standards are defined on an annual or bi-annual basis by SMMA, and this becomes part

of the contract put out to tender. The maintenance packages take into account seasonal variations and include an inspection regime by SMMA staff. The downside, however, has been a reduction in these inspection and monitoring capabilities, due to the loss of experienced operational staff as a consequence of outsourcing.

For the last two years, Groningen has worked with target specifications, a form of contract which specifies the visual targets which contractors must achieve. Previous contracts stipulated production-related outputs such as frequencies of work, and dates by which work should be carried out. In the new system, the contractor is free to choose the inputs and the kinds of expertise to be deployed, but has to meet carefully prescribed outcomes. The system relies on the selection of experienced contractors since it shifts much of the risk to contractors themselves. And experience has shown that this system has delivered higher quality at a lower cost. It only works, however, if the contractor is familiar with the area and can estimate the nature of the tasks correctly.

Malmo's Streets and Parks department employs both private and public contractors, and different contractors work in different sectors of the city to maintenance standards defined by the department. The system relies on close cooperation between the city and contractors, with contractors expected to take the initiative in innovating and improving their practices. The pay-off is their enhanced ability to secure further contracts thereafter. The system in Malmo has been the result of a decade-long evolution in the city's approach to contracting out work, which began with the city giving very detailed instructions to

Volunteers working in a park in Tokyo

Community volunteers working in Wellington park

contractors, but which has evolved into a looser and mutual understanding of aims and objectives. The success of this approach has been essentially driven by skilled contractors and good communication between the department and its contractors. The department has also divided the city into sectors to make contracting packages more viable, and, in order to maintain a competitive market, the sector boundaries are changed with each new contracting cycle. This avoids complacency and market-cornering by contractors, forcing them to be more competitive in terms of price, quality and cooperation (see Aarhus case study page 26).

The Tokyo Parks Association, the large public corporation in charge of maintaining 64 out of the 76 large parks in Tokyo, has also adopted competitive practices for contracting out maintenance work. In this instance, the drive towards more efficient cost performance follows recent policy approaches emanating from central government. The legislation on contracting out and monitoring green space maintenance work has just been revised, and new directives requiring local government to adopt more business-like approaches are expected to come into force shortly.

The experiences across the cities which have so far experimented with contracting out suggest a number of factors which are of critical importance:

- Contracting out needs to be viewed as a mutually supporting and long-term partnership between public and private, and not simply as a way of driving down costs in the short-term
- Quality expectations need to be specified as carefully as price on the basis of outcomes rather than inputs
- Delivery must be carefully monitored

Striving for efficiency whilst retaining services in-house: Not all of the cities went down the path of contracting out maintenance responsibilities. In Minneapolis, for example, most maintenance work is still conducted by in-house teams, as a strongly unionised MPRB workforce has opposed both contracting out day-to-day maintenance to private firms and the transfer of maintenance tasks to voluntary and community groups. The benefit has been the generation of a high and enduring sense of responsibility for the city's parks amongst the in-house staff. The

downside has been the relatively high cost to operate the system and the lack of flexibility in allocating maintenance tasks. The latter problem is caused by the tendency for the union to impose strict limits on the type of work each employee can perform. Changing maintenance routines can therefore result in time-consuming negotiation and arbitration.

Other cities have retained their maintenance work in-house but have been more innovative in the way they pursued efficiency gains:

- **Business units** Wellington is quite unusual in New Zealand for having retained operational parks functions in-house. One of the major benefits, it argues, has been the flexibility to respond to unexpected needs without the need to renegotiate external contracts. Thus, where maintenance is contracted out in the city, this is usually because it is a 'non-core' green space function such as rubbish collection (about to be contracted out via a service agreement to the City Operations Business Unit, which is responsible for refuse collection and disposal, city-wide). To achieve adequate standards of efficiency with in-house services, the council manages much of its operational responsibilities as 'business units', whose standards of service can be compared against benchmarks and which are run along private self-contained business management lines.
- **Specialisation** Maintenance programmes are planned annually in Wellington and carried out by mobile, specialised Park and Gardens crews operating throughout the city from a central depot (eg for mowing or tree care). Previously, maintenance staff and equipment were based geographically around the city and individual staff members were responsible for a range of tasks. Centralising staff into functionally-specialised teams has proved more efficient and has raised standards, with less idle time for equipment and a general improvement of skills and knowledge through specialisation. Thus, although site-based operational teams are still effective and efficient in places where highly specialist knowledge or intense maintenance is required, such as in the city's botanical gardens, zoo and cemeteries, elsewhere, they have been abandoned.
- **Profit sharing** In Aarhus, independent of the privatisation efforts (see below), a new profit-sharing approach has been implemented in the NED in order to encourage operational

staff to cope with difficult maintenance tasks. Savings in relation to an accepted contract describing aims, budget, timeframe, and so forth, may be either shared according to actual hours worked, or used for investment in the district's equipment. In 2002, a profit of 7,000 DKK (1,000 Euros) per person involved was paid out; in 2003, 600,000 DKK (85,000 Euros) was used for equipment, on top of the efficiency gains.

Striving for efficiency a half-way-house In addition to its successful profit-sharing scheme, Aarhus has been prepared to think radically about the future structuring of its green space management services, whilst accepting that full privatisation may not be the answer, as redundancy costs have proved prohibitive. The generous public sector employment traditions in the city, for example, mean that staff in the new Municipal Contract Unit (GDA) need three-year notice periods before they can be made redundant, and if they are not needed for green space maintenance duties during this period, they have to be allocated elsewhere in the municipality. This means that it is difficult to predict cost-savings and efficiency gains through contracting out, and positive gains can only be secured if GDA is made more competitive.

The answer has been the rethinking of maintenance arrangements to involve private contractors more widely, whilst giving the internal units the chance to bid for work. The municipal green space maintenance unit has therefore been reorganised as a contractor arm of NED and will have to tender against private contractors for maintenance work. It is hoped that the experience of restructuring the unit into district groups and the associated gains in efficiency driven by profit-sharing will greatly improve the chances of the municipal green space contractors to compete with private contractors, thus saving the city the redundancy costs, whilst securing much needed efficiency gains.

This solution, it is hoped, will also avoid other perceived risks with extensive contracting out, namely the weakening of the connection between planning and day-to-day maintenance, and the loss of the sense of responsibility for individual parks which comes from being assigned to the same area for a long time.

Two further approaches are worthy of mention, because they look beyond who does what to consider how best things should be done:

- **Seasonal flexibility** In Hanover, although the majority of work is undertaken by public sector employees, seasonal working peaks are often met by using private contractors. There is also a flexible system of working time within the city's Environment and Green Space Division (FUS) that has been accepted by employees and which assumes longer hours at certain times of year in exchange for shorter hours elsewhere.
- **Quick response** Paris has a very pragmatic repairs policy, based on the need to discourage further damage and thereby reduce demands on its maintenance services. Once damage has been identified, repairs are carried out as soon as possible, replacing the damaged item with identical new ones. In the case of the large numbers of new playgrounds being retrofitted into existing green spaces, the experience has been that damage is largely unintentional. In these cases, the policy is to

adapt to the new reality and to gradually redesign and simplify layouts that are more robust in the face of new pressures. The risk is that previously rich environments will be turned into sterile, functional playgrounds.

Involving the community in maintenance A number of cities have made particular efforts to involve communities in maintenance work, recognising the pressure communities can place on their political representatives to invest in high quality green space. In Curitiba, for example, better quality provision is often secured through neighbourhood pressure being placed on respective city councillors. Initiatives focused specifically on maintenance, complementing broader initiatives already discussed in chapter 03.

Tokyo was perhaps the most proactive on this front, where local residents are often given management responsibility for small parks, and where several community organisations and voluntary groups have participated in parks maintenance since the 1960s. The further involvement of community groups in green space maintenance is now being actively promoted by central government, and the idea is being translated into the production of model contracts and the formation of information exchange networks between voluntary and community organisations.

In Aarhus, smaller green space projects under neighbourhood council control have only been implemented and maintained by mobilising local, voluntary labour. The initiative has delivered viable green space management on shoestring resources and created a long-term sense of responsibility within the local communities affected. In Curitiba, a schools initiative in deprived neighbourhoods has helped to train young people in gardening and related activities through an extra-curricular programme which also offers the opportunity of long-term employment in green space maintenance. Elsewhere, including Zurich, feedback from green space users and other municipal staff has been used to define maintenance priorities.

Environmental priorities In a number of cities, maintenance priorities were increasingly being influenced by environmental concerns, although only Zurich has received ISO 14001 certification. There, environmental concerns are prioritised in all maintenance activities, which follow guidelines for maximising ecological support in a systematic and goal-oriented manner. Elsewhere, a number of initiatives reflected an environmental approach:

- In Aarhus, environmental concerns underpin municipal plans, and resource consumption in all municipal activities, including green space management, is monitored through green accounting, published annually by the statistical office. As a result, wherever possible a more extensive (rather than intensive) maintenance style is adopted, leading to a more natural appearance for green spaces in and around the city.
- Environmental certification plays a part in the selection of contractors in Malmo.
- In Curitiba, the recycling of – and use of cheap and durable – materials has become common practice in the management of the city's green spaces.
- Eco-auditing is used in all parts of FUS in Hanover, including

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in operational work, to assess the sustainability of management and maintenance practices. There is no certification, but the standards recommended by the auditing process are adopted by the division.

- Finally, environmental policies in all German cities from the 1980s have contributed to the removal of standardised green space management practice and its replacement by differentiated methods which consider wildlife issues and local citizens' requirements. Initial, political objections to these approaches, which often looked messier, were overcome and the positive effect (at least in Hanover) has been that individual parks were once again treated as unique places, and no longer as indistinguishable parts of a collection of standard units.

Despite the increasing mainstreaming of environmental approaches to urban green space management, in general these issues were not well developed. And where they were, their future was not guaranteed. In Hanover, for example, despite the long environmental interests of the city's inhabitants, tastes are swinging back to a more 'manicured' park style, and away from the rougher, but more ecologically-diverse, 'natural look'. The trend reflects the waning of the conservation lobby in the city and the loss of political interest in such matters. The trend may yet be repeated elsewhere as other political pressures come to bear.

Reinvestment processes

Processes of reinvestment were not always seen as distinct from day-to-day maintenance processes, but rather as degrees along a continuum of caring for urban green space. Thus, some tasks needed daily attention, others are on much longer time cycles up to many years, as and when reinvestments need to be made. These latter investments were nevertheless generally funded through different mechanisms that many of the international case studies were finding increasingly difficult to secure.

The issue broke down into questions of need and of the relationship between new investments and their long-term maintenance.

Assessing reinvestment needs The cities exhibited a range of approaches for assessing reinvestment needs. However, none as yet had systems in place to automatically track the depreciation of green space assets in order that long-term investment needs can run in parallel with day-to-day maintenance requirements. Approaches included:

The standard approach This is for green space units in their various guises to make annual bids for capital expenditure to their administrative and political masters, bids that thereafter are considered alongside other calls on municipal budgets from

Allotment gardens, Hanover. Environmental policies have contributed to the removal of standardised green space management practice; different types of green spaces are treated as unique places with specific management needs

across city remits. In Aarhus, for example, the need for reinvestment in green spaces is initially decided on the basis of agreement between the leaders of the different units within NED. Bids are next cleared with other municipal departments and accepted by the relevant city councillor, before being presented for approval to the City Board. Hanover operates a similar process. Each section of FUS is responsible for planning the necessary reinvestment. Their requirements are sent to a central analysis group in the finance department, which subsequently advises the municipal cabinet, which makes the final decision about budgetary allocation. Neither system guarantees that requests for funding will be met, although in Hanover it is easier for a new investment project to be included in the budget if there is already financial support from other sources, either public or private.

Thematic reviews Malmo takes a more systematic approach to reinvestment in its parks, where major new investments are usually preceded by a thematic review, for example focusing on city playgrounds. Thematic reviews are normally based on a political decision about the need for such a review, and enable systematic consideration to be given to the investment needs of a particular area. A report of the review is submitted to the technical committee of the municipality, which can then recommend the allocation of funding to the respective department.

A continuum In Melbourne and Zurich, the new management tools reveal the need for reinvestments, just as they reveal maintenances needs (see above). In Melbourne, for example, the LOTS framework identifies the need for immediate and long-term decisions to be made on asset maintenance and renewal that are clear and transparent and that reflect both workforce and organisational objectives in the process (see Melbourne case study page 70). In Zurich, decisions on new investment are based on the classification of green space services under the five product groups, where maintenance and reinvestment priorities can be prioritised.

Long-term financial planning Recent changes in Wellington have separated regular maintenance regimes from one-off capital projects. Reinvestment is now managed under the Asset Management section of the Parks and Gardens Unit. Until recently, funding for major green space projects was vulnerable to allocations made on a year-to-year basis to emerging political priorities. The situation prevented managers from being able to commit to long-term works. The recent advent of long-term (10-year) financial planning has greatly improved managers' ability to forward plan and should result in more consistent investment in new and refurbished urban green space.

Life-time approaches A significant trend was the concern to give greater consideration to life-time approaches to investment decisions, with ongoing maintenance costs becoming an increasingly important concern when allocating funding.

The experience in Groningen provides a case-in-point where the problem of a general lack of coordination between annually-set maintenance budgets and the maintenance tasks derived from one-off capital investments funded through urban regeneration and housing sales money were recognised some years ago.

Parc Andre Citroen, Paris. Such projects have to reflect policy on long term durability and cost

Today, green space managers routinely participate in the development process and are able to project the long-term consequences of different design options, consequences which will eventually make themselves felt on their budgets.

Other cities exhibited a similar concern. In Aarhus, cooperation between departments of the city authority over new green spaces starts at project level, ensuring that there is a maintenance input from the very beginning. In Malmo, the twin objectives have been adopted for new projects, to improve quality and reduce maintenance costs at the same time. Today, both those planning new investments and those responsible for overseeing day-to-day maintenance participate in the formulation of proposals.

In Hanover, because the divisions within FUS are responsible for both investment and day-to-day maintenance, long-term management issues are considered for all capital investment proposals. The exceptions are projects decided through design competitions, in which the separation between design and long-term cost implications are made more acute by the tendency to judge schemes on the basis of narrowly defined design variables. Projects awarded on this basis in Paris exhibit the same problem, and generally prove far more costly to maintain than those designed in-house, although they have tended to deliver more innovative design solutions.

Outside of these examples, reinvestment projects in Paris have to reflect policy on long-term durability and life-cycle cost. Thus, and typically, design characteristics of new investments are carefully specified so that tenders deliver the best long-term cost/quality ratio. Information is routinely collected on the performance of new parks, new facilities and equipment. Unfortunately, however, there is as yet no consistent means to feedback this information into investment decision-making.

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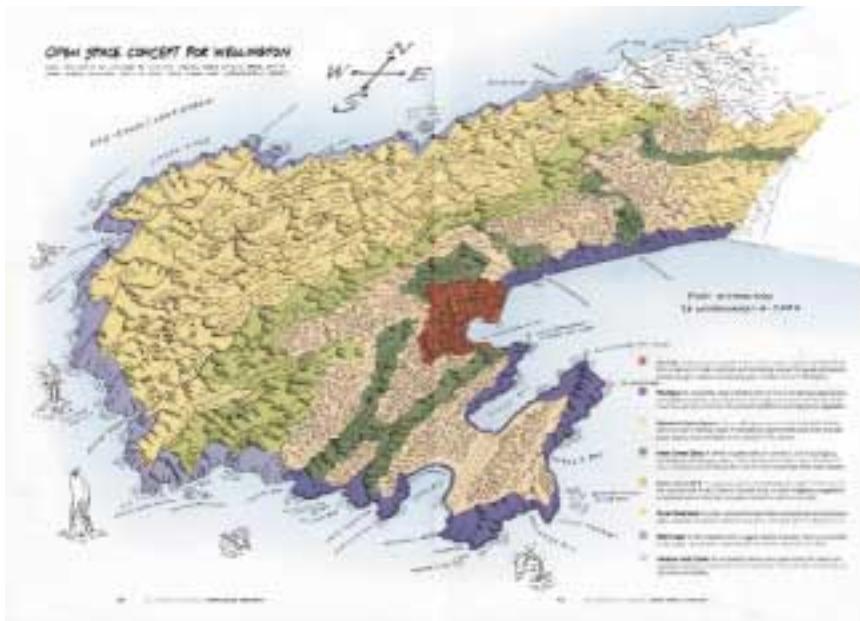
Wellington (population 175,000), New Zealand's capital, surrounded by steep hills, was covered in forest until the Europeans settled in 1840. Originally built around the harbour on low-lying land, it spread onto the steeper hillsides as it grew. Although large tracts of green space remain, partly due to the Town Belt, green space in the flat areas, including the CBD, is under development pressure.

Asset management

Although there is satisfaction with the availability and standard of Wellington's open spaces, improvements are constrained by resources. Long-term budgeting and asset management plans introduced in the late 1990s improved the situation. In future, urban containment and higher densities could bring more resources by increasing the rating base but would add pressure on green space management as access to private gardens diminishes and use of urban green space intensifies.

During the early 1990s, the condition of many of the city's green spaces was, due to long-term deferred maintenance. In the last 10–15 years, better documentation and management planning have improved the understanding of the need for reinvestment and forward planning, resulting in increased funding.

Wellington's Parks and Gardens Unit, responsible for the management of green space, uses asset management software to programme maintenance, inspections, replacements and funding. Standard life expectancies cannot be applied due to unpredictable factors (damage, differing site conditions, political demands and public complaints) therefore all assets are inspected, their condition assessed (using a grading system), asset management plans are prepared and priorities set.

The first set of asset management plans has only just been completed and proved useful in providing documented justification for securing funding and to aid green space advocacy. Another useful outcome has been an improved ability to recognise trends (consistent damage and failure of rubbish bins led to their replacement with a more robust standard model).

The former annual funding process also impeded managers' ability to forward plan. The recent advent of 10-year financial planning has allowed commitment to long-term works, although the 10-year framework is still a reasonably coarse tool and requires constant review of operating budgets to reallocate priorities and apply for additional funding if required. For instance, completion of the Oriental Bay upgrade has added a new asset (through capital expenditure) that now requires additional funds for ongoing maintenance.

Inner city greening

Although Wellington has 200m^2/person of green space, its historic development resulted in a serious deficiency within the CBD. In 2002, an independent study of CBD greening, prompted by politicians' concerns about the lack/poor quality of green in the inner city, found that Wellington had been successful in establishing a broad spatial framework of green spaces but had failed at the more detailed level of site management and design, particularly in spaces of a more 'urban' nature. Recent projects such as the waterfront development are leading the way towards the next phase: upgrading at the detailed site level to accommodate intensified use.

Two decades ago, when Wellington's port activities relocated, the waterfront adjacent to the CBD became increasingly popular when it opened up to the public. The controversy surrounding its redevelopment raised the issue of balance between buildings and urban green spaces: although development in prime locations attracts people and activities, earning revenue to fund space provision, the community favours a waterfront largely dedicated to green public space.

In the late 1990s, opposition to proposed changes to the district plan allowing a redevelopment of a significant proportion of the waterfront led to the axing of the infamous 'Variation 17'. It was replaced with a 'Waterfront Development Framework' that set out the broad principles for all areas and was more acceptable to community interests. The lessons were that the amount of development needed for the development company to be self-funding was unacceptable to the community and that only additional public funding could ensure open space provision and reassure the community about its continued vested interest in the area.

The council can increase provision in the inner city through powers under the Resource Management Act, which requires developers to set aside land as reserve contributions or pay into an acquisition fund. During the 1980s- early 1990s, when high-rise development replaced older buildings to meet earthquake standards, the council negotiated open space provision through development control, allowing increased building height in return for on-site open space.

No lasting results were achieved because public tenure of the open space was not secured at the time of negotiation and some of the sites were not suitable (shady, windy, too secluded). Consequently, several of these spaces have been built over and negotiated rights are out of favour. Given the high cost of CBD land, Wellington may need to revisit these mechanisms to improve the distribution and quality of inner city green spaces by identifying suitable sites and use its own assets and regulatory powers as leverage.

Clockwise from left:
Open space concept; The Wellington Botanic Garden is a showpiece, attracting large and increasing visitor numbers all year round; The Karori Wildlife Sanctuary, sited in a former water reservoir area, is a highly successful community-based conservation project in the heart of Wellington city; Frank Kitts Park, developed in the early 1990's lead the way with redeveloping Wellington's waterfront and opening it for public use

Case study: Melbourne

Melbourne (population 3.5 million), Victoria's capital, is Australia's second largest city. It has an extensive integrated network of open spaces which includes metropolitan parks, three major waterways, a network of shared-use trails through Melbourne, Port Phillip Bay's recreational facilities and marine parks. Virtually all the open space is Crown Land but is managed by various tiers of government.

Parks Victoria

Parks Victoria is responsible for managing 40% of the network of green space (6,200 hectares) within urban Melbourne, (the rest falls under the jurisdiction of 31 metropolitan councils) as well as national and state parks around the metropolitan fringe. Parks Victoria has wide statutory responsibilities for the management of the integrated network and has developed some interesting management techniques.

The agency was created in 1996 from the amalgamation of the Victoria National Parks Service and Melbourne Parks and Waterways, to manage most of Victoria's national, state, regional and recreational parks, becoming a statutory authority in 1998. Through the mergers declining funding levels could be maximised by directing resource priorities across the whole system and eliminating duplicated services between government organisations.

Parks Victoria is responsible for the coordination of open space network planning at the strategic level to ensure a collaborative, consistent and long-term approach across municipal boundaries with agreed priorities for major initiatives, producing in 2002 an open space strategy and vision.

The Victoria state government has embarked on a management reform program for public service departments/ agencies that focuses on the impact of their service delivery activities rather than on the actual service provision. Four key output groups have been identified to describe Park Victoria's service delivery obligations to government. The 'visitor services' group is directly responsible for the management of green spaces.

The 'Levels of Service' (LOS) framework

The delivery of sustainable visitor services and facilities with limited resources requires a strategic context for the management and the creation of built assets. With an ageing asset base and an inequitable distribution of park facilities, the challenge is to reverse the declining quality of visitor services. Parks Victoria has developed the LOS framework to establish the 'optimum' quantity and mix of visitor services, given forecast user demand and the level of resources available.

The LOS framework uses a comprehensive, regularly updated database of visitors, assets and resources, which includes the value, condition, life expectancy and future maintenance requirements of the built assets and follows five steps to develop optimum approaches for each park according to its relative priority in a park-wide context. This process quantifies the gap between model levels of service and actual levels for each park, generating appropriate service level scenarios. When applied to determine future asset replacement costs it indicated that Parks Victoria is significantly under-spending on maintenance, facing major replacement costs in the next 10 years.

In maintenance, standards developed through LOS provide a 'service offer' to users who can expect a better service at 'high' LOS sites than at 'basic' ones, within a framework that offers more equitable resource allocation and greater certainty. Standards are based on pattern of use, visitor expectations and geographical distribution. For example, where sites are dispersed, maintenance frequency may be reduced with more work carried out on each visit to optimise efficiency. A 'Visitor Facilities Manual' for ground staff complements the framework.

Predicting and monitoring park use is an important element in meeting customer needs and evaluating output performance from a customer perspective. Surveys of visitor numbers, satisfaction monitoring and community perceptions of both the parks and the agency are undertaken on a regular basis. In addition, important work is undertaken to develop predictive models to assess the impact of changes to current service levels and future needs for application in the LOS framework.

Funding the metropolitan park network

The primary source of funding for Parks Victoria's metropolitan parks is revenue from a 'parks charge' levied on all domestic, commercial and industrial properties within metropolitan Melbourne. Collected and administered by the government, the tax is based on property value but over 92% of domestic properties currently pay a single (minimum) charge. Parks Victoria receives about two thirds to spend on its corporate governance and the management of green spaces.

Even with this discrete funding, Parks Victoria continually needs to present its case to government for additional funds to meet increasing costs and the growing scale of its asset maintenance/ replacement liability. A low priority on the government agenda, parks need to gain recognition for the wider benefits to the community. The ability to quantify and demonstrate these benefits will provide a sound basis for increased support for at least the current funding commitments.

Clockwise from left:
Family on Fern Gully Walking Trial at Upper Yarra Reservoir Park; Jogging by Albert Park Lane with Melbourne skyline in the background; Cycling at Jells Park in winter; Melbourne seen from Royal Botanic Gardens

The lessons for English practice

Maintenance processes

A common trend across most of the 11 case studies has been the effort to restructure public services provision, and green space management within it. In a process not dissimilar to that affecting the UK, public sector agencies in the chosen cities have been experimenting with ways of delivering services which are more integrated, outcome-focused, that decentralise responsibilities and are less bureaucratic. The degree to which these changes have been implemented varies considerably, and whereas some cases seem to be already very successful, in others it is still too early to tell. How these changes are being implemented has also varied, with some cities radically restructuring green space maintenance organisations and their practices (eg Zurich), and others incrementally changing practices without significantly altering organisational structures (eg Aarhus).

In chapter 05, the more general consequences of those changes were discussed in terms of their organisational capacities and resourcing. This chapter has therefore examined their implications for maintenance processes, and a number of lessons for English practice emerge.

A first, important lesson is the importance of clearly-defined and properly resourced maintenance plans as tools for structuring, coordinating and delivering maintenance routines. As the experience of Hanover, Groningen and others cities demonstrate, such plans allow for clear linkages between daily maintenance routines and long-term management programmes and policy priorities. Some cities have invested considerable effort in increasingly sophisticated maintenance planning tools, and the results so far are encouraging in terms of the better use of resources, the quality of maintenance being achieved, and in the ability to secure funding on the basis of accurate and demonstrable information. Moreover, the evidence from Wellington suggests that maintenance plans, when adequately monitored, can improve the ability to identify trends in the performance of green space designs, facilities and equipment, and thus prevent costly remediation work (eg by identifying where maintenance needs consistently exceed or are below forecasts).

A second lesson is that there is no single best way of organising maintenance routines. The majority of the cities examined opted for some form of geographical basis, with maintenance teams allocated to areas or districts within the city. The advantages here are the detailed knowledge of, and sense of responsibility for, individual parks or areas that are fostered by this approach. By contrast, Hanover organises maintenance by task specialisation, with specialist teams in, for example, tree pruning covering the city, with advantages for the optimum use of specialised skills and machinery. So, although there seems to be a case overall for some form of geographical reference to maintenance routines (see chapter 07), equally important seems to be the consistent application of whichever approach to maintenance is

adopted, so that specialist/geographically-bound knowledge can be developed, and put into practice.

The issue of contracting out management and maintenance of green spaces was discussed in chapter 04, where it was revealed that there are several approaches to contracting out among the 11 cities, all equally successful. In general, the evidence confirms that contracting out should be viewed as an outcomes-focused, mutually-supportive partnership between the parties, rather than as a cost-cutting exercise. Such a partnership is likely to be both long-term and positive, and is likely to be nurtured rather than exploited for short-term gain (on either side). The experiences in the 11 cities demonstrated that both in-house and contracted-out maintenance services can be organised efficiently. The key seems to be to recognise the strengths and weaknesses of each approach, and to use them accordingly.

Within such a relationship, it will be important to emphasise the setting and monitoring of clear standards of delivery through considering the cost/quality ratio. This key lesson, emanating from all the international experiences examined, nevertheless applies as much to cases where the main relationships are between municipal organisations and private contractors (eg Malmo or Curitiba), where one public body delegates maintenance responsibility to another (eg Melbourne or Hanover), or where a voluntary sector organisation is the partner (eg Tokyo).

A further lesson is that the delegation of some responsibilities to the operational level is desirable if maintenance routines are going to be flexible enough to incorporate the varied and changing demands of users and the multiplicity of individual green spaces contexts. The cases suggested that this requires a clear maintenance responsibility for individual parks, good communication channels between maintenance teams and green space users, and an ability to change routines locally if and when necessary. The roles of park keepers in Paris and Minneapolis and area maintenance team leaders in Zurich and Groningen seem good examples of both, and suggested that, where local flexibility is required, public rather than private employees are likely to be more adaptable, unencumbered as they are by the often highly prescriptive contractual arrangements which define the responsibilities of private contractors.

Finally, it is important to emphasise the role of environmental concerns in defining maintenance priorities across the majority of the cities examined. This seemed to provide a broader perspective to urban green space maintenance needs and put these activities on a stronger footing in relation to other municipal priorities.

Reinvestment processes

The constraints on reinvestment in nearly all the cities were discussed in chapter 05. This context reinforces the importance of systematic approaches for assessing and justifying reinvestment needs. **In this regard, the main lesson to come out of the international cases relates to the potential benefits of planning reinvestment activities in the context of thematic reviews, as in Malmo; asset management systems, as in Zurich, Melbourne and Groningen; or on the basis of long-term financial planning, as in Wellington.** This is based on the need to place reinvestment priorities in the context of other green space management needs, thereby providing clear cause and effect links between day-to-day maintenance activities and longer-term reinvestment. Although this process was still in an evolutionary phase in most of the cities, its potential is quite considerable. The aim should be the automatic tracking of depreciation over time, and to factor in reinvestment as part of the continuum of maintenance activities – from minor and regular works, to major and periodic work.

A last key lesson concerns the increasing consideration of lifetime issues in investment decisions. Many of the cities provided good examples of efforts to consider the potential future costs of ongoing maintenance in investment decision-making. This has meant a closer participation of maintenance staff in development and investment decisions, sometimes including the formal analysis of development and investment plans by operational managers. A parallel lesson in this regard is the need to reshape monitoring and feedback systems to provide enough information to allow for the long-term maintenance consequences of new investment to be assessed. Several of the cities are still struggling with this task (see chapter 07).

What can we learn?

- Maintenance plans are vital tools for structuring, coordinating and delivering maintenance routines, and to establish linkages between daily routines and long-term management priorities.

- When adequately monitored, maintenance plans can help to identify trends in the performance of green space designs, facilities and equipment, and thus prevent costly remediation work.

- There is no single best way to organise maintenance routines, but recognising where specialist (authority-wide) knowledge and where geographically-bound knowledge is required is key.

- Contracting out should be viewed as an outcomes-focused, mutually-supportive partnership between the parties, rather than a cost-cutting exercise; the setting and monitoring of clear standards of delivery through considering the cost/quality ratio for all tasks is required.

- Delegation of some responsibilities to the operational level can help to ensure that maintenance routines are flexible enough to incorporate the changing demands of users and contexts, but requires good communication channels between maintenance teams and green space users.

- Where local flexibility is required, public rather than private employees are likely to be more adaptable, unencumbered as they are by necessarily prescriptive contractual arrangements.

- Systematic approaches are required for assessing and justifying reinvestment needs – thematic reviews, asset management systems, and long-term financial planning provide possible models.

- Reinvestment decisions should factor in lifetime costs on the basis of the close participation of maintenance staff in development and investment decisions.

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07 How are management practices applied to local contexts?

The English context

The impact of standardised approaches to urban green space management

The exact nature of the delivery processes are inevitably shaped by the specific contexts within which they operate. The macro-context has already been discussed, including the political, organisational and policy/legal contexts. Specific local contexts will also have a decisive influence, and will be determined by a range of factors:

- The socio-economic context for urban green space
- The particular physical context (density, urban form, infrastructure, etc)
- The land use context (eg city centre, suburbs, etc)
- The cultural/historic context

Different contexts may raise different issues as regards the management of urban green space and the responsiveness of management approaches to these factors, yet a range of evidence has pointed to a move away from locally-based approaches to green space management in favour of centralised and standardised approaches. This trend has been exemplified in the loss of traditional park keepers, inspiring 'Improving Urban Parks, Play Areas and Open Spaces' to recommend a return to community-based approaches based upon geographical areas, and the re-instatement of site-based gardeners/wardens/keepers.

Different contexts will also determine, to a large extent, the different pressures that green spaces will be subject to in terms of the nature and intensity of their use. Two key factors affecting whether – and to what extent – these issues impact on their quality over the short and long-terms are:

- The regulation of spaces, particularly how they are policed and how different activities are sanctioned or discouraged

(including who has overall responsibility for enforcement).

- How spaces are monitored in order to aid the processes of regulation and as feedback into the policy-making and implementation processes.

On the former concern, 'Living Places: Powers, Rights and Responsibilities' concluded that, although a wide range of powers are available to local authorities in England, these are fragmented and often poorly used by urban green space managers, not least because of the costs associated with their use. 'Living Places: Caring for Quality' confirmed this, identifying the poor coordination between regulatory regimes, the lack of resources for enforcement, the patchwork nature of bye-laws, and insufficient enforcement and prosecution powers as key barriers to better public space management.

On the latter concern, 'Green Spaces, Better Places' argued that, to achieve more locally responsive approaches to green space management, an investment in monitoring and review systems was required, preferably through means that actively involved local communities and other stakeholders in their use. Green space management should begin, they argued, with audits of existing spaces, their potential, usage, quality and condition, and their value to the community.

The following questions were asked of the international partners:

- How responsive are management processes to different local contexts: socio-economic, physical, land use, and cultural/historic?
- What types of regulation exist within the urban green space context?
- Who is responsible for establishing and enforcing regulations on the use of green spaces, and how empowered are they to use the regulations?
- How is the use of green spaces policed?
- How are the costs of enforcement activity recovered?
- How are problems such as vandalism, anti-social behaviour, improper activities and crime dealt with?
- How are dog-related problems dealt with?
- What kinds of monitoring and feedback systems are used?
- What types of information systems exist to manage and monitor green spaces?
- How do the different stakeholders, users and maintenance personnel participate in feedback processes?
- What are the practices for dealing with users' complaints in terms of taking the issue forward, timing of response, keeping the complainant informed, etc?

The international experiences

Localising management approaches

To a greater or lesser extent, all the cities attempted to be responsive to the needs of different types of urban green space (see chapter 02), recognising that different types of space presented different management problems and therefore required different management solutions. The problems associated with small green spaces in inner urban locations, for example, have presented particular challenges in a number of the cities. This reflects the intensity of management required, which is of a different order altogether to that required in outer areas, or in larger parks, and to which centralised management systems seem to have difficulty in adjusting.

In Paris, management processes are highly responsive to the socio-economic context in the sense that decisions are highly politicised and tend to favour groups and segments with high visibility (eg a systematic bias towards the needs of young people in the design, renovation and maintenance of green spaces). But there are also differences in how green spaces are managed, depending on whether they are in central areas or in the periphery. This is especially so as regards the creation of new green spaces. Thus, in central, densely built areas, money has recently been spent in the compulsory acquisition of derelict houses and their replacement with green space, or in the purchase of private backyards and their transformation into common green areas. In outer Paris, by contrast, the creation of new green spaces depends on larger urban renewal interventions (see Paris case study page 82).

Maintenance routines were also typically related to local context in the 11 cities. In Hanover, for example, standardised approaches are never used, and instead regimes are determined by the special character and function of individual green spaces. Therefore, more complex and costly approaches are used in the Herrenhausen gardens and more intense and daily routines are implemented in the summer along the city's lakes and canals. Green space managers in the city argue that it is not a question of how much work is done, but whether the right work is done at the right time.

Location-specific maintenance is also part of general practice in Minneapolis. The lawn-mowing programme, for example, is divided into different categories of green spaces, depending on the required intensity and frequency of mowing, taking into account dominant uses and the nature of each green space, cultural features, ecological conditions and the regional and historic context. Thus, intensely-used sports areas and neighbourhood parks require a more intense maintenance routine.

Devolving management

A logical progression of these more locally-responsive approaches to green space management has been the devolution of responsibilities to levels below the city-wide scale. The spatial scale of these management areas varies in a number of categories:

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- **City sectors** For management and monitoring purposes, Malmo has been divided into several sectors, each of which has its own area manager, who acts as a supervisor and is the point of contact with private maintenance contractors who report any problems to the supervisor.

- **Neighbourhood management** Within the Urban Management Division in Groningen, responsibility for all major public space maintenance goes to the City Maintenance Section. The exceptions are responsibilities for public space replacement and the day-to-day maintenance of green spaces at the neighbourhood level, which go to the Neighbourhood Maintenance Section. The section is made up of neighbourhood teams including planning officers and advisors, general supervisors and foremen. The planning officers are in charge of day-to-day management programmes, and ensure that the aspirations laid down in neighbourhood management plans are fulfilled through the quality of specifications, contractors and job supervision. The leaders of the neighbourhood teams effectively operate as district managers, coordinating the management of all urban green spaces in their areas.

- **Individual sites** Elsewhere, management responsibility is devolved to varying degrees, down to the site level. In Hanover, for example, maintenance groups are responsible for individual sites or small groups of sites, and carry out all the maintenance work in them (the exceptions being street cleaning, undertaken by Waste Management Services, and tree maintenance, by a specialised and properly equipped team within the city's Environment and Green Space division). In Minneapolis, strategic decisions on park services are made at a regional or district level, with the coordination of contractors or internal staff on the ground being carried out by the respective park managers.

- **Mixed approaches** In Paris, operational staff are attached to geographical areas of the city, and are responsible for day-to-day maintenance in those areas. In addition, each park has at least one dedicated park keeper responsible for a range of day-to-day management functions.

Re-centralising management Despite the benefits that such approaches bring through the greater tailoring of management regimes to local circumstances and the greater responsibility felt by local staff, they have not been without their problems. In Groningen, for example, the emphasis on devolved management led to wide discrepancies in the state of repair of green spaces throughout the city. So, in the mid-1990s, greater centralisation was adopted. Management programmes are now determined centrally, following local consultation.

Within the maintenance unit of Zurich's Green Planning Office (GSZ), there are still green space managers for every city district who are in charge of day-to-day maintenance of green spaces in their areas. However, as noted in chapter 06, there has recently been a drive towards city-wide, specialist teams and away from geographically-based teams, in order to drive up efficiency through optimising the use of specialist machinery, and through raising the skill levels of specialist staff. For example, GSZ has a unit which specialises in historic parks and heritage, and which oversees the maintenance, repair and replacement of historic

gardens and their facilities. All these gardens now have individual maintenance plans for routine maintenance, planting, repair to equipment, and so forth, and these guide the specialist teams at the level of the individual site.

Regulating spaces

City-wide regulatory controls through planning and conservation legislation have already been discussed in chapter 04. In addition, a range of powers existed in the 11 cities to manage urban green spaces on a localised, day-to-day basis. The responsibilities for enacting these powers varied between cities, as did the range of problems and their solutions:

Regulatory responsibilities The prime responsibility for regulating urban green spaces in all the cities fell to the municipal authorities. In Hanover, for example, the city's Environment and Green Spaces department (FUS) is responsible for enforcing green spaces regulations. These are initiated variously by the city council and district councils, or are the result of higher level legislation.

The use of bye-laws

Typically, local bye-laws form the basis for regulations, for example in Malmo, dealing with litter and control of dogs, as a complement to national legislation. Thus, in Wellington, operational regulation of activities within green spaces is governed by reserve management plans prepared under national legislation to regulate public uses in each reserve, whilst the Wellington Consolidated bye-law contains standard rules and provisions for all the city's green spaces.

In Curitiba, the regulatory basis for the management of public spaces falls almost exclusively on the municipality, through municipal laws covering issues ranging from land use and zoning, nature conservation areas, and environment-related property tax exemptions, to tree protection and the Municipal Forestry Code. These laws are initiated by the City Mayor and approved by the city council, and the responsibility for enforcing them falls with the Municipal Secretariat of the Environment (SMMA) and the Municipal Guard.

The police The police also have an important role to play in most of the 11 cities, and generally the relationship between city authority and police is viewed as an important partnership, with clearly prescribed roles for each party. In Curitiba, there is no specific municipal legislation regarding the use and misuse of parks, but vandalism is often seen as a problem, particularly in parks further from the city centre and around low-income residential estates. In this case, because it constitutes a criminal act, dealing with it is the responsibility of the police. In Zurich, the city has created clearly-defined park and open spaces regulations for its territory, but enforcement is the responsibility of the police. For its part, the city has engaged in a communication campaign to explain to users what is and is not allowed, and provide a permanent, visible presence of maintenance staff in all key green spaces.

Parks Police Only Minneapolis had the advantage of a dedicated force to police the city's parks. Thus, parks

Natural areas park rangers have recently been appointed to patrol Wellington's more extensive reserve lands and support community volunteer rangers

regulations are enforced by the resident park keepers and by the city's Parks Police department, a law enforcement agency whose role is to protect park users and park property. Parks Police officers are professionally-trained police officers of the State of Minnesota, and are responsible for visitor and resource protection, emergency services, the maintenance of good order in parks, law enforcement, and information and public service. They also host safety programmes for the community. For its part, the Minneapolis Parks and Recreation Board (MPRB) has statutory authority to define and regulate the use of all its land holdings, and MPRB ordinances are uniformly applicable to all parkland owned or managed by the board. Beyond this general framework, MPRB also seeks inputs from each community to devise use standards and prohibitions for individual parks (see Minneapolis case study page 42).

Park keepers/managers More common was the use of parks keepers or managers in a regulatory role. The Department of Parks and Gardens in Paris, for example, is responsible for enforcing green space regulations which are uniform throughout the city. To achieve this, there is at least one park keeper in every park, responsible for opening and closing the gates and enforcing the regulations. Each park has a small shed for the keeper, which is also usable in an emergency. Park keepers write daily reports which form the basis for the department's actions to tackle vandalism, safety issues or, in the worst cases, to make structural changes in park layout. In Hanover, park managers within FUS are also responsible for ensuring that regulations are complied with. In their case, however, the role is more to observe and advise than to punish, and they operate closely with the police, social services and the youth services

(particularly relevant in the case of anti-social behaviour) in this task. Unfortunately, due to a lack of resources, the number of such managers has declined over recent years.

Rangers In Wellington, an award-winning safe city programme for the Central Business District has included uniformed officers providing a visible and approachable patrolling presence in all public spaces. These services are contracted out to a local security firm. Volunteer rangers also assist with patrolling and inspecting green spaces in the larger 'natural' areas. Together with fully paid rangers, they act as the 'eyes and ears' of the council. In the most visible green spaces in Paris, park keepers are helped by municipal security. Municipal security was created in part as a means to improve communications between the department, the municipality as a whole and the police. Although in many respects they are akin to the police, they do not bear arms and are limited to patrolling the city's green spaces.

Authorised officers Parks Victoria is responsible for the administration and enforcement of a wide range of legislation under a management services agreement signed with the State's Department of Sustainability and the Environment (DSE). The General Manager of National Park Policy and Strategy is responsible for creating enforcement policy, with line managers in charge of ensuring that staff understand and comply with it. Only authorised officers can conduct enforcement activities. Authorised officers are properly trained, including on how to use their discretion about whether to inform, educate, issue a warning, a penalty notice or prosecution proceedings. Education and interpretation programmes are also used as an initial approach to achieve compliance with the regulations. Parks

07

Provision for dog fouling, Zurich

In Paris, the approach to vandalism has been to 'design out' the problem

Victoria works with DSE, the police and local government to maximise the effectiveness of regulations, especially when this involves operating across areas of responsibility, for example, the use of local government bye-laws which assist Authorised Officers in dealing with dog offences and littering. DSE manages all court prosecutions and the resultant fines go into a consolidated revenue fund.

Problems and solutions

Three issues seem to create the greatest range of enforcement problems across the 11 cities: anti-social behaviour, vandalism, and dog-related problems. Significantly, however, they were rarely proving to be major problems, and were usually kept well under control by efficient enforcement mechanisms and/or programmes of repair. With the exception of Curitiba, where the reverse was true, these problems were most apparent in central areas because of the intensity of their use, and because these areas were also the highest maintenance priority:

Anti-social behaviour This was considered a problem in Paris, Malmo and Zurich. In Zurich, negotiation has been adopted by the city's social services as a means to resolve conflicts between different social groups and their use of parks. The approach has led to the 'Sip züri' initiative; a programme to encourage the coexistence of different groups in public space. Stadelhofer Platz, for example, is a meeting place for punks and alcoholics, but is also a busy intersection for users of a main railway station, for shoppers and the city's restaurants. The approach in this case involved conflict management, with a hotline for local shop and restaurant owners to call to report incidents, after which a social worker is quickly on the scene to help solve any issues.

Regular meetings between the various parties to talk problems through, and a public-private partnership between the shops and restaurants and the city authorities, have also helped. The partnership aims to organise events in the space and so attract other users and thereby change the character and quality of the area.

Vandalism This is also a problem in Zurich, particularly in the heavily used lakeside parks, where the solution has been a much more intensive programme of maintenance and cleaning than in other parks. Waste disposal and vandalism are the biggest problems in Aarhus, where solutions include the employment of a gardener to travel around on a full-time basis to report problems and, if possible, to identify culprits, who are then reported to the police. The theft of expensive plants has also been a problem and is being solved by tagging plants with GIS chips in order to track their movement and arrest the thieves. Although vandalism is not a major issue in the Parisian parks, where it does occur, the solution has been to redesign the affected area in order to discourage or prevent it from happening again.

Dog problems Dog fouling and other dog-related problems was reported in a number of cities, although this is an issue which is – understandably – viewed very differently by dog owners to non-dog owners. In Zurich, for example, efforts to regulate dog access to parks have failed because of the strength of feeling amongst, and lobbying powers of, dog owners. The alternative has been to discuss with representatives of all affected parties a set of measures that will have broad acceptance, emphasising the need to involve key interest groups in decision-making, if regulation is to be effective. In Aarhus, the problem of dog

fouling has been handled by providing easy access to plastic bags in areas where there are significant complaints from users. In Malmo, there are no special programmes to deal with the issue, but better information and facilities have helped to alleviate the problems it causes.

In Wellington, a council policy document – The Dog Control Policy – sets out the responsibilities of dog owners and the areas in which dogs are: prohibited at all times, at specified times, allowed on a leash, or allowed to run free. In relation to dog fouling regulations, because these issues are difficult to enforce, control relies on the initiative of members of the public to ask dog owners to comply or to report non-compliance. Results have been understandably mixed because of the reluctance of the public to report offences.

Monitoring localities

Monitoring was both a city-wide activity to report on the effectiveness or otherwise of management systems and record public opinion, and a site-specific activity to focus attention on the success or otherwise of managing specific local contexts and green spaces:

Management systems

In Aarhus, Hanover and Wellington, city-wide management processes, including those for managing green space, were subject to periodic health-check assessments in order to ensure that performance was being optimised. In Aarhus, management quality is assessed by the local council itself every year and by independent external experts every three years. The aim is to maintain a score of '1' for best practice for the Nature and Environment Division (NED) as a whole on a 'Balanced Scorecard' system.

Apart from supervision of construction work, Hanover does not yet have a complete monitoring system. Instead, standardised business reports for all departments within the city administration are produced twice a year and related to the yearly management plans. These are a controlling instrument for the full municipal cabinet and the city council, but act to monitor progress towards green space management goals. There are also periodic audits by the council and an external impartial agent in Wellington, in this case focusing on the performance of the operational team leaders. The leaders are responsible for setting and achieving adequate standards of maintenance.

These macro-initiatives are particularly important in helping to establish a culture of improvement and of monitoring.

Monitoring areas More focused (specifically on green space) monitoring activities were widely practiced as a means to both assess the 'state' of urban green space, and to monitor the impact of management approaches.

GIS systems A number of the cities employed GIS systems as a continually updated record of the condition of their green space resources. In Aarhus, for example, management systems allow for the continuous electronic updating of plans, programmes and budgets. The system allows for continual feedback on green
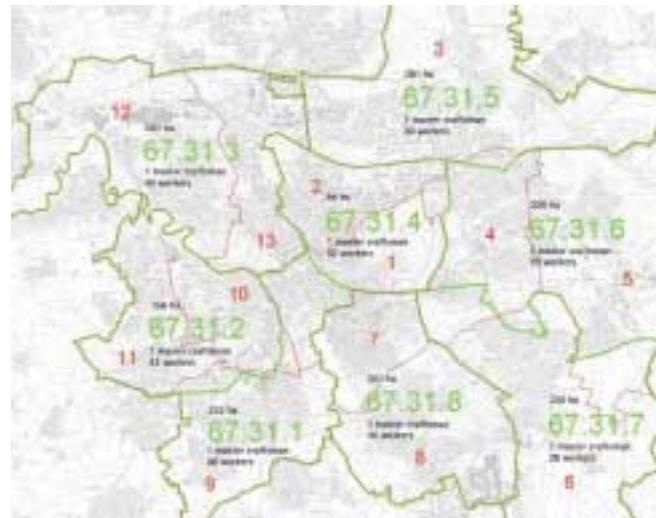
Maintenance districts, Hanover

space management, but also for economic and other feasibility studies to be run whenever needed. In Malmo, all areas managed by the Streets and Parks department are logged into a GIS system, containing data on the location, the area itself and maintenance routines. This is used to inform maintenance plans and budgets.

GIS is also used in Curitiba to monitor green space affected by the city's squatter settlements; areas of the city where the problems of managing green spaces are particularly evident. Although these areas account for just 2.3 per cent of the municipal territory, 70 per cent of them are located on riverbanks and in other environmentally sensitive areas. More importantly, the number of dwellings in these areas has expanded at over three per cent per annum. As these areas are not subject to inspection programmes, and powers and political will to curb the invasion of new sensitive areas are limited, there has until recently been restricted capacity to monitor the impact of the settlements on the environment. Effective monitoring has now been introduced using a new GIS system, backed by systematic field surveys. The system records the extent of settlement and documents and organises spatially all management interventions, both actual and programmed, and their impacts.

Inspection regimes These are used in Paris as an additional layer of monitoring, conducted by a special body ('the Inspectors') within the Department of Gardens and Green Spaces. In Minneapolis, parks are monitored daily by their resident park keepers for hazards and maintenance problems, whilst periodic inspections by crew leaders and the district foreman are intended to keep park keepers motivated. More complete and rigorous inspections of all parks are conducted semi-annually by the Director of Park Operations and the Maintenance Supervisors. Although effective, the inspection regime in Minneapolis is not as rigorous as the systems found in other cities in the US. New York's Parks and Recreation Department, for example, employs a team of trained inspectors to conduct 4,000 random inspections every year, the results of which are widely published and which rate the condition of a range of features, from the presence of peeling paint and protruding bolts to the condition of athletic fields.

07

The BORG system of management in Groningen allows different types of green spaces to be managed to suit particular requirements

Measurement systems The most sophisticated systems employed a range of measurement systems to carefully monitor and record the conditions of urban green space.

In Groningen, the 'Beheer Openbare Ruimte Groningen' (BORG) system of management information for green spaces links management options directly to criteria and to visualised target scenarios (eg actual images of how a green space should look, depending on the level of quality and intensity of maintenance regime selected). The intended results of management action can then be assessed and discussed by experts and lay people. The system allows different types of green spaces to be managed to suit their particular requirements. It also allows the condition of green spaces to be regularly recorded or the success of management policies and processes to be assessed on the basis of clearly specified quality thresholds (see Groningen case study page 84).

In Melbourne, Parks Victoria uses an asset management system to record the condition of its parks. The system is based on a comprehensive database, covering the value, condition, life-expectancy and future maintenance requirements of each park, information which is then used to compare maintenance levels with industry standards and to calculate asset replacement costs. The system sits beside: first, the Levels of Service (LOS) framework, which measures green space management activities against pre-determined targets, and which, amongst other things, is used to assess performance (see chapter 06); and second, the State of Parks report, a consolidated environmental information report produced in 2000. All key parks are included in the latter, which is extensively utilised to prioritise programme management activities to areas at risk.

The asset management system used in Wellington (see chapter 06) is also effective at evaluating the durability and physical condition of the city's parks, particularly their furniture, paving and planting. The system has therefore proved to be a useful tool to recognise trends (eg consistent damage to particular types of equipment or consistent failures of particular aspects of maintenance), although it is less useful as a tool to analyse the design quality of different components (eg their functionality). To complement the system, the City Plan 2003–04 includes a set of indicators to measure the performance of green space management. These include the number of bird species found in the city's parks, the length of maintained tracks, the percentage of residents who think green spaces are free of litter, and so forth. Because the indicators are still very broad, the city is developing ways through which they can be converted into more meaningful benchmarks (see Wellington case study page 68).

Monitoring citizens

A further important category of monitoring occurs through the various approaches used to gauge citizen opinion on green space quality and its management. A wide range of approaches were found:

- **24-hour helpline** User complaints in Curitiba are dealt with by a 24-hour helpline which manages complaints and queries related to a broad range of municipal services (not just green space). Complainants receive a number and this enables the complainant and municipal staff to monitor its progress through the various levels of the administration.
- **Complaints management system** Complaints by the public in Hanover are managed through a city-wide complaints

It is vital to gauge citizen opinion (including the views of children) when monitoring green space quality and management

management system. The system includes prescribed times for complaints to be answered, and members of the public are kept informed of the progress of their complaints.

- **Customer Service Division** Within the Malmo Streets and Parks Department, the Customer Services Division deals with all complaints and comments from residents. This information feeds into a performance evaluation of all private contractors, a process which happens at the end of initial three-year contracts. The aim is to put pressure on contractors to stick to high levels of quality, with the incentive that good feedback will trigger automatic extension clauses to come into play, thereby extending contracts for a further two years.
- **Keeper logs** In Paris, user complaints are recorded by park keepers in their log books and passed on to the local district and deputy Mayor to coordinate a response.
- **Satisfaction surveys** Parks Victoria relies on regular surveys of visitor opinions and telephone interviews to gauge the awareness of, and satisfaction with, the services provided. These surveys are also used to develop predictive models to access the likely impact of changes in management strategies and practices. Wellington also conducts regular public satisfaction surveys on its various services, whilst the Parks and Gardens Business Unit has started to conduct its own visitor surveys to provide direct feedback on its problems and successes.
- **Internet surveys** The Department of Park Development in Tokyo has recently adopted internet surveys, backed by site surveys on specific initiatives as a means to monitor public opinion on urban green space management. The techniques have led to good results – for example, on a enclosed area in one park, introduced on a trial basis for dogs to run free.
- **Balanced scorecard** In Aarhus, systems are in place to follow

citizens' complaints as an indication of good management and as a way of engaging with changing resident attitudes and needs. A 'Balanced Scorecard' system is used to measure staff performance when dealing with such complaints. Therefore, if more than a prescribed level of complaints reaches the higher levels within the organisation (because they were not dealt with by lower levels), the staff concerned get negative points.

The need for, and importance of, understanding and reacting to user views was universally recognised, although taking these approaches too seriously can itself create problems. The downside of the system in Aarhus, for example, is the permanent dilemma it creates between responding to, and spending time on, the minutiae of individual complaints in order to avoid them registering negatively on the system, as opposed to concentrating time and effort on a community-wide perspective and on strategic priorities.

Another salutary tale comes from Groningen, where the Dutch tradition of demand-based public services is reflected in the reaction of urban green space managers to the complaints hotline for the city's municipal services, including its green space management. Critics of the system argue that it has often led to *ad hoc* problem-solving, and thereby to a reactive maintenance programme at the expense of regular, long-term work. The tendency is also to react to those who shout the loudest, rather than to those who are in greatest need.

Case study: Paris

Paris (population 2 million), France's capital, has a long tradition of green spaces, parks and squares dating back to the reign of Napoleon III, including the Bois de Boulogne and the Bois de Vincennes. Since 1977 it has been governed by all-powerful Mayors

Centralised powers

Paris is perhaps unique for the historic importance of city government and the fact that in this highly centralised system all decision-making powers are vested in the city authority that owns most of the urban green spaces and is responsible for policy, provision and management.

Since Paris gained the right to self-government in 1977, all decisions rest with the Mayor who has unrivalled powers, including the ability to raise resources. Central government usually does not get involved in decisions regarding green space management and although there are consultations with the 20 local mayors, the Mayor of Paris is under no obligation to take into account local views. Responsibility for green spaces is delegated to the Deputy Mayor for Green Spaces.

The Mayor also has fundraising powers through taxation. Although green spaces are very popular, their share of the general budget has remained at around 1% for both investment and operation expenditure. All the resources come from the city's budget, as no other source of funding exists, such as sponsorship, alternative taxes or income from charges. Advertising is banned and income from leasing facilities (always 8% of annual turnover) goes back to the city treasury since French law forbids specific revenue to be channelled to an individual account.

Green space provision

The city has always been proud of the quality of its parks, although provision and distribution are seen as a problem. Green spaces are, together with public transportation, the main political priority of the socialist Mayor, elected in 2000. The main plank of his green space policy, directed by political aspirations, has been a commitment to improve access so that all citizens would be living within 500 metres from a green space.

Although 20% of the city's area is open space, its distribution throughout Paris is uneven. In 1973, the Paris Region adopted a 300 metres target based on deficiency maps, according to which 75% of the population fell outside this standard. Successive administrations seized every opportunity to create new green spaces within deficient areas, almost doubling the overall green space area and reducing the proportion of inhabitants lacking adequate access to 40%. Despite clear progress, the difficulties in achieving the 1973 target prompted the incoming Mayor to adopt the more pragmatic 500 metres goal to be achieved by the end of his term in 2007.

This has led to all opportunities being systematically considered:

- Creating new green spaces in all major urban renovation
- Creating micro green spaces by acquiring decaying housing

Urban renewal sites, mainly former railways land, tend to be located in the peripheral districts of Paris and only represent some 200 hectares, of which only 25% is required to be dedicated to open space. In high-density areas, most new provision relies on micro green spaces: the municipality can purchase decaying housing with the specific purpose of creating green space *(dents creuses)* or they can landscape the back yards of existing houses, a process which has become very popular.

A recent trend has been the provision of playgrounds within traditionally laid out parks and gardens, usually smaller spaces that are not protected by heritage designation. The current administration has been responding to the needs of young people but, by taking this approach, has shaken the management style of staff in the Department of Gardens and Green Spaces who come from a 'civil service' tradition (when Paris was governed by the State) that favours formal soft landscaped gardens. The Department now faces the challenge of integrating these playgrounds into their well-proven traditional management.

Anti-social behaviour

Traditional management has kept antisocial behaviour under control with very low levels of vandalism in the city's green spaces, despite the absence of community involvement in the decision-making process. This must be a tribute to the traditional doctrine of discouraging these acts by repairing any damage without delay. Where vandalism or antisocial behaviour persists, the Department seeks approval to modify the layout and design of the green space to address the problem.

Watchmen based in each garden are responsible for supervision, enforcement of regulations and locking the gates (gardens in Paris have railings). In the last 10 years, the Department has created its own parks police (largely recruited from the ethnic groups) who are trained to intervene in conflict situations and, unlike French police, do not carry arms. They are mainly deployed in tourist areas or 'problem areas'. Watchmen prepare daily reports, used by the Department to respond to any acts of vandalism, security needs or structural changes.

Clockwise from left:
Parc de Bercy – a new neighbourhood park on former railway land; A recent trend has been the provision of new playgrounds

Case study: Groningen

Groningen (population 177,000) is located in the northern Netherlands, a sparsely populated region. It is now the seventh largest city in the country, serving the whole region. The major economic activities are farming and gas and salt extraction. Groningen has a large inland harbour, reached via the coastal town of Delfzijl.

The BORG management system

Groningen, known throughout the Netherlands for its progressive policy on public spaces, became the first town in the mid-1970s to give priority to people over cars and to subscribe to the concept of neighbourhood-based services, focused on improved contact with residents. As the shortcomings of this highly decentralised approach became apparent, Groningen developed its own management system (BORG) results – rather than cost-oriented, to improve the quality of green spaces.

At the end of the 1980s, various developments at the national level led to a shift from a centrally managed, sector-based approach, to a more integrated devolved management. The city's administration became more outward looking, with an emphasis on consultation and civic participation, an approach that became known as neighbourhood-based service and was also applied to the management of its green spaces.

Experience showed that focusing services on the local area had been taken too far: the introduction of a complaints hotline had lead to an *ad hoc*, reactive problem solving at the expense of regular, planned work. It became clear that devolved management and neighbourhood-based services were resulting in inefficient management and in wide discrepancies in the state of repair of urban green space in the various neighbourhoods throughout the city.

A policy reversal was adopted and management programmes were once more determined centrally. To a greater extent than in other Dutch municipalities, the chain of decision-making and responsibilities came under review, revealing that various departmental heads bore responsibility for too many successive steps: in many cases policy development, programming, implementation, evaluation and monitoring all fell to a single officer.

The improved allocation of responsibilities under the new system of management, known as 'Groningen Public Space Management' (BORG), advocated a split between the formulation, implementation and assessment of management programmes, resulting in a much more professional organisation. After an independent consultancy assessed the scope and management needs of the city's green spaces, BORG developed a system for evaluating green space quality.

Based on this management tool, the Urban Management Division, responsible for maintenance and reinvestment, developed a method whereby the condition of all urban green space can be regularly evaluated. Enough knowledge of the city's green spaces is now available to enable the development of tailored management programmes and for controls to be in place that allow results to be verified and, more importantly, opened to discussion.

Clockwise from left:
A scarce example of green space in the inner city; Priority is given to pedestrians and cyclists

A system was also instigated to assess the effect of damage and pollution on the visual quality of public space, which enables all stakeholders, experts and lay, to agree on the desired quality of urban green space management and determine precisely the results that have been achieved. There is, however, no framework at present for involving residents actively in day-to-day green space management activities (maintenance); public participation is only used in project development, in accordance with a nationally established framework. To a limited extent, BORG overcomes this, encouraging residents to become involved in assessing urban green space quality and has also helped to raise residents' awareness of their surroundings.

Focus on output

The neighbourhood-based services became more user-oriented when the focus was shifted to results on the ground. Under BORG management, results are based on criteria and visualised target scenarios. The town is also divided into 'structural elements': city centre, parks, trading estates, etc, and the management quality to be attained in each 'structural element' is established on the basis of both photographs and pre-determined criteria.

Although the budget for green space has remained fairly constant over the years, it is a popular target for cuts, made easier by the difficulty to demonstrate the visible consequences of sequential small economy measures on the city. Experience has shown that the link

between results and projected costs established through BORG has given green space managers a greater level of trust in budget applications.

Green space development, such as the renewal of an existing park or the development of an ecological network, is managed separately from the maintenance. This division means that the knowledge and expertise for management is poorly represented in the development process and many designs are costly to maintain. Conversely, rigid management regimes have been applied to designs which require special management programmes. The evaluation of outputs using BORG has helped create a better basis for negotiations on new designs and maintenance budgets.

The lessons for English practice

Localising management approaches

In each of the 11 cities, management approaches have been adapted to respond to the individual needs of different types of green spaces, even when there is no formal provision for dealing with those, as in Paris. The norm, therefore, is that management systems are able to factor in the varying demands of different types of green spaces, whilst some cities have developed quite sophisticated mechanisms to cope with a variety of geographical, seasonal and cultural contexts by shaping management approaches accordingly.

The first key lesson is therefore that individual green spaces do have different management needs, whilst the more successful cities seem to be those which openly acknowledge and understand those differences and actively plan for them. To do otherwise leads to inefficient and wasteful management and risks compromising the quality of green spaces and community support for management efforts, as indicated by the former experiences in some cities (eg Tokyo and Zurich).

Nevertheless, approaches to incorporating individual needs into management systems vary, and once again there seems to be no one right approach. In nearly all cases, locally –responsive management implies some degree of devolution of management responsibility to local areas, together with good communications between management and operational teams and users. Thus, even where there is a larger degree of centralisation of management decisions, such as in Paris, there is still room for local adaptation of maintenance routines. **The second key lesson is therefore that a degree of devolution of management responsibilities to local areas is likely to contribute to the overall quality of green spaces, especially if backed up by a responsive, city-wide management system.** Individual park maintenance plans, dedicated park keepers, area-based managers and user participation can all play an important role here.

The proviso, however, is that certain management tasks are likely to be most efficiently delivered at a city-wide scale to ensure the optimum use of specialist skills and machinery. The key, it seems, is to recognise the most appropriate level at which to deliver each task, and to structure management approaches accordingly.

Regulating spaces

The cases also demonstrated that regulating urban green space is primarily a municipal affair, complemented – where relevant – by general legislation emanating from higher levels. Several cities build upon national statutory systems (eg environmental legislation or land use planning) to derive their own regulations for green space use, but the lack of appropriate regulation did not seem to be a concern anywhere.

Anti-social behaviour, littering, vandalism and dog-related problems affect all of the cities to some degree, and regulations are generally in place to deal with these problems.

A key issue, however, was how regulation could be effectively enforced, a matter highly dependent upon the characteristics of the cities' particular legal, institutional and cultural environments. Thus, Minneapolis and Melbourne have internalised enforcement into their management system through, respectively, their parks police and authorised officers. A number of cities use parks staff such as rangers or keepers as enforcement staff, whereas others rely on collaboration with the police. Given the generally low levels of user problems reported by the cities, it seems that each of these can be successful, although they are likely to have very different resource implications.

Nevertheless, since the majority of problems in green spaces result from the inappropriate behaviour of users, considerable success was reported when enforcement of regulation was backed up by information, education and consensus-building about the relative importance of certain norms of behaviour. Zurich, for example, has been particularly successful with such approaches in helping to solve conflicts between the demands of different user groups (eg youths and the elderly, dog owners and parents with small children), which would not be eliminated by simple enforcement.

A further key lesson is that enforcement action should feedback into green space management systems. For example, the success reported in Paris and Malmo of using feedback on infringement of parks regulations to inform investment priorities (eg dog or litter bins and public toilets) and to make changes in park designs so that they are less susceptible to vandalism or inappropriate use. The challenge here is to keep the balance between offering a good quality, inspiring environment, and designing a robust environment that resists misuse. Much, it seems, can be achieved through appropriately resourcing enforcement activities, and through reacting promptly to problems to prevent their escalation.

Monitoring localities

Several of the 11 cities have developed mechanisms for monitoring the performance of their management systems, the needs and quality of individual parks, and the interaction between the green space municipal departments and green space users. Some of these systems are internal to the municipal administration, whereas others serve as tools to involve other stakeholders in green space management decisions. Such systems have been put in place to fulfil a number of purposes. The chief amongst these are the desire to secure effective cost management, to assess the suitability and effectiveness of management processes, to bolster political and public support for green spaces services, and to improve and sustain the quality of green spaces. The emphasis on each of these objectives varies from place to place, but there seems to be a general trend to move from an

exclusive focus on financial aspects to a progressive evolution towards controlling green space quality.

The first and quite obvious lesson coming from the experiences is that effective monitoring systems are essential to securing good quality green spaces. Ideally, such systems should fulfil all the purposes listed above simultaneously (ie controlling quality of management processes, cost efficiency, the impact of management decisions on green space quality and serving as a tool for stakeholder participation and for setting political agendas), although the adoption of complex monitoring systems of this kind is a very recent phenomenon. Nevertheless, the cities that have managed to do so seem to have achieved a good degree of success (eg Groningen and Wellington).

The second lesson is that effective and comprehensive monitoring as described above will require a considerable effort in developing the parameters and the criteria to feed into the system. This is not an easy task, as systems have to be generated locally to be appropriate to local contexts, and there are clear cost, time and manpower implications which probably explain why the majority of the cities examined have not yet arrived at this stage. It is, nevertheless, essential, if a culture of continual improvement is to infuse urban green space services.

A final lesson concerns the importance of monitoring users' interactions with green spaces and their management. All 11 cities had well-developed suggestions and complaints management systems, whether or not dedicated to green spaces issues. Some were done through electronic means, others through park keepers' logbooks, others still through regular surveys. The first key point here is the need to link those systems to management and maintenance decision-making, as achieved in Minneapolis, Malmo, Melbourne and Aarhus. This, however, is not just a matter of securing users' support. It is also about making good use of an invaluable source of first-hand information on green space performance.

The further key point is the need to carefully consider the equilibrium between understanding and recognising the importance of users' views and responding promptly to these views, without losing sight of strategic and long-term objectives of green spaces management. Examples from Aarhus and Groningen illustrate the tensions which might emerge, and the need for urban green space managers (and the systems they employ to measure their performance) to maintain an appropriate balance.

What can we learn?

- Successful cities understand the diversity of green space types and actively plan for them.

- Some devolution of management responsibilities eg through individual park maintenance plans, dedicated park keepers, area-based managers and user participation, can contribute to the overall quality of green spaces, if backed by a responsive, city-wide management system.

- Some management tasks will be most efficiently delivered at a city-wide scale to ensure the optimum use of specialist skills and machinery.

- Ensuring that necessary local regulations are in place (eg to combat anti-social behaviour, littering, vandalism and dog-related problems), and reacting promptly to problems, is critical.

- Internalising enforcement processes into the overall green space management system can deliver a more integrated and effective enforcement regime.

- Enforcement should be properly resourced and backed up by information, education and consensus-building about the relative importance of certain norms of behaviour.

- Effective monitoring and complaints management systems are essential to monitor management processes, cost efficiency and the impact of decisions on green space quality to encourage stakeholder participation and to feedback intelligence from enforcement activity.

- A balance needs to be struck between responding promptly to local resident views and delivering the strategic and long-term objectives of green space management.

07

08 What can we learn?

The English context

The need to identify and spread good practice

The six sets of issues discussed in chapters 02 to 07 are, to some degree, linear, in that each feeds into the next until the quality of urban green space is affected on the ground in a series of measurable ways – higher quality space, more users, more satisfied users, higher property prices, and so forth. The stages are also potentially (and ideally) iterative, with managers learning from what has worked and what has not and using this information to feedback into a refined process from the start.

As a final set of issues, the international case studies examined:

- The extent to which the processes of management have or have not impacted favourably on the quality of urban green space, and therefore on the extent to which outcomes have been positive or negative.
- What can be learnt from approaches and mechanisms used by the authorities to further refine their processes, and indeed, whether any learning mechanisms are in place to do this.

In England, the 2000 Urban White Paper – 'Our Towns and Cities: The Future' made it very clear that, not only had a lot of public open space within urban areas been lost to encroaching development, but too much of what was left was neglected and poorly maintained. The White Paper argued for measures to improve the way new parks, play areas and public spaces are planned and designed and existing ones are managed and maintained, including:

- Identifying and spreading good practice
- Developing the Green Flag Award scheme as a national award for excellence in the provision, management and care of parks, play areas and open spaces

Winner of four Green Flag Awards, Mowbray Park, Sunderland sets a standard in England to which many park managers aspire

'Green Spaces, Better Places' prioritised the importance of learning from good practice and went on to argue for developing good practice networks, covering the delivery of better information for professionals, voluntary and community groups on preparing and implementing green space strategies; developing planning and design solutions for improving the quality of new and existing spaces; and on applying quality standards to day-to-day maintenance operations. To this end, the monitoring and evaluation of demonstration projects was also advocated.

'Improving Urban Parks, Play Areas and Open Spaces' has also advocated the need to learn from what has worked. It suggested that demonstrating how urban green spaces meet wider council policy objectives, for example, in education, health, regeneration, and so forth, can raise the political profile of urban green spaces and raise the commitment of an authority to green space management. This role of demonstrating the benefits of urban green space in order to encourage commitment and resources was woefully lacking throughout the sector.

The following questions were therefore asked of the international partners:

- What levels of quality are being achieved, and what are the general perceptions of green spaces in the city?
- How much is that a result of: the initial design, the management regimes, levels of resourcing, political commitment?
- What benefits have been generated for the city and community – economic, social, and environmental?
- How are innovative practices disseminated within and outside the city?
- How can practice be improved, and what plans exist to improve in the future?
- What have been the key innovations in urban green space management?

The international experiences

The outcomes of good practice

Recording the benefits

Although none of the cities examined would regard their green space management practice as beyond criticism, all reported considerable benefits from their emphasis on green space quality, and often a resulting reputation for their city as possessing a high quality green environment. These reputations were not accidental, but resulted from the emphasis on, and investment in, urban green space and its management, and the associated efforts by municipal agencies to promote these benefits to a wider audience as a key component of their city marketing strategy. They variously reflected benefits in terms of:

- **Enhanced professional reputations** In general, green space provision and quality in Aarhus is considered close to optimal by citizens, but the city also has a reputation for this quality amongst other city professionals with green space-related occupations.
- **Developing an environmental awareness** In Curitiba, an efficient process of communication and marketing by the city administration has succeeded in projecting a positive image of a well-managed city to the local population, to the country and overseas. Linking green space management to broader environmental and quality of life concerns has been particularly important in attracting support and in helping to inject 'green issues' into the daily life and consciousness of the city's citizens.
- **City marketing** Malmo's Streets and Parks department is one of the most successful parks administrators in Sweden, and the city's administration uses the city's parks as an important component of its marketing programmes. A study on the standard of living in the city carried out in 2003, for example, showed that the quality of its green spaces was one of its most important positive characteristics.
- **Maintaining momentum** Survey results consistently show that the citizens of Minneapolis are pleased with their parks and supportive of the work of the Minneapolis Parks and Recreation Board (MPRB) in maintaining them. The support has helped to maintain the position of the board within the city and therefore to maintain also the continuity of its work.
- **Supporting equity objectives** Parisians are proud of the quality of their green spaces – their only complaint is about the quantitative lack of such spaces. The fact that the same high level of quality can be found in every district of Paris is regarded as an expression of social equality and democracy.
- **Supporting recreation and leisure** In Wellington, significant benefits have been recognised from the high quality green space within the city. Foremost amongst these are social benefits, through excellent recreational opportunities, environmental benefits through support for a healthy ecosystem, and economic benefits, through the growing popularity of the city to tourists.
- **Attracting business and jobs** Residents' perception of having a high quality of life in Zurich are primarily linked to the quality of the city's green spaces, together with the quality of public transport. The high quality of life has been a major benefit to the city in helping to attract and retain businesses and employees to the city.

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Mechanisms for learning

Typically, cities were not shy in selling these benefits of their green space management practices, to both internal and external audiences. In Hanover, for example, the city's green spaces are highly appreciated by the public, which has in turn had a positive influence on the attitude of the city council to their management. This appreciation is partly a result of the quality of green spaces, and partly of communication and PR work by the Environment and Green Space Division, focusing on that quality. Hanover is now seen as having a rich 'garden quality' which the city actively exploits in selling its benefits to a wider audience.

Significantly, however, there were very few examples across the 11 cities of attempts to actively share the benefits of their practice with other municipalities, or to learn the lessons that other cities may have to offer. In Paris, for example, there are no institutional mechanisms for the dissemination of good practice within or outside the city; a not uncommon situation elsewhere. Only four examples were found of mechanisms to share information between municipalities, and to thereby learn from one another:

- In Denmark, there is not much dissemination of good practice, although experiences are shared at the annual meetings of the Association of Heads of Green Space Management Departments.
- In Germany, the Permanent Conference of Green Spaces Divisions (GALK), run by the German Federation of Cities, has been a major forum for the exchange of information and experience on green space management issues, and its journal – 'Stadt + Grün' – is the public discussion forum of the organisation.
- The diffusion and communication of achievements is seen as an important activity in Zurich, where the Green Planning Office (GSZ) publishes a quarterly magazine – 'Grünzeit' – to promote its activities to a wider audience, including to the city population.
- In Australia and New Zealand, the setting up of the 'Key Strategic Partners Group' of leading parks management bodies has been seen as key to continuing innovation and the exchange of information. The group was formed to share knowledge and innovation, to collaborate on projects and to compare performance through benchmarking. This Key Strategic Partners Group' is now in the process of setting up a legal entity in the CABE Space mould. The 'Parks Forum Party' will aim to: provide leadership in the development of best practice and innovation; offer a forum for agencies to share information and experience; assist the development of government policy; and enhance community understanding of the role and importance of public parks. In this respect at least, England seems to be ahead of the game.

Wellington, New Zealand. The city has recognised the need to share the benefits of good practice and learn from the experience of others

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Overarching lessons for English practice

The need to identify and spread good practice

It is clear from the 11 cities that well-managed green spaces bring benefits which go beyond those directly enjoyed by the users of those spaces. Foremost among these was the enhanced reputation of those cities as high quality living environments. A key lesson is therefore that well managed, good quality green spaces can be effective tools in fulfilling other, more general, policy objectives. Marketing their localities, for example, was one outcome observed in a number of the cities as a response to the increasingly competitive economic environment. Because of the direct and obvious linkages between green spaces management and broader environmental issues, raising environmental awareness was another common outcome.

The outcomes of good practice

A number of common experiences characterised the international practices, and can be boiled down to 13 key lessons. Although not all were apparent to the same extent in every city, their relative frequency across the 11 international exemplars allows some confidence to be placed in their applicability elsewhere:

01 Political commitment
The first key lesson was the need for strong political commitment to green space quality, a lesson reinforced across the international case studies. In Curitiba, for example, success in the management of green spaces has resulted from a mix of political will by successive city mayors, reinforced by the technical skills of the city green space managers. Often, this success is self-perpetuating, as in Hanover, where improvements in the green space management regime reinforced a positive perception of the city's green spaces, which led in turn to greater political commitment. Thus, political and administrative commitment needs to exist side by side if a strong organisation to manage green space both strategically and operationally is to be built. As in Hanover, this is likely to require support for green space issues at all levels of the administration, and across the political spectrum. Alternatively, as in Wellington, it may simply require the consistent green space advocacy of a number of influential local politicians, for whom green space is a particular passion.

Elsewhere, the wider benefits of green space may need to be proven to achieve political buy-in. In Aarhus, the perceived quality of the city's green spaces has long been seen as a major influence on public policy, and is regularly used in political debate. The view is that the visual image and recreational amenities offered by the city are attractive for living and will attract new enterprises and skilled employees, bringing with them clearly-defined social and economic benefits. Of course, political commitment by itself is unlikely to be sufficient, and, as in Zurich, high quality green space is most likely to result from the combined effort of staff in the city's administration as well as of its politicians. Nevertheless,

the inclusion in the new English local government structures of at least one cabinet member with direct responsibility for urban green spaces would seem a minimum starting point to build a greater political commitment in England to green space management.

02 A long-term statutory commitment
A long-term commitment went hand-in-hand with a political commitment as a pre-requisite for not only delivering high quality green space, but for ensuring that it remains high quality thereafter. This commitment was exemplified by Minneapolis, whose experience demonstrated the value of foresight, long-range planning and fostering civic commitment to urban green spaces. In Aarhus also, the public interest in green space issues has in turn sustained political interest in green spaces for over 50 years, in the process inspiring the work of the municipal administration. The direct benefits in sustaining high quality green space in both these cities, and in other cities which have exhibited such a long-term commitment, such as Paris and Curitiba, are clear to see. In different ways, in all these cities, the management of public space is a statutory responsibility of the city authorities, something that more often than not was not the case elsewhere.

The result is that, whereas in Minneapolis, Aarhus, Paris and Curitiba, the need to invest in the management of urban green space is non-negotiable, elsewhere, wavering political commitment could, and did, have a much more direct and profound effect. Thus, although local political commitment seems more important than any statutory duty for delivering both high quality green space provision and an exemplary commitment to its management, a carefully constructed set of statutory green space roles and responsibilities could create the incentive required to raise the quality of existing green space management practice in England to at least a minimum acceptable level across the board.

03 A strategic view
A long-term commitment is also required to deliver the next overarching lesson, the benefits of a strategic view of green space management. In Aarhus, for example, the adoption of a green structure as the basis for urban development with a clear basis in policy has helped to ensure that green space priorities infuse other key policy areas within the city. In Curitiba, the relative continuity of green spaces strategies – regardless of political changes in the city's administration – has also helped to consolidate the importance of green spaces management in relation to other city services and priorities. In Minneapolis also, the strategic decision to set aside more than 1,000 acres of waterways and parkways when MPRB was established is now delivering dividends. This land, which could not be built upon but could be built next to, is now adding value to adjacent properties and increasing the city's tax base, while maintaining a network of public open spaces in the city. Similarly, recognition of the importance of planning a coherent open space framework at the city-wide scale in

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Wellington has helped in reinforcing the unique image of the city, made green space more widely accessible, and is now assisting the city to develop coherent management strategies and objectives.

Such a strategic view of green space planning is rarely taken in England, but over time it has the potential to deliver widespread benefits. A statutory provision for local authorities to create green space strategies as an element of the new Local Development Frameworks, linked to the Community Strategy process, might offer the necessary incentive to deliver a more strategic and community-driven view of urban green space. Where prepared, Green Plans should include a clear spatial vision for green space, as well as policies for the provision, design and long-term management of urban green spaces. They should also provide the basis for more detailed Green Space Management Plans to be prepared, establishing the structuring, coordinating, resourcing and day-to-day delivery of green space maintenance.

The international case studies demonstrated that, where green space planning is not taken seriously (eg in Minneapolis), the lack of planning seriously impairs the ability of green space managers to innovate and to reflect changing user needs.

04 A local view

A coherent local view on urban green space management which adequately reflects the priorities of local populations is vital. In Hanover, for example, the aspiration has been that green spaces should remain a matter of social and cultural interest, because citizens must be convinced that green spaces are necessary elements for the life and identity of the city. The participation of citizens as users and customers is the favoured approach, hand-in-hand with an improvement in communications between the city and citizens. Elsewhere, the aspiration in Malmo has been for a continuous dialogue between the city and its residents on the content and quality of green space interventions, and the use of well-developed mechanisms for community involvement in Wellington, reflecting the fundamental attitude that green spaces belong to the public and are managed on their behalf.

Public involvement in green space management has its costs, including the dilemmas associated with excessive resident influence on maintenance priorities and the resulting reactive style in Groningen. But in Tokyo, the new focus on green space quality was proving to be both the cause and effect of greater community participation in various stages of planning and management of green spaces. The emphasis on community reflects the general trend for people in Japan to review how they spend their lives following the recession in the country throughout much of the 1990s.

As in Tokyo, cultural issues play an important role in determining the nature and extent of participation, and the public attitude generally to green space. In Zurich, for

example, the high educational standards of the local population and the accepted standards of social control ensure that citizens generally respect the city's green spaces and their role in the management process. In England, the apathy of local populations (and therefore their politicians) towards green spaces might be addressed through a far greater emphasis on educating local citizens about the benefits of green space, and by involving them more directly in green space decision-making and management processes. Attitudes will not be transformed overnight, but the international case studies illustrated many means to deliver change, and, given enough time, this community support can be harnessed to shape political priorities.

05 Adequate and reliable resources

The attitudes of local populations and their political representatives determine the resources available to green space management. Not all of the case study cities were generously funded, but all were funded to an adequate level which allowed them to at least meet ongoing management responsibilities, even if monies for long-term capital projects were more difficult to come by. Hanover, for example, was funded at the higher end of the scale for German cities, but not at a level which discourages the city from seeking external sources to deliver such projects. The MPRB was perhaps the most generously funded of the organisations studied, benefiting in this case from the unique blend of financial independence and public accountability and a resulting park-friendly political environment. Even here, however, recent cuts have brought uncertainty, reflecting the importance of reliable funding over the long-term.

A key lesson was therefore that there is not only a need for adequate funding, but also for reliable sources of funding over the long-term. In the case of Wellington, the new 10-year funding plans will deliver a new environment for investing in green space, by removing obstacles to long-term planning and allowing the city to commit itself to projects spanning several years. In England, the constraints of the annualised budgetary rounds need to be overcome to ensure longer-term planning for green spaces, whilst the capital and revenue funding available for green space management should be clearly published at both local and national levels to allow adequate local scrutiny of available resources. Currently, green space management is all too easy a target for cuts, despite its relatively small share of the overall funding cake. Nevertheless, as the most successful international case studies suggested, the need to protect revenue funding streams is paramount, in order that maintenance can be prioritised across existing open space networks.

The importance of exploiting supplementary income streams was also demonstrated across the international case studies. But in order to maintain an entrepreneurial spirit, these funds should be collected and spent directly by green space management departments as additional funding, over and above core income streams.

06 Making the case internally

Winning resources against other competing claims represented a key and increasing skill amongst public space managers. In Groningen, for example, an important finding has been that strength of conviction and the ability to present green space issues to key political and organisational audiences is important in raising trust, something that requires strong leadership. Similarly, in Malmo and Wellington, the importance of marketing green space success to an internal audience of politicians as well to the wider population was viewed as vital in securing political support and a willingness to spend. Green space managers therefore have to be advocates for the benefits of high quality public space, not least of their soft economic benefits.

Parks management in Melbourne has also been highly successful, although this cannot be taken for granted. The long-term sustainability of a high-quality parks network here (as elsewhere) is dependent upon the ability of Parks Victoria to maintain the confidence and commitment of the state government and the broader community. This in turn relies on continual efforts to make the case for the organisation's existence, based on its unique understanding of green space in and around Melbourne. Green space managers in England also need to understand that half the battle lies in demonstrating – and repeatedly demonstrating – the value they add, and thereby to garner cross-political and public support for their work. The most successful international examples are founded on this ability to continually make the case for resources to a wide range of audiences, and on publicising their successes.

07 Skilled intervention

The Aarhus case suggested that the key to success is a well-trained and engaged staff who know how to combine political, economic, organisational and design skills and how to take advantage of a variety of opportunities. In this case, and in Minneapolis, long-serving staff with detailed knowledge of their city's parks deliver highly expert management of a diverse system of open spaces. The cities showed that the need for a continual renewal and investment in skills is required, not just at management levels, but also at the operational end of green space management. Departments staffed with marginalised, low-status staff were never found in the successful cities. The transformation of urban green space management services in England from the 'Cinderella service' of local government to a 'premier division service' will require a similar and continual investment in staff. The creation of dedicated degree programmes and continual professional development opportunities in the sector may provide a valuable starting point. But the aim should also be to create long-term stability in organisational structures so as to nurture greater staff stability and commitment, and the building of internal, personal and strategic links.

08 Focusing on quality

Having appropriately skilled staff was also a necessary pre-requisite for a focus on the quality – as opposed to simply the quantity – of urban green space. In Tokyo until very recently, the traditional attitude of central and local governments was to emphasise the quantity rather than the quality of green spaces. The result was the provision of many standardised green spaces without much regard for the actual needs of surrounding communities. This has now changed, and management practice reflects a new focus on quality and on meeting specific needs. The benefits of such a focus were exemplified by Paris, which has demonstrated a long-term commitment to high quality parks, dating back to Napoleon III and Baron Haussmann; quality which is inherent in the original park designs, and in subsequent interventions. The spaces created at that time carry on delivering lasting economic, social and environmental value to the city in the form of a large number of robust, urban spaces.

In England, urban green space managers need to be involved from the start in the design and planning of new green spaces. So do skilled landscape designers in the ongoing management of existing spaces, particularly as and when new interventions are planned. A key lesson was that designing high quality, resilient green spaces can not only save on green space resources through the proper consideration of life-time costs, but can also ensure that residential communities engage more fully in their ongoing management by providing the spaces they want, rather than simply the spaces that policy says they need.

09 Emphasising efficiency (devolving responsibility)

The other side of the coin was the equal emphasis placed on the efficiency of management processes by many of the cities. In Hanover, and Aarhus, for example, an investment in modern management methods has improved overall efficiency and reduced the costs of green space maintenance, in the latter case through the introduction of their public contractor unit to directly compete with the private sector. In Paris, by comparison, the very clear decision-making structure in the municipality is seen as part of the explanation for the level of quality achieved, and one of the reasons why parks services have never been outsourced to private contractors. Both here, and in Wellington, the benefits of highly-skilled and specialised maintenance personnel have also played a role, whilst in Wellington, in contrast to a number of other cities examined, the return to centralised depots and the division of labour by function rather than by geographic area has proved to be an efficient management model.

On this latter issue (localised versus centralised management and operations), benefits were apparent in both models, and clearly will need to be weighed up in any given circumstances. The key aim in English local authorities should be to establish the optimum cost to quality ratio, and to do this by distinguishing those elements of the service which

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are best devolved to the neighbourhood level, from those that require a more strategic organisation, and planning their delivery accordingly. The international case studies suggested that this might be done through developing a clear, typologically-driven view of green space, with management strategies for particular types of space defined by their history, geography, ecology, uses and by local and national aspirations.

10 Involving others

The same was true for the involvement of the private sector, with different cities reporting success with both heavily privatised, and largely public models, and all states in between, and still delivering high quality urban green space management. Most cities saw this relationship as a partnership which needed nurturing and careful management over the long-term. In Malmo, for example, the city strives for good collaborative relationships with private contractors, aiming to increase expertise and responsibility for quality on the part of contractors and the creation of a transparent but competitive environment for the authority. In Tokyo, new partnerships with the private sector represent an innovative departure for the city that is being embraced, along with PFI processes, to encourage more competitive practices in the delivery of local services.

Most cities saw the value of such productive partnerships with the private sector, but also the value of engaging other key stakeholders in the management of green space in order to secure a better understanding of the role and significance of urban green spaces to metropolitan life. In Melbourne, for example, this included voluntary groups, communities, users in all their guises, educators, health professionals, private sector operators, and other local government departments with an influence on green space. In England, the dogmatic pursuit of Compulsory Competitive Tendering is over, but this should not mean a wholesale return to public management of the green space sector. The objective instead should be to find the right balance by carefully considering which aspects of urban green space management can be more efficiently and effectively delivered by the private sector, and which are best left to the public sector. The former are likely to be the more routine and easily specified maintenance tasks, whilst tasks requiring a greater degree of creative interpretation and adaptability in the field might be retained in-house.

11 Integrating responsibilities to coordinate actions

The imperative to integrate local government green space responsibilities and local government activities with the green space activities of other organisations was widely recognised. This was apparent in Groningen, for example, where it is accepted that the city still needs to convincingly move beyond sectoral approaches to green space management. Sometimes this was achieved by devolving responsibilities (eg budget and staffing) to a local level, with the mission of better integrating service delivery at the coalface, as in Hanover. Elsewhere, integration has

happened to a greater or lesser extent at a more strategic level. Such is the case in Malmo, for example, where good collaboration with other public bodies to secure coordinated intervention has been an important feature of the city's success.

In both models, the benefits of having one strong central organisation with responsibility for all – or the vast majority of – green space management functions seemed evident. In Curitiba, for example, the concentration of powers, responsibilities and resources in the Municipal Secretariat of the Environment (SMMA) and its importance within the city's administrative structure, has made it easier for the city to take over duties from the state and the federal governments and consequently to develop more integrated approaches to green space issues. This accumulation of powers within a single organisation has also made it easier for the municipality to gain access to international finance to implement new green spaces, and also to enforce their powers on existing spaces.

The proviso to this recommendation is that it is more important that aspirations and actions are coordinated than that ownership and responsibilities for green space necessarily reside in the one place. Thus, some of the case study cities still had a fragmented pattern of ownership and responsibilities, but, through carefully coordinating their activities, were able to deliver successful green space management. In England, delivering better coordinated green space services seems to be fundamental, and fully integrating responsibilities in one overarching organisation will be an important means to achieve that. A clear distinction between the ownership and management responsibilities for urban green space, will help to reduce the number of agencies with responsibilities for managing urban green space. More important, however, seems to be the simple commitment to work in an integrated manner with all organisations and stakeholders with a role in green space management. Green space managers should particularly adopt the principle that green space planning and green space maintenance activities should be carefully coordinated, even if institutionally separated across organisational structures.

Finally, enforcement powers need to be taken seriously, properly resourced and coordinated with other green space management activities. The need for proper feedback loops between enforcement work and policy, design and maintenance activities was a key finding from the international case studies. Without joining up this service to other public space management activities, the quality of green space can be quickly undermined.

12 A dedicated management model

Dedicated and semi-independent agencies such as Parks Victoria and MPRB seem to have been particularly successful, in part because the range of competing calls on expenditure does not exist. In the case of Minneapolis, however, the conditions which have made the MPRB

successful are not easy to replicate, since the board's political and financial independence and narrow focus on parks were put in place before the municipal government was powerful and organised enough to protest. It is highly unlikely that local governments today would relinquish their tax-raising powers and political accountability to an independent parks agency, save for exceptional cases. The latter might include relatively rare but nevertheless important circumstances where new settlements or other major developments are being planned, and where it is important to capture the rising land value to pay for long-term management needs. The Government's sustainable communities plans in South East England may provide the necessary opportunity, whilst the hypothecated funding model used in Minneapolis might offer the right tool.

13 Monitoring investments and outcomes
Fundamental to ensuring that existing powers were being used in an effective manner were the monitoring activities of the different city authorities. These ranged from regular assessments of management performance (eg Aarhus), to much more fundamental systems designed to both record existing, and play a part in delivering new, quality. The most fundamental approaches were found in Wellington and Groningen. In the former, the city's efforts to quantify maintenance and reinvestment needs through asset management processes have resulted in more funding and a different perception of green space amongst citizens and politicians. In Groningen, by contrast, the innovative BORG system, with its visual target scenarios and the concomitant split between formulation, implementation and assessment of management programmes, has led to a much more focused, outcome-based management process.

It seems that the need to accurately record the state of urban green space and thereafter to monitor the delivery of public space management goals should not be underestimated as a means to ensure that other policy and management goals are being delivered, including the delivery of a cost-effective, quality-focused service. The most sophisticated systems might even track the depreciation of assets over time, so that the condition of new investments can be tracked and lessons leant, and so that costs can be factored into ongoing work programmes as part of a continuum of replacement and maintenance activities.

In England, these systems are largely absent, but can bring significant benefits in the era of 'Best Value', where continual improvement in service is a Government objective, but one dependent on adequate feedback and measurement systems to inform decision-making. A model approach to monitoring green space and green space management quality might be usefully developed, perhaps by CABE Space and its partners, but will always need to be adapted in the light of local contexts, management approaches and priorities.

What can we learn?

Despite the successes that the 11 international exemplar cities were enjoying in the management of their green spaces and the benefits that flowed from that success, they often remain isolated examples of success within their own countries. It was surprising therefore, that so few explicit attempts to share the benefits of their experience with other municipalities were apparent, even when it was clear that there would be benefits for all concerned. The findings suggest that there remains a significant potential for reflective mechanisms to assess and exchange good practice, and that that such approaches are likely to bring benefits to both towns and cities that are currently excelling in this field, and to the many more (including many in England) with some way to go.

Future research

This report is part of the learning process, but the process still is in its early days, both in England and elsewhere. A key element of such a learning strategy is the commissioning and learning from research, such as that on which this report is based. This research has suggested a number of potentially fruitful lines for further enquiry:

- The potential and impact of green space policy for delivering other economic, social and environmental goals.
- Raising the profile of green space issues as a local political and community concern.
- Green space strategy and maintenance planning and its relation to spatial and community planning.
- Models for green space resourcing, fund-raising, marketing and budgetary management.
- The green space design and management skills base.
- Management models for sustainable green space maintenance and regulation by the public sector.
- Monitoring and asset management systems for green space management.

All of these can be examined in the national context of green space management in England, but as a final and fundamental line of enquiry, the effort to learn from developing international good practice should continue to be made. This report only scratches the surface.

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Appendix

The research methodology
A simple methodology

The research involved three clear tasks:

01 The identification of good practice in parks and urban green space management overseas (in a way which can be compared with English experiences)
02 The identification of the transferable elements from the international good practice
03 The formulation of recommendations about how to incorporate international good practice in the management of green spaces in England

A simple, linear, three-part process was used to tackle the tasks.

Part one: a framework for analysis

The first stage of the project aimed to quickly get to grips with the theoretical, policy and practice-based context for the management of urban parks and green spaces. This was done in order to formulate more precisely the terms for the international comparison of good practice. A short period at the beginning of the project was therefore used to review and understand this body of research/literature and to develop an analytical framework for the comparative study.

The analytical framework took the form of an initial mapping (based on existing literature – research, policy and advice) of the key contributions to the management of urban parks and green spaces. The framework needed to provide a robust basis against which to examine international practice and a ready means to make comparisons with practice in England. It also needed to be simple and robust enough so that the partners in the research could understand and use it. For example, so that key concepts were interpreted in a similar manner. Getting the analytical framework right was therefore crucial to successfully delivering the research.

A summary of the key issues arising from the review of research, policy and advice is presented in chapter 01, alongside the analytical framework.

Part two: commissioning international partners

In the second stage, the analytical framework was used as a basis to commission a series of reports from international research partners on the management of urban parks and green spaces.

The selection of international partners encompassed two interlinked stages: the first was the identification of cities which could provide examples of good practice in the management of green spaces of relevance to the UK context. The second involved the identification of expert partners who were knowledgeable about urban green space management in the selected cities, and who were prepared to produce a case study report to specifications and within the timeframe required by the research.

Established links between the research team and/or members of the steering group and appropriate research institutions around the world were used as an initial means to search out and commission experts or groups of experts in the field of green space management. Partners were sought in a wide range of cities which the literature revealed exhibited innovative practice in green space management. In this manner, a long-list was drawn up, and then was gradually whittled down.

The key general criteria for selection included the reputation of the city for excellence in green spaces management. But it also included the relevance of the city and its achievements to the issues currently facing urban green space management in England. Therefore, the selected cities needed to fit one or more of the following criteria:

01 A reputation for good practice in the management of urban green spaces
02 Recognised success in the adoption of solutions similar to those advocated in England to improve the state of urban green spaces
03 Success in tackling the key issues of eg funding, coordination, etc, highlighted in the UK literature, albeit in a different context
04 A variety of sizes and types of case study to make findings relevant to the different types of English towns and cities.
05 A variety of geographical, cultural and institutional contexts, to highlight how these influence the outcomes of green space management solutions
06 The availability of adequate contacts and sources of information, and a willingness to complete the study within the timescale and for the resources available

As suitable experts or expert groups were identified, they were formally commissioned as research partners to prepare a 5,000-word report following and addressing the structure and issues specified in the analytical framework, as laid out in a formal International Partner Protocol and pro-forma. Time and resources did not allow original research in each country, although the international partners were encouraged to elicit the views of other key stakeholders and stakeholder groups within their country before compiling their reports. Reports were therefore variously based on:

01 Key stakeholder views
02 Available case study data
03 Secondary published sources
04 Expert opinion

The international partners were identified concurrently with the analytical framework being prepared, and in consultation with the steering group. Nevertheless, previous experience of international comparative research suggested that stage two offered the greatest potential to delay the project. However, although there were risks associated with a reliance on international partners, these were heavily outweighed by the benefits. Foremost amongst these were:

01 The collaborative nature of the research and ability to tap into existing networks of expertise
02 Being able to take advantage of local in-depth knowledge about green space management and its institutional, political and financial context
03 The ongoing assistance of international partners throughout the research project up until publication
04 The different perspectives brought to the research by the international partners
05 The speed and cost of such an approach, allowing more in-depth work to be undertaken within the five-month period of the research

In choosing the international partners, cities (and their regions, where relevant) were suggested as units of research, rather than whole countries. This was because the management of institutional frameworks and practices is largely locally determined in most developed countries, which are not on the whole as centrally governed as the UK. The international partners were all requested to submit a draft report for comment by the research team, and for input from the Steering Group, before submitting their final report by the pre-agreed deadline.
A three month period was allowed for this aspect of the work.

Part three: the comparative analysis

The third part of the project commenced once the internal partner reports had been received. During this stage, the seven fundamental questions discussed in chapter 01 and reflected in the structure of the analytical framework were used as a basis for comparatively assessing the international experiences, and for compiling the final research report.

An important feature of the report has been the need to make lessons from overseas relevant to an audience in England and within England to local authorities of different sizes. The basis of the report, therefore, was a comparison with what is already known about practice in

England, gauged during the Part One review. The findings were therefore presented both as a comparative review of the international experiences, and as key lessons for English practice.

Key sources of research, policy and advice

The sources

This first part of the research aimed to quickly get to grips with the theoretical, policy and practice-based context for the management of urban parks and green spaces. This has been done in order to formulate more precisely the terms for the international comparison of good practice.

The process involved examining a range of existing research initiatives and guidance as a means to develop an analytical framework for the comparative study. It was not the intention to undertake a comprehensive review of green space management literature, but instead to examine the key sources of research and advice which have emerged in England in recent years as the focus on improving green space management practice in the UK has also gradually emerged. A number of the sources themselves constitute a summation of a much larger body of literature.

These issues, identified through the quick-fire review, informed the analytical framework which was used to interrogate the international case studies. The main sources are summarised below in a manner which distinguishes between the challenges for practice and the solutions already being advocated in England. It became quickly obvious during this stage of the work that many of the challenges, and a significant proportion of the solutions, were common across a number of the reports.

The references

Our Towns and Cities: the future. Delivering an Urban Renaissance – The Urban White Paper. DETR, 2000

Green Spaces, Better Places – Final report of The Urban Green Spaces Taskforce. DTLR, 2002

Living Places: Cleaner, Safer, Greener. ODPM, 2002

Living Places: Powers, Rights and Responsibilities. DEFRA, 2002

Living Spaces: Caring for Quality. ODPM, 2004

Improving Urban Parks, Play Areas and Open Spaces. DTLR/University of Sheffield, 2002

The Use of Public Parks in England, Sport England. The Countryside Agency, English Heritage, 2003

Public Parks Assessment: A survey of Local Authority-owned parks, focusing on parks of historic interest. Final Report, undertaken by The Urban Parks Forum. DTLR, Heritage Lottery Fund, EH, The Countryside Agency, May 2001

Green Spaces Investigative Committee: Scrutiny of Green Spaces in London. Greater London Authority, November 2001

Improving Green Urban Spaces. Beacon Councils Research – Round 3 Theme Report. University of Newcastle/DTLR, June 2001

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