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Integration in Spatial Planning: Case Study of the Cape Town Metropolitan

Spatial Development Framework

by

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Thesis submitted in fulfillment of the requirements for the award of the degree of Master of Arts in Environmental and Geographical Science

Department of Environmental and Geographical Science
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2002

Declaration

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work.

Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and has been cited and referenced.

Signature  signature removed  Date 30/08/2002
EXECUTIVE SUMMARY

It is the underlying position of this thesis that sustainable development embraces the concept of integrating economic, social, environmental, demographic and political issues. High levels of poverty and previous unequal access to resources and power in South Africa emphasise the need for an integrated approach, with a critical focus on democracy, participation and transformation of institutions. Sustainable development requires tradeoffs, for example through regulatory frameworks. City managers use these frameworks provide a just and equitable means for informed, integrated and sustainable decision-making.

The thesis, in terms of theory and precedent attempts to derive an understanding of what integration is in terms of the broader context of sustainable development and how it is perceived in both Spatial Planning and Strategic Environmental Assessment processes. Although both have, at times, common objectives, they have different rationales and methodologies. The assumption is made that spatial planners believe their procedures and methods are sufficient for the integration of biophysical, social and economic issues. The question thus raised is: how is it possible to ascertain whether integrated planning is occurring?

The intention of this thesis is to evaluate the extent of integration which occurred in the Cape Town Metropolitan Spatial Development Framework (MSDF). The Integration Framework is used as a tool to evaluate the MSDF - it constitutes five dimensions, substantive, methodological, procedural, institutional and policy integration. These provide the criteria for determining the extent to which integration has occurred in the MSDF.

The MSDF process was initiated in 1991 and was the first planning exercise attempting to change the city structure and reverse the legacy of apartheid. It took into account the unique environment of the Cape, its people and the economy; the plan itself was prepared during a period of political, legislative, institutional and social change. The MSDF was adopted in 1996 by the Cape Metropolitan Council. An Environmental Evaluation was also done for the first time at metropolitan level, giving the spatial planning process a new dimension.

The research methodology is based on both the review and analysis of relevant literature and documentation, and interviews with key individuals involved in the formulation of the MSDF. The data collated were assessed against the criteria of the Integration Framework to establish the extent
The evidence was analysed using two separate techniques - time-series analysis and pattern matching.

The main findings of the research were that all five dimensions of integration were relevant in the MSDF. However, the extent and success of integration varied over time. This was due to changes to the institutional and policy frameworks during local government restructuring.

The central conclusions underpinning the research findings are that:

- spatial planning, by its very nature, has integrated biophysical, social and economic issues, **but at a spatial level only**;
- institutional integration is difficult to achieve during a period of transformation and democratisation, and is exacerbated by changes of duties and powers of institutions;
- transformation and democratisation affects policy integration, for which institutional integration is a prerequisite;
- substantive integration requires screening and scoping of issues at an appropriate level, and can be affected by timeframes over which spatial frameworks are developed; and
- methodological and procedural integration is easier to achieve at the lower order, project levels, but still relies on institutional and policy integration at higher strategic levels.
ACKNOWLEDGEMENTS

I would like to acknowledge the staff of the Environmental Management and Spatial Planning Departments of the City of Cape Town for their participation, advise and interest. A special word of thanks to Mr Keith Wiseman and Ms Sharon Pheiffer for their encouragement and for their comments on an early draft of the thesis.

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<td>CWG</td>
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<td>IDP</td>
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<td>IEM</td>
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<td>IEEMP</td>
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<td>IMDF</td>
<td>Interim Metropolitan Framework</td>
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<td>ISI</td>
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<td>IUCN</td>
<td>The World Conservation Union</td>
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<td>Abbreviation</td>
<td>Full Name</td>
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<td>LA</td>
<td>Local Agenda</td>
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<td>LUPO</td>
<td>Land Use Planning Ordinance 15/85</td>
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<td>MDF</td>
<td>Metropolitan Development Framework (former name of MSDF)</td>
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<td>MLC</td>
<td>Metropolitan Local Council</td>
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<td>MOSS</td>
<td>Metropolitan Open Space System</td>
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<td>MTAB</td>
<td>Metropolitan Transport Authority Board</td>
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<td>MSDF</td>
<td>Metropolitan Spatial Development Framework</td>
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<td>Muni-SDF</td>
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<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<td>NP</td>
<td>National Party</td>
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<td>PAWC</td>
<td>Provincial Administration Western Cape</td>
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<td>PPP</td>
<td>Policies, Plans and Programmes</td>
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<td>RDP</td>
<td>Reconstruction and Development programme</td>
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<td>RGS</td>
<td>Regional Growth Strategy</td>
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<td>RMA</td>
<td>Resource Management Act of New Zealand</td>
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<td>RSA</td>
<td>Republic of South Africa</td>
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<td>Spatial Development Initiative</td>
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<td>SEA</td>
<td>Strategic Environmental Assessment</td>
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<td>SOE</td>
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<td>University of Cape Town</td>
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<td>UDC</td>
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<td>UN</td>
<td>United Nations</td>
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<td>United Nations Conference on Environment and Development</td>
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<td>United Nations Environment Programme</td>
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<td>UPRU</td>
<td>Urban Problems Research Unit</td>
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<td>WCEDF</td>
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<td>WCRSC</td>
<td>Western Cape Regional Services Council (same as RSC)</td>
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<td>WCED</td>
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<td>WWF</td>
<td>World Wide Fund For Nature</td>
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<td>ZSA</td>
<td>Ziller Shandler Associates</td>
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CHAPTER ONE
INTRODUCTION

Urban environmental problems are created, *inter alia*, by population growth - a factor which occurs in spite of, and apart from, specific historical trajectories in social, economic and political relations (Devas and Rakodi, 1992). Population growth means that there is a need for the provision of more basic services and infrastructure, as well as more jobs and factories. One implication of creating social and physical infrastructure is that more renewable and non-renewable resources are being used. The challenge is to provide for the necessity for economic growth, as well as for human needs, in a sustainable manner.

In fact planners, urban managers and environmental managers in developing countries, face overwhelming challenges due to population growth, and the associated environmental problems of providing shelter, basic services and opportunities for employment (Devas and Rakodi, 1992). Sustainable development is usually the point of departure regarding any issue related to environmental problems and is the central principle of all environmental issues (Fuggle and Rabie, 1992; van Wyk, 1999; Devas and Rakodi, 1992; Drakakis-Smith, 1995).

The concept of sustainable development has a long history. However, it became more focused with the release of the Brundtland report entitled *Our Common Future*, which was prepared for the World Commission on Environment and Development in 1987, and which quickly gained momentum to the point where there has been a proliferation of literature world-wide on this topic. The definition for sustainable development given in the report is “…development which meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p.8). This definition points to the interdependence and interrelationship between economy, development and the natural environment. Five years later in 1992, the Rio Earth Summit’s United Nations Conference on Environment and Development (UNCED) reinforced the concept of sustainable development, which was adopted by more than 170 leaders world-wide. It was given operational expression through the Agenda 21 programme that calls for local government bodies to consult with their communities and develop a strategy for sustainable development - commonly referred to as Local Agenda 21 (LA 21). The Rio declaration was revisited in 1997 at the “Rio plus 5” where action programmes set out in Agenda 21 were reviewed, refined and endorsed for the guidance of activities in developed and developing countries. An important emphasis was that environmental programmes had to take cognisance of the need for the
sustainment of livelihoods and alleviation of poverty. The revised Rio declaration sets out the following principles regarding the environment and development:

- that environmental policy should be an integrated part of development policy;
- that all countries have a common but differentiated responsibility for resolving global environmental and development problems;
- that environmental problems should not be exported from one country to another; and
- that recognition be given to the special need for assistance on the part of developing countries in order that they be able to implement decisions (United Nations: Sustainable Development - Agenda 21 (n.d.) [online]. Available from: http://www.un.org/esa/sustdev [Accessed 25 April 2000]).

These above principles, emphasise the fact that the environmental problems of many countries are tied to issues of development and poverty.

In the interim there has been a growing debate about the surrounding terminology of sustainable development, which dates back to the early nineties. The authors of Caring for the Earth: A Strategy for Sustainable Living published in partnership by the IUCN, UNEP and WWF in 1991, adopted the term “sustainability”. Phrases such as “sustainable society” – living by principles which reflect the need to respect and care for other people and for nature and “sustainable living” – the development of practical strategies based on the sustainable principles – are used. This publication challenges the WCED’s definition of sustainable development and suggests “…improving the quality of human life while living within the carrying capacity of supporting ecosystems” (IUCN et al, 1991, p.10). In other words, sustainable development is not necessarily able to be guaranteed in the long term because there are so many unknown or unpredictable factors involved. One of the themes in this book involves the necessity for working towards a sustainable society by setting up a national framework for the integration of development and conservation, which involves all interests and which seeks to identify and prevent problems before they arise. Following on from this, the national framework should be adaptive and able to redirect its focus in response to experience and new needs (IUCN et al, 1991).

Sustainable development requires that tradeoffs be negotiated by enhancing the development of human activities so that they are socially beneficial, environmentally sound, and economically feasible (McCarney, 1995). This implies that there should be an integrated relationship amongst the various issues involved - physical planning and development, social, economic and environmental. Human activity needs to be regulated through government intervention through the creation of, for example, regulatory frameworks (Devas and Rakodi, 1992; McCarney, 1995). This intervention
must ensure that “…humanity take no more from nature than nature can replenish” (IUCN et al, 1991, p.8). Regulatory frameworks provide a means for equitable, fair and just decision-making for the enabling of informed and sustainable decisions. Cities need to be planned and managed through intervention in order to restore a “balance” and to produce more sustainable outcomes (Devas and Rakodi, 1992). To this end, the creation of regulatory frameworks to aid decision-making needs to be holistic (integrated). However, the problem experienced in local government is this: how do we evaluate whether integration has occurred, in preparing Spatial Planning frameworks for example?

This thesis seeks to evaluate a particular spatial development framework in order to assess the extent of integration that has occurred, in order that it may be determined whether a spatial development framework is reaching optimum sustainable levels. The one under examination is the Cape Town Metropolitan Spatial Development Framework (MSDF); a tool called an Integration Framework will be used to assess information on the MSDF.

1.1. Background to the Research Problem

The background to the research problem stated above will be discussed more fully in the subsequent sections and chapters of this thesis.

The issue of integration is seen as one of the many principles of sustainable development. Other principles are, inter alia:

- respect and care for the communities;
- improvement of the quality of human life;
- conservation of the earth’s vitality and diversity;
- minimisation of the depletion of non-renewable resources;
- the necessity for keeping within the earth’s “carrying capacity”;
- the necessity to change personal attitudes and practices;
- the enabling of communities to care for their own environments; and
- the creation of a global alliance (IUCN et al, 1991).

All these principles, including that of integration, are interrelated and mutually supporting.

South African Context

In South Africa, environmental concerns gained recognition in the 1980s and more recently in the 1990s, through the formulation of policy and legislation on the environment. The Bill of Rights chapter in the Constitution encourages the passing of legislation to “…secure ecologically
sustainable development” (RSA, 1996b, section 24 (b)(iii)). From a physical planning perspective the Development Facilitation Act (67/1995) (DFA) (RSA, 1995) was the first statute after the democratic elections in 1994 to recognise sustainable development in its set of principles, of particular note is section 3(1)(h) on sustainable land development which states: “Policy, administration practices and laws should promote sustainable land development at the required scale in that they should –

(i) promote land development which is within the fiscal, institutional and administrative means of the Republic;
(ii) promote the establishment of viable communities;
(iii) promote sustained protection of the environment;
(iv) meet basic needs of all citizens in an affordable way; and
(v) ensure the safe utilisation of land by taking into consideration factors such as geological formations and hazardous undermined areas.”

While it can be argued that the principle on sustainable land development in the DFA emphasises development as such, rather than the sustainable use of resources such as land, water, air and soils, the definition requires that a pragmatic approach to this issue be followed: communities should have the ability to access employment opportunities and basic services in an affordable way. It also stresses the need for sustainable outcomes – the use of sustainable land development approaches is aimed at protecting the environment.

The National Environmental Management Act (107/1998) (NEMA) defines sustainable development as “…the integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure [that] development serves present and future generations” (RSA, 1998a, section 1 (1)(xxix)). This definition takes on a much broader perspective than is portrayed in the DFA. The National Environmental Management Act (107/1998), like the DFA, also puts “…people and their needs at the forefront of its concern,” so as to “…serve their physical, psychological, developmental, cultural and social interests equitably” (RSA, 1998a, section 2(2)). It places emphasis on development rather than sustainability. More important, and crucial to this thesis, NEMA conceives of sustainable development as being a concept embracing interconnectedness through the integration of social, economic and environmental issues into the decision-making processes of planning and development.

It may be noted that South Africa’s position regarding the “global definition” of sustainable development, is that this country not only supports the notion of inter- and intra-generational equity, but also places a strong emphasis on the socio-economic values of human wellbeing and the
protection of natural resources. The reason for this difference lies within the local agenda versus the global agenda debate. McCarney (1995) argues that there has been a shift in concentration from local issues to global issues, and their role within international agencies. The author compares the agendas of the Brundtland Commission and United Nations Conference on Environment and Development (UNCED). McCarney (1995) demonstrates that while the Brundtland definition focused on the common challenges of population, food, species and ecosystems, energy choices and industrial production, UNCED emphasised natural resource issues and the natural environment such as ozone depletion, biological diversity, global warming and the like. McCarney (1995, p.235), further argues that this shift has occurred because the agenda for UNCED has been influenced by Northern countries which are “...less politically conscious of pressing urban problems” and do not have to address issues regarding the lack of basic services such as shelter, piped water and sewerage. It can be argued that there is a distinction between the environments of cities in developing, as opposed to developed, countries. The latter (the North) concentrate on higher-order environmental issues like climate change, while developing countries (the South) focus on the interrelationship between poverty and the environmental degradation of immediate living environments (Fuggle and Rabie, 1992; McCarney, 1995; Drakakis-Smith, 1995).

Regarding the North/South debate, South Africa shares similar environmental problems both with the rest of the developing world and, as a relatively industrialised country, with those of the North as well. This is evident in the way more affluent communities focus on urban and industrial pollution and the creation of “green cities”, whilst poorer communities are more concerned with access to resources and basic needs. These environmental problems were compounded by apartheid policies, for example the separatist development strategies by means of which Black communities were localised separately and far away from White urban ones; the latter had exclusive access to all the resources, which contributed to the impoverishment of Black communities.

Criticism has also attended the concept of sustainable development. Both Shiva (1992) and Bartlett (1998) argue that “sustainable development” is a contradiction in terms. Bartlett (1998) suggests that when the term “sustainable growth” is applied to material things, it is self-contradictory. He argues that the term implies that growing demand will become infinite in size whilst the resources of the ecosystem remain finite in size. Thus, if sustainable development is to be achieved, materials need to be recycled to the maximum degree and no growth can occur in the annual material consumption of an economy. Bartlett (1998) maintains that population growth is the biggest problem contributing to this issue. To become sustainable, population growth needs to be reduced which will, in turn, reduce the need for materials. Thus, there will be a lesser impact on the
resources of the ecosystem. Also, growing affluence and consumption patterns would be variables in this equation.

Shiva (1992) argues that the concept of development and growth through sustainable development is based on a false interpretation of sustainability. The author argues that the market economy reigns supreme, as it dictates, through demand for profits and capital accumulation, how nature and human needs are managed. This creates ecological instability, as new forms of poverty are created when people have to compete for scarce resources with those who have a profit motive. Even if raw materials and market commodities do have substitutes, sustenance can not be replaced with money. A pseudo-sustainability can be created in this way.

**Sustainable Development: Urban Planning and Development**

Sustainable development embraces the concept of the integration of environmental, social and economic issues. McCarney (1995, p.245), argues that the regeneration of cities should follow an integrated approach based on the concept of ecosystems. Furthermore, the author states that a city should not be seen as separate from nature, and quotes Kevin Lynch, “People and their cities are as much natural phenomena as trees, streams, nests and deer paths. It is crucial that we come to see ourselves as an integral part of the total living community”. The ecosystems approach is based on the interrelationships amongst environmental elements.

Areas of environmental concern need to be addressed in an integrative manner, as they are interconnected in diverse and complex ways. This interconnectedness was identified by Drakakis-Smith (1995) who postulated the following components of sustainable urban development (Figure 1.1):
Drakakis-Smith (1995) argues that economic, social, environmental, demographic and political issues are all interconnected and to achieve sustainable urban development there is a need to integrate these issues as much as possible.

Firstly, economic activities, employment and poverty should be integrated to link the external role of the city with national and regional economy. Secondly, the responsibilities of the state are to provide basic infrastructure for communities. To do this a better understanding is required of trade-offs and the relationships amongst the urban environment, urban governance and urban poverty (McCarney, 1995). This must be seen within the context of “…most cities struggling to cope with detrimental consequences of rapid growth” (Drakakis-Smith, 1995, p.664). South African cities have their own distinctive features, compounded by the “separate-but-equal” development ideology of apartheid in the past. It produced a complex set of spatial and physical problems, which resulted in the inefficient functioning of cities through inappropriate physical planning. In the apartheid era, cities were characterised by formal White suburbs with large townships or informal settlements, and endemic poverty, on their outskirts; this led to the disintegration of local government and service provision (Patel, 2000).
These issues are closely linked to the third area of concern, i.e. the urban social environment and the provision of basic needs illustrated by Figure 1.1. A wide range of concerns is encompassed in the latter, and includes the provision of shelter, food, education and health care. The social environment includes the enhancement of human, cultural and social capital. Capital is any store of value that facilitates action. There are five different types of capital mentioned, as follows:

- **financial capital:** money available for investment;
- **physical capital:** real estate, equipment and the infrastructure of economic production;
- **human capital:** training that increases productivity on the job which thereby earns monetary returns (training costs money and is therefore an investment);
- **cultural capital:** good cultural knowledge that can be turned to the owner’s financial advantage (e.g. elocution, dress, art appreciation, golf); and
- **social capital:** relationships of trust embedded in social networks (these become a store of value when participants can rely on one another to uphold social norms and to reciprocate favours).

Capital has several properties. It can be stored; it has mutual metamorphosis (e.g. selling and buying inventory, getting a job through networking); and it can be taxed (e.g. depreciation, risk, theft, obsolescence, changing knowledge or fashions). In general, the metamorphosis of any form of capital into any other form of capital in turn requires capital to initiate the metamorphosis. Nothing comes of nothing; to trade, one must have something to exchange with which therefore excludes the poor and dispossessed who lack money, property, education and knowledge. Only social capital has popular access (a unique property) and so, in turn can create and maintain itself. Cohesive communities have large social networks – a capital resource that can be traded (e.g. rotating savings and credit associations). Thus, social capital costs no money and is available to all. It can be transformed into financial, physical, human and cultural capital (N. Dewar, pers. com., 2002).

Key environmental problems for the urban poor have been highlighted as follows: inadequate, overcrowded and poorly located housing, lack of basic services and infrastructure (e.g. water, sewage, and waste), air pollution, urban sprawl, inefficient and inequitable urban structure and lack of public transport (CMC, 2000; McCarney, 1995). These can all lead to the breakdown of social norms, cultural values and established networks.

The debate concerning the role of urban social movements in accessing limited social and physical resources is linked to the failures and limitations of democracy. These are all issues which are currently being experienced through transformation in the post-apartheid era in South Africa. Patel (2000) argues that much of the transformation currently underway and which contributes towards more relevant sustainable development, is the relatively recent move from Spatial Planning
(physical planning) to Integrated Development Planning; this includes institutional transformation and co-ordination, democracy and community participation.

Fourthly, employment, poverty, the urban environment, the meeting of basic needs and the question of human rights are all issues of concern that need to be set against the conditions of their demographic context. Population growth rates, migration and morals are also issues to be assessed and incorporated into the programme of development.

The fifth and last component in Figure 1.1 relates to the political sphere, which Drakakis-Smith (1995) considers an important dimension of urban sustainability - for example, where planning processes, via political decision-making, need to take cognisance of the situation of the poor. McCarney (1995) makes the point that in South Africa there are strong relationships between the urban environment and issues of governance and that these should not be separated. Institutional transformation in post-apartheid South Africa, through democracy, participatory planning and restructuring of government institutions, is leading to more sustainable practices, and thus should be seen as a component of sustainable development (Patel, 2000).

In summary, the discussion above establishes that sustainable development should embrace the concept of integration of economic, social, environmental and physical development. Furthermore, that the high levels of poverty and history of unequal access to resources and power in South Africa have emphasised the need for an integrated and holistic approach in order to achieve sustainable development, with a critical focus on democracy, participation and transformation of institutions (Patel, 2000).

However, government intervention, via regulatory frameworks, and tools such as Spatial Planning and Strategic Environmental Assessment are required, as will be discussed below.

Towards Sustainable Development – Regulatory Frameworks

Regulatory frameworks and administrative control as approaches to intervention have evolved over time along with social, economic and political environments, and have been influenced by changing ideas, ideologies and fashions (Fuggle and Rabie, 1992; Devas and Rakodi, 1992). Thus, new measures and tools are constantly being developed to cope with new challenges. These need to state clearly the scope, method and process that should be followed. For intervention to be effective, government needs to generate the skills and capacity to apply such tools to aid the
decision-making process (Fuggle and Rabie, 1992; Devas and Rakodi, 1992). Government regulatory measures can either be direct, either pre-empting or preventing environmental impacts, or mitigating and managing those that have already occurred (e.g. via laws and regulations), or indirect, via encouraging and changing people’s attitudes (e.g. by means of education and capacity-building). Alternatively, the measures could provide a platform for enabling the management of the environment and the achievement of sustainable development. These supportive measures can either inform decision-making or facilitate impact management (e.g. Strategic Environmental Assessments, integrated resource planning) (RSA, 1997).

Drakakis-Smith (1995) argues that most governments in developing countries consider environmental concerns as secondary to the pressing problems of economic growth and politics, and thus do not have sufficient knowledge and information on the environmental degradation that is taking place. Insufficient political will and inadequate institutional capacity to manage the environment is further compounded by problems deriving from the failure to provide access to resources and basic needs (Wyn Williams, 1997; McCarney, 1995). Good governance depends on the ability of government to empower the general public in the participation of decision-making (McCarney, 1995; Drakakis-Smith, 1995; Wyn Williams, 1997). Issues such as decentralisation, democratisation, empowerment and community-based involvement have been identified as matters that play an important part in achieving sustainable government intervention strategies (Wegelin and Borgman, 1995; Wyn Williams, 1997). Environmental problems, as discussed in the preceding sections, are multidimensional and interconnected and it is essential that the intervention develops a “…strategic approach to environmental management that must be multi-sectoral, multi-disciplinary and participatory” (Wyn Williams, 1997, p.24). Other than preparing regulatory frameworks, government may intervene through tracking, measuring and monitoring the rate of change taking place in the environment. Hodge, Hardy and Bell (1999) argue that change should be measured in order to review and to learn from previous mistakes, in an attempt to improve the situation and thus contribute to human and ecosystem wellbeing.

Government intervention occurs at all levels (i.e. national, provincial and local). In South Africa, national policies address, inter alia, the huge backlogs of the infrastructure needs of the poor, as well as unemployment, health and educational matters, in order to create sustainable livelihoods and alleviate poverty. Several environmental policy processes have been initiated by the Department of Environmental Affairs and Tourism as well as other departments; these aim to address environmental issues of land, agriculture, mining, rural development, biological diversity, pollution control, forestry and water, as well as Environmental Impact Assessment (EIA).
The Reconstruction and Development Programme (RDP), a national government intervention strategy, was initiated in 1995 specifically to address issues with regard to the provision of basic services, shelter and the creation of employment. Later in 1996 the Growth, Employment and Redistribution Strategy (GEAR) was implemented. In combination, these formed the basis of national government’s transformation process and have set certain targets in terms of achieving higher levels of economic growth, development and employment. Increasing human requirements and economic activities require government intervention, especially where there are ever-increasing pressures on the use of land (employment nodes and settlements) and other resources. These have great impacts on the environment at the local level.

Integrated Environmental Management (IEM) is another regulatory mechanism at national level to manage the environment. The intention of IEM is give decision-makers adequate information on possible adverse environmental effects of an activity and to help make decisions on possible alternatives or investigate whether mitigation measures or the “no-go” option needs to be adopted (RSA, 1997).

In South Africa, land is seen as a scarce resource that requires intervention measures to promote its sustainable and integrated management. Land-use regulatory measures are activated through two mechanisms, i.e. Spatial Planning and land-use management (RSA, 2001). In the year 2000 the Integrated Development Plan (IDP) was introduced as a means whereby local governments could start co-ordinating their budgets and integrating their projects (RSA, 2000). A component of the IDP is an overarching spatial development framework which is intended to manage the local governments’ land resources appropriately.

Spatial development plans and strategies impact on the environment and should be dealt with in the context of IEM. To achieve sustainable development, environmental issues have to be integrated into all development processes at all levels of decision-making. Strategic Environmental Assessment constitutes a mechanism for the integration of environmental concerns into development processes (RSA, 1997).

Thus, Spatial Planning and Strategic Environmental Assessments are, *inter alia*, tools used by local government authorities as a means to intervene and achieve sustainable development. Both, at times, have common objectives, as far as achieving sustainable development is concerned, but different rationales and methodologies (Eggenberger and Partidario, 2000). In this regard, one
problem experienced in local government is that spatial planners, given their professional training, think that environmental assessments are not necessary and tend to believe that the procedures and methods they themselves use are sufficient for the integration of biophysical, social and economic issues, and thus for the achievement of sustainable development (Eggenberger and Partidario, 2000; Partidario, 1996; Healey et al, 1997). Negative evidence, including the experience of the inadequate functioning of towns and cities in South Africa, suggests otherwise.

1.2. Research Objective and Motivation

Since integration is a principle embraced by the concept of sustainable development, how is it possible to ascertain whether integrated planning is occurring? This is the question that constitutes the research problem. The challenge will be to use set criteria in order to assess the degree of integration in a particular Spatial Planning exercise.

The international study on the integration of environmental, social and economic issues in Spatial Planning (hereafter referred to as the International Study on Integration, or ISI) has its origins in the recent emergence of Strategic Environmental Assessment (SEA) as a tool for planning and decision-making (Eggenberger and Partidario, 2000). The ISI reviewed existing practices in integrated planning and environmental decision-making. To do so, it developed a framework based on five dimensions of integration, namely substantive, methodological, procedural, institutional and policy. A literature review which focuses on this framework and the topic of integration will be discussed in more detail in chapter two.

In essence, institutional intervention and policy development are to be understood in terms of the allocation and management of institutional as well as land resources, and their sustainable use. The integration of the substantive issues of the social, economic and environmental sectors include both those global and local. The integration of tools used and procedures followed in the Spatial Planning exercise addresses the methods and procedures dimension of integration. Thus, there are five key dimensions - substantive, methodological, procedural, institutional and policy focussed upon by the Integration Framework for the evaluation of the integration of Spatial Planning into social, economic and biophysical issues (Eggenberger and Partidario, 2000).

This Integration Framework has never been used within the South African context. However, applying it to a particular Spatial Planning process in this way could provide an improved understanding of how Spatial Planning and environmental assessment at a local level could
integrate better in the promotion of sustainable development. A case study located within the Cape Town Metropolitan area was selected for this research. More details with regard to this will be provided in chapters three and four.

The Study Area: Cape Town Metropolitan Area

Cape Town (Figures 1.2 and 1.3) is located on the extreme south-western tip of South Africa. It is bounded by the Atlantic Ocean to the west, False Bay to the south and the rural hinterland of farms and mountain ranges to the north and east. Cape Town has a unique environment of mountains, coastal plains, beaches and rocky shores and is located within the Cape Floral Kingdom, the smallest of the six plant kingdoms in the world. The long-term sustainability of its economy and the quality of life of its residents are reliant on the quality of the environment. These unique environmental resources must be carefully managed to ensure that future development is environmentally sustainable (Pheiffer, 2001).

FIGURE 1.2: THE CITY OF CAPE TOWN IN SOUTH AFRICAN CONTEXT

Source: CMC, 1996
FIGURE 1.3: CITY OF CAPE TOWN BOUNDARY

Source: CoCT (CMC)
Cape Town metropolitan area, like many other urban areas in South Africa, has inherited a complex set of spatial and physical problems, largely caused by apartheid legislation under the “apartheid era” which have resulted in an inefficient city. These problems include high levels of poverty - 26 percent live below the household subsistence level, and the unemployment rate is 20 percent; the informal employment sector employs 22 percent of the Cape Town working population. Other problems include rapid population growth at 3 percent per annum; inadequate social facilities such as parks, sports and health centres; poor levels of education facilities and training; a lack of adequate and affordable housing (in the year 2000 an estimated backlog of 230000 houses was identified) and a lack of basic infrastructure and services; a lack of easily accessible health care facilities; the impact of HIV/ AIDS will mean that the number of orphans will have increased to 76 percent, or 88000, in the year 2006; and finally, inadequate public transport has resulted in high car ownership, which reinforces longstanding issues of urban sprawl and travelling long distances from and to work (Pheiffer, 2001; CMC, 1996). Urban managers are now faced with a challenge in terms of these urban realities that have created a myriad of environmental problems, and which have had certain implications for the Spatial Planning and development of the City of Cape Town.

Spatially, most of these problems are being experienced in the poorer Black areas of the metro south-east (areas consisting of Khayelitsha, Gugulethu, Phillipi, Mitchells Plein), which lacked social and economic opportunities (Figure 1.4).

**FIGURE 1.4: AREA OF DEVELOPMENT PRIORITY**

Source: CMC, 1996
The Cape Town Metropolitan Spatial Development Framework (MSDF) is an overarching long-term spatial development framework, which originated in 1991. Its main purpose is to guide the form and location of physical development in the Cape Metropolitan Area, and is based on a defined vision of a well managed, integrated, metropolitan region in which development is intensified and integrated along public transport corridors, and sprawl contained at the urban edge (CMC, 1996).

The objective of this thesis is to apply the Integration Framework to the Cape Town Metropolitan Spatial Development Framework (MSDF) in order to assess the extent to which integration has occurred in the process of Spatial Planning. The reason for this is to determine whether the MSDF furthers the goal of sustainable urban development.

**Research Design Methodology**

A qualitative and inductive approach was adopted when answering the research question. The research methodology used a particular case study, selected to establish and evaluate the different dimensions of integration in the MSDF process, and an inductive approach was adopted (Strauss and Corbin, 1998). **Figure 1.5** illustrates the research design. Strategic Environmental Assessment and Spatial Planning are two types of tools used in environmental planning and management; integration is one of the key principles of sustainable development. An Integration Framework was used as an evaluation criterion when assembling data to interrogate the research question. The analysis relied on data collated from relevant documentation and interviews. The evidence was analysed by making use of two different techniques, i.e. time-series analysis and pattern matching. Finally the results were generalised back to theory.
1.3. Scope of Study

The scope of this thesis is described below:

- the undertaking of a literature review on integration in general, with regards to Strategic Environmental Assessment and Spatial Planning;
- the description of the Integration Framework as a tool for measuring the extent of integration;
- the justification of the Integration Framework in terms of two case studies to which this framework has been applied;
- the application of this Integration Framework to MSDF by conducting interviews and assessing MSDF documentation;
- the analysis of the results in order to assess the extent of the integration which has occurred;
- the focus on integration is confined to the Spatial Planning field, as this is a particular area within local government where it is greatly required.

1.4. Structure of Thesis

This thesis comprises five chapters. Chapter one provides the background to the research problem, states the research question and provides an overview of the thesis. The current literature on the topic of integration and the Integration Framework is discussed in chapter two. Chapter three specifies the methodologies and techniques used in this research. Results of the case study research are presented and analysed in chapter four. Chapter five discusses conclusions drawn from the research and identifies what contributions it has made to the theory discussed in chapters one and two. Finally, the References provide a list of all literature sources used.
1.5. Conclusion

Sustainable development is a difficult concept to interpret, as it is bound up with rhetoric, and at the same time takes on a paradoxical character. There are many debates and different points of view on this concept. Any of which can be accepted, depending on the point of reference or set of values being used. The challenge here is to integrate environmental sustainability with the development priority needs of the country. It is evident that the understanding of sustainable development in the South African urban context has its own meaning and needs to be sensitive to profound political, cultural and social changes (Patel, 2000). But more important, sustainable development needs to take on an integrated and holistic approach. Government intervention is required in order that an integrated approach in decision-making be implemented, so that, by integrating economic, social and environmental issues against the back-drop of a demographic and political sphere, sustainable development may be achieved.

In this thesis, the researcher argues that sustainable development can be achieved through an integrative approach in Spatial Planning. The aim here is to show that assessment and analysis of a Spatial Planning (government intervention) exercise, aided by the Integration Framework (substantive, methodological, procedural, institutional and policy) will determine the level of integration, and whether it furthers the goal of sustainable development.

This chapter has laid the foundation on which this thesis is structured. It introduces the research problem and related questions. It describes the methodology briefly and provides an outline of the thesis structure. The following chapters will detail this research, and its conclusions.
CHAPTER TWO
THE INTEGRATION FRAMEWORK

2.1 Introduction

Chapter one established that integration is a key principle of sustainable development; that integration between conservation and development is needed in order to achieve this, and that government intervention is needed to ensure that it happens through integration with the aid of certain measures, tools and mechanisms. Two particular tools used in local government are Spatial Planning and Strategic Environmental Assessments (SEA), which will be discussed more fully below. The question is: how do we evaluate whether integration has occurred in Spatial Planning? This chapter will explore the meaning of the term "integration" and how it is perceived within the development planning and environmental management realms. It will also discuss the nature of SEA and Spatial Planning. Chapter one briefly discussed the Integration Framework that will be used to evaluate the level of integration in a Spatial Planning process. This chapter will explain and demonstrate the Integration Framework tool used in the research undertaken for this thesis.

2.2 Defining Integration

2.2.1 The General Concept

The collective concept of integration is very broad. The term "integration" is used in many different contexts, such as in the fields of planning and environmental management. Most of the literature does not provide a specific definition of the concept, unless it is defined exclusively in terms of a specific theme or sector of interest. For example, in the justice community, integration is described as those processes that deliver information and intelligence for the enhancement of decision-making at all levels of the justice system. Integration of information improves public safety and results in efficient use of public resources. Therefore, having the right information at the right time and the right place results in better decisions (United States Government: Office of Justice Programs – Information Technology Initiative, Justice Integration (n.d.) [online]. Available from: http://it.ojp.gov/integration [Accessed 22 May 2002]). There has also been an attempt to define integration in terms of interracial discourse in America after the civil rights era. In this essay it was stated that there is no single definition or understanding of the general concept on integration (The Nation: Reclaiming Integration, by Eric Foner and Randall Kennedy (n.d.) [online]. Available from http://past.thenation.com/issue/981214/foner.htm [Accessed 22 May 2002]). In the realm of sociological
theory, integration has frequently been discussed; however, Cowdell and Gubin (1999) came to the conclusion that it is not defined within texts, but that when the concept is discussed it is by way of synonyms or the way in which the state of integration is achieved.

Patidario (1998) stated that integration is something that happens all the time. For example, she claims that when two different topics need to be addressed together, this is integration, similarly, if two different professionals are addressing the same problem with similar objectives, they are integrating. Furthermore the author argues that integration should not be seen as the sum of parts that make up a whole (Figure 2.1). If new parts are added, a whole new entity is created due to the new relationships that are established, because each individual part has specific characteristics and dynamics, which in combination act in a different way to produce a different outcome (Patidario, 1998).

**FIGURE 2.1: INTEGRATION**

![Diagram of integration process](attachment:image.png)

The discourse on integration above suggests that this concept may be too complex and difficult to explain and thus a precise definition does not exist. It should be noted, however, that to some, integration is considered a goal in itself and to others, rather a means to an end.

This thesis will investigate and analyse the way in which integration is achieved in Spatial Planning. This topic is a key area in international debate and research, and can be attributed to the perception of some spatial planners that SEA “...re-invents procedures and approaches” already in place in Spatial Planning (Eggenberger, 1998). The perception in other cases is that integrating Spatial Planning and SEA, is crucial for sound development and that this creates an opportunity to force sustainability approaches into decision-making (Eggenberger and Patidario, 2000).
2.2.2 Integration Perceptions in Spatial Planning

Spatial Planning is a strategic instrument used to co-ordinate all sectors of human enterprise (e.g. social, cultural, political, economic, environmental) through the ordering of space (Healey et al., 1997; RSA, 1999). It deals with the pre-emptive co-ordination of all human activities which have an impact on our living space and, reciprocally, how spatial distributions influence and determine human behaviour. Its aim is to allocate different land-use functions and activities as effectively and efficiently as possible by capitalising on the specified and appropriate location. Spatial Planning is used to describe a sphere of activity which is allegedly “neutral” and “technical”. However, in practice it is profoundly political (for example, within the South African historical context, it was a powerful tool for controlling socio-economic and land-use patterns by the implementation of separatist development and social control (RSA, 1999)). Since most developmental issues have spatial implications, Spatial Planning is an important integrative and interventionist tool. The Green Paper on Planning and Development in South Africa (1999) states that developmental issues in Spatial Planning need to make reference to the full range of social, cultural, economic, political, environmental and technological issues and that these need to be addressed in a sustainable manner.

Spatial Planning is a public sector activity “…which creates a public investment and regulatory framework within which private sector decision making and investment occurs” (RSA, 1999, p.33). These regulatory frameworks are of a substantive and procedural nature with principles that guide the location and quality of development and physical infrastructure. It is thus the role of government agencies to initiate, develop, implement and monitor strategies, plans, policies and projects, and to regulate the location, timing, type and form of development (Healey et al., 1997). The aim is to ensure that development occurs in an orderly and sustainable manner.

To develop the public investment and regulatory frameworks and to identify priority projects within them, it is necessary to go through stages of a development cycle. The planning system has a layering approach, where policies or visions are evolved which inform the creation of concepts or programmes, which in turn lead to plans and eventually to individual projects. Each layer has its own set of strategies as to how it will be implemented within a timeframe and budget (Eggenberger and Partidario, 2000). Policies, plans and programmes (PPP) (Figure 2.2) are “strategic” components of the development cycle. This strategic level refers to a set of objectives, principles and policies that give shape to the vision and development intentions of PPP (Therivel and Partidario, 1996). A “project” is distinct from PPP and can be considered as the implementation
aspect of the development cycle (Therivel and Partidario, 1996). It can also be referred to as a proposed capital undertaking, typically involving the planning, design and construction of a large-scale plant, facility or structure (Sadler and Verheem, 1996). Thus there is a hierarchy or tiering of PPP and projects in the development cycle (Therivel and Partidario, 1996). This multi-layered planning system is a powerful and common instrument for the integration of plans. It could either reflect a "top-down" approach where policy informs plans, programmes and projects, or a "bottom-up" approach, where grassroots planning projects inform policy development (RSA, 1999).

**FIGURE 2.2: STAGES IN THE DEVELOPMENT CYCLE**

![Diagram of development cycle]

Source: Adapted from DEAT, 2000

**Figure 2.2** illustrates that policy, plans and programmes occur at a strategic level in a development cycle. Policies are broad statements of intent that initiate this cycle. Policy objectives are implemented through the identification of plans and programmes. Both these identify projects for the carrying out of the selected options, which are then implemented and thereafter monitored (DEAT, 2000). Policies, plans and programmes or "PPP" as described in the above definitions, are the more strategic tiers of decision-making within the development cycle (Therivel *et al*, 1994; Sadler and Verheem, 1996). The meaning of PPP differs from country to country, as it is dependent on the political and institutional context. In terms of the South African context, the definition of PPP can be seen in **Table 2.1** below.
TABLE 2.1: POLICIES, PLANS AND PROGRAMMES

<table>
<thead>
<tr>
<th>POLICY</th>
<th>PLAN</th>
<th>PROGRAMME</th>
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<tr>
<td>A general course of action or proposed overall direction that is being pursued and which guides ongoing decision-making.</td>
<td>A purposeful, forward-looking strategy or design, often with co-ordinated priorities, options and measures that elaborate and implement policy.</td>
<td>A coherent, organised agenda or schedule of commitments, proposal instruments and/or activities that elaborate and implement policy.</td>
</tr>
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</table>

Source: DEAT, 2000

The role of Spatial Planning is to integrate different sectoral elements creatively (RSA, 1999); and so spatial planners are to become “…listeners and articulators of what they listen to from others, as well as being responsible for integrating their contributions” (Vasconcelos and Reis, 1997, p.113). Spatial Planning can “…provide a context and focus for ethical issues, social justice, development processes, regeneration and strategies for sustainable development” (Albrechts, 2001, p.37).

The fundamentals of Spatial Planning can be summarised as follows:

- process-orientated - the process will determine the product (outcome); thus an integrated process is required to achieve an integrated product;
- integrative in its assessment of potentials, constraints and impacts on development;
- co-ordinative, collaborative and participative in its procedures;
- layered in its approach to the sharing of responsibilities among different levels of government;
- proactive - determining the potential of the environment to shape itself;
- normative in purpose - decision-making is based on principles (discretionary) and is not rule-based;
- innovative in its search for solutions - including alternatives;

There has been resistance from some spatial planners to the inclusion of environmental assessment in their policy-and-plan-making processes. These planners believe that Spatial Planning procedures and approaches are already in place and are sufficient for the integration of biophysical, social and
economic issues via the co-ordination of different sector policies with respect to sustainable development (Eggenberger and Partidario, 2000; Partidario, 1996; Wiseman, 2000). However, Healey et al (1997) have identified several problems and deficiencies in Spatial Planning processes. One of the problems of specific interest was that plans failed to take account of new values and concerns, notably with respect to environmental quality: "...the environment was usually treated either as a landscape ..... for economic and social life or as a container within which activity happened or in terms of the aesthetics of built form. Biospheric .... relations were largely ignored" (Healey et al, 1997, p.28). Another deficiency which was highlighted, was the absence of a collaborative consensus building approach when involving key actors in articulation and implementation of public policy.

There has been a shift in the articulation of policy frameworks from spatial plans to a normative approach when it comes to identifying policy criteria, standards, indicators, output measures and benchmarks. Furthermore, the introduction of new environmental management devices such as LA 21 calls for Spatial Planning to adopt new roles in anticipating development, proposing alternatives and other measures, and in co-ordinating sector activities (Healey et al, 1997; Eggenberger and Partidario, 2000).

Since the late 14th century, planning has followed an holistic approach via the establishment of multidisciplinary teams for the execution of its work (Partidario, 1998). This is an indication that there is in fact a level of integration within Spatial Planning. In South Africa, a process to review current planning approaches and procedures was necessary in order to recommend changes, and was initiated in 1999 (RSA, 1999). More specifically, it recommended that inter-sectoral decision-making within government spheres should be promoted and that such planning and development processes be developed, thus emphasising the need for integration. Integrated development planning emerged as a distinct approach in 1995 and was promoted by the Reconstruction and Development Programme office of national government. Integrated development planning at that stage was defined as:

"....a participatory planning process aimed at integrating sectoral strategies, in order to support the optimal allocation of state resources between sectors and geographical areas and across the population in a manner that promotes sustainable growth, equity and the empowerment of the poor and the marginalised" (Department of Provincial and Local Government, 2000).
Thus it was only fairly recently that these integration ideas, as set out under the objectives of local government, were brought into the Constitution (RSA, 1996b, section 152) as well as several other policy documents. Examples are:

- White Paper on Local Government;
- Green Paper on Development and Planning;
- Development and Facilitation Act, 1995;
- Local Government Transition Act, 1996;
- Municipal Structures Act, 1999; and

The purpose of this approach to planning is to achieve faster and more appropriate service delivery, as well as a framework for economic and social development within a municipal area.

The Integrated Development Plan (IDP), as prescribed in chapter five of the Municipal Systems Act, 2000, is a planning instrument that addresses the economic, environmental, socio-economic, institutional and spatial issues of a municipal area and is linked to a municipal budget. This implies that planning is no longer confined to physical land-use planning and development but that it also includes financial, social and other associated considerations. Integrated development planning is also dependent on the integration of other planning instruments, for example Spatial Planning, Zoning, Subdivision and Environmental Assessment (Glazewski, 2000). However, the IDP process will not be discussed further as it is not the focus of this thesis; it is mentioned simply because it played a part in elucidating the case study process and highlighting the need for developing sectoral strategies.

The new challenges to Spatial Planning can be addressed only if integration is accepted as a guiding principle. As such, it can play a significant role in enhancing sustainable development in policy and planning processes by taking environmental concerns into consideration (Elling, 2000; Eggenberger and Partidario, 2000). The integration of Spatial Planning and policy processes with the help of tools such as Strategic Environmental Assessment (SEA - definition follows below) is important, but integration is a complex concept that requires further examination (Thissen, 2000; Eggenberger and Partidario, 2000). Empirical evidence at the interface between spatial planning and environmental evaluation will help to elicit a clearer understanding of how integration can contribute towards sustainable development (Eggenberger and Partidario, 2000). The discussion will now focus on what integration perceptions exist within Strategic Environmental Assessment discourse.
2.2.3 Integration Perceptions in Strategic Environmental Assessment

The literature has indicated that defining Strategic Environmental Assessment (SEA) is complicated due to the complexity associated with the concept.

A widely used definition of SEA is:

"...the formalised, systematic and comprehensive process of evaluating the environmental impacts of a policy, plan or programme and its alternatives, including the preparation of a written report on the findings of that evaluation, and using the findings in publicly accountable decision-making", (Therivel et al, 1994, pp.19 & 20).

Another definition of SEA was later formulated by Sadler and Verheem (1996, p.27) as:

"...a systematic process for evaluating the environmental consequences of proposed policy, plan or programme initiatives in order to ensure they are fully included and appropriately addressed at the earliest appropriate stage of decision-making on par with economic and social considerations."

It can be argued that the first definition of SEA implies that it is a formalised process based on the evaluation of a proposed policy, plan or programme (PPP) and that it is therefore not integrated into the PPP formulation process, but is rather a "stand alone" process. However, the definition of Sadler and Verheem is less exclusive as it allows for integrated and holistic decision-making, which includes the concept of sustainability.

The White Paper on Environmental Policy for South Africa (RSA, 1998b) gives a very narrow definition of SEA, in line with that of Therivel et al (1994), in that SEA is applied separately from PPP formulation processes:

"...a process to assess the environmental implications of a proposed strategic decision, policy, plan, programme, piece of legislation or major plan".

A more recent guideline document on SEA (DEAT, 2000, p.9), suggests that a more proactive and integrative approach to SEA should be adopted in South Africa and defines it as:
"...a process of integrating the concept of sustainability into strategic decision-making".

More recently, another definition provided by Partidario and Clark (2000, p.4) states that:

"...SEA is a systematic, on-going process for evaluating, at the earliest appropriate stage of publicly accountable decision-making, the environmental quality, and consequences, of alternative visions and development intentions incorporated in policy, planning, or program initiatives ensuring full integration of relevant biophysical, economic, social and political considerations".

It is this definition that is adopted in this study. Strategic Environmental Assessment can provide the means whereby environmental objectives, considerations and alternatives are introduced into strategic decisions (Sadler and Verheem, 1996). It can also ensure that the principle of sustainability is carried down from broad policies into individual projects (Therivel and Partidario, 1996: Therivel et al, 1994). This definition adds another dimension to the definition of SEA, in that not only is it proactive and integrative, but is linked to various stages of the development cycle. Strategic Environmental Assessment is used as a tool for the evaluation of the economic, social and environmental concerns of a proposed plan and thus has traditionally been reactive to PPP development. A more proactive approach, which ensures that PPP development is incorporated with SEA process, is now being advocated. However, current literature indicates that practical research is required to explore ways in which SEA can promote sustainable development.

SEA has emerged and has been used as an assessment tool in the preparation of PPPs in South Africa since 1995. However it is not used here as commonly as it is internationally. The late awakening in this country, is due to the adoption of a stronger approach to sustainability, both in the environmental management and the spatial planning fields. Through political and legislative changes, these occurred gradually after the first democratic elections in 1994 (Wiseman, 2000). The SEA studies performed in South Africa have been focused mostly on assessment of the environment and its effect on opportunities, constraints and alternative scenarios for development, as well as being a guide for regional and sectoral initiatives towards sustainability. They have also indicated that there is strong link with physical development planning (Wiseman, 2000).
The perception in European countries is that environmental assessments at a strategic level enhance Spatial Planning processes (Sadler and Verheem, 1996; Eggenberger and Partidario, 2000; Elling 2000). Here in South Africa SEA is recognised in policy at national levels although its implementation is not mandatory. Several Spatial Planning projects carried out in South Africa have included some form of environmental assessment (Wiseman, 2000). Spatial Planning and SEA have different rationales, but often share the common objective of achieving sustainable development. These common goals and objectives need to be studied further and enhanced in order to benefit both Spatial Planning and SEA so that sustainable decision-making in the development process may be attained (Eggenberger and Partidario, 2000).

Current discussions concerning the evolving perceptions that underpin SEA, revolve largely around the extent to which effective decision-making promotes sustainable development (Verheem and Tonk, 2000; Brown and Therivel, 2000; Sadler and Verheem, 1996; Eggenberger and Partidario, 2000; Therivel, 1997; Marsden, 1998; Partidario and Clark, 2000; DEAT, 2000). Considerable research has been conducted over the last decade or so concerning the development and understanding of SEA as an integration and intervention tool (Partidario and Clark, 2000; Therivel and Partidario, 1996; Sadler and Verheem 1996; Therivel et al, 1994; Verheem and Tonk, 2000). The issues considered in the literature cited above concern sustainability, context and integration; these require further discussion.

There is strong advocacy for the use of integration as a preferred means of increasing the effectiveness of environmental assessment in order to promote sustainable development (Eggenberger and Partidario, 2000; Kirkpatrick and Lee, 1999; Fischer, 1999; Marsden, 1998; Buckley, 1998; Partidario, 1996; McCarthy, 1996; Wood and Tomlinson, 2001). The literature, indicates that integration has many dimensions, which makes it a complex concept that needs to be investigated further (Thissen, 2000; Kirkpatrick and Lee, 1999, Eggenberger and Partidario, 2000).

As in Spatial Planning, there are two approaches to integration in SEA literature, the first being the structural or vertical integration of SEA and project environmental impact assessment (EIA), and the second concerning the integration of environmental assessment with other policy instruments such as land-and resource-use planning, which is a horizontal approach (Partidario, 1996; Sadler, 1996).

There has been an abundance of literature exploring the vertical integration of project EIA and SEA. The concept is expressed in different ways, including tiering, “bottom-up” and “top-down”
approaches (Sadler and Verheem, 1996; Therivel et al., 1994; Therivel and Partidario, 1996; Partidario, 1996). In most countries SEA has evolved upward from EIA (of projects), i.e. the “bottom-up” approach, rather than the trickling down of objectives from broader environmental policies to specific projects, which is the “top-down” approach (Therivel, 1993; Brown and Therivel, 2000; Goodland, 1998). Partidario (1996) suggests that the “bottom-up” approach is the extension of project EIA to strategic levels of decision-making, making use of the same kind of procedures, methods and principles. This approach is generally used in countries that have more experience in environmental assessment (Eggenberger, 1998; Eggenberger and Partidario, 2000); the “top-down” approach is however used where sustainable development is promoted via policy and planning at a strategic level, and filtered down to project level. The latter approach is favoured in countries which have stronger planning traditions (Eggenberger, 1998; Eggenberger and Partidario, 2000). Strategic Environmental Assessment in a “top-down” approach could therefore form the framework within which project EIA could be assessed (Figure 2.3).

**FIGURE 2.3: TIERED APPROACH TO INTEGRATED ENVIRONMENTAL MANAGEMENT AND THE DEVELOPMENT CYCLE**

![Diagram](source: Adapted from DEAT, 2000)

Strategic Environmental Assessments are applied at the strategic level in the development cycle (Figures 2.2 and 2.3) and SEA itself is a hierarchy that can set the context for project EIA (Therivel and Partidario, 1996; Sadler and Verheem, 1996; Partidario and Clark, 2000).

Some countries have formal regulatory systems in place for the implementation of SEA; however, many others have an informal system in the form of guidelines (Therivel and Partidario, 1996,
Therivel et al, 1994). Project EIA has been effective within a legislative framework. However, there is uncertainty if the same applies to SEA, due to the flexible and continuous nature of PPP formulation (McCarthy, 1996).

South Africa developed environmental evaluation legislation fairly recently, compared with the United States, which introduced its National Environmental Policy Act some 40 years ago in 1970. In South Africa a national policy on Environmental Conservation, which recognised the value of environmental assessment, was prepared in 1980. This White Paper formed the basis for the Environmental Conservation Act 73/1989, which included some provisions for project EIA (Van Wyk, 1999). Integrated Environmental Management (IEM) emerged in 1989 as part of a national strategy to ensure the integration of environmental concerns into development actions. Integrated Environmental Management lays down the provisions for the investigation, assessment and communication of potential impacts and activities on the environment (Van Wyk, 1999). It was strengthened further by the introduction of a guideline document released by the then Department of Environmental Affairs in 1992. Another national policy released in 1993, entitled “Policy on a National Environmental Management System”, made provision for an holistic approach to the environment and the management thereof. The most recent policy (1998) on environmental management has made a link between planning and environment through IEM. It explicitly requires spatial development planning, as well as other plans to incorporate IEM principles and methodologies. Both EIA and IEM form part of the National Environmental Management Act 107/1998 (NEMA) and its regulations. Strategic Environmental Assessment, however, is not legally required within South Africa. A guideline document has been produced by the Department of Environmental Affairs and Tourism (DEAT) as a voluntary tool for those practitioners who wish to carry out a SEA (DEAT, 2000; CSIR, 1996).

In terms of planning legislation, the Development and Facilitation Act 67/1995 (DFA) (RSA, 1995) also makes provision for environmental evaluation. This provision is encompassed in the principles in chapter one, section 3(1)(c)(viii) and section 3(1)(h)(iii), which requires that efficient and integrated land development should take place via the development of policy, administrative practices and laws which encourage environmentally sustainable land development practices and processes.

South Africa has made strong policy provisions for taking environmental concerns into consideration in the PPP and in project formulation process; these also require that it should be done in a sustainable manner.
Horizontal integration is based on the assumption that PPPs are subject to multiple stages of decision-making, concerning for example, the choice of objectives, the choice of alternatives, and the choice of mitigation measures; attempts should then be made to integrate SEA into each of these stages of decisions (Therivel and Partidario, 1996). Strategic Environmental Assessment should not be observed as a stand-alone process and should be integrated into the different levels of the decision-making and development cycle (Eggenberger and Partidario, 2000).

An integrated process, as opposed to a stand-alone process, requires community consultation to ensure transparency, accountability and iterations of the assessment (McCarthy, 1996). However, McCarthy (1996) postulates that with an integrated approach, there is a lack of transparency in the cross-referencing and examination of interactions between biophysical and other goals in the PPP formulation process.

Procedures and outcomes of spatial plans have differed depending on whether the assessment takes place after the completion of the plan or is integrated in its formulation. This is due to the fact that the general objectives of the plan will alter if assessment is integrated in its formulation (Elling, B, 2000).

Strategic Environmental Assessment is a tool for the assessment of a range of possible alternatives in a way that is systematic and ongoing and which ensures full integration of relevant issues for the achievement of sustainable development. This raises the question of what the meaning of “full integration” is and how it helps in the achievement of sustainable development.

Many would argue that integration is already happening, especially in Spatial Planning; this has already been discussed in a previous section. However, while integration is recognised in both planning and environmental assessment fields, the question posed by Eggenberger and Partidario (2000), “…does this integration mean the same for both fields?” is relevant. Recognising that it may take different dimension of integration, the authors identified five dimensions of integration which they considered expressed the ideal. These five ideal forms of integration are described as substantive, policy, institutional, methodological and procedural, and will be discussed in the next section. A critical question would be to determine whether all planners and impact assessors are addressing the same types and levels of integration. Strategic Environmental Assessment and Spatial Planning share many common concerns and overlaps. However to reach their full potential, both SEA and Spatial Planning need to choose to integrate in order to contribute to sustainable
development (Eggenberger and Partidario, 2000). Many studies have been conducted internationally on SEA (Sadler and Verheem, 1996; Therivel and Partidario, 1996; Partidario and Clark, 2000), but there appear to be gaps in the literature on the subject of integrated planning. For this reason, Eggenberger and Partidario (2000) have initiated an international study on good practice in this area.

2.3 The Integration Framework

Markus Eggenberger and Maria do Rosario Partidario developed a tool which assisted in reviewing existing practices in integrated planning and environmental assessment. The tool is referred to as the “Integration Framework” (Figure 2.4) in this thesis and focuses on common aspects of Spatial Planning and SEA. This framework was developed as part of an international study which examined the overall goal of sustainable development; guiding principles for the integration of sectoral aspects of environmental, social and economic issues; and institutional and methodological aspects such as public participation, visioning and the assessment of alternatives. The main purpose of this international study was to contribute to the development of an integrated planning framework that would:

- ensure the early consideration of environmental, social, economic and institutional issues in the Spatial Planning process, enabling more sustainable planning practices; and
- improve the links between Spatial Planning and tools such as Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) (Eggenberger and Partidario, 2000).

### FIGURE 2.4: INTEGRATION FRAMEWORK

<table>
<thead>
<tr>
<th>FIVE FORMS OF INTEGRATION</th>
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<tbody>
<tr>
<td><strong>SUBSTANTIVE</strong></td>
</tr>
<tr>
<td>The integration of physical or biophysical issues with social and economic issues</td>
</tr>
<tr>
<td>The integration of emerging issues such as health, risks, bio-diversity, climate change etc.</td>
</tr>
<tr>
<td>The (appropriate) integration of global and local issues</td>
</tr>
<tr>
<td><strong>METHODOLOGICAL</strong></td>
</tr>
<tr>
<td>The integration of environmental, economic and social (impact) assessment approaches such as cumulative assessment, risk assessment, technological assessment, cost/benefit, multi-criteria analysis, etc.</td>
</tr>
<tr>
<td>The integration of the different applications, and experiences with the use of particular tools such as GIS</td>
</tr>
<tr>
<td>The integration and clarification of (sector) terminologies (incl. the element of “strategic”)</td>
</tr>
<tr>
<td><strong>PROCEDURAL</strong></td>
</tr>
<tr>
<td>The integration of environmental, social, economic planning/assessment, Spatial Planning and EIA</td>
</tr>
<tr>
<td>The integration of sector approval/ licensing processes, Spatial Planning and EIA</td>
</tr>
<tr>
<td>The adoption of co-ordination, co-operation and subsidiarity as guiding principles for (government) planning at different levels of decision making</td>
</tr>
<tr>
<td>The integration of affected stakeholders (public, private, NGO) in the decision making process</td>
</tr>
<tr>
<td>The integration of professionals in a truly interdisciplinary team</td>
</tr>
<tr>
<td><strong>INSTITUTIONAL</strong></td>
</tr>
</tbody>
</table>

32
As previously discussed, the definition of integration is very broad and represents more than one use in different contexts. The "Integration Framework" tool has been used to investigate the substantive, policy, institutional, methodological and procedural forms of integration, in order to determine the extent to which it has occurred in a Spatial Planning process. These criteria have been identified in order to assess the integration of the natural environment, as well as social and economic issues in Spatial Planning, so that an integrated planning framework may be developed. The reason for identifying these separate criteria and desegregating them from a systematic approach is so that they may be studied individually, and thus evaluate what is effective and what is not (Eggenberger and Partidario, 2000).

Each of the dimensions or forms of integration within the framework is discussed below in order to explain how they will be applied to the case study selected for this research. These dimensions have been explored by various authors (Partidario, 1996; Therivel, 1997; Sadler and Verheem, 1996; Marsden, 1998; Partidario, 1998) and have been brought together by Eggenberger and Partidario (2000).

2.3.1 Substantive Integration

The objective of substantive integration is to evaluate the substance that is important and meaningful in a PPP process. The criteria used to evaluate this form of integration were, firstly, to determine whether physical, biophysical, social and economic issues, were integrated with spatial issues. Marsden, (1998) equates substantive issues to "change" in reference to how environmental assessment is carried out and to what effect. Hence the question, "does it contribute towards sustainability and is it an integrated process or stand-alone?" Eggenberger and Partidario (2000) as well as McCarthy (1996), state that substantive integration relies on the notion of scoping. Thus, should the environment be seen as being physical or biophysical only, or should it include social...
and economic environments as well? Also, should it include other emerging issues which are integrated into existing planning procedures?

Thus, in this case study it will be necessary to determine, firstly, whether any substantive issues in terms of physical, biophysical, social and economic issues were identified, and if so whether they were integrated at all in the process of Spatial Planning. Secondly, it must be determined whether issues such as health, risks, biodiversity have been merged within the planning process. It will be necessary to identify what the emerging issues were at the time, and to investigate how any of the issues given as examples, or any other emerging issues identified in the data, were integrated into the case study. Thirdly, it is necessary to identify appropriate global and local issues that were prevalent at the time, and the way in which they were integrated into the planning process.

2.3.2 Methodological Integration

The intention behind methodological integration is to establish the range of techniques used in the PPP processes (Therivel, 1997). There is no agreement on an appropriate methodology or tool for the integration of the various substantive issues, as the approaches used by economists, ecologists and sociologists to evaluate policies and projects all differ (Sadler, 1996). In this case, the criteria used to evaluate the level of methodological integration were applied, firstly to determine whether integration of environmental, economic and social (impact) assessment approaches (such as cumulative assessment, risk assessment, technological assessment, cost/benefit, multi-criteria analysis, etc.) had been used within the planning process.

Strategic Environmental Assessment tries to achieve sustainable development through, inter alia, the measurement of carrying capacity with regard to human beings, fauna, flora, landscape, natural resources, cultural heritage and material assets (Therivel, 1993; Therivel et al, 1994). Thus, to ensure sustainability, the carrying capacities should not be exceeded. Spatial Planning should be appropriately directed to ensure that these capacities do not exceed current resources and that the ways in which it is used are monitored. Predictions with regard to the future use of the environment, as well as possible alternative uses and mitigation measures, should be made, in case the capacity is exceeded (Therivel et al, 1994).

The literature on the methods and techniques used to assess the environment is abundant. Definite yardsticks and clear criteria are needed for evaluating policies or strategies for the achievement of sustainable development (Au, 1998). Methodologies employed tend to differ in each country, and
since they are not very well developed or commonly agreed upon, require further empirical research (Therivel, 1993, 1998). However, a range of techniques has been identified in the literature, and these will be explained briefly (Therivel and Partidario, 1996; Therivel, 1998; Verheem, 1992; Therivel, 1993; Eggenberger and Partidario, 2000).

- **Identification of environmental stock or baseline data:** environmental targets, limits and carrying capacities need to be set in order to qualify the impacts made. The environmental stock can be divided up into:
  * natural resources, which include the measurement of aspects such as air quality, water conservation and quality, land and soil quality and mineral conservation;
  * local environmental quality, which measures landscape and open spaces, the urban environment “liveability”, cultural heritage, public access to open spaces and building quality.

- **Compatibility matrices:** there are several of these. Some
  * test whether the plans’ strategies and policies are working in tandem or are in contradiction;
  * test the environmental impact of each policy on each environmental component – this is a qualitative and subjective application;
  * measure the plans’ objectives against sustainability objectives or establish what they contribute to sustainability objectives.

- **Environmental targets:** this method sets performance criteria. An example is the setting of targets to reduce impacts, e.g. to reduce the loss of greenfields land to development by 50% (compare 1986-1991 period).

- **Overlays:** this is usually a series of maps laid over each other in order to identify common problem and opportunity areas and to assess the interrelationships between elements portrayed on the maps (McHarg, 1969).

- **Checklists of criteria:** these criteria will be formulated in terms of sustainable development.

Strategic Environmental Assessment as a method and technique is perhaps less important than the spirit in which it is carried out or used. Therivel (1998) states that even if SEAs are carried out only partially it will be satisfactory, as the main reason for the application of SEA is to improve the PPP and to foster better decisions that are sustainable. It is better to integrate partially than not at all (Therivel, 1998).

The second criterion is to evaluate whether different applications/ tools such as geographical information systems (GIS) have been used in the Spatial Planning process. For instance, in order to make appropriate decisions, or calculate or measure entities such as carrying capacity, accurate databases are required to provide credibility to the process. The causes, impacts and solutions
which pertain to the many environmental problems are difficult to predict due to the lack of information on environmental systems. Organised data is required via methods such as remote sensing and GIS, to determine the environmental significance of an area (Therivel et al, 1994). The implication is that an up-to-date environmental database needs to be established to assist in the analysis and evaluative planning processes (Horton and Memon, 1997).

The third criterion is to determine whether the process has clarified any sector terminologies (e.g. strategic), i.e. to determine whether there was any discussion about specific terms during the Spatial Planning process and how these were clarified.

2.3.3 Procedural Integration

The purpose of procedural integration is to ensure that environmental, social and economic issues form an intrinsic element in the formulation and implementation of the plan-making process (Partidario, 1996). The criteria used to establish this are:

- Firstly, it should be determined whether the procedural assessments of economic, social and environmental issues (e.g. social impact assessments, traffic impact assessments, environmental impact assessments) and spatial issues were integrated. Is there a systematic approach in ensuring that environmental considerations are systematically incorporated in all levels of decision-making?
- Secondly, it must be established whether there were any sectoral regulations/ legislative requirements and if so, in what way they were integrated with planning regulations/ legislative requirements.
- Thirdly, the guiding principles of government must be determined (were they subordinate – tiered to each other or equal – spheres?). How did they respond to each other in terms of co-operation and how did they co-ordinate issues?
- Fourthly, it is important to identify who the stakeholders were, and how, and to what degree, they were integrated in the process. The participation and co-operation of a wide range of interest groups is needed to ensure that the principle of sustainability and the objective of equity are implemented as far as possible (Therivel et al, 1994). However, public participation is complicated by the breadth of issues involved and the continuous evolution of PPP formulation (Therivel, 1993). Public capacity-building regarding environmental issues is required in order for the public to participate in decision-making processes more fully (Therivel et al, 1994). Procedurally, planning decisions should be made in a rational and open way through the promotion of equity and public participation (Therivel et al, 1994).
• Lastly, the question as to whether there was integration of different sectoral professionals in a true interdisciplinary team should be investigated.

2.3.4 Institutional Integration

The idea of institutional integration refers to the organisational context required to develop and implement an integrated process (Partidario, 1996). Several criteria were developed to assess institutional integration. They are:

• Firstly, it must be determined whether the leading local authority/ies had the capacity to deal with the emerging issues (environmental problems) and to identify what they were. The lack of institutional and policy integration can lead to practical implementation problems when sustainable development is being aimed at (Therivel et al, 1994). It is necessary for institutional structures to be restructured and rationalised in order to carry out policy more effectively (Therivel et al, 1994).

• The second criterion is the necessity to determine the identity of the leading authority responsible for integration, and to establish what they did to ensure that it took place.

Many countries have institutions that are too rigid to achieve sustainability. Such government institutions are compartmentalised into separate departments that represent different sectors with their own agendas and budgets. These institutions are therefore not able to meet the broad strategic goals if there is a lack of co-ordination across sectoral departments. The political and organisational context determines the culture and structure within which decisions and assessments are made. A political culture, which is supportive of environmental values, goes hand-in-hand with political will (Marsden, 1998; Partidario, 1996). Thus, a supportive attitude from politicians and government officials is needed in the implementation of sustainable development principles (Sadler, 1996; McCarthy, 1996). This implies that decision-makers need to make a fundamental shift in the weight currently given to environmental considerations in the development cycle process (Therivel, 1993).

• The third criterion is the determination as to how information was exchanged and how the different sectors were able to intervene. It is also important to determine what co-operation existed between institutions for the data collation used to make consistent predictions on the environmental impacts (Therivel et al, 1994).

• The fourth criterion is the establishment of who the leading and participating agencies were and what their role was in the Spatial Planning process.
2.3.5 Policy Integration

The central focus here is to understand what the overall policy context is that provides the rationale for the planning process, and to define the major goals, principles and objectives of existing policy (Partidario, 1996).

It has been realised that policy is particularly significant, as it has more far-reaching effects than even the largest single development projects. "If governments and electorates actually are concerned that development should be sustainable, then SEA, particularly at a policy level, is an urgent and essential step in that direction" (Buckley, 1998, p.83). A national overarching framework is required to guide particular policy instruments in the achievement of sustainable development, as policies operating in isolation can be in conflict if this does not exist (Marsden, 1998). The implication of this is that integration and co-ordination are needed to ensure that the national strategy is being followed. The sooner that the integration of environmental policies and regulations is made with institutional structures, the sooner governments can be held accountable for not taking environmental concerns into consideration (Therivel et al, 1994).

The first criterion in this regard is to address the way in which the term "sustainable development" has been understood throughout the process. It has been argued in chapter one that sustainable development is difficult to define, though, it was found that an integrative approach is necessary (Therivel, 1993). In achieving sustainable development, explicit consideration should be given to resources that are threatened by irreversible, cumulative or secondary impacts, for example, unique natural features, significant habitats and species, the use of energy and the use of non-renewable resources (Therivel, 1993). Partidario and Clark, (2000) argue that there are two approaches to sustainability. These may be placed conceptually at polar ends of a continuum scale. One pole describes whether environmental constraints are seen as the dominant aspect (strong approach); the other pole reflects an equilibrium of the environment together with the economic and/ or social contexts (weak approach) (Partidario and Clark, 2000). They can be illustrated as follows (Figure 2.5):
The Brundtland Commission points to the interdependence and interrelationship between economy, development and the environment, and illustrates the weak approach to sustainable development. Here, SEAs are used to “tweak” strategic action and to mitigate their most negative environmental consequences (Partidario and Clark, 2000). However, SEA has the potential to play a stronger role in decision-making by the incorporation of sustainability targets or carrying capacities into the strategic actions of PPP formulation (Therivel, 1998; Therivel et al, 1994; Partidario and Clark, 2000). This point is supported in the South African context when the effect of the environment on development is examined. This is done in an integrative way by incorporating sustainability issues into the formulation of plans and programmes; this is done by setting up objectives and implementing them via strategies (DEAT, 2000).

A world-wide study which compares SEAs in terms of the sustainability approaches to development (Figure 2.5), illustrates that the strong approach to sustainability has not yet been politically accepted, due to economic pressures (Therivel et al, 1994). However, the guideline document on SEA in South Africa (DEAT, 2000) has indicated that to be effective, a strong approach to sustainability is needed.

It can be argued that both the strong and weak approaches indicate that sustainable development stresses the importance of considering economic, social and environmental issues simultaneously in
the development cycle or PPP design. The concept of sustainable development brings together these three elements in the formulation of policy, which trickles down to project level. This integrative approach determines the interdependencies that are involved in developing the PPP. Furthermore, national policy does not always allow for rigorous appraisal; also policy may not be explicitly stated and often does not reflect political realities.

The second criterion is to determine whether each sector generated sustainable regulations and how these were integrated into the Spatial Planning process. The third criterion is to assess whether each sector generated strategies and to examine how these were integrated. The fourth criterion is to investigate the political interventions (national, provincial or local) in terms of developing new policy/ legislation/ holding elections. The last criterion for the establishment of policy integration is to determine whether the government (national, provincial, local) at the time was acting in a responsible manner. Did they follow policy? Did they do what was expected of them?

2.4 Justification of Integration Framework

Having described the Integration Framework tool that will be used in the research undertaken for this thesis, attention will now be focussed on its application in two different contexts. The case studies being examined were part of the International Study that was briefly discussed under 2.3 above, and are based in Switzerland and in New Zealand. These case studies were done similarly to the way in which the Integration Framework was used, although their application or method was not articulated (Schultz, 2001; Fookes, 2001). The conclusions of these case studies are discussed briefly below.

In the Switzerland case study, the Canton Guide Plan was an instrument in the Swiss planning system that ensured the integration and co-ordination of economic, social and environmental aspects in Spatial Planning. The context in which this planning took place is based on a three-tier government system (Federal, Canton, and Commune). Planning in Switzerland appears to be happening within a stable political and institutional context. National planning "drives" the Spatial Planning system and each level of government has to co-ordinate those of its own activities that have an effect on the physical environment. This system provides the means whereby powers and duties can be devolved down to the lowest possible level in the three-tier system. The guide plan is prepared by the Canton and co-ordinates all matters that have a spatial impact. This plan is binding on both Federal government and the Communes. In the case study, the approach to developing the guide plan is described as "integrated planning". Sustainable development is defined in the Swiss
constitution and it is the Federal Office for Spatial Planning's responsibility to implement the national sustainability action plan. The status of SEA is under discussion in Switzerland and is not yet a formalised process. Even though SEA is not yet been implemented in that country, it is thought that this process be will suitable for Canton guide planning (Schultz, 2001). The case study indicated that from a methodological point of view, tools needed to be developed which make decision-making more transparent; currently the economic dimension seems to usurp the environmental and social dimensions in terms of policy integration. The strengths in this case study lies in its substantive, procedural and institutional integration. A summary of the outcomes is provided below in Table 2.2.

**TABLE 2.2: CANTONAL GUIDE PLANNING IN SWITZERLAND**

<table>
<thead>
<tr>
<th>1 Substantive integration: fully integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guide planning is integrated planning; it addresses specifically the interlinkages between economic, environmental and social issues. In many Cantons the plan itself is divided in chapters such as &quot;settlement and environment&quot;, &quot;transport and environment&quot;, etc. Risks, natural hazards, biodiversity are integral parts of the plan.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2 Methodological integration: more noticeably integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact assessment tools are used in many cases. However, decision-making processes are often not sufficiently documented or transparent.</td>
</tr>
<tr>
<td>Geographic information systems are used in most of the Cantons, but the current monitoring of the spatial development can still be improved by collecting more sophisticated data in order to make monitoring an early warning system for negative spatial development.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3 Procedural integration: fully integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-ordination, co-operation and subsidiary are integral parts of the guide plan process. Affected stakeholders can participate in the decision-making process. However, there is still a need for &quot;marketing&quot; the guide plan. The public is often not aware of the far-reaching impact spatial plans have on daily life. Therefore awareness-raising should be one of the future tasks for key actors in guide planning.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4 Institutional integration: fully integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>The integration of issues is the key objective of the Cantonal authority for Spatial Planning. It should provide the capacity to cope with emerging issues and duties. However, staff is mostly concerned with daily business and little time is left for strategic work that has to be done.</td>
</tr>
<tr>
<td>The guide plan is the instrument that defines who has to do what at which time with whom. It co-ordinates interdisciplinary teams from different units of the Cantonal administration to solve problems with spatial impact.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5 Policy integration: more noticeably integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the moment a study is being carried out by the ORL-Institute that analyses the potentials for strengthening sustainability in guide planning. The results were to be available in autumn 2001. The federal office for Spatial Planning initiated the study because it is obvious that Cantonal guide planning is very well suited to implement sustainable development. However, it does not guarantee</td>
</tr>
</tbody>
</table>
In general the economic dimension seems to be much more powerful than the social and the environmental dimensions. Economic claims to space are mostly very likely to be implemented. Therefore there is a need for tools that make decision-making processes more transparent and facilitate the consideration of the three dimensions. The study proposes to give guidelines for the Cantonal authorities to deal with those problems that can be integrated in their daily work.

Guide planning is the co-ordination of activities with spatial impact; it therefore integrates the different sector policies and finds solutions for conflicts between activities.

At the moment a discussion is going on which involves integrating controlling mechanisms into guide planning. These controlling mechanisms are used to compare the defined goals of spatial development with the actual spatial development and to initiate action in case of a mismatch of goals and actual development. Controlling mechanisms should also check as to whether activities determined in the guide plan have actually been implemented and what the impacts of these activities are. Indicators play a crucial role in this process.

The integration of a controlling system into guide planning provides a greater accountability of the whole planning process. It makes spatial development more transparent and shows the need for a well-defined system of objectives.

Cantonal guide planning is probably a suitable instrument for implementing SEA. However, at the moment the discussion about SEA has just started in Switzerland and therefore its future is still undefined.

The New Zealand case study, the Auckland Regional Growth Strategy 2050, was developed during a time of political and institutional change. The Regional Growth Strategy (RGS) initiated by Auckland Regional Council was a collaborative effort by local government within a metropolitan area. The RGS is a long-term statement of a vision, desired outcomes, priorities and principles that are translated into a growth concept. This strategy includes a SEA in the planning process. The context within which the case study took place is also a three-tiered political/institutional system with national, regional and local tiers of government; these have prescribed responsibilities that are devolved to local levels of government. The national framework for Spatial Planning takes place through the Resource Management Act of 1991 (RMA). The purpose of this act is to promote the sustainable management of natural and physical resources. Policy and plans are developed at the appropriate level of government. The land-use system and EIA is one and the same, meaning that this case study is strong on procedural aspects. The project was initiated in the early 1990s without an explicit reference to SEA (Fookes, 2001). The author however argues that the methodology adopted for the case study stands as a good example of SEA and also of the Integration Framework. Institutional integration was achieved through the Regional Growth Forum, an ad hoc forum with the status of a committee of the Auckland Regional Council (ARC); the signing of a Memorandum Of Understanding between the ARC and territorial local authorities formalised institutional
commitments. The fact that the Regional Growth Forum became a committee of the ARC made the forum more accountable, as decisions had to be ratified by key role-players, the ARC and territorial local authorities. The other forms of integration have been rated according to the summary in Table 2.3 below.

### Table 2.3 Auckland Regional Growth Strategy 2050

<table>
<thead>
<tr>
<th>Box 1 - Forms of integration</th>
<th>How strongly addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1 Slightly</td>
<td>✗</td>
</tr>
<tr>
<td>2 More noticeably</td>
<td>✓</td>
</tr>
<tr>
<td>3 Fully</td>
<td></td>
</tr>
</tbody>
</table>

1 Substantive
- The integration of physical or biophysical issues with social and economic issues
- The integration of emerging issues such as health, risks, bio-diversity, climate change etc.
- The (appropriate) integration of global and local issues

2 Methodological
- The integration of environmental, economic and social (impact) assessment approaches such as cumulative assessment, risk assessment, technological assessment, cost/benefit analysis, multi-criteria analysis, etc.
- The integration of the different applications, and experiences with the use of particular tools such as GIS
- The integration and clarification of (sector) terminologies (including the element of "strategic")

3 Procedural
- The integration of environmental, social, economic planning/assessment, Spatial Planning and EIA
- The integration of sector approval/licensing processes, Spatial Planning and EIA
- The adoption of co-ordination, co-operation and subsidiary as guiding principles for (governmental) planning at different levels of decision making
- The integration of affected stakeholders (public, private, NGO) in the decision making process
- The integration of professionals in a truly interdisciplinary team

4 Institutional
- The provision of capacities to cope with the emerging issues and duties
- The definition of a governmental organisation to ensure integration
- The exchange of information and possibilities of interventions between different sectors
- The definition of leading and participating agencies and their respective duties and responsibilities

5 Policy
- The integration of "sustainable development" as overall guiding principle in Spatial Planning and EIA
- The integration of sector regulations
- The integration of sector strategies
- The timing and provisions for political interventions
- Accountability of government

Source: Fookes, 2001
2.5 Conclusion

The literature on integration indicates that there is no clear definition of this concept and that it is one which is discussed by way of synonyms or the way in which the state of integration is achieved. The process can happen vertically via the integration of the structure of environmental assessments of SEA with project EIA, or horizontally via the integration of environmental assessments into other policy instruments such as Spatial Planning. Spatial Planning is used as a strategic instrument in the development cycle which regulates the location, timing and form of development. It integrates biophysical, social and economic issues in the process. The question raised was how to evaluate the level of integration in a Spatial Planning process. It was concluded that in order to assess this, an interpretative, analytical framework is needed as a tool. Five dimensions of integration were identified in the Integration Framework (substantive, policy, institutional, methodological and procedural) for the assessment of the extent of integration between “spatial planning” and “environmental,” “social” and “economic” issues.

The Integration Framework has been applied successfully in two different contextual areas and it will now be applied for the first time to a South African case study. Chapter three will describe in more detail the methodology used in applying and evaluating the criteria in such a context, specifically in the case of the Cape Town Metropolitan Spatial Development Framework.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

Having set out the research problem and theoretical knowledge in chapters one and two, the research design, methodology and analysis techniques used to address the question will be set out in this chapter.

3.2 Research Design

The research design selected for this thesis was mentioned briefly in chapter one: it is illustrated again in Figure 3.1 below.

![Figure 3.1: Research Design](image)

Before discussing the research design in more detail, it is appropriate to remind the reader at this point that this thesis is investigating how to evaluate whether integration has occurred in preparing spatial planning frameworks. The research design (Figure 3.1) is intended to illustrate the logic which has specifically been brought to bear in answering this question.

Firstly, the research design has been planned in such a manner as to develop an understanding from current theory about key concepts such as sustainable development, integration in general, and integration tools in particular, such as Spatial Planning and Strategic Environmental Assessment (SEA). Chapters one and two focussed on this theoretical body of knowledge with regard to setting out the statement of the problem and the current thinking around these key concepts. Secondly, the Integration Framework, as discussed in chapter two, was presented as an appropriate vehicle for the
evaluation of a Spatial Planning exercise; specifically via the discourse on SEA and integration. Thirdly, this Integration Framework was used to evaluate a case study - the Cape Town Metropolitan Spatial Development Framework (MSDF) - within the South African context, in order to assess the extent of integration that has occurred.

This research approach is based on induction as opposed to deduction, which is grounded in theory or theory-building. The data collated is drawn from a real-life situation. Deduction is a form of interpretation (conceptualising or hypothesising); researchers try to deduce what is going on based on data gathered, readings or assumptions about the nature of life (Strauss and Corbin, 1998). However, case study research based on induction (theory-building) does include some deduction based on prior theory and therefore it is a mixture of the two approaches (Perry, n.d.). It has been argued that a case study research design is inferior to the traditional (positivism) research one, due mainly to inability to judge the quality of the former (Yin, 1994; Perry, n.d.). However, the research design should provide more insight into and enhancement of our understanding of the Spatial Planning process in Cape Town, as well as a meaningful contribution to plans for further action, thus building onto existing theory. The next section will justify the use of the case study research methodology further.

3.3 Choice of Case Study Research Methodology

The decision to use a case study research methodology is based on the nature of the research question (Strauss and Corbin, 1998; Yin, 1994). Five different research methodologies/strategies have been identified by Yin (1994), as follows: experiments, surveys, archival analysis, history and case studies. Yin (1994) suggests that there are three different criteria used to determine which type of research methodology should be followed. These are: the form of the research question (how, why, what, where, how many, how much, who); whether or not it requires control over behavioural events; and whether or not it focuses on contemporary events. The research question in this thesis is primarily one of "how", and thus a case study methodology is eminently suitable.

This strategy was selected because Spatial Planning is a very dynamic process, influenced by externalities, and is therefore not something that can be examined by controlling behavioural events. By following an empirical approach based on a real case study, evidence which responds to the research question and to theory can be extracted. As mentioned in chapter one, the case study in which all five forms of integration can be tested is the Cape Town Metropolitan Spatial Development Spatial Framework (MSDF). It is particularly suitable as it was developed over a ten-
year time period at a stage when political and institutional change was re-shaping the country. Concepts such as sustainable development and practices of integration, as well as transparency and transformation of institutions, were introduced over the period during which the MSDF was being elaborated, and these influenced its formulation. The MSDF also addressed elements of biophysical, social and economic issues – further reasons why it provides a case worthy of in-depth study.

3.4 The Case Study: Cape Town Metropolitan Spatial Development Framework

Before this discussion returns to the research methodology, it is necessary to provide more details about the case study selected and the context within which it developed, in order that the methodology used may be better explained.

Institutional/Political Context and Planning System

The political aspects and administrative organisation of the Republic of South Africa changed significantly over the period of research. The Constitution of the Republic of South Africa, Act 108 of 1996, makes provision for three spheres of government, i.e. national, provincial and local. These are independent and autonomous and are not inter-linked. This differs from the tiers of government that existed prior to the introduction of the Constitution (RSA, 1996b). Each sphere of government has its own legislative, administrative and executive functions. The Constitution also requires cooperative governance ensuring that the three spheres support, consult and co-ordinate their actions with one another.

In terms of the Constitution, national and provincial government carry out their functions in a shared manner by way of agreements. For example, “environment” is a concurrent legislative function of both national and provincial government. Local authorities can therefore not make legislation around environmental issues, but must conform to national and provincial environmental legislation. In some cases, local authorities even administer and enforce this legislation on behalf of provincial and national authorities.

The Constitution assigns municipal planning to the executive and administrative competence of local authorities. Local by-laws may be promulgated by a local authority for the areas which it has the right to administer (such as planning). However, such by-laws may not conflict with the relevant national and provincial legislation. Thus, Spatial Planning is the function of local
authorities within this three-sphere system of government, though their freedom to administer it is again constrained by the limits of the relevant provincial legislation.

Prior to the 1996 Constitution, the competencies of the three-tier government system were quite different. Thereafter however, in terms of Spatial Planning, two crucial changes were made. Firstly, town planning was made part of a new concept of Integrated Development Planning (IDP) (RSA, 2000) rather than being a distinct area of administrative or legislative competence (line-function). It was realised that Spatial Planning carried out alone and separately from other functions and levels of government had limited value. Secondly, the decentralisation of planning functions to local government was introduced, a phenomenon consistent with world trends (Berrisford, 2000).

Since the promulgation of the Constitution in 1996, the three spheres of government operate as follows. National government establishes and co-ordinates a set of overarching legal frameworks. For example, the national Physical Planning Act of 1967 has been replaced by the Development Facilitation Act (DFA) of 1995; however, only chapter one of the DFA which sets out the general principles for land development has been implemented in the Western Cape. The Municipal Systems Act, 32 of 2000 is another example which sets out clear policy on municipal planning and makes provision for the preparation of IDPs by local authorities.

Moving down from national level, provincial governments make these national frameworks more specific to their own provinces by establishing Provincial Acts and Ordinances. The provincial government of the Western Cape has promulgated the Planning and Development Act of 2000. However, this Act has not been implemented and, as a result, Spatial Planning remains under the Land Use Planning Ordinance of 1985 (LUPO). The Land Use Planning Ordinance provides a set of procedural requirements for Spatial Planning, including provisions for forward planning by the preparation and approval of local structure plans (LUPO, 1985).

In terms of spatial planning instruments, national government uses legal and policy frameworks, and deals with planning that affects national interests. For example, Spatial Development Initiatives (SDI) are identified and established by national government. The Maputo corridor SDI linking South Africa with Mozambique is a case in point.
Provincial government also uses legal and policy frameworks for Spatial Planning. It has to prepare a provincial Integrated Development Plan (IDP) in consultation with the other spheres of government (RSA, 2000). Other planning instruments are provincial sectoral plans.

Local government Spatial Planning instruments include legal and policy frameworks, a local IDP, spatial plans such as spatial development frameworks and structure plans, zoning schemes, sectoral plans, building plans and title deeds.

The approach that guides planning in South Africa is mostly “top-down” as everything must be done in terms of the national/provincial legislative framework. However, the national legal and policy framework for spatial planning does not provide a spatial framework at the local city or metropolitan scale. This is the responsibility of the local authority.

In terms of LUPO such spatial frameworks/structure plans shall be reviewed once every ten years and shall lapse at the expiry of a period of ten years after approval. However, a structure plan may be amended or withdrawn by a local authority, subject to due process being followed. In practice, however, many spatial plans have been prepared without the final legal consent needed to assign them status as statutory plans. The MSDF is an example of a plan that has been partially implemented and which continues to guide many spatial planning decisions, but which has no statutory status ten years after its inception.

The legal requirement in terms of LUPO is that the local authority needs to involve the public by advertising its intent in preparing a structure plan and then once a final draft has been produced it will be advertised again for comment. This form of participation has for some time been referred to as “participation by objection” and many planners agree that it is inadequate.

Some local authorities have been involving the public more fully than just this legal requirement. However, the prevailing trend remains that of participation by objection, since the public are usually informed and involved in the review of draft spatial plans, rather than in the formulation of the planning goals and spatial strategies. However, over the last five years a concerted effort has been made by local authority planners to engage in participation that is consensus-based and which involves the public from the outset in formulating the vision, principles and spatial strategies of the planning area concerned.
Political transformation and government restructuring started in the late 1980s/early 1990s. This process occurred in tandem with the development and implementation of the MSDF. With political transformation in South Africa came institutional transformation. Before the first democratic local authority elections in 1996, the Cape Metropolitan area as was fragmented and inefficient as were many settlements in South Africa (RSA, 1999). The Cape Metropolitan Area (CMA) specifically consisted of 61 separate municipalities, management committees and councils (Figure 3.2) that were amalgamated into a new metropolitan system of government. This comprised six Metropolitan Local Councils (MLC’s), namely, Blaauwberg Municipality, Cape Town Municipality, South Peninsula Municipality, City of Tygerberg, Oostenberg Municipality and Helderberg Municipality. The Cape Metropolitan Council (CMC) was the seventh overarching council (Figure 3.3) (Watson, 2002). The six MLCs and the CMC were allocated the execution of specific functions, with the local councils being responsible for planning decisions and service delivery, and the CMC (comprising much of the former Western Cape Regional Services Council) responsible for bulk services and overarching planning. Thereafter, the seven councils were amalgamated to form a single unicity with a single council, the City of Cape Town. Figure 3.3 illustrates the present status of the previous six municipalities and overarching metropolitan authority – they are now administrations with different, reduced powers and duties.
FIGURE 3.2 CITY OF CAPE TOWN BOUNDARY PRE 1997

Source: CoCT (CMC)
Selection of the Cape Town Metropolitan Spatial Development Framework

The MSDF was selected as a particular case in the South African on which to focus the research question. Yin (1994, p.38) states that “...a single case can represent a significant contribution to knowledge and theory-building”. Conditions which justify using a single case study are based on the following rationales - that it is critical, unique and revelatory (Yin, 1994). The MSDF is a unique case since there are not many (if any) spatial frameworks that have been developed over an extended period during the occurrence of political and institutional transformation. The MSDF has been analysed and observed by previous researchers, Watson (2002) and Pheiffer (2001), but for reasons that are different from the focus of this research. Pheiffer’s (2001) work was based on evaluating the MSDF in terms of social and spatial sustainability and Watson (2002) evaluated the MSDF under political transition. Therefore the data presented by this research can be considered exclusive, since it will disclose outcomes not made previously.
Objectives of the MSDF

The objective of the MSDF is to provide a long-term overarching spatial framework for the City of Cape Town. It was a process that started in the early 1990s as a response to the necessity for spatial restructuring and integrating the city which was a result of the apartheid legacy (Watson, 2002; Pheiffer, 2001; CMC, 1996; RSA, 1986). The aim was to achieve this through a set of principles, goals, policies and four spatial structuring elements (spatial strategy) that would have legal status in the form of a structure plan (CMC, 1996; CMC, 1999).

The MSDF spatial vision for the Cape Metropolitan Area is to:

- address the needs of the people in order to fulfil their potential and optimise their opportunities in the metropolitan area;
- seek a pattern of urban growth and development based on development nodes, activity corridors, a metropolitan open space system and a well defined urban edge;
- establish a well-defined, compact urban form for long-term sustainability of the urban areas as well as the rural hinterland;
- provide a framework that may furnish the citizens with diverse employment, housing and recreational opportunities, and a vibrant social and cultural living environment;
- support the realisation of an efficient and integrated economy;
- ensure that the metropole’s unique and sensitive natural splendour is preserved and protected for the use and enjoyment of present and future generations;
- protect and enhance distinct historical and cultural features; and
- support democratic, accessible and non-discriminatory government (CMC, 1999).

The development of the MSDF was based on number of fundamental planning and development principles as well as Spatial Planning principles. These are listed below.

Fundamental Planning and Development Principles:

- Equal opportunity
- Social justice
- Sustainable development
- Transparency and accountability
Spatial Principles for Planning and Development:
- Management for sustainability
- Containing sprawl
- Residential intensification
- Urban land-use integration
- Redressing imbalances
- Creation of quality urban environments (CMC, 1999).

The vision and principles were translated into a spatial conceptual framework consisting of four structuring elements. These are Urban Nodes, Activity Corridors, Metropolitan Open Space System (MOSS) and the Urban Edge (Figure 3.4). Urban nodes and activity corridors give rise to intensification and mixed-use opportunities linked to a public transport system, thus potentially curbing sprawl. The delineation of an urban edge will also potentially curb sprawl into the hinterland. At the same time a Metropolitan Open Space System is planned in order to complement the built fabric. The MOSS is designed to play an important ecological, recreational/cultural and productive resource role. These structuring elements are thus intended to act in a mutually reinforcing manner.

FIGURE 3.4: STRUCTURING ELEMENTS

SOURCE: CMC
The preparation of the MSDF is local government’s way of intervening to ensure change of the inefficient trends of dealing with urban environmental problems, and to shift development towards the goals of sustainability. The structuring elements are intended to provide the framework for where public investment should occur, and where and how certain parts of the city, previously isolated from social and economic opportunities, can to be reconnected and integrated.

3.5 Information Gathering

The research design requires that the data collected for a case study be tested for validity as well as reliability (Yin, 1994). Furthermore, Yin (1994) states that the reliability of the research is to be tested in the data collection phase, and measured in terms of using case study protocol and the case study data base (Table 3.1). Validity is tested in three different ways. Firstly, construct validity assesses the data collection phase; the criteria are to check for evidence indicating that multiple sources were used and whether a chain of evidence was established with the data; another criterion is to observe whether any key informants were used to review the draft case study report. Secondly, internal validity assesses the data analysis phase by establishing whether any of the following tactics were followed: pattern-matching, time-series or explanation building. Thirdly, external validity must be tested by assessing the research design in terms of whether it can be applied and replicated elsewhere.

<table>
<thead>
<tr>
<th>Tests</th>
<th>Case study tactic</th>
<th>Phase of research in which tactic occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct validity</td>
<td>- use multiple sources of evidence</td>
<td>Data collection</td>
</tr>
<tr>
<td></td>
<td>- establish chain of evidence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- have key informants review</td>
<td></td>
</tr>
<tr>
<td></td>
<td>draft case study report</td>
<td></td>
</tr>
<tr>
<td>Internal validity</td>
<td>- do pattern-matching</td>
<td>Data analysis</td>
</tr>
<tr>
<td></td>
<td>- do explanation-building</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- do time-series analysis</td>
<td></td>
</tr>
<tr>
<td>External validity</td>
<td>- use replication logic in multiple-case studies</td>
<td>Research design</td>
</tr>
</tbody>
</table>
The criteria used to address the research question are contained within the Integration Framework, which was discussed in chapters one and two. This Integration Framework formed the bases on which information was gathered on the MSDF.

Multiple methods and sources were employed to gather the relevant information. The methods used were a questionnaire followed by interviews and analysis of several types of documentation. These are all discussed in more detail in the following sections.

3.5.1 Questionnaire

A questionnaire was designed by making use of the criteria set out in the Integration Framework. The intention was to interrogate several key role-players in the MSDF process in order to validate information obtained from other sources. A copy of the final questionnaire is attached as Appendix 1.

Initially a pilot questionnaire was constructed and administered. It had an additional section in it, which dealt with the investigation of contextual issues, but this was later discarded. A planning official unrelated to the MSDF process at the CMC Administration, was asked to participate in the pilot interview, to test for problems of interpretation related to the questions (e.g. ambiguity) and to test the length of time the interview took to conduct. The aim was to limit the length of the questionnaire to an hour-long interview. The pilot interview indicated that the section on contextual issues increased the interview by 30-40 minutes. The contextual section was then discarded and the final questionnaire took just over an hour to complete. The contextual section was effectively researched by using documentation from the MSDF process. The geographical, developmental and institutional, and political contexts of the case study had to be described as they set the scene within which the case study took place.

The final questionnaire was structured, firstly, in order to give a brief introduction about the aims and objectives of the research. This half page explained that the information used for this research thesis would be fed into an international study endorsed by International Association of Impact...
Assessment. Thereafter, questions were asked to determine what the current positions of interviewees were, what their role and positions were during the MSDF process, and the period of time during which they were involved in the process.

The questionnaire comprised three further sections. The first dealt with MSDF process and how it related to the different forms of integration (Figure 2.4). The second dealt with the fundamental elements relating to the MSDF process in terms of how successful the process was and what elements were essential for integration. The third section dealt with positive and negative impressions experienced during the MSDF process, and events and issues that could have been dealt with differently.

Most questions were structured in an open-ended and probing fashion. It should be emphasised that they were not intended to elicit descriptions and factual details of the process only, but also opinions about what could be done to improve it in order to establish whatever key lessons the respondents had learnt from it.

3.5.2 Interviews

Key individuals, who were involved in the MSDF process ab initio and remained involved after the launch of the technical document of the MSDF in 1996, were selected as interviewees. The following key institutions/sectors and representative individuals were selected for the interviews:

**Peter Tomalin: Western Cape Regional Services Council (RSC)**
The RSC was originally nominated as leading agent for the project, and later, through institutional transformation, the role was taken over by the CMC. At the inception of the MSDF in 1991, Peter Tomalin was Deputy Head in the Engineering Department, responsible for planning up until 1997. The MSDF was his department’s responsibility. In 1998 he took on the position of Executive Director of Planning, Environment and Housing within the Cape Metropolitan Council. The MSDF was managed within his planning department under his leadership.

**Peter de Tolly: Cape Town City Council (CCC)**
The CCC was nominated as the other leading agent to help the RSC “drive” the project. Peter de Tolly was Deputy City Planner at the CCC at the inception of the MSDF and in 1995 was seconded to the Olympic Bid team. He was made Director of Special Projects within the Cape Town Municipality after his return from the Olympic Bid work.
Khalil Mallagie: Western Cape Economic Development Forum (WCEDF)

The WCEDF was an ad-hoc forum established at a time when political and institutional transformation was about to transpire. It was in operation from 1992 to 1995. It had taken over certain responsibilities such as the co-ordination of stakeholders in the MSDF process, and the formation of a vision and set of principles within which the spatial development framework was to be developed. In a sense the WCEDF could have been described as the leading agent during this period. However, final decisions were still being sent to the RSC for approval. Khalil Mallagie was an official at the CCC and was seconded to the WCEDF to fulfil and co-ordinate the administrative support function.

Basil Davidson: Urban Development Commission (UDC)

The WCEDF was made up of several commissions of which the UDC was one. The UDC, of which Basil Davidson was the chair, was also the commission that took responsibility for the MSDF. Prior to chairing the UDC, Basil led a delegation of civil society groupings to the Caledon Conference, which is where the MSDF was initiated.

Vanessa Watson: Urban Problems Research Unit (UPRU)

This unit is affiliated to the planning school at the University of Cape Town. Urban Problems Research Unit was involved in researching current urban trends; this was sparked by the introduction of the White Paper on Urbanisation in 1985. The information gathered by UPRU was fed into the MSDF process. Vanessa Watson worked for UPRU at that stage and was also invited to serve on the co-ordinating working group of the MSDF. She has also done her own research independently on the MSDF as part of her Ph.D. Vanessa is currently Associate Professor in the School of Architecture and Planning in the Faculty of the Built Environment at the University of Cape Town.

Cecil Madel: MLH Consulting Town Planners

MLH is a planning firm which was appointed by the RSC as leading consultants for the MSDF. Cecil Madell and Ken Sturgeon project-managed the MSDF from the inception to the production of the technical document (1990-1995). Cecil subsequently left MLH to form his own company, MCA Planners, but several other staff members of MLH remained involved with implementation of the MSDF up until recently (2000/2001).
Simon Nicks: Chittenden Nicks Partnership

Chittenden Nicks Partnership was another planning firm appointed in the MSDF process and under the leadership of Simon Nicks, produced research on activity corridors and the Way Forward document, which was the foundation of the technical document. He was involved from 1989-1995.

David Shandler: Ziller Shandler Associates (ZSA)

Ziller Shandler Associates was a firm of facilitators appointed by the RSC right from the outset and which facilitated the Caledon Conference in 1991. The firm was responsible for designing the process and facilitating all the sessions. David Shandler, who was a partner with ZSA is now a partner with one of the biggest facilitation firms in Cape Town, Common Ground. He was involved with process up until 2000/2001.

Kim van Deventer: Development Action Group (DAG)/ Social

The Development Action Group is a Non-Governmental Organisation (NGO) which was one of the key stakeholders in the MSDF process. Kim van Deventer was a staff member of DAG at the time (1992/3) and had the role of technical advisor to the trade unions, other NGOs and community-based organisations (CBOs) in the MSDF process. Prior to her involvement with DAG, she was a staff member of the CCC within the Planning Department (1990/1). Her involvement with the MSDF process was from its inception until 1994 and thereafter she kept in touch from a distance. In 1997 Kim was appointed as Executive Director of Economic and Social Development within the Cape Metropolitan Council.

Jane Prinsloo: Economic

Jane Prinsloo, at the inception of the MSDF, was Head of Special Projects, and thereafter Assistant Director of Planning at the CCC. She was responsible primarily for heading the team that was producing work “in-house” on the MSDF. Her direct involvement spanned the years between 1991 to 1994/5. Jane was made Head of Economic Development under Kim van Deventer at the Cape Metropolitan Council.

Guy Bodington/ Fran Curry: Environmental

Guy Bodington and Fran Curry were staff members of the CCC at the inception of the MSDF. Under Jane Prinsloo they were part of a team which were specifically responsible for doing the environmental layer of the MSDF. They produced the Environmental Evaluation report in 1993. Guy Bodington no longer lives in South Africa and Fran Curry is now a staff member of the South Peninsula Administration.
Clive Keegan: Politician

Clive Keegan was a councillor and chairperson of the Urban Planning Committee shortly before the 1994 national democratic elections and dealt with planning matters at the CCC as well as the RSC.

Each of the above individuals was contacted telephonically by the researcher and requested to grant an interview. Everyone agreed except Guy Bodington, Fran Curry and Clive Keegan. Guy Bodington had immigrated to Zimbabwe and there was no easy way of contacting him for an interview. Fran Curry was on long leave at the time that the interviews were carried out and when reached at a later stage she was not prepared to be interviewed. Similarly, Clive Keegan could not be reached for an interview. In all a total of ten interviews was held. All were carried out in the period between 19 December 2000 and 17 January 2001. Because of being unable to interview someone from the environmental sector who was involved with the MSDF process, the researcher approached the Environmental Department of the Cape Town Municipality and made a request to examine the original overlay plans prepared at 1:100000 and to obtain a copy of the 1993 Environmental Evaluation report.

Each interview was tape-recorded and then transcribed. Permission was sought from each interviewee to record the interview in order to produce accurate notes for further use in evaluation and analysis. The verbatim transcripts from the interviews proved essential to this research during the analysis of the data.

3.5.3 Documentation

In addition to the questionnaire and the interviews, various documents relevant to the MSDF were scrutinised in terms of the case study template to determine how the different forms of integration were evident in the MSDF. They are as follows:

- letters, memos, faxes and minutes from the RSC and CMC files (historical records);
- agendas, minutes of meetings and other written reports of events which took place during the process, extracted from RSC and CMC files;
- proposals, progress reports and other administrative documents from the RSC and CMC files;
- formal studies/reports and evaluations done on MSDF;
- articles filed in RSC and CMC files;
- various statutes such as Acts, Bills and papers prepared for national and provincial (Western Cape) level;
• maps and diagrams prepared for the MSDF process;
• relevant books and reports.

The documentation obtained on the MSDF was catalogued chronologically (Table 4.1).

3.6 Analytical Techniques Used

The information or evidence gathered on the MSDF case study was categorised and tabulated to facilitate analysis. Two analytical techniques were used to address the research question; they are time-series and pattern-matching analysis. These analytical techniques show how the data were collated, how they contributed in evaluating different aspects of integration within a Spatial Planning process, and how the internal validity of the research design was verified through the convergence of evidence. Validity of the research can be confirmed via the method of triangulation (Figure 3.5).

FIGURE 3.5: VALIDATION: MULTIPLE SOURCES OF EVIDENCE

The Integration Framework with its set of criteria was discussed in chapter two. Use of the framework’s criteria confirms the external validity of this research methodology, as the tool can be replicated and used in different contextual situations. Multiple sources of evidence have been used to establish a chain of events, thus achieving construct validity. Internal validity will be demonstrated through making use of pattern-matching and time series analysis, as demonstrated below.
3.6.1 Time-series Analysis

Time-series analysis is a methodology that culminates in a particular outcome or set of effects that traces a course of events (Yin, 1994). The relevant documentation on the MSDF was perused and placed into a time series. This technique also assisted with understanding the context within which the MSDF process unfolded. The documentation spanned the period from 1985 to 2001. The year 1985 was selected as a starting point as this was when the Land Use Planning Ordinance No. 15 of 1985 was enacted and the White Paper for Urbanisation (RSA, 1986) introduced; these had a profound effect on how metropolitan areas were going to plan for their urban environments. It is because of these legislative requirements that the MSDF process was born. Over this period, all the events that happened within the MSDF process were tracked and documented by the researcher and collated into a table. This included sectoral, legislative, institutional and international events which had an effect on the MSDF (Table 4.1). On the Y-axis, this table has annual years listed chronologically from 1985 to 2001. The X-axis comprises four categories. The first column identifies documents relating specifically to the MSDF process. The second column is entitled “sectoral documents”; these documents were generated at various time periods and outside of the MSDF process, but they do have an indirect impact on the MSDF. The third column lists all the relevant institutional, political and legislative events and products over this time span; the intention is to track all the changes that occurred whilst formulating the MSDF. The last column is designated “International”; the focus here is to identify any international policies or events that could have influenced the MSDF. The time-series analysis traced the changes which have occurred over time. It has helped to determine the trends and relationships of the events that occurred over the time period under review.

The MSDF documentation was then categorised into logical process-related groups in which five phases were identified. These phases are generally chronological, although some do overlap with others; they are briefly described below.


The MSDF was the first planning project at a citywide scale that had to be conducted in a joint manner by the various local government institutions that then existed. Each local authority had its own procedures for executing its spatial planning process. The CCC planners proposed the preparation of a Growth Management Strategy that was an holistic approach to Spatial Planning and which addressed institutional/political, environmental, economic and cultural issues. In contrast,
the RSC planners were focused on generating a map indicating suitable land to accommodate urbanisation and city growth. A compromise had to be found between these two approaches.

There was recognition from the outset that greater institutional and public involvement would be needed and that this process could not merely follow the minimum requirements as required for a statutory planning exercise. Public participation in the preparation of spatial plans was not required, except to call for comment once the plan had been completed. As this was a new way of approaching a planning exercise, the RSC planners decided to appoint specialist consultants to establish, manage and facilitate the public process.

The unbanning of the African National Congress (ANC) in 1992 raised concern about the legitimacy of the existing local authorities and of any new policy work being generated by them, as this would not be representative of the entire community, and thus in the long run would not be sustainable. A new vehicle had to be found that would carry the project over the beginnings of a transitional phase in this political transformation period. As a result, the Western Cape Economic Development Forum (WCEDF) was established which was representative of broad regional stakeholders. The WCEDF played a key role in the early stages of the MSDF by providing an effective forum for the input of community perspectives into the process.


Once the overall approach and process had been determined, a working group was established to co-ordinate the investigative work. At this stage the working group consisted of the RSC, CCC, Chamber of Commerce, Development Action Group (an NGO), Cape Provincial Administration and the MSDF consultants. This was a phase in which a number of reports were commissioned to identify and analyse the spatial structure of the Cape Metropolitan region at that time (RSC files: 30/15/9/19/6; 30/15/9/19/4; 30/15/9/19/10/; 30/15/9/19/9; 30/15/9/19/7; MLH and Agriplan, 1993). Most of the sectoral issues that were addressed were of a spatial nature and the substantive issues of that sector were not investigated. Very few of the investigative reports were based on primary research. Instead, they consisted of existing information from various sources that had been consolidated. This time period also highlighted a sectoral policy vacuum.

Environmental issues were highlighted in an Environmental Evaluation (EE) report (CCC, 1993b), which identified both broad and detailed issues. The Environmental Issues Statement, which forms part of the EE report, specifically identified issues that had a negative impact on the quality of life.
of the inhabitants of the city, the economy and the natural environment itself, thus indicating that something had to be done to reverse these trends. The key focus of this analysis was the realisation that sustainable development could be achieved through this process. The analysis made use of map overlays to indicate spatially where and where not to build.

The social issues which were addressed, related mostly to the housing shortage, informal settlements and the associated quality of life. The lack of basic services and facilities experienced by the poorest in the population was listed as top priority.

The economic analysis focused on the number of jobs and their spatial distribution. This showed that few, if any, employment opportunities were located within the poorest sectors of the city. The high unemployment rate was coupled to the fast-growing population, and to poverty and literacy levels.


The establishment of a vision and planning principles took place after the issues and problems were identified. The vision and principles that were adopted helped to assess and prioritise the issues identified (CCC, 1993a; MDF CWG, 1993a); these were developed in a workshop with the WCEDF. Both the vision and the principles emphasised the concept of sustainable development and provided a foundation on which later aspects of the process could be supported.


Before any concrete proposals were made, different spatial growth models were tested with organised public groups. The models used were based on three cities considered to have similar characteristics to Cape Town: Los Angeles, Sao Paulo and Curitiba. The first set of proposals made was documented in a report entitled The Way Forward: December 1993 (MDF CWG, 1993b). The impact of each one of those models was tested with the organised public groups and it was found that the Curitiba model was preferred.

The Curitiba model of city growth is based on densifying urban areas within corridors and nodes. Public transport is thereby sustained as population densities are increased along transport routes. Mixed uses such as employment opportunities, and residential as well as community facilities within corridors and nodes, would reduce the need for private travel. This would have positive
implications for the environment as it would reduce pollution, energy consumption, travel time and distances and would minimise pressure to expand outwards into “greenfields”. The consolidation of all “green spaces” into a Metropolitan Open Space System (MOSS) would create recreational opportunities for the dense urban areas.

Several documents were generated by the consulting team to support the proposals made in *The Way Forward*. One such document, entitled *Policies for Implementation* (MDF CWG, 1994), highlighted the absence of general policies that would facilitate the implementation of the MSDF.

Specific proposals were set out for the “inner metropolitan area” as well as for the “towns of the outer metropolitan area”. The combination of the proposals into a single unified urban system was presented in a conceptual diagram that shows MOSS, Activity Corridors, Nodes and Urban Edge (*Figure 3.4*). The planning team believed that these spatial proposals would redress the legacy of apartheid that has marginalised Black and Coloured communities physically, socially and economically.

To carry out these proposals *The Way Forward* identified four policy arenas that needed to change in order to support the implementation and development programme: Institutional, Management, Finance and Legislation. It was recommended that policies should change and tools/mechanisms be developed so that they could operate in a unified and integrated way.

In 1994 the first national democratic elections were held, and with this transition came the generation of new national directives on growth and economic development. These directives had a direct impact on the MSDF and included programmes such as the national Reconstruction and Development Programme (RDP).

In 1995 the co-ordinating work group was expanded to include representatives of the new institutional structures that were emerging. The inputs received from this group and other participants on *The Way Forward* were incorporated into the form of a draft *MSDF Technical Document*. Another round of public consultation was held before the document was finalised. Thus, by 1996 the MSDF had reached a number of significant milestones, including the assessment of alternative spatial growth scenarios, the completion of technical analyses and public participation in the development of a draft *MSDF Technical Document*. 
Implementation Phase (1996 – 2001)

In November 1996 the MSDF Technical Document was formally launched. The intention was that this document would be implemented by all the local authorities included in the boundary of the metropolitan area in order to direct their future growth and development (CMC, 1996). Consistent with the transformation process, the RSC planners recognised the benefits of establishing the MSDF as a statutory Structure Plan (under Provincial Planning Legislation). Giving the MSDF statutory status would give it more weight when ruling on individual development applications.

Following the first fully democratic local government elections in 1996, 61 separate municipalities, management committees and councils were amalgamated into a new metropolitan system of government comprising six Metropolitan Local Councils (MLC’s) and the Cape Metropolitan Council (CMC). The six MLCs and the CMC were allocated the execution of specific functions. The local councils were responsible for planning decisions and service delivery and the CMC (comprising much of the former RSC) responsible for bulk services.

For the first time, local authorities in the Cape experienced real autonomy and were given a mandate to function independently from the others. The new local authorities revisited their spatial plans in order to plan and develop what was best for the survival (financially) of their area of jurisdiction; the MSDF proposals were perceived as placing restrictions on the development of local growth areas. Thus the implementation of the MSDF became uneven as the larger MLCs had enough resources to develop their own plans, whereas the smaller municipalities continued to implement the MSDF proposals.

A key consequence of the new institutional autonomy (i.e. spheres of government) was that some of the MLCs no longer supported the MSDF and opposed its establishment as the over-arching statutory plan. In the process, the MSDF and its proposals were amended and became a compromised solution for future development. Other programmes stemming from the MSDF, such as the Urban Edge process and MOSS, required a significant amount of negotiation and participation amongst the six institutions for their initiation and implementation. Similarly, the integration of environmental, social and economic issues at the citywide scale became difficult as the various institutions flexed their new-found autonomy and focused on local interests.
In December 2000, local government elections were held again and the final phase of local government restructuring took place. In this final phase, the seven local government institutions were amalgamated into one single institution, the Unicity. Within this new institutional structure, co-operation appears to have improved, since there is a new attitude which aims at planning for the betterment of the City of Cape Town as a whole and not one of competition between local jurisdictions. New legislation requiring Integrated Development Plans has been introduced by national government, and as a result, planners are now grappling with how best to use the MDF proposals in terms of the new legislative requirements.

3.6.2 Pattern-matching Analysis

Table 3.2 below is a comparative analysis done on the key role-players who were interviewed and the five phases described above. The technical document on the MDF was launched in 1996 and this product is what is commonly referred to as the MDF. It has been used to implement the policies and strategies identified within it. This table indicates that all the interviewees were involved in the formulation of the MDF; a few of them were still involved with its implementation after this time period.
### TABLE 3.2: MSDF PHASING AND INTERVIEWEES GRAPH

**MSDF PHASES**  
1. PHASE 1: PROCESS AND APPROACH FORMULATION  
2. PHASE 2: ISSUES AND PROBLEMS ANALYSIS  
3. PHASE 3: VISION, PRINCIPLES AND GUIDELINES  
4. PHASE 4: PROPOSAL  
5. PHASE 5: IMPLEMENTATION

**INTERVIEWEES**  
Cecil Madelein  
Peter Tomlin  
Khalil Mullahie  
Vanessa Watson  
Jane Prinsloo  
David Shandig  
Peter de Tolly  
Simon Nicks  
Kim van Deventer  
Rael Davidson

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PHASE 1</th>
<th>PHASE 2</th>
<th>PHASE 3</th>
<th>PHASE 4</th>
<th>PHASE 5</th>
<th>YEAR</th>
<th>INTERVIEWEES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1990</td>
<td>Cecil Madelein</td>
</tr>
<tr>
<td>1991</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1991</td>
<td>Peter Tomlin</td>
</tr>
<tr>
<td>1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1992</td>
<td>Khalil Mullahie</td>
</tr>
<tr>
<td>1993</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1993</td>
<td>Vanessa Watson</td>
</tr>
<tr>
<td>1994</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1994</td>
<td>Jane Prinsloo</td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1995</td>
<td>David Shandig</td>
</tr>
<tr>
<td>1996</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1996</td>
<td>Peter de Tolly</td>
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<tr>
<td>1997</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1997</td>
<td>Simon Nicks</td>
</tr>
<tr>
<td>1998</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1998</td>
<td>Kim van Deventer</td>
</tr>
<tr>
<td>1999</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>1999</td>
<td>Rael Davidson</td>
</tr>
<tr>
<td>2000</td>
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<td></td>
<td>2000</td>
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<td>2001</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>2001</td>
<td></td>
</tr>
</tbody>
</table>

**KEY:**  
- PHASE 1: PROCESS AND APPROACH FORMULATION  
- PHASE 2: ISSUES AND PROBLEMS ANALYSIS  
- PHASE 3: VISION, PRINCIPLES AND GUIDELINES  
- PHASE 4: PROPOSAL  
- PHASE 5: IMPLEMENTATION  
- PERIOD INVOLVED IN THE PROCESS BY INTERVIEWEE
Chapter two discussed the five forms of integration as being the criteria on which the data collection and analysis were based. The data collected through the interviews were put into a matrix (Appendix 2). The ten interviewees were listed on one axis of the matrix and the criteria per integration type on the other. The purpose of the matrix was to interrogate and screen the interviews against the criteria and to draw conclusions on any general patterns emerging from their responses. The findings are discussed in chapter four.

This matrix was then translated into a table reflecting the Integration Framework; in addition each criterion was assessed in terms of a value to reflect an overall level of integration that has occurred in the MSDF process (Table 3.3).

**TABLE 3.3: EVALUATION TABLE OF THE MSDF**

<table>
<thead>
<tr>
<th>FORMS OF INTEGRATION</th>
<th>How strongly addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>SUBSTANTIVE</strong></td>
<td></td>
</tr>
<tr>
<td>The integration of physical or biophysical issues with social and economic issues</td>
<td></td>
</tr>
<tr>
<td>The integration of emerging issues such as health, risks, bio-diversity, climate change etc.</td>
<td></td>
</tr>
<tr>
<td>The (appropriate) integration of global and local issues</td>
<td></td>
</tr>
<tr>
<td><strong>METHODOLOGICAL</strong></td>
<td></td>
</tr>
<tr>
<td>The integration of environmental, economic and social (impact) assessment approaches such as cumulative assessment, risk assessment, technological assessment, cost/benefit, multi-criteria analysis, etc.</td>
<td></td>
</tr>
<tr>
<td>The integration of the different applications, and experiences with the use of particular tools such as GIS</td>
<td></td>
</tr>
<tr>
<td>The integration and clarification of (sector) terminologies (incl. the element of “strategic”)</td>
<td></td>
</tr>
<tr>
<td><strong>PROCEDURAL</strong></td>
<td></td>
</tr>
<tr>
<td>The integration of environmental, social, economic planning/assessment, Spatial Planning and EIA</td>
<td></td>
</tr>
<tr>
<td>The integration of sector approval/licensing processes, Spatial Planning and EIA</td>
<td></td>
</tr>
<tr>
<td>The adoption of co-ordination, co-operation and subsidiary as guiding principles for (government) planning at different levels of decision making</td>
<td></td>
</tr>
<tr>
<td>The integration of affected stakeholders (public, private, NGO) in the decision making process</td>
<td></td>
</tr>
<tr>
<td>The integration of professionals in a truly interdisciplinary team</td>
<td></td>
</tr>
<tr>
<td><strong>INSTITUTIONAL</strong></td>
<td></td>
</tr>
<tr>
<td>The provision of capacities to cope with the emerging issues and duties</td>
<td></td>
</tr>
<tr>
<td>The definition of a governmental organisation to ensure integration</td>
<td></td>
</tr>
<tr>
<td>The exchange of information and possibilities of interventions between different sectors</td>
<td></td>
</tr>
<tr>
<td>The definition of leading and participating agencies and their respective duties and responsibilities</td>
<td></td>
</tr>
<tr>
<td><strong>POLICY</strong></td>
<td></td>
</tr>
</tbody>
</table>
The integration of “sustainable development” as overall guiding principle in planning and EIA
The integration of sector regulations
The integration of sector strategies
The timing and provisions for political interventions
Accountability of government

Key:
Categories

1 = Slightly integrated
2 = Integrated
3 = Fully integrated
✓ = Unchanged
☑ = Increase over time
☒ = Decrease over time

The evidence is summarised in Table 4.1, the matrix in Appendix 2 and the actual documentation was then interpreted and assigned a value from one of three categories. The three categories are as follows: “1” for slightly integrated - thus, if there was none or very little evidence that integration occurred, a “1” was assigned to those criteria. A “2” was assigned if the evidence showed that there was integration; thus, there is no doubt that integration occurred, but not to its full potential, which would then be valued at “3”. Another level of measurement was introduced to reflect the time factor that was present. If integration increased or improved over time it was indicated with “☒”. If integration decreased it was indicated with “☒” and if there was no change over time it was indicated with “✓”. The overall evaluation of the extent of integration that has occurred in the MSDF process is illustrated in chapter five (Table 5.1).

3.7 Ethical Considerations

The transcripts and recordings from the interviews will be kept in the archives of the Environmental and Geographical Science library at the University of Cape Town for a period of fifteen years. The information cannot be used against these individuals in a court of law or by any other means.

3.8 Limitations

Although the individuals representing the environmental sector and political sector could not be reached for an interview, enough evidence was gathered to address these aspects without the interviews.
Obtaining files to verify some of the information from the CMC was difficult as the files were either lost or the administrative staff did not know where particular files were located. The files also did not contain certain information, for example the presentations given by the CCC planners to the UDC on the MSDF early in the process; also, information on the Environmental Evaluation were not on file.

3.9 Conclusion

The research methodology, in the case of the MSDF, is based on empirical evidence. The MSDF study was selected to establish and evaluate the different forms of integration as a Spatial Planning process. The aim of the analysis is to build on to existing theory and to move from the specific (case study) to the general (theory) (Strauss and Corbin, 1998). The Integration Framework has provided the criteria to determine how the five forms of integration have been applicable in the MSDF. The analysis relied on the data collated from relevant documentation and interviews conducted. The evidence was analysed making use of two different techniques i.e. time-series and pattern-matching analysis.

This research methodology could not claim absolute reliability as the analysis was interpretative and subjective, but it was internally consistent in making use of pattern-matching and time-series analysis. External validity was established by screening the MSDF against generally accepted criteria, the Integration Framework.

The next chapter will analyse the MSDF case study in terms of how it has measured against the evaluation criteria.
CHAPTER FOUR
EVALUATION OF THE CAPE TOWN METROPOLITAN SPATIAL DEVELOPMENT FRAMEWORK

4.1 Introduction

The context and aims of the MSDF were discussed in chapter three. This chapter presents the evaluation and analyses of the data that has been collated on the MSDF over an eleven-year period (1990 – 2001). Chapter five will discuss these findings within the broader context of the literature. As described in chapter three, two different types of analysis techniques were used, namely pattern-matching and time-series analysis. In this chapter the Integration Framework (Figure 2.4) is applied to the MSDF case study. The findings of this research are presented in terms of this framework. The responses of the interviewees have been used in terms of the case study template of the five forms of integration (Appendix 2). It should be noted that the evaluation and analysis focussed particularly on the initial years of developing and presenting the spatial proposals of the MSDF, namely from its inception to the adoption of the MSDF Technical Document in 1996. However, the development of more detailed strategies and action plans and the process to have the MSDF approved formally as a structure plan were also included in this evaluation and analysis.

The documentation that was examined was placed into a chronological timetable (Table 4.1). This table traces the events and changes in the MSDF over time in relation to other processes taking place. The time series has provided some valuable insights into the linkages between the different forms of integration, reinforcement of the context within which this process happened, as well as the patterns which have emerged from the interviews and other relevant documentation. Analysis of responses to each form of integration as per the Integration Framework follows.
TABLE 4.1: MSDF TIME SERIES ANALYSIS: CHRONOLOGICAL EVENTS

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MSDF DOCUMENTS/PRODUCTS</th>
<th>SECTORAL (SPATIAL, ENVIRONMENTAL, ECONOMIC &amp; SOCIAL)</th>
<th>INSTITUTIONAL / POLITICAL &amp; LEGISLATIVE</th>
<th>INTERNATIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td></td>
<td><strong>LUPO (15 of 85)</strong></td>
<td><strong>White Paper on Urbanisation</strong></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td></td>
<td><strong>Influx controls abolished</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td></td>
<td><strong>Establishment of WCRSC</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td></td>
<td><strong>Cape Metropolitan Area Guide Plan</strong></td>
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<td>1989</td>
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<td><strong>Package of Plans approach designed for Victoria and Alfred waterfront development</strong></td>
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<td>1990</td>
<td><strong>Regional Development Strategy Committee established</strong></td>
<td><strong>The planning of a future Metro Cape Town (UPRU)</strong></td>
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<td><strong>An Overview of Development Problems in CMA (UPRU)</strong></td>
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<td><strong>Strategies for the economic development of the Western Cape “Growing the Cape” (Wesgro)</strong></td>
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<td><strong>Cape Town Structure Plan (CCG)</strong></td>
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<td><strong>CMA Planning Survey: need for future low income housing (Bertie v Zyl)</strong></td>
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<td><strong>Metropolitan Transport Plan (MTAB &amp; CCC)</strong></td>
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<td><strong>Tourism Study for the Western Cape &amp; Cape Peninsula (Dennis Moss)</strong></td>
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<td><strong>Tourism study West Coast &amp; RSC (Univ. of Stellenbosch)</strong></td>
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<td><strong>Land Availability Study (Macro plan)</strong></td>
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<td><strong>Metro South East Structure Plan (RSC)</strong></td>
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<td><strong>Activity Corridors as an urban strategy (Chittenden Nicks &amp; CSIR)</strong></td>
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<td>1991</td>
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<td><strong>Scrap Group Areas Act, Separate Amenities Act etc.</strong></td>
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<td><strong>Physical Planning Act 125 of 1991</strong></td>
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<td><strong>Environmental Checklist for Structure Plans (DEA)</strong></td>
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<td>MSDF DOCUMENTS/PRODUCTS</td>
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<td>INSTITUTIONAL/ POLITICAL &amp; LEGISLATIVE</td>
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<tr>
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<td>Problems and issues</td>
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<td>WCEDF launched</td>
<td>UNCED conference</td>
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<td>Analysis</td>
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<td>IEM Guidelines</td>
<td>Rio de Janeiro: Agenda 21</td>
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<td>CWG established</td>
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<td>programme for sustainable development</td>
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<td>3</td>
<td>Principles &amp; Guidelines Document</td>
<td>Urban growth in metropolitan Cape Town: implications for inland and coastal waters (CCC)</td>
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<td>Convention on Biodiversity (Rio)</td>
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<td>The Environmental Evaluation for the CMA (CCC)</td>
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<td>UN framework convention on climate change</td>
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<td>A Vision for the future of the Metropolitan Cape Town (CCC)</td>
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<td>The Way Forward - Interim Metropolitan Development Framework document</td>
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<td>MSDF discussion</td>
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<td>1st National Democratic elections</td>
<td>United Nations</td>
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<td>document prepared for the UDC: approach (CCC)</td>
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<td>National Policy Framework, Reconstruction and Development Programme</td>
<td>Conference on Human</td>
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<td>Draft MSDF</td>
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<td>Disbanding of Commissions</td>
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<td></td>
<td>CWG expanded</td>
<td></td>
<td>CMC established and replace WCRSC</td>
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<td>Development and Facilitation Act No of 1995</td>
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<td>Urban Development Strategy of the GNU (Gov. Gaz 16679)</td>
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<td>6</td>
<td>Adoption of MSDF by CMC</td>
<td>SEA a primer (CSIR)</td>
<td>1st local government elections</td>
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<td>statutory working group established</td>
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<td>Growth, employment &amp; redistribution: National economic policy (GEAR)</td>
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<td>MSDF communications programme started</td>
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<td>Local Transitional Act No 97: introductions of IDPs</td>
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<td>7</td>
<td>Comment by all local authorities on Technical MSDF</td>
<td>White paper on National Transport Policy</td>
<td>White paper on Western Cape Provincial Transport Policy</td>
<td>Rio plus 5</td>
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<td></td>
<td>&quot;Road show&quot; to all</td>
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<td>Housing Act no 107 of 1997</td>
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<td></td>
<td>1st and 2nd newsletters</td>
<td></td>
<td>National urban development framework policy</td>
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<td></td>
<td>MSDF Booklet (short synopsis)</td>
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<td>EIA Regulations and Guidelines in terms of Environmental Conservation Act of 1989</td>
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<td></td>
<td>MSDF Stiffy disc</td>
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<td>Unbundling of 61 local authorities to 6 metro local</td>
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<td></td>
<td>MSDF video</td>
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<tr>
<td>YEAR</td>
<td>MSDF DOCUMENTS/PRODUCTS</td>
<td>SECTORAL (SPATIAL, ENVIRONMENTAL, ECONOMIC &amp; SOCIAL)</td>
<td>INSTITUTIONAL / POLITICAL &amp; LEGISLATIVE</td>
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<tr>
<td>1998</td>
<td>• Draft MSDF Statutory plan</td>
<td>• 1st SOE Report</td>
<td>council and 1 metro council</td>
<td>• CEROI Cities' state of the environment report on the internet UNEP/GRID Arendal</td>
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<td></td>
<td>• Bilateral with local authorities regarding the statutory plan</td>
<td>• Economic trends and spatial patterns (CMC)</td>
<td>• Integrated development planning for local authorities: A user friendly guide (identify SEA as valuable tool for larger municipalities)</td>
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<td></td>
<td>• 3rd, 4th &amp; 5th newsletters</td>
<td>• Moving Ahead Cape metropolitan transport plan (CMC)</td>
<td>• White Paper on the conservation of Biodiversity N1/1095 GG 18163</td>
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<td>• 1st draft guidelines document</td>
<td>• TSDF</td>
<td>• White paper on Local Government</td>
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<td></td>
<td>• Statutory Plan advertised for comment</td>
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<td>• Local Government Municipal Structures Act</td>
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<tr>
<td>1999</td>
<td>• Statutory Document submitted to PAWC for approval – April 1999</td>
<td>• Economic Development &amp; local government strategy</td>
<td>• Green Paper on Environmental Management Policy (addresses need for SEA)</td>
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<td></td>
<td>• 6th newsletter</td>
<td>• 2nd SOE report</td>
<td>• White paper on Local Government Municipal Structures Act</td>
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<td></td>
<td>• Urban Edge detailed study</td>
<td>• CTM municipal Spatial Development Framework</td>
<td>• National Water Act</td>
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<td></td>
<td>• Scenic drives study</td>
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<td>• White paper on Environmental Management Policy (addresses need for SEA)</td>
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<td></td>
<td>• Minerals structure plan</td>
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<td>• Green Paper on Planning and Development</td>
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<tr>
<td>2000</td>
<td>• MSDF Handbook interpretation and application of MSDF principles and spatial concepts (CMC)</td>
<td>• IEMP</td>
<td>• Western Cape Planning and Development Act</td>
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<td></td>
<td>• MSDF indicators study</td>
<td>• SEA in SA guideline document CSIR</td>
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<td>• LA 21</td>
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<td>• Moss detailed study</td>
<td>• 3rd SOE report</td>
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<td>• Rural development strategy</td>
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<td></td>
<td>• Implementation Strategy of MSDF</td>
<td></td>
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<tr>
<td>2001</td>
<td>• MSDF redraft for City of Cape Town</td>
<td>• 4th SOE report</td>
<td>• 2nd democratic local elections: from 7 local authorities to 1 single unicity</td>
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<td>• Promotion of Access to Information Act</td>
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<td>• Local Government Municipal Systems Act</td>
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4.2 Substantive Integration

4.2.1 The Integration of Physical or Biophysical Issues with Social and Economic Issues.

The issue identification process consisted of various technical reports prepared by public, private and academic sector professionals from as early as 1990 (Table 4.1).
There was general consensus amongst the interviewees that biophysical, social and economic issues were integrated within the MSDF and thus it was "...not confined to spatial issues only" (Interview 2). However, it was stated that even though non-spatial issues were addressed, they occurred at a superficial level (Interview 9); because the focus of the MSDF was to devise a physical structure plan providing spatial solutions, it was a "spatially driven" process. It therefore did not address the dynamics and linkages among spatially defined elements. The very name of the plan, "Spatial Development Framework" attests to this emphasis.

Biophysical, social and economic issues were investigated relatively early on in the process, as part of the problem statement and contextual analysis. Particular attention was given to the physical aspects of development as a specific concern of planning, as well as the social, political and economic aspects (MLH and Chittenden & Associates, 1993). The consultants appointed to this process produced several working papers on each of the issues investigated. The key development issues and sectoral problems and issues were synthesised and listed in point form in the document Problems, Issues and Key Development Challenges Facing the Cape Metropolitan Area prepared by MLH and Chittenden and Associates in 1993. The key development issues identified were:

- the Cape Metropolitan Area (CMA) demographic profile: its size, growth trends and projections, age and sex structure as well as household size and dependency ratio;
- history/reasons for structural underdevelopment: old policies that had given rise to this were listed. The document identified the lack of opportunities and inadequate training, recession, sanctions and economic slow-down as reasons for the underdevelopment;
- unemployment, poverty and social instability: here the levels of unemployment, poverty, crime and violence as well as housing and facility shortages were listed;
- unsustainable development was explained in terms of environmental degradation and pollution of sensitive natural areas (rivers, bays, wetlands, indigenous vegetation, and agricultural land), air pollution (industrial effluent, exhaust gases and non-electrical sources of energy), non-renewable resources (fuel, coal, oil), duplication of community facilities, inadequate basic services (lack of water, electricity etc.), poor integration of physical structure of the CMA and inefficient use of renewable resources;
- inappropriate urban form and structure were detailed as inefficient city structure and growth patterns, inappropriate standards (regulations, engineering design standards), separation of land-uses, location of poor communities, inefficient public transport system, and lack of developed commercial and industrial infrastructure in low income areas;
- the fragmented local government bodies highlighted poor and inefficient metropolitan management, lack of proactive management strategy, exclusion of majority participation in
metropolitan administration, unaccountable local government structures, financial unsustainability and exclusion of people of colour from the voters’ role.

The following sectoral issues were investigated as being affected by, and in turn affecting, urban management practices: population dynamics, employment opportunities, housing, social services, transportation, the natural and agricultural environment, basic utility services and land issues (MLH and Chittenden and Associates, 1993). For each one of these sectoral issues the planning and development implications were stated; these briefly outlined the situation of the CMA and indicated that it was facing a number of major development problems.

The information was all secondary information and no new surveys or research projects were initiated to inform these documents (Interview 1 and 8). The biophysical issues were highlighted in the Environmental Evaluation report (EE) (CCC, 1993b), which identified both broad and detailed issues. The Environmental Issues Statement (CCC, 1992), which formed part of the EE report, specifically identified issues that had a negative impact on the quality of life of the inhabitants of the city, the economy and the natural environment itself, indicating that intervention was required to reverse these trends. The analysis that was undertaken in the EE document made use of map overlays that indicated where and where not to build.

The CCC through their Municipal Structure Plan exercise had already started to gather information on key issues and problems to inform their planning process (at a metro level). The Environmental Issues Statement (EIS) report, dated July 1992, was prepared in-house by the Environmental Management Department of CCC specifically for the Metropolitan Development Framework (MDF), which was what the MSDF was first called (RSC file 30/15/9/19/7). An environmental evaluation and land-use suitability study followed from this analysis. This paper referred to the United Nation’s Conference on the Environment and Development (UNCED) and highlighted the dilemma of how to reconcile environmental management with development concerns, and how to reach the goals of sustainable development.

The EIS stated that it had assessed the condition of the metro environment and the causes of the inter-related environmental and developmental problems, and concluded that the two concerns could not be resolved separately (CCC, 1992). Furthermore the EIS stated that both concerns impacted negatively on the quality of life of the inhabitants of the city, the economy and the natural environment itself, and that action was required to reverse these trends. The key environmental issues identified by the Environmental Management Department ranged from broad-level issues
such as proposing a regional water policy, through to detailed sectoral issues such as providing access to potable water. A summarised table of these issues is attached as Appendix 3.

The EIS indicated that there was a great need for various policies, systems, monitoring and management plans to address the issues listed, and it was intended that the Growth Management Strategy would take these issues further. It is important to note that the major constraints to the addressing of these relevant issues were identified as being due to the conflict of jurisdiction over all three levels of government (co-operation and co-ordination). The lack of policy and finances was also highlighted as a key concern that needed to be addressed.

The EIS report (CCC, 1992) recognised that achieving sustainable development would be the key goal of any development process. Consequently it listed five key environmental concerns, viz.:

- ensuring the maintenance and rehabilitation of essential ecological processes and life support systems;
- the sustainable utilisation of renewable resources;
- the rational utilisation of non-renewable resources;
- the conservation of biological diversity; and
- the integration of environmental principles into planning and development.

Following the EIS, the CCC produced an environmental report entitled *The Environmental Evaluation for the Cape Metropolitan Area* (EE) in August 1993. The purpose of the EE report was to inform the MSDF process as well as the vision statement for the CMA. In addition, it was to inform a process that had been established in order to develop an Environmental Policy for the CMA, but which was never completed. The EE report made several policy and action recommendations that acted as a basis for the sustainable spatial planning of the CMA. Specific policy areas that were addressed included improving the quality of life; minimising loss of resources; maintaining and developing quality sites sustainably; overcoming water shortage; and creating a Metropolitan Open Space System (MOSS). More specifically, it made policy and action recommendations which are summarised in Appendix 4.

The EE report included several map layers, which indicated where areas of resources and constraints were located and where development could occur. These informed the proposals contained within the *MSDF Technical Document*. Some of the “action areas” identified within the EE report are in the process of being implemented - for example, the delimitation of an urban edge.
In June 1993, a paper on biophysical issues entitled *Agricultural Resources Evaluation* was prepared by MLH Consulting Town Planners in association with Agriplan. The purpose of this report was to focus on the loss of agricultural land because of the encroachment of development. The report emphasised that the loss of valuable agricultural land should be curbed, and that it could be measured against loss of income and job opportunities. It was also suggested that further research should be conducted and policies introduced as protection against the loss of valuable agricultural resources. The creation of an urban edge is one of the spatial strategies introduced to address this particular issue.

The social issues related mostly to the housing shortage, informal settlements and associated quality of life matters (for example AIDS) in order to anticipate future land requirements. The lack of basic services and facilities available to the poorest sectors of the population were listed as top priorities. These issues were discussed in a working paper entitled *CMA Housing Issues*, prepared by MLH consultants (MLH, 1993). Two other working papers based on social facilities were prepared. The first was *Education and Training*, which examined the current position and location of education facilities and enrolment numbers; the other was *Health Issues*, which highlighted the inequitable distribution of health care facilities in the CMA (RSC file, 30/15/9/19/9). The spatial strategy was to develop a new node in the metro south-east to address these issues; corridors to this node, in which housing and services would be provided, were to be linked and developed.

The economic analysis focused on the number of jobs and their spatial distribution. It showed that few employment opportunities were located within the poorest sectors of the city. The high unemployment rate was coupled to the fast growing population, poverty and low literacy levels. The economic information on the Western Cape economy, trends and opportunities was supplied by Wesgro, a non-profit organisation which promotes economic growth in the Western Cape (Watson, 2002).

The biophysical, economic and social issues that were identified were analysed in a “broad brush” fashion. There were no detailed facts and figures on the costs, benefits and quantities of the natural resources. Thus the information that was presented did not reveal or explore the relationships amongst the different sectors. Hence the trends that needed to be revealed were not understood in sufficient detail (Interview 7 and 10). However, the issues informed the basis for formulating the proposals of the MSDF. These issues thereafter informed the development of the policies and strategy phase (1993-1996) which culminated in the *MSDF Technical Document*. 
Very few political and community stakeholders actually critically debated the "issues and problems" that were being identified in the MSDF process, the reason being that the "...issues had already been adequately identified and described ad nauseum .... and what was required were quick action plans" (Nicks, 1995, p. 26).

It was only much later in the implementation phase, from 1998 onwards (Table 4.1), that such detailed projects as the Urban Edge study and the MOSS study, initiated from the MSDF, evaluated more detailed issues.

4.2.2 The Integration of Emerging Issues such as Health, Risks, Bio-diversity and Climate Change.

The interviewees were of the opinion that emerging issues such as health, risks, bio-diversity and climate changes were not addressed because they were new concepts that were not part of the city's agenda at that stage (Interview 2). For example, winter flooding is a critical issue in the flat, low-lying areas of Cape Town, where there are high water tables. The informal settlements experience flooding because there is poor or non-existent infrastructure to facilitate drainage, and thus the combination of poor sanitation (portable chemical toilets and self-built pit latrines) and standing water poses a health risk in such settlements (Nicks, 1995). This was highlighted as an issue but not discussed in terms of the spatial proposals made. The MSDF was a "...spatial programme to address spatially related issues" (Interview 1) and those such as "...redress [of] an inefficient spatial city, poverty reduction" (Interview 2) were emerging issues that were of much higher priority than those previously mentioned. Others, such as new policy and legislative imperatives, for example the Reconstruction and Development Programme (RDP) and Development and Facilitation Act (DFA) were "...superficially edited into the MSDF document" (Interview 9). Thus, the discussion was focussed mainly upon space and how the use of it could be made more efficient.

The MSDF Technical Document contains a map showing spatially the area of highest photochemical smog, but does not discuss this environmental health risk (CMC, 1996, Figure 6.1). For instance, it is estimated that industry contributes 85 percent of sulphur dioxide pollution, while industry and motor vehicles contribute 53 percent and 42 percent respectively of nitrogen oxide pollution. Milnerton industrial area, where the oil refinery is located, has been identified as a specific source of industrial pollution. It is located perpendicular to the prevailing winds, and thus pollutes large areas (Nicks, 1995). Although such detail was not evident in the MSDF Technical
Document, the need to “…generate environmental policy and emission control regulations to promote development that sustains a healthy and pollution free environment” was mentioned although not emphasised (CMC, 1996, p.87).

The word “bio-diversity” was also once mentioned as a role of MOSS (CMC, 1996, p.53). The meaning of it or what it is to achieve was not explained and thus it was not clearly understood.

The time-series, Table 4.1, shows that these issues were emerging through international conventions on biodiversity and climate change held in 1992, a year after the inception of the MSDF. However, issues were not included in the MSDF document, since its purpose was to concentrate on metropolitan issues only - the process was clearly focussed on local issues. It was only much later in 1997/98, with the Rio + 5, and City State of the Environment Report on the Internet programmes (CEROI), that local programmes were introduced. Examples are Local Agenda 21 and State of the Environment Reporting (SOE), which started to highlight issues concerning bio-diversity. It was also only in 1997 that a White Paper on conservation and biodiversity was published (Table 4.1). These events occurred after the MSDF was formulated and therefore were not integrated into it.

4.2.3 The Integration of Global and Local Issues.

Taking a global perspective, the MSDF drew on the experience of international case studies; Curitiba, Los Angeles and Sao Paulo were used as comparative growth models. Some interviewees felt that these concepts were not well enough understood as “…they did not look at the institutional structures that made the concept (sic) succeed” (Interview 10) and that these “…global solutions were mismatched with local issues” (Interview 9). It was also pointed out that globalisation was “big” at the time the MSDF got underway but that the policy-makers did not “…state the role it wanted to play” (Interview 6). This was particularly true for global issues introduced by the Rio Convention, Local Agenda 21 and others topical at that time, such as global warming.

Some local issues/events were briefly addressed within the MSDF Technical Document. One example was the Reconstruction and Development Programme (1993/4), which put into action key ideas such as redistribution, reduction of poverty; another is the national strategy GEAR (1996), which focussed on promoting economic growth and global positioning.
The MSDF highlighted many local issues, which included:

- low-density urban sprawl and inappropriate development;
- separation of place of work and residence, creating excessive trip generations via emphasis on private transport;
- unequal distribution of resources and facilities; and
- uncoordinated management of provision of services.

These were all important to the spatial restructuring of the metropolitan area.

These sectoral issues were not studied in depth, as it was not the purpose of the document to do so. However the issues were highlighted and it was indicated how the spatial model could assist in resolving them; for example, broad natural areas of metropolitan significance were identified. The MSDF indicated that detailed local and sub-regional studies were needed to develop clear policies on the biophysical aspects of the metropolitan area. Sectoral elements which were addressed in the MSDF, but not given any spatial manifestation in terms of its four structuring elements, are tabulated below (Table 4.2). Some of these issues were presented spatially as diagrams, but did not form part of the four main spatial structuring elements as advocated in the MSDF. Some of these policy statements were made to highlight the local knowledge gap and to indicate where further studies were required.

**TABLE 4.2: MSDF SECTOR SPECIFIC ISSUES**

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<thead>
<tr>
<th>SECTORAL ISSUE</th>
<th>POLICY STATEMENT NUMBER*</th>
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<tr>
<td>Environmental Resources and Constraints:</td>
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<tr>
<td>Scenic Landscape</td>
<td>Policies 27 – 35</td>
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<tr>
<td>Metropolitan Nature Areas</td>
<td>Policies 36 – 39</td>
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<tr>
<td>Cultural and Historic Precincts</td>
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<td>Inland and Coastal Water</td>
<td>Policies 40 – 44</td>
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<tr>
<td>Mineral Deposits</td>
<td>Policy 45</td>
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<td>Agricultural Land</td>
<td>Policy 46</td>
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<td>Horticulture</td>
<td>Policy 47</td>
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<tr>
<td>Environmental Hazards</td>
<td>Policies 48 &amp; 49</td>
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<tr>
<td>Housing:</td>
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<tr>
<td>Problems in existing areas</td>
<td>Policies 50 – 52</td>
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<tr>
<td>Provision of additional housing choices</td>
<td>Policies 53 &amp; 54</td>
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<tr>
<td>MSDF and National and Provincial Housing Policy</td>
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</tr>
<tr>
<td>Reconstruction and Development Programme</td>
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<td>SECTORAL ISSUE</td>
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<tr>
<td>Transport:</td>
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<tr>
<td>Need for integrated transport system and single transport authority</td>
<td>Policy 55</td>
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<tr>
<td>Focus on provision of public transport</td>
<td>Policy 56 – 58</td>
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<td>Towns in outer metro region (e.g. Atlantis)</td>
<td>Policies 59 &amp; 60</td>
</tr>
<tr>
<td>Metropolitan-wide transport linkages</td>
<td></td>
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<tr>
<td>Employment:</td>
<td></td>
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<tr>
<td>Create opportunities for business and employment</td>
<td>Policy 61</td>
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<tr>
<td>Reconstruction and Development Programme</td>
<td>Policies 62 and 63</td>
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<tr>
<td>Location of major projects</td>
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<td>Promotion of Tourism</td>
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<td>Smallholdings</td>
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<td>Industrial and manufacturing activities</td>
<td>Policy 64</td>
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<tr>
<td>Large regional and other shopping centres</td>
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<td>Cape Town International Airport and Sea Port</td>
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<td>Strategy on Co-ordination of stakeholders</td>
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<td>Social Services/ Infrastructure:</td>
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<td>Identify authorities responsible for service delivery</td>
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<tr>
<td>MSDF to guide location and investment of social services</td>
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<tr>
<td>Develop an integrated approach to provision of and upgrading of services</td>
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<tr>
<td>Implications for investment in infrastructure relating to urban sprawl</td>
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<td>Policy needed on subdivision</td>
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*NOTE: The policy numbers refer to the policies listed in the MSDF addressing the specific sectoral issue.

Source: Adapted From CMC (1996)

New and more sophisticated information on biophysical, social and economic issues became available during the implementation phase of the MSDF. From 1996 onwards, various sectoral policies and strategies were generated. The MSDF was criticised by several sectors as not having current and in-depth understanding of the different contextual fields (Watson, 2002). In particular the economic sector challenged the MSDF and went so far as to suggest that the MSDF “... does not understand the local space-economy” (Watson, 2002, p.115). It was only in 1998 that the Economic Trends and Spatial Patterns (CMC, 1998a) study was initiated (Table 4.1). This study argued that fixing an urban edge would drive the land prices up to the detriment of the poor (Watson, 2002). Also, the study showed that “mega projects” were being located outside the intended development corridors, indicating that the MSDF proposals were inflexible, - i.e. failing to keep up with the unpredictable economic shifts occurring in the CMA (Watson, 2002). It also
indicated a lack of political will and regulatory power. Thus, the MSDF was based on information that existed during the early 1990s. New studies and policies that were being developed implied that spatial proposals were not in synchronisation with “what is happening on the ground” and that perhaps it was time for the MSDF to be reviewed.

The CCC was selected as the South African city which would bid for the 2004 Olympic Games. The bid was recognised as an event with potential continental significance, as not only would it have been the first time that an African city hosted the Games, but considerable investment would have to be made with regard to providing facilities in poorer areas of the CMA, including the upgrading of transportation linkages in those areas (Nicks, 1995). The Olympic Plan was considered an opportunity to address some of the social problems and to provide the bulk infrastructure that the municipalities could not afford, as well as to foster private sector development (Interview 7). In the event, the bid was unsuccessful.

4.2.4 Summary

It can be argued that the MSDF process showed that biophysical, social and economic issues were integrated at a spatial level. The MSDF Technical Document shows a hexagram of an integrated approach that was to be followed (Figure 4.1), and this figure indicates that it has followed an holistic approach. However, Interviewee 9, referring to this figure, states “...it was totally superficial working with them [all the sectors referred to in figure 4.1], because the understanding of the dynamics between them, what drives them, what leads, what follows, how things fit together wasn’t really analysed together, because you were sitting in this spatially driven thing.” Thus there was a lack of more detailed substantive information on many issues, and this prevented further integration from occurring. This was all due to the spatial focus of the MSDF and the fact that no primary research was undertaken during the early phases of the process. However, the MSDF was instrumental in raising an awareness of a wide range of urban and environmental issues (Nicks, 1995).
Recently this was reinforced in the *MSDF Redraft Document – 2001*, where it was stated that "...more localised and detailed planning from other sectors, is obviously necessary to give effect to the proposals contained in the MSDF" (CoCT, 2001, p.36).

4.3 Methodological Integration

4.3.1 The Integration of Environmental, Economic and Social (Impact) Assessment Approaches such as Cumulative Assessment, Risk Assessment, Technological Assessment, Cost/Benefit, and Multi-Criteria Analysis.

The interviewees stated that none of the above approaches were applied as they were not well known at the time, particularly to the project team members. The approaches were recognised only much later on in the process and it was only in "...1999/2000 that the team started to look at [for instance] performance indicators" (Interview 4). Poor levels of information and lack of detail (for example on many environmental issues) resulted in a failure to portray the nature of trade-offs between costs and benefits. More detailed research was thus required to highlight these relationships (Nicks, 1995). The *Environmental Evaluation* (EE) study did however help to
determine the direction of urban expansion by mapping general areas of environmental hazards, historical and cultural resources and environmentally sensitive areas (CCC, 1993b; Interviews 7 and 5). As the terms of reference of the MSDF included designing and developing spatial proposals, an understanding was needed of how cities develop and what impacts they have on the environment.

An assessment technique used in the MSDF was to determine what impact city growth had on the environment; this was done by evaluating international cities that are similar in nature to Cape Town (Interview 8). However, in performing this assessment it was pointed out that not enough information had been generated to measure and understand the trends and dynamics of city growth (Interview 7).

One of the methods used to comprehend trends and dynamics of city growth was cognitive mapping. The general public was invited to participate in preparing a map which indicated what parts of the city “worked well” and which did not (Watson, 2002; Interview 8). The reason for using this method was to understand how the different neighbourhoods within the metropolitan area perceived the city and to establish what vision was being promoted (Watson, 2002). Another method used in formulating the MSDF was “scenario building”, a common approach in the planning processes (Watson, 2002). Three development scenarios of comparative cities were developed to show how Cape Town could possibly change in the future. The chosen cities were Los Angeles, Sao Paulo and Curitiba (Figure 4.2). Los Angeles was represented as the classic sprawl city with low densities, pollution, poor public transport, lack of open space, and vast and costly infrastructure (CMC, 1996). These are the same issues that underlie Cape Town’s spatial problems and serve as a warning of what could happen if certain trends continue (Watson, 2002). Sao Paulo was a “Third World” example of high population growth rates and poor management, and was described as the “Tidal Wave Scenario” (CMC, 1996). This depicted a situation of being unprepared for, and engulfed by, a “tidal wave” of rapid population growth of predominantly poor people (Watson, 2002). Curitiba was represented as the “What works best scenario” (CMC, 1996). Curitiba had adopted a number of strategies (compaction, densification, public transport based in corridors, public open space and environmental management) including the spatial principles contained in the MSDF. It provided an excellent example of how the MSDF should implement its own strategies (Watson, 2002). These three scenarios were used as an important persuasive device for making the MSDF a saleable commodity and for communicating it to non-planners (Watson, 2002). The experience of the three cities impressed upon the public the consequences of various development approaches and the impact that they might have on various urban and environmental issues (Nicks, 1995).
The economic analysis that was undertaken in the MSDF investigated socio-economic conditions, focussing on the following: who its people were (its labour force); what their average income was; their subsistence levels; where they lived; what the divisions of economic activity were; and what the economic growth sectors were (CMC, 1996; MDF CWG, 1993b). The economic analysis did not, however, include the structure and dynamics of the local economy; trend analyses such as establishing the amount of office space developed, or analysis of the property and land markets, were not performed (Interview 7). Techniques like location quotient analysis or comparison of industry growth performances (shift share analysis) were not used (R. Wolpe, pers. com., 2001).

Environmental, economic and social (impact) assessment approaches, such as cumulative assessment, risk assessment, technological assessment, cost/benefit, and multi-criteria analysis, were not integrated into the MSDF process. However some of them have been referred to in the MSDF Technical Document. Reference was made to the application of IEM procedures for the assessment of the impact of proposed development that threatens metropolitan-scale resources. The document also advocated the undertaking of social cost/benefit studies (including environmental criteria) to inform all major transport projects (CMC, 1996, pp.62 and 74).
The time series table (Table 4.1) shows that IEM guidelines have existed since 1992. However, it can be argued that the planners involved thought such techniques or tools were applicable at the project level as oppose to the framework itself, prepared at the metropolitan level.

4.3.2 The Integration of the Different Applications, and Experiences with the Use of Particular Tools such as GIS

The Geographic Information Systems (GIS) tool was only just being developed at the inception of the MSDF so “...it was not used in the early days”; most of the work was done through sketches, overlay maps and the use of applications like the McHarg Analysis (Interview 1). Much later, in 1995, GIS was used when sufficient data was generated to produce layers of information, such as steep slopes, wetlands and river-systems (S. Willoughby, pers. com., 2002). Other applications were demographic analysis in order to understand the movement of people and trip generations, and also photographic analysis (Interview 8). Although GIS was used later, it was questioned whether such tools actually contribute to the understanding of the dynamics of the issues at hand (Interview 10).

The Environmental Evaluation made use of a series of overlay maps, synthesising all information at a scale of 1:50000, these informed the proposals for conservation and development. Graphs, charts and figures were also used in the MSDF to indicate trends such as population projections, average income, employment sectors breakdown, and spatial distribution of household subsistence levels.

The earlier documentation on the Metropolitan Development Framework (MDF) (1991 – 1993) did not use any GIS-generated maps. Electronic information layers were developed only after this period. Geographic Information Systems has thus been used only in the development of the detailed strategies/proposals of the MSDF.

Early on in the process there were three different GIS systems (CCC, CMC and PAWC) in place that could not interface with each other (Nicks, 1995). After the 1996 elections, the new MLCs also generated their own GIS systems independently from each other. Thus there was no integrated citywide GIS. It is only recently (with the new Unicity in place) that the information technology department is trying to integrate all systems across the city so that the data can be shared (S.
Willoughby pers. com., 2002). Furthermore, the Promotion of Access to Information Act (2000) requires that information be shared rather than used exclusively between agents (Table 4.1).

The MSDF did determine sectoral evaluation criteria to measure and monitor the success of its proposed strategies; these categories were transport, housing, employment, environment, management and composite life costs (CMC, 1996). However, there was no evidence that illustrated how these were measured or implemented. Performance indicators were only determined much later in 1998/99 when SOE reporting was introduced by the environmental management department of the CMC (Interview 4). State of Environment reporting has since been undertaken on an annual basis.

The time line (Table 4.1) indicates that the Department of Environmental Affairs had also developed a detailed checklist in 1991 for the development of structure plans, but there was no evidence to suggest that it was used.

4.3.3 The Integration and Clarification of (Sector) Terminologies (e.g. “Strategic”).

The CCC staff, who had international experience, produced a number of papers to explain and motivate new planning concepts such as “strategic urban management”, “urban growth strategy”, “natural systems performance base”, “satisficing” and “comprehensive planning” (Interview 7). However there appears to have been no concerted effort to explain or clarify sectoral terminologies; only planning terminologies were clarified. This is evident in the glossary of various documents produced on the MSDF (MDF CWG, 1993a; MDF CWG 1993b; CMC 1996).

4.3.4 Summary

It can be argued that the assessment tools used for each sector varied and changed during the MSDF process. Spatially, a superficial comparative assessment of the three scenarios was undertaken and which formed the basis for the spatial proposals that were later to be made. In a damning assessment, Watson (2002, p.110), states that the presentation of these three scenarios gave the impression that the planners had “…scanned a range of possible alternatives and made a rational choice”. This was not the case.
The Environmental Evaluation report comprising the mapping of biophysical opportunities and constraints formed a key input of the analysis phase. However, the environmental evaluation did not address environmental scenarios or alternatives, and possible impacts of policies, plans and programmes identified in the MSDF were not recognised or assessed. In the economic analysis a demographic profile of the labour force was provided, but no in-depth analysis was undertaken with regard to the local space economy (Watson, 2002). It was only much later in the process after the 1996 elections had taken place and new functions within the Unicity had been established, that in-depth methods and information were used and applied.

It can be argued that the tool of spatial analysis and representation was a common one, used to help integrate the various social, economic and biophysical aspects into the final MSDF plan. Geographic Information Systems was used effectively in the later stages of the MSDF process, although the available databases were rather crude and often incomplete.

4.4 Procedural Integration

4.4.1 The Integration of Environmental, Social, Economic Planning/Assessment, Spatial Planning and EIA.

Even though an Environmental Evaluation (EE) was generated and integrated into the MSDF process, the general consensus amongst the interviewees was that there was no integration of biophysical, social, economic planning/assessment, spatial planning and EIA. It was considered that the Environmental Evaluation was a “desktop study” and did not address trade-offs or delve into “…understanding the dynamics” of the issues identified (Interview 9). Among the reasons offered was that “…the primary objective of the MSDF was to prepare a spatial plan” (Interview 1) and that the non-spatial elements were meant to be addressed under another process outside of the MSDF. Also it was suggested that there was “…too much compartmentalisation” (Interview 10) of the different sectors and this prevented full integration, particularly within the government sector which was managing the process.

The MSDF states that it should be used as a basis for the preparation of local and sub-regional structure plans and that the principles could be implemented only through more detailed levels of planning (CMC, 1996). To implement this the “package of plans” was a tool developed by the CCC in 1989 to deal with the V & A Waterfront development (Interview 7). It consists of a set of scaled, hierarchical plans developed for the provision of strategic direction for detailed building plans. This
was the basis on which each of the six Metropolitan Local Councils (MLCs) prepared their local spatial development frameworks; these were to promote local area strategies and to refine the proposals made in the MSDF (Pheiffer, 2001; CoCT, 2001). The MSDF process thus developed as a hierarchical or tiered procedure for providing direction to lower-order plans; in other words, the "...MSDF acts as a policeman" to guide further, more detailed plans (Interview 7). It can therefore be argued that the MSDF was intended to provide the overarching planning framework which would inform more detailed levels of planning, thus assuming a hierarchical structure. The integration of procedures such as IEM would be addressed only at a more detailed project level.

4.4.2 The Integration of Sector Approval/ Licensing Processes, Spatial Planning and EIA.

The MSDF dealt with "...broader spatial planning issues rather than detailed issues" such as sector approval/ licensing processes (e.g. business and liquor licenses), and therefore these were not integrated within it (Interview 3). It was also considered that the MSDF was a "...visioning document, which did not incorporate an implementation plan" (Interview 9). Therefore the sectoral approval systems were not included in the MSDF as these would have been part of an implementation plan. Transport issues were addressed emphatically as a sectoral issue, but only at a broad level. The four structuring elements of the MSDF were not tested "on the ground" or integrated with detailed sector approval systems. For example, the implementation of Wetton-Landsdowne Activity Corridor project proved to be problematic to implement in some areas; one reason was that it lacked detailed geological information which complicated the plan approval and development process (Interview 5).

The level of detail addressed in the MSDF was too broad to integrate sector approval or licensing processes. However, it did address land-use planning as a sector in terms of development proposal approvals; to be effective the requirements as set out in terms of the Land Use Planning Ordinance had to be followed (LUPO, 1985, section 4(2)). To meet these, the plan needed to be circulated to all affected local authorities and advertised to the general public for comment before being proclaimed by the Provincial Government as a structure plan. Assigning statutory status to it would have meant that all local authorities and other government bodies would have had to comply with the MSDF in terms of planning and development control (CMC, 1996). Submission of the plan to the provincial authorities was initiated in 1998, at a stage when the first local government transition had taken place (Table 4.1). Since all the relevant local authorities had been party to the MSDF process this should have been merely a procedural process. However, new tensions between metropolitan and local authorities arose over the content of the plan and bedevilled the efforts of the
metropolitan planners to gain a speedy approval (Watson, 2002). The CMC planners argued that a provincially approved plan would have made it more transparent, binding everyone to it – preferable to operating with a "bottom drawer" plan (Watson, 2002). However, to date the MSDF is still not approved as a statutory plan and acts only as a guiding document.

In terms of Table 4.1, EIA was introduced as a legal tool only in 1997, after the spatial planning proposals had been formulated in the MSDF. Integrated Environmental Management was identified in the MSDF Technical Document as an important procedure and states “…the importance of the resource may be seen to outweigh the need for development …. judgements will need to be made on a case-by-case basis and the use of Integrated Environmental Management (IEM) procedures” should be used (CMC, 1996, p.62). It was also recommended that transport projects undergo a social cost benefit analysis as part of the project motivation (CMC, 1996).

4.4.3 The Adoption of Co-ordination, Co-operation and Subsidiary as Guiding Principles for Planning at Different Levels of Decision-making.

From the outset, when it was decided to prepare an overarching plan cutting across several local authority boundaries and tiers, it was realised that there would be some form of co-ordination between all the affected authorities. At the Caledon conference held in 1991 - the milestone event at which the process was initiated - the requirement for co-ordination and co-operation was highlighted. This was implemented by giving a joint mandate to the two main local authorities within the CMA - the RSC and the CCC - which had to pool their combined resources to prepare this overarching plan (CMC, 1996; RSC file 30/15/9/19(1)). However, co-operation and co-ordination amongst authorities did not remain constant over the years. The RSC had access to more financial resources than the CCC, which led to the appointment of consultants and thereby excluded the experienced CCC staff from participating fully in the process (Interview 4; Watson, 2002).

Co-ordination and co-operation amongst authorities were not mentioned as principles in the Principles and Guidelines document (MDF CWG, 1993a). However, in the proposals made in the MSDF, the need for co-ordination and close co-operation between planning authorities at different levels and across boundaries was acknowledged. This was particularly in relation to the promotion of employment opportunities and economic development (CMC, 1996).
However, these principles were difficult to implement; one of the interviewees opined that there were "...too many institutions involved e.g. Airports Company, Harbour Authorities etc. [that] did not have the same interest at heart as the City" (Interview 10). This implies that parastatal institutions which had control over certain resources within the CMA were making decisions about them that could affect the efforts of the local and metropolitan authorities. However, this has changed since the introduction of the Constitution in 1996, in which co-operative governance is prescribed and intergovernmental relations promoted (RSA, 1996b, sections 40 and 41). The Constitution of 1996 also provided for the decentralisation of powers to local authorities, and placed them on a par with the other two spheres of government (RSA, 1996b, section 40(1)). However, the introduction of decentralisation has made it more difficult for the MSDF to be become an approved structure plan, as in the opinion of the metropolitan local authorities in the period between 1997 and 2000, it constituted a constraint on local planning activities (Watson, 2002).

4.4.4 The Integration of Affected Stakeholders in the Decision-making Process.

The involvement of affected stakeholders changed over time. At the inception of the MSDF, national-level negotiations between the ruling party (National Party) and the African National Congress (ANC) were beginning and subjecting the MSDF to a public participation process at this particular time was perceived by the officials as a difficult task (Watson, 2002). The political situation was in a state of flux, and local authorities were considered by the Black majority to be illegitimate structures, non-representative and undemocratically elected. The Western Cape Economic Development Forum (WCEDF) was launched in December 1992, and was promoted as a major opportunity for the RSC and CCC to use as a vehicle to "drive" the metropolitan process and to bring together all the major organisations and interest groups that had a stake in regional development matters. The WCEDF was perceived as a "talk-shop" and a way of empowering community groupings and enhancing the legitimacy and effectiveness of any new development strategies being formulated (Watson, 2002).

The stakeholders that were members of the WCEDF were of metropolitan significance and comprised two groups, those with voting rights and those without. The stakeholders who had voting rights were local and regional government authorities, labour bodies, business bodies, civic institutions and political parties. Non-voting stakeholders comprised development, service, and funding bodies, central government departments and parastatal departments. Each of these bodies fulfilled a role in the process. The Confederation of South African Trade Unions was the representative of labour, and, according to Watson (2002), a strong member which was guarding the
interests of both workers and poorer communities. The South African National Civic Organisation (SANCO) wanted work opportunities closer to where people lived. The Western Cape United Squatters Association joined the process only in 1994, and represented the poorest of the poor. The business sector’s role was unclear due to the diverse number of businesses represented and thus it was difficult for it to put forward a unanimous voice. As far as the political sector was concerned, there were no National Party (NP) members and the ANC members participated with capacity constraints, given the ongoing violence taking place within the townships (Watson, 2002). The Community Based Organisations (CBOs) from the poorer areas were mostly concerned with the provision of basic needs; environmental issues were often a low, or even a conflicting, priority for them (Nicks, 1995). NGOs and CBOs did play a major role in the process. For instance, DAG assisted in formulating the process, and environmental NGOs were instrumental in highlighting certain issues and thus creating awareness amongst the public. Moreover, CBOs caused local authorities to commit themselves to producing a metropolitan scale framework (Nicks, 1995).

The WCEDF comprised three levels: the “Plenary” on which all members were represented; the “Steering Committee”, elected by the Plenary; and the six “Commissions” that were concerned with specific sectoral issues. These Commissions were Development Strategy, Urban Development, Economic Growth and Restructuring, Rural and Agricultural Development, Short-term Job Creation, and Education and Training (Watson, 2002; Interview 3).

The political situation at the time was such that the planning process had to be placed in the hands of a non-statutory body that was more representative than the local authorities. Thus the public participation process of the MSDF was placed under the auspices of the Urban Development Commission (UDC) (Watson, 2002). The UDC established working groups to assist it with its tasks and so the RSC’s Metropolitan Development Framework Co-ordinating Working Group (MDF-CWG) became the working group for the MSDF, with the addition of civic, labour and NGO representation (Watson, 2002; Pheiffer, 2001).

Later on, after the 1994 elections, the RSC became the CMC (in 1995) and regained administration of the MSDF from the WCEDF and UDC; there was a new sense of purpose towards obtaining statutory status of the MSDF. Participation became more skewed as representation shifted overwhelmingly towards government departments (Watson, 2002).

There was consensus from the interviewees that the affected stakeholders were fully integrated into decision-making in the earlier phases of the process. It was a conscious decision from the outset.
that all stakeholders should be involved. It was the first time ever in the history of Cape Town that a planning process was embarked upon in such a way (i.e. to involve stakeholders in a participative manner). It was “...due to political change” that this new approach to participation in planning processes was adopted (Interview 4). The planners were so committed to this concept that a consultant was appointed to design a process to ensure that all affected stakeholders were identified and that they participated. This process was perceived as the “…first city partnership through the establishment of the WCEDF” (Interview 7) - a vehicle outside of local authorities which encouraged the participation of stakeholders (Nicks, 1995).

Although affected stakeholders did participate, their involvement was uneven and depended on the dynamics of the process. “Many of the stakeholders were involved at different points in the process either through their own choice or by design of the process” (Interview 9). Also, the level and effectiveness of the stakeholders’ involvement was questioned, largely due to “…capacity and educational limits” as well as “…their ability to participate and express their views” appropriately (Interviews 1 and 10). Community bodies and NGOs were particularly singled out in this regard. These shortcomings meant that substantive contributions could not be made and that the proposals of the consultants/project team remained largely unchallenged and unaltered.

However, after the 1996 elections the forums were closed down and communication with the public took place in the form of leaflets and occasional workshops (Interview 4; Watson, 2002). This indicated a shift or change in public participation and as a result the “…public’s interest withered and died” (Interview 4). More recently Pheiffer (2001), concluded in an evaluation of the MSDF that if more ongoing community, civic, NGO and sectoral involvement had been entrenched throughout the process, greater support would have been obtained for the MSDF in obtaining statutory approval. Also, more consistent decision-making with regard to lower-order plans would have been made if such support had been maintained.

4.4.5 The Integration of Professionals in a Truly Interdisciplinary Team.

Procedurally, there was recognition from the outset that greater institutional and public involvement would be needed, and that this process could not merely follow the minimum requirements as required by LUPO: public participation in the preparation of spatial plans was not a statutory requirement, except to call for comment and objections once the plan had been completed. Since a new approach was being instituted, the RSC planners decided to appoint specialist consultants to establish, manage and facilitate the public process.
All interviewees observed that the core project team (technical team) consisted of physical planners from the RSC, CCC and consultants (except the process consultant). Some of the interviewees indicated that this team could not be "...boxed as spatial planners" as some of them had an environmental or economic disciplinary background (Interview 1). The opinion was that since this was a process where different professionals were working together for the first time, "...the MSDF did play a role in getting the different professions working together, for example "...putting land-use planners and transport planners together for the first time" (Interview 9). Also it was stated that the project team made sure that comments were invited from various different sectors. Thus there were people involved from other sectors that could, and did, influence the process. Furthermore, the core project team reported to the Co-ordinating Working Group (CWG) which was representative of the metropolitan stakeholders. This was in accordance with the membership of the Plenary of the WCEDF.

Prior to 1995/6, the CWG had consisted of all local authorities, Winelands District Council, Provincial Administration Western Cape, Department of Land Affairs, Cape Chamber of Commerce, COSATU, Development Action Group, Green Coalition, Olympic Bid Company, RDP, SANCO and the Consultants. After 1995/6, the CWG was expanded to include more sectoral representation within local authorities. The constitution of this group indicates that it was a broadly interdisciplinary team. However, the entire core-working group comprised spatial planners who worked via the CWG and the UDC.

4.4.6 Summary

It can be argued that there was partial integrated assessment during all phases of the process. An environmental evaluation was part of it and the MSDF did refer to IEM, but failed to incorporate detailed procedural aspects of how such processes would be integrated. Similarly, sectoral approval processes were not integrated, as these issues were perceived to be too detailed. However, the integration of metropolitan spatial planning with local planning processes was promoted through the "package of plans" approach. As was observed earlier, this is a "top-down" approach whereby metropolitan plans provide guidance to local level ones, and inform detailed plans at precinct and site level. This process also responded to national directives, which changed over time.

Thus it was evident that procedural integration of planning approval for project proposals was intended to be guided by the MSDF, using the "package of plans" approach. However, the
integration was not fully achieved during the interim phase of local government restructuring; this was a consequence of institutional divisions and new powers and duties that occurred after 1996. The six new Metropolitan Local Councils became more parochial in exercising their newfound powers, and did not want to be compromised by planning concepts that had been developed by another authority, in this case the CMC. However, in the final phase of local government restructuring, many of these conflicts would have been removed due to the formation of a single Unicity, with one decision-making body. Thus the potential for procedural integration should have been high.

There was little consideration about the integration of planning approval processes with other sectoral approval processes that existed during the preparation of the MSDF. For example, the MSDF did not address the spatial location and approval of facilities such as solid waste disposal sites and waste water treatment works, which required their own sectoral approval procedures. Procedural requirements for project-specific EIA emerged from national government in 1998 and these too have yet to be integrated with spatial planning procedures by local, provincial or national government.

It can also be argued that there was partial integration as far as organised public participation was concerned. At the outset it would appear that this was well integrated, since there was a dramatic change in the planners’ approach to participation, which deviated from the legal requirement that was based on “participation by objection”. However, as observed, over time the format of participation changed and the involvement of other sectoral agencies became limited, uneven, and erratic.

4.5 Institutional Integration

4.5.1 The Provision of Capacities to Cope with the Emerging Issues and Duties.

The emerging issues of rapid urbanisation and political transformation meant that institutions had to be adapted to deal with these efficiently and effectively. De Tolly (1990), argued that local and metropolitan authorities lacked the skills needed to manage policy and to determine co-ordinated spending priorities, and that institutional development was required to improve the quality of life for urban habitants. This was only addressed effectively much later after the launch of the MSDF, through the introduction of Integrated Development Planning (IDP) via the Local Government Act
of 1996 (Table 4.1). The IDP was briefly discussed in chapter two and will not be discussed further here.

The RSC and CCC were given a joint mandate at the Caledon Conference in 1991 to prepare the MSDF, but the RSC used their financial resources to appoint planning consultants to do this without the CCC’s endorsement. The latter resented this decision as they had internal capacity within the department comprising people who were willing to work on the plan (Interview 7). The decision also biased the balance of power in favour of the RSC (Watson, 2002). The CCC had a bigger staff complement - over fifty staff members - who had local and international urban experience, and who had already undertaken large-scale metropolitan planning exercises. The RSC on the other hand had only a small number of planners with experience in local area (statutory planning) and rural planning. There were also institutional jealousies over the metropolitan function that influenced the planning process in terms of the two different approaches to metropolitan planning, i.e. strategic planning versus land identification or “blueprint planning” (Watson, 2002).

According to the interviewees, institutional and technical capacity did exist. Their responses could be allocated into one of three categories.

1. Some referred to the capacity problems of the NGOs. They could “…not comment on the substantive issues” (Interviews 1 and 5) and also did not have access to sufficient resources to attend all the meetings/workshops (Interviews 3 and 7). However, environmental NGOs were perceived to be more influential in policy formulation and decision-making as far as the more affluent areas of the CMA were concerned (Nicks, 1995). Another capacity problem referred to was that of the project team. Here there was a slight contradiction of opinion on the part of the interviewees.

2. Others were of the opinion that there was no shortage of resources as the planning “…consultants were on-board for ten years” (Interview 4).

3. Still others thought that there was “…enough capacity but maybe it was not fully utilised” (Interview 3), also that there was a “…willingness and openness … but not the right expertise” (Interview 6) to address emerging issues.

Compartmentalisation or fragmentation was intrinsic in the institutional structure of the various local authorities, implying that policy co-ordination and decision-making were extremely fractured (Nicks, 1995). Within the RSC, pre-1996, the planning section fell under the directorship of the Engineering Department. This section was made up of a town planning division and a metropolitan planning division plus the engineering section. There were no departments or staff within the RSC
dedicated to environmental, social or economic issues. It was only with the transformation in 1996 that the new CMC structure created new directorates (Watson, 2002). This fractured institutional environment led to the fact that no “binding decision” could be made (Interview 10). Thus, during the formulation of the MSDF, the RSC did not appear to have the capacity to cope with emerging issues of urbanisation and the effects of it on the environment; capacity was “bought-in” in the form of consultants to address these issues. The RSC planners did what they could under the circumstances at the time to ensure integration with the capacity they had (Interviews 1, 2 and 10).

4.5.2 The Definition of a Governmental Organisation to Ensure Integration.

This issue was addressed in the light of the RSC (CMC) being seen as the leading agent and thus the one taking responsibility for ensuring integration throughout the process. The interviewees made contradictory comments about the RSC’s ability in this regard. It was pointed out that the RSC had a clear agenda so that at times it was suitable to integrate issues/ institutions/ sectors and other times not (Interview 9). Part of this agenda was to meet the deadlines which had been set and thus the process dominated the kinds of inputs received (Interview 3).

The RSC was efficient at setting out procedures, processes and systems, but tended not to be critical thinkers (Interview 1). Thus the perception is that substantive integration of issues was not sufficient as the technical inputs were mostly from a planning or spatial perspective (Interview 6). Furthermore, the approach followed was not that of a Regional Growth Strategy that would have integrated all sectors (Interview 7). However, there was partial integration due to multi-sectoral stakeholder involvement, as discussed earlier. One interviewee considered that because elected councillors at that stage (pre-1996) had no direct role, it was not an integrated process (Interview 4). It was therefore difficult to prove absolute integration as the interviewees’ responses were so diverse with regard to the interpretation of what was meant by integration (Interview 9).

Theoretically, inter-agency and sectoral co-ordination appear to have been met as the MSDF Technical Document did discuss how to create synergy and achieve co-ordination among the different organisations. In particular it included the specific roles of, and relations between, the following bodies/ organisations:

- CMC and the Winelands District Council;
- MSDF and Provincial Administration of the Western Cape;
- MSDF and metropolitan local authorities (pre-2000);
- MSDF and private sector;
Institutional and political changes influenced these proposals to a large degree as in reality, little institutional integration took place. As discussed earlier, the initial phases of government transition caused local authorities to become separate entities rather than co-operating and integrating resources; furthermore, within the local authorities the different sectoral department did not always work in an integrated manner. It was only with the emergence of the IDP that the different departments within institutions were forced to work together (Interview 4).

In terms of method, the appointment of planning consultants led to division between the RSC and CCC, as they worked to a different set of criteria in terms of producing a product to fulfil their briefs (Interview 5). However, it was also pointed out that the RSC planners did what they could in the context of limited resources and the political and institutional circumstances that existed (Interviews 2, 8 and 10).

### 4.5.3 The Exchange of Information and Possibilities of Interventions between Different Sectors.

There was consensus from the interviewees that there was a concerted effort made to share information. This was done through dialogue in workshop sessions, meetings, presentations and through numerous reports. However, it was pointed out that there was no system in place where resolution on the issues could be agreed on, especially in view of the fact that concern was often expressed over the quality of information that was used (Interview 1). In addition to this, there was concern over the lack of detailed information that should have been used to "...spell out the dynamic of how things work" (Interview 7). Examples of the detailed surveys and data collection that were not prepared in the MSDF were: the understanding of the retail and office dynamics within the city; the recognition of where the growth points are; and why they are there (Interview 7 and 10). Also, it was questioned whether or not the gathered information that was shared added value to the process and whether it determined any "...dominant trends .... at a macro and micro scale" (Interview 10). Thus, the information about the issues remained fairly coarse (Nicks, 1995). For instance, no detailed facts and figures on costs, benefits and quantities were given; this implies that there may have been relationships that were not fully understood. As mentioned earlier, there were no citywide databanks and the information gathered by authorities was on an ad hoc basis. Often the information available was out of date and the information that was captured was done in such a manner that, for example, it was difficult to create a time-series analysis (Nicks, 1995).
Regarding the issue of intervention, it was observed that "...things were constantly raised by people and not heard" (Interview 9). For instance, aspects of socio-economic development were raised but were superseded by land-use and transport issues (Watson, 2002). It was considered by the various stakeholders that more intervention could have taken place, but did not because of inexperience and also because of the abstract and complex nature of the information that was presented for comment (Interview 6). Watson (2002) makes the point that there was no attempt on the part of non-planning stakeholders to put forward alternative solutions (intervene) as there was "...no capacity or incentive to conceive of, or articulate a challenge to the spatial paradigm ... it appeared to be the most rational and political acceptable alternative". Frequently the use of technical language caused non-planning participants to struggle to make the link between "...day-to-day problems and abstract large-scale spatial ideas" (Watson, 2002, p.65).

The WCEDF played an important role in ensuring that all the information that the local authorities and other stakeholders were generating was distributed to all the stakeholders (Interview 3). On the RSC/CMC files there exists an abundance of documentation (letters/ minutes/ memos/ notes/ comments), which indicates that several drafts of various reports prepared on the MSDF had been circulated for input. This can also be verified through the works of Pheiffer (2001) and Watson (2002).

4.5.4 Defining Leading and Participating Agencies and their Respective Duties and Responsibilities.

The unbanning of the African National Congress (ANC) in 1990 raised concern about the legitimacy of the existing local authorities and of any new policy work being generated by them, as these would not be representative of the entire community, and thus in the long run would not be sustainable. A new vehicle had to found that would carry the project over the beginnings of a transitional phase in this political transformation period. As a result, the Western Cape Economic Development Forum (WCEDF) was established, representing broad metropolitan stakeholders. The WCEDF played a key role in the early stages of the MSDF by providing an effective forum for community perspectives to provide input into the process (Watson, 2002). As mentioned earlier (section 4.4.4), there was a short period (1992 – 1995) (Table 4.1) when the MSDF fell under the auspices of the WCEDF. This created confusion at times as it made the leadership role unclear (Interview 3). However, it was also pointed out that the WCEDF had a definite role to play in terms
of being a facilitative vehicle to include all stakeholders, whilst representation within local authorities was being rectified through the democratic elections that were underway (Interview 3).

In 1995 when the RSC dissolved and became the CMC, the “...blurring of leadership” (Interview 4) fell away as the CMC with its new metropolitan functions became the sole leading agency of the MSDF. New conflict arose over the respective role and functions - as set out in the Local Government Transition Act No. 97 of 1996 - of the CMC and the six Metropolitan Local Councils (MLCs). The CTM (previously CCC) was one of the MLCs. This newfound conflict concerned the perceived hierarchical role of the CMC over the MLCs, especially since the new Constitution (108 of 1996) provided for spheres of government as opposed to tiers of government, as discussed earlier in chapter three. Following the first fully democratic local government elections in 1996, 61 separate municipalities, management committees and councils were amalgamated into a new metropolitan system of government, comprising six Metropolitan Local Councils (MLC’s) and the Cape Metropolitan Council (CMC) (Watson, 2002). The six MLCs and the CMC were allocated specific functions to execute, with the local councils responsible for planning decisions and service delivery, and the CMC (comprising much of the former RSC) responsible for bulk services and metropolitan planning.

For the first time, local authorities in the CMA experienced meaningful autonomy and were given a mandate to function independently from the others (RSA, 1996a and b). Some of the new local authorities “revisited” their spatial plans in order to plan and develop what was best for the survival (financially) of their area of jurisdiction. The implementation of the MSDF became uneven because the larger MLCs, like Cape Town Municipality and City of Tygerberg, had sufficient resources to develop their own plans, whereas the smaller municipalities continued to implement the MSDF proposals (Watson, 2002; Pheiffer, 2001; Interview 9).

The MSDF Technical Document was formally launched in November 1996. The intention was for all the metropolitan local authorities within the Cape metropolitan boundary to direct their planning and future growth and development in accordance with the spatial concepts as documented in the MSDF. At the same time, the CMC (RSC) planners recognised the benefits of establishing the MSDF as a statutory structure plan (under LUPO) whilst proceeding with the transformation process. Giving the MSDF statutory status would give it more weight when ruling on individual development applications, thereby greatly enhancing its position (Watson, 2002).
In December 2000, local government elections were again held and the final phase of local
government restructuring took place. In this final phase, the seven local government institutions
were amalgamated into a single one, the City of Cape Town (CoCT) via the Municipal Structures
Act of 1998. Within this new institutional structure, co-operation appears to have improved since
there is a newfound attitude of planning for the betterment of the City of Cape Town as a whole,
and not for competing local areas. New legislation - the Local Government Transition Act of 1996
and the Municipal Systems Act of 2000 - requires the implementation of Integrated Development
Plans, and as a result planners are now debating how best to use the MSDF proposals in terms of the
new legislative requirements. It is expected that the MSDF will be redrafted to form the spatial
framework product of the IDP (CoCT, 2001).

Thus the general perception was that the leading and participating role-players evolved and changed
over time as the process continued. Participation and attendance also changed over time, which was
regarded as part of civil and political life (Interview 10). From the beginning of the MSDF process,
the RSC and CCC were given a joint mandate (at the Caledon conference) to lead the process, there
had been considerable conflict between these two institutions. This was specifically with regard to
the direction the process should take both in the formulation of the overarching plan and the
substantive detail to be included in it. The reason was their differing philosophical approaches to
planning (Interview 6; Watson 2002). The RSC and CCC were seen as the leading authorities
because they had available the most resources that could be used for the drawing up of such a plan.
The RSC had the financial resources and the CCC had specialised expertise to contribute to the
process (Interview 5; Watson, 2002). The biggest conflict occurred when the RSC used their
financial resources to appoint planning consultants to manage the process because, in effect, this
excluded the involvement of the CCC; the consultants were composing the document (Interview 4
and 7).

Other than the power-struggle between the leading local institutions there was also a conflict
between the participating and leading agencies, due to a lack of resources and technical expertise
(Interview 9).

The responsibility of the CMC (RSC) to obtain political approval for the MSDF was communicated
to the participating agencies, as it was important to understand the difference between making
decisions within the plan-making process, and the decision-making powers of the elected politicians
serving on the local council (Interview 2).
In terms of leadership responsibilities, it was pointed out that there was need for political leadership, which was absent in this process (Interview 1). This was particularly true for the earlier stage of the MSDF process. "It was run with relative autonomy by the officials and it needed to be, because the councillors were a fairly conservative bunch at the time" (Interview 6). It was not until after the 1996 elections and after the MSDF proposals had been formulated that Clr Watkyns, as chairman of the Planning, Environment and Housing Committee, became involved with the MSDF (Interview 1). There was a complete shift in power as the politicians took over and made decisions. At this stage, the agenda became a political one and the process consultant found himself less involved with its design. He explains it as follows: "... politicians were making decisions – political ones, about the process to follow and a lot of it was about being around obtaining political gain" (Interview 6).

4.5.5 Summary

In summary it can be argued that there was generally a low level of integration amongst the various local government institutions during the MSDF process. Initially, the level of institutional integration seemed high, as there was an eagerness and a common challenge to change the city structure to a more equitable and sustainable form. This was evident in the amount of information that was shared in the problem and issues phase (Interview 1). Similarly, there was common cause prior to 1996 that the institutions that existed were undemocratic and would be dismantled. As a result, parochial interests were largely forgotten in the struggle to move towards a democratic local government system.

In the interim phase following the 1996 local elections, the newly formed institutions however, became more parochial rather than less. Conflict between the interim local councils and the metropolitan authority was focused on access to financial and other resources and on perceptions of a hierarchy in which the CMC was perceived to have a higher status than the six MLCs. This conflict was accentuated by locally-generated service levies which accrued to the CMC and which were distributed by a political process to which the local councils did not have access. As a result, institutional integration in spatial planning was reduced to such a level that metropolitan and local plans were often in conflict.
4.6 Policy Integration

4.6.1 The Integration of “Sustainable Development” as Overall Guiding Principle in Planning.

There was general consensus among the interviewees that “sustainable development” had been introduced as an overall guiding principle in the MSDF and this was evident in the Principles and Guidelines Document (MDF CWG, 1993a). It was “…labelled differently then” and it was only later that the term “sustainable development” became better understood (Interview 2). Moreover, the interpretation of sustainable development changed over time. In the MSDF process it was introduced through the yin-yang idea of providing a balance in the ongoing management of growth/change and conservation (Figure 4.3). This idea was specifically introduced by the Environmental Evaluation report (CCC, 1993b); which areas to “conserve” and which to “develop” were identified spatially (Interview 7). The MSDF translated these ideas into the concepts of Metropolitan Open Space System (MOSS) and the Urban Edge - i.e. elements that would “conserve” and Activity Corridors and Nodes – i.e. areas to “develop”. Earlier thinking about the term “sustainable development” meant to “…put in place a more sustainable city form”; this would mean we would use fewer non-renewable resources by putting areas of work closer to where people live (Interview 4).

The assessment of the documentation in Table 4.1, indicated that there was a gradual change in the meaning of “sustainable development” over the period of time from its inception to the implementation of the MSDF. It first appeared in the Principles for Planning and Development in the Cape Metropolitan Area (MDF CWG, 1993a) document and was identified as a principle to inform planning and development. The importance of the principle was eluded to and stated that:

“The concept of “sustainable development” must inform all aspects of planning for the continuing development of the CMA. This implies meeting the current development needs of all, but in particular the poor, without compromising the ability of future generations to meet their essential needs” (MDF-CWG, 1993a, p.8).

This definition of “sustainable development” takes on features of the classical Brundtland definition as discussed in chapter one, but singles out the issue of the poor, i.e. social sustainability, as an important aspect to be considered in development projects.
Similarly the EE report (CCC, 1993b) quotes the Brundtland definition, but then highlights four points of “sustainable development” that were focussed on in the spatial aspects of environmental planning. They are:

- “satisfaction of basic needs;
- equity in terms of access to resources (intra and intergenerational);
- limiting the use/destruction of non-renewable resources; and
- sustainable use of renewable resources” (CCC, 1993b, p.2).

The Way Forward (MDF CWG, 1993b) report, which was the first draft of the MSDF, did not give a definition of “sustainable development”, but discussed the “yin and yang relationship” (MDF-CWG, 1993b, p.25) between conservation and development (Figure 4.3).

**FIGURE 4.3 YIN YANG RELATIONSHIP**

Figure 4.3 suggests that the management approach should be embraced in order to balance development and conservation though ongoing growth (CCC, 1993a).

The **MSDF Technical Document** defines “sustainable development” as:

“... the process of meeting the development needs of all without compromising or jeopardising the ability of future generations to meet essential needs. This includes management and maintenance of a wide range of resources on a continuous basis” (CMC, 1996, p.103).

Thus this definition, still based on the Brundtland one has become more management-orientated with less emphasis on the poor.
More recently the *MSDF Redraft* (CoCT, 2001) report defined “sustainable development” as:

“The process of meeting the development needs of all without compromising or jeopardising the ability of future generations to meet their essential needs. This assumes the sensible utilisation of natural resources, and the enlargement of their vitality and productivity through (1) the maintenance and management of vitally important ecological processes and life-giving systems and (2) the sustainable use of natural resources and ecosystems on a continuous basis. (Improving the quality of life while living within the carrying capacity of the supporting ecosystems)” (CoCT, 2001, p.49).

The Brundtland definition still remains as part of the core definition, but has added a new dimension to it: this is by the recognition of environmental management of natural resources as part of an ecosystem, and by bringing in the concept of carrying capacity as a means to measure and limit development.

4.6.2 The Integration of Sector Regulations and Strategies.

At the time when the MSDF was initiated there was a policy vacuum and only later from 1998 did certain sectoral policies and strategies emerge. Examples are documents such as *Moving Ahead: Cape Town Metropolitan Transport Plan* and *Economic Development and Local Government Strategy* presented in 1999 and *Integrated Environmental Management Plan* in 2000 (*Table 4.1*). However, transport and environment were the only sectors making progress in developing strategies within their ambit during the formulation of the MSDF (Interview 2). Because MOSS and Urban Edge were part of the spatial strategy developed in the MSDF the environmental sector was to some degree well integrated (Interview 1), though limited in theoretical depth. Social and economic sectors had no strategies in place although the project team was very aware of the relevant issues, and integrated them as best as they could (Interview 1 and 2). The team drew on information available at the time, even though there were no strategies or regulations in place. Wesgro produced several economic documents (*Growing the Cape, 1990; A Guide to the Western Cape Economy, 1992; The Western Cape Economy* in 1995, *Take off for a decade of growth, 1995*) which outlined an economic vision and approach for the city. This information was used and integrated in the formulation of the MSDF. Several references had been made to this work, particularly in section three which dealt with the CMA’s development context – opportunities and constraints (CMC, 1996). Similarly, the work done by the Urban Foundation was being investigated. This covered housing and urbanisation issues which promoted urban development policies aimed at
establishing stable Black and Coloured middle classes (Watson, 2002). The Urban Problems Research Unit at University of Cape Town identified the urban problems in Cape Town and started to develop spatial strategies around them; these were incorporated into and adopted by the MSDF process (Watson, 2002).

As mentioned earlier, the request from the community groupings was not for strategy but for action; however, appropriate processes were needed. Activity Corridors, Nodes, MOSS and the Urban Edge were all spatial strategies through which a range of issues could be addressed, as well as through which a range of action plans could be co-ordinated and implemented. The preparation of regulations and action plans were understood to be part of the next stage of the MSDF Technical Document (Nicks, 1995; Interview 1). It was important to put in place a management framework before more detailed action plans and regulations could be implemented, as they had to respond to a broader vision. This issue is reinforced by Watson (2002, p.115) who stated that procedural and legal aspects “…be regarded as beyond the scope of the document, which was aimed primarily at gaining consensus around a broad strategy”.

The vision for the future of metropolitan Cape Town established in 1993 played an important integrative role that helped to identify issues and make proposals regarding strategies. It was helpful to refer to the vision at times when deadlocks needed to be overcome, such as when parties balked at detailed proposals (Nicks, 1995).

After the local government elections in 1996, a different allocation of powers and duties was determined for metropolitan and local government authorities (RSA, 1996a). This led to the establishment of new institutional structures within the CMC; new directorates were being created, such as the Economic and Social Development Directorate and the Transportation and Traffic Directorate. The Transportation and Traffic Directorate and Environmental Department were not new functional departments, but had previously been attached to the CCC. Policy directives from national government supported these functional areas. This is evident in the review of the National Transport Policy in 1996; the National Housing Act in 1997; the National Job Summit in 1998 for local economic development; and the National Environmental Management Act in 1998 (Table 4.1). These newly created functions, together with their separate legislation/ policies, militated against integration as each had its own imperatives to develop plans and policies within its own particular area (Watson, 2002).
As mentioned earlier, sectoral policies started to emerge only from 1998 onwards (Table 4.1), after the MSDF had been formulated and adopted by the CMC. This did not mean that there were no inputs from all the different sectors; the project team scrutinised most studies that were completed in 1990 within the CMA (e.g. strategies being generated for economic development of the Western Cape by Wesgro, tourism studies, housing studies and a study on land availability). There was also information assembled and papers written specifically for the MSDF process, such as the *Environmental Evaluation* study; problems and issues analysis informed the process. There was thus sectoral information available but no clear sectoral policy in place.

### 4.6.3 The Timing and Provisions of Political Interventions.

Planning policy at the inception of the MSDF existed in the form of Statutory Guide Plans (National Physical Development Plans). It was prepared in 1988 for the Cape Metropolitan Area in terms of the Physical Planning Act of 1967. The purpose of these plans were to ensure that changes to the land-use patterns were consistent with the guidelines as contained in the Guide Plan. The RSC was specifically made responsible for its implementation (DDP, 1988). These plans were comprehensive “blueprint” land-use plans drawn up in the early 1980s by the central government planning committee, which was focussed on designating land parcels for settlement by different racial groupings (Watson, 2002). The Cape Metropolitan Guide Plan was drafted in 1984 and approved in 1988; refer to Table 4.1. Prior to 1986 national government policy was based on influx controls in terms of which Black people were separated from Whites in urban areas and were frequently resettled in homelands. The influx control laws were established in order to restrict the movement of Black people: they were allowed to temporary access White areas to offer their labour. In 1986 these controls were abolished and replaced by the White Paper on Urbanisation. This allowed Black people to move freely to the cities, but separate living areas for the various population groups had to be maintained (Watson, 2002). The White Paper on Urbanisation was a direct intervention in terms of advising local authorities to identify areas for Black settlement (Watson, 2002).

In 1988, the RSC responded to the White Paper on Urbanisation by setting up a sub-committee to investigate land for future housing for low-income groups (Black people). The CCC recognised that there was a shift away from racial ideology, and proposed the idea of developing a Regional Development Strategy to determine how future development could be best integrated with the potential of the region (Watson, 2002). This was a major change form the previous “…reactive search for leftover land” assigned to particular race groups; now there was a more proactive
approach, dealing with development and integration (Watson, 2002, p. 23). Watson (2002) argues that the time was ripe to take this shift seriously and to pursue the approach as a way to intervene in local planning.

In terms of national policy prior to the 1994 elections, the shared Government of National Unity (GNU) developed the new Constitution for a democratic South Africa. The Reconstruction and Development Programme (RDP) introduced in 1994 was to set the agenda for the GNU (Watson, 2002). The programme was aimed to meet the basic needs of the poor through infrastructural investment and also to stimulate economic growth; more important it was also to give direction to city planning (Watson, 2002). This direction was:

- to break down apartheid geography through more compact cities and good public transport;
- to redress the imbalances in infrastructure, transport and basic services;
- to promote access to employment opportunities and urban resources;
- to promote densification and unification of the urban fabric; and

The MSDF’s conceptual spatial pattern argument could now be strongly justified in terms of national policy. However, the RDP was short-lived when the offices closed in 1996/7 due to several difficulties, such as lack of skills and the capacity to implement the RDP (Watson, 2002).

The newly-elected national government now changed its strategy; emphasis on spatial restructuring in the RDP was now shifted to economic growth via the introduction of the Growth, Employment and Redistribution (GEAR) economic policy in March 1996. Economic growth was to be achieved through private sector investment, and stimulated by:

- curtailing government spending;
- containing inflation;
- reducing corporate taxes;
- phasing out exchange controls;
- restraining wage increases; and
- speeding up privatisation (Watson, 2002, p. 72).

There was no direct intervention from elected politicians at local authorities until after the 1996 elections (Interview 3). Even though the extra parliamentarians participated in this process via the WCEDF, they made very few demands on it. Pre-1996, officials from the CMC (RSC) informed their councillors on a “need-to-know” basis (Interview 6). Other interventions in the MSDF process were via the establishment of RDP forums. The process was then delayed for a while whilst local
authorities were deciding how to address and absorb this new programme (Interview 3). In some instances, political intervention was very much part of the process in terms of the national corridors initiatives. The Lansdowne Corridor in particular was singled out as a national government-funded project (Interview 3).

The democratisation and transformation of metropolitan and local government structures was the second critical and the most important political intervention. The three phases of local government transition were:

1. Pre-interim phase: The existing local authorities were abolished after the 1994 elections. Government forums were established, pre-interim councillors were elected until the 1995/6 local elections, and new municipal and metropolitan boundaries were drafted (Watson, 2002). In this phase (Table 4.1), the MSDF was under the auspices of the WCEDF. The redrafting of the metropolitan boundary meant that the outlying regions of the Winelands District Council (Stellenbosch, Paarl, Wellington and Franschoek) were excluded from the process (Figures 3.2 and 3.3).

2. Interim phase: With the municipal elections in 1995/6, the Cape Town region was restructured from 61 local bodies to 6 Metropolitan Local Councils and a metropolitan authority (the CMC), which operated via power-sharing arrangements. It was at this stage that the councillors in the metropolitan sphere played a more prominent role in the process (Watson, 2002). The establishment of “spheres” rather than “tiers” of government placed new tensions on the MSDF as MLCs did not have to be subjected to metropolitan planning (Watson, 2002).

3. Final phase: This current phase was initiated by the second democratic local government elections in 1999/2000 where the power-sharing fell away, and the CMC and six MLCs were amalgamated into one single authority – The City of Cape Town.

Integrated Development Planning (IDP) was introduced in accordance with the Local Government Transition Act (RSA, 1996a) and elaborated on in the Municipal Systems Act of 2000 (RSA, 2000). An IDP is described as a plan aimed at the integration of development and management of a council or municipality. It is intended to integrate all aspects of land-use planning, transport planning, infrastructure planning, environmental planning and budgeting in order to promote integrated economic development. Integrated Development Plans are therefore interpreted as a public management tool rather than a spatial planning tool (Watson, 2002).

4.6.4 Accountability of Government.
In 1989, national government was being challenged and was having to face unrest and large-scale marches. Infrastructural reform efforts were hampered by the unrest situation as well as the recessions that led to rent and service payment boycotts and to the collapse of township administration (Watson, 2002). A growing number of informal settlements in Cape Town also started voicing their objections to forced removals, as well as lack of delivery of housing and services on the land on which they were squatting (Watson, 2002). These were the socio-political context and conditions under which the future metropolitan plan was being structured.

The introduction of the 1986 White Paper on Urbanisation and the abolition of influx controls meant that Cape Town authorities had to plan and accommodate Black urbanites in a way that conformed to the principles of separate development (RSA, 1986; Watson, 2002). The official regional development Guide Plans in terms of the Physical Planning Act of 1967 were based on deconcentration and decentralisation points in the CMA (e.g. Atlantis). These were being challenged as it was recognised that they were outdated and also as it became clear that the strategies had failed (Watson, 2002). The CCC decided that its new responsibilities were to “…look towards adjusted or new institutional frameworks …. [which are] …. more appropriate to the demands of the rapidly urbanising region” (de Tolly, 1990, p.2). Furthermore, de Tolly (1990) argued that the challenge to the CMA would be the management of urban expansion through new policies and urban institutions that were capable of responding to these new issues, and that placed strong emphasis on leadership to fulfil this challenge. De Tolly (1990) also argued that there was a need for reform of local government: local authorities had a weak base with limited financial autonomy and over-centralisation of political power at national level, and thus metropolitan institutions did not have the ability to play a comprehensive management role. This implies that the local and metropolitan authorities were faced with monumental problems with regard to managing urban growth, but that they did not have the resources, managing ability or functionality to deal with them in the changing times.

In the absence of a democratic municipal authority, the establishment of the WCEDF helped to give legitimacy to the MSDF process and the advantage of a window of opportunity before a new government was elected. At the time, terminology such as “transparency” and “accountability” became “buzzwords” of the day (Nicks, 1995). Political parties and civic organisations, previously banned, participated in the process and brought with them “…incisive knowledge of principles surrounding openness and accountability” (Nicks, 1995, p.36).
Integration is a principle that was introduced only in 1997 through national government’s policy documents (Interview 1). Despite this, there is still a lack of integration; this is evident in the misalignment of land-use planning procedures in terms of LUPO (1985) and the EIA regulations in terms of the Environmental Conservation Act (RSA, 1989) as amended (Interview 2). There was a growing verbal commitment to the integration of these two sets of legislation, but implementing it has been problematic and this is where government’s accountability to integration has failed (Interview 6).

The MSDF adopted “openness and accountability” as a principle to inform planning and development: “Extensive and effective public participation should be an integral part of the ongoing planning and management of the CMR. Planners and decision-makers should see themselves and their actions as being accountable to the citizens of today, as well as to future inhabitants. Decision-making processes should be consistent, clear and transparent” (MDF-CWG, 1993a, p.8).

The new Constitution has made provision for all levels of government to be accountable and transparent (RSA, 1996b, section 195 (1)), thus making the concept a legal requirement.

4.6.5 Summary

It can be argued that both nationally and locally there has been little, if any policy integration, even with the new legislation which has emerged since 1994. As a result, environmental, social and economic policy and legislation remain largely separate from spatial planning and development policies. More recently, the Municipal Systems Act of 2000 (RSA, 2000) requires Integrated Development Planning (IDP) as a local government management device. However, IDP itself does not integrate the various sectoral policies and strategies which exist nationally. As mentioned in chapter two the approach that guides planning in South Africa is mostly “top-down”, as everything must be done in terms of the national/provincial legislative framework. Figure 2.2 in chapter two illustrates the “top-down” approach of policies informing plans from which programmes are generated and from which a number of projects are initiated to implement the policy. Legally, all the mechanisms have been created for the achievement of integration. However institutional support and political will are required to ensure that it happens.

Nevertheless, the MSDF process did partly succeed in integrating sectoral issues, even though there were very few clear sectoral policies and strategies in place at the time of its development. Several local policies were developed during the interim transformation phase, including those for
transportation (the *Moving Ahead Transport Plan*) (CMC, 1998b), and economic development. These were prepared in tandem with the MSDF, and by sharing information and by employing the MSDF spatial models of growth, a significant degree of integration was achieved.

The evidence also shows that the meaning of “sustainable development” was based on the Brundtland definition (a weak approach), and that it changed over time. The emphasis moved from poverty, to management, to ecosystems management, which emphasised the need to determine carrying capacity.

4.7 Conclusion

It can be concluded from the analysis of the MSDF process that all five forms of integration were relevant. However, the extent and success of integration varied, both between sectors and areas and over time, as the institutional and policy frameworks changed during the pre-interim, interim and final phases of local government restructuring.

The evidence shows that economic, social, biophysical and spatial planning issues were identified, but that there was insufficient detail for them to be integrated in a substantive manner. This was due largely to lack of primary and detailed information as well as separate sectoral management structures. Thus substantive integration was achieved at a spatial level only.

A variety of methods was used to analyse economic, social, biophysical and spatial planning issues in the MSDF process. However, none of these sectors was analysed in-depth. This was undertaken only much later, when additional methods and new information provided more details (e.g. from State of Environmental Reporting) (*Table 4.1*).

The level of integration of stakeholders into the process was initially considered promising, but this became narrowly focussed on metropolitan stakeholders, which meant that the MSDF was not supported at “grassroots” level (Pheiffer, 2001). Participation also waned towards the end. There was no integration of sectoral approval processes, but a vehicle was created for a hierarchical approval structure in the planning sector which required ongoing public participation at programme and project levels.

Institutional integration was successful *ab initio*, but became less so with local government restructuring, particularly in the interim restructuring phase. With democratisation of local
government, new concepts were introduced through the new Constitution (RSA, 1996b) such as cooperative, transparent and accountable governments. However despite the fact that these principles were adopted at both national and local level, it was difficult in practical terms to see whether they were being implemented at the local level.

Initially there was a policy vacuum, which meant that policy integration was very weak. As the country was being transformed through the political process, so sectoral policies at the national level were being generated and many of them put in place by 1998. Local governments took their cue from national government and as Table 4.1 shows, new sectoral policies at a metropolitan level were being developed and adopted from 1998 onwards. It is evident that development of sector policies was not integrated, due to the compartmentalisation which had been entrenched by separate sector policy and legislative processes.
CHAPTER FIVE
CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This thesis has set out to determine if Spatial Planning processes are integrative. An attempt was made to survey the concept of integration in the context of sustainable development as well as its perceptions in Spatial Planning and SEA processes.

The discourse on sustainable development has indicated that human activity causes environmental degradation and that an holistic and multidisciplinary approach is needed to prevent environmental disasters and to promote sustainable development. There is no agreed definition for this concept, but in South Africa a strong emphasis is placed on socio-economic values, human well being and the protection of natural resources. Environmental concerns are interconnected via economic, social, biophysical, demographic and political issues. Thus, sustainable development is achieved when these issues are dealt with in a manner, which promotes this integration.

Democracy, participatory planning and restructuring of government institutions will lead to more sustainable development practices and are thus regarded as important theoretical elements in the process. Public involvement is also important to help make planning processes more transparent and provide an improved, more sustainable outcome. The need for an integrated and holistic approach is particularly important because of the high levels of poverty and a history of unequal access to resources and power in South Africa, especially among Black and Coloured citizens. Government intervention is therefore required to regulate human activities and to provide basic services, in order to prevent environmental degradation and to promote more sustainable development outcomes.

At a strategic level, intervention tools are required to ensure that in practice sustainable development is in accordance with the development cycle. Both Spatial Planning and Strategic Environmental Assessment (SEA) constitute such tools. The literature shows that SEAs are constantly evolving to aid more effective decision-making in the Policy, Plan and Programme (PPP) development cycle. Currently, SEAs are considered to be an ongoing process for the evaluation of impacts on the environment of PPPs at the earliest stage of the development cycle. They also ensure full integration of relevant biophysical, economic, social and political considerations, and thus promote sustainable development. Strategic Environmental Assessment promotes sustainable
development by facilitating more effective decision-making. Its approach towards sustainability is underpinned by the integration of social, economic and environmental contexts.

The literature on integration indicates that it is too complex and difficult to define, but that it is something that commonly occurs. As was discussed in chapter two, it can happen vertically via the integration of the higher-order levels of environmental assessments with those at project level, or horizontally via integrating environmental assessment with other instruments like spatial and sectoral planning. In the development cycle, a strategic spatial framework is used to regulate the location, timing and form of development; it integrates biophysical, social and economic issues. Vertical integration also occurs in the planning process through the “package of plans” approach. The purpose of this research is to measure the level of integration that has occurred in the preparation of a spatial planning framework. Integration is, inter alia, a principle of sustainable development; thus, the significance of this research is that it will be a partial means of determining whether sustainable development is being achieved.

A tool for assessing the degree of integration is the Integration Framework discussed in chapter two. It comprises five dimensions which are used to assess integration between spatial planning, biophysical, social and economic issues. The five dimensions identified were substantive, policy, institutional, methodological and procedural (Figure 5.1). These have been applied to other international case studies (Fookes, 2001; Schultz, 2001). In this research thesis the Integration Framework was applied to the Cape Town Metropolitan Spatial Development Framework (MSDF) as a case study to assess the level of integration that has occurred in this instance.

The research methodology that was used was discussed in chapter three. The aim of the analysis is to build on to existing theory and to move from the specific (case study) to the general (theory) (Strauss and Corbin, 1998). The Integration Framework (Figure 2.4) provides the evaluation criteria for determining how the five forms of integration have been applicable in the MSDF. The analysis relied on the data collated from relevant documentation and interviews conducted. The evidence was analysed by making use of two different techniques: time-series analysis and pattern-matching. Finally the results were generalised back to theory, which is discussed in this chapter.

The analysis of the MSDF process has indicated that all five forms of integration were relevant to it. However, the extent and success of integration varied over time, both for the different sectors and for the municipal areas. This was due to changes to the institutional and policy frameworks during the pre-interim, interim and final phases of local government restructuring.
The analysis of the case study in chapter four showed that economic, social, biophysical and spatial planning issues were identified, but lacked sufficient detail to be integrated in a substantive manner. This was due largely to the spatial focus of the process and lack of primary and detailed information. Thus substantive integration was achieved at a spatial level only. Although a variety of methods was used to analyse economic, social, biophysical and spatial planning issues in the process, the economic, social and biophysical sectors lacked in-depth analysis. This was done only much later in the process and new methods and material, such as the State of the Environment Reporting, (Table 4.1) have contributed to providing more detailed information.

Public participation was integrated initially, but became narrowly focussed on metropolitan stakeholders, which meant that the spatial framework was not supported at “grassroots” level (Pheiffer, 2001). Participation also waned towards the end. There was no integration of sectoral approval processes, but a vehicle was created for a hierarchical planning approval structure through the “package of plans” process.

Institutional integration existed at the outset, but became less prominent with local government restructuring, particularly in the interim phase. With the democratisation of local government, new concepts and principles, such as co-operation, transparency and accountability were introduced. However it was difficult to ascertain in practise whether these concepts and principles were being implemented.

Initially a policy vacuum existed and integration was very weak in this regard, but as the country was transformed, more sectoral policies were put into place. Nationally, most new sectoral policies were in place by 1998. Local governments took their cue from national government and, as Table 4.1 shows, at a metropolitan level new sectoral policies were being developed and adopted from 1998 onwards. It is evident that the development of sector policies is not integrated; this is due to the fragmented institutional structures entrenched at national level through separate sector policy and legislative processes. It is a requirement that local governments prepare IDPs and it is hoped that, through their implementation, integration will occur. The new City of Cape Town has prepared an Interim IDP for the business year 2001/2002. However it does not fully meet the requirements of the IDP guidelines.

The results of the research findings of the MSDF case study are summarised in the matrix below (Table 5.1). More detailed discussion will follow.
### TABLE 5.1: EXTENT OF INTEGRATION IN THE MSDF

#### FORMS OF INTEGRATION

<table>
<thead>
<tr>
<th>How strongly addressed</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SUBSTANTIVE</strong></td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>The integration of physical or biophysical issues with social and economic issues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The integration of emerging issues such as health, risks, bio-diversity, climate change etc.</td>
<td>✗</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The (appropriate) integration of global and local issues</td>
<td>✗</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>METHODOLOGICAL</strong></td>
<td>✗</td>
<td></td>
<td>✗</td>
</tr>
<tr>
<td>The integration of environmental, economic and social (impact) assessment approaches such as cumulative assessment, risk assessment, technological assessment, cost/benefit, multi-criteria analysis, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The integration of the different applications, and experiences with the use of particular tools such as GIS</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>The integration and clarification of (sector) terminologies (incl. the element of “strategic”)</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td><strong>PROCEDURAL</strong></td>
<td>✗</td>
<td></td>
<td>✗</td>
</tr>
<tr>
<td>The integration of environmental, social, economic planning/assessment, Spatial Planning and EIA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The integration of sector approval/ licensing processes, Spatial Planning and EIA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The adoption of co-ordination, co-operation and subsidiary as guiding principles for (government) planning at different levels of decision-making</td>
<td>✗</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The integration of affected stakeholders (public, private, NGO) in the decision making process</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>The integration of professionals in a truly interdisciplinary team</td>
<td>✗</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INSTITUTIONAL</strong></td>
<td>✗</td>
<td></td>
<td>✗</td>
</tr>
<tr>
<td>The provision of capacities for coping with the emerging issues and duties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The definition of a governmental organisation to ensure integration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The exchange of information and possibilities of interventions between different sectors</td>
<td>✗</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The definition of leading and participating agencies and their respective duties and responsibilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>POLICY</strong></td>
<td>✗</td>
<td></td>
<td>✗</td>
</tr>
<tr>
<td>The integration of “sustainable development” as overall guiding principle in planning and EIA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The integration of sector regulations</td>
<td>✗</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The integration of sector strategies</td>
<td>✗</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The timing and provisions for political interventions</td>
<td></td>
<td>✗</td>
<td></td>
</tr>
<tr>
<td>Accountability of government</td>
<td></td>
<td></td>
<td>✗</td>
</tr>
</tbody>
</table>

**Key:**
- 1 = Slightly integrated
- 2 = Integrated
- 3 = Fully integrated
- ✗ = Unchanged
- ✗ = Increase over time
- ✗ = Decrease over time
5.2 Conclusions about the Research Question and Implications for Theory

The assumption was made that Spatial Planning processes does not sufficiently integrate biophysical, social and economic issues. However, the case study has indicated that Spatial Planning, by its very nature has integrated biophysical, social and economic issues, but at a spatial level only.

The conclusions to the findings for each dimension of integration applied to the MSDF (Table 5.1) are stated below as well as the implications and contributions this research has made to the theory developed in chapters one and two.

5.2.1 Substantive Integration

The findings in chapter four suggest that substantive integration during the formulation of the MSDF – was slight, but that it increased over time (Table 5.1). Thus, it was only later on that substantive integration become more prevalent with detailed studies emanating from the MSDF process; information gathering also improved through methods such as GIS.

The substantive issues identified in the Problems and Issues document (MDF-CWG, 1993a) did help to establish the purpose and objectives of the MSDF. There was evidence to suggest that it was the MSDF’s intention to identify and integrate all sectoral issues (MDF-CWG, 1993a) (Figure 4.1). However this was achieved only at a spatial level (Interviews 4 and 9), which prevented further integration from occurring. Sectoral issues were identified merely for further research through other processes (Interview 2; MDF-CWG, 1993b). The literature indicates that the interrelationships among economics, sociology, biophysics, demography and politics need to be understood if sustainable development is to be achieved (Drakakis-Smith, 1995).

The issues that were identified and focussed upon were local ones of metropolitan significance, as global issues were not perceived as part of the city’s business plan at that stage (Interviews 1 and 2; CMC, 1996). These were addressed only much later in the process through Local Agenda 21 and CEROI programmes (Table 4.1). The shift towards the incorporation of global issues happened as a result of local government achieving a better understanding of local issues. This pattern is consistent with what can be found in the literature of Drakakis-Smith (1995), McCarney (1995) and Fuggle and Rabie (1992).
The context and timeframe within which the MSDF developed provided only limited current and detailed information for the substantive integration of all issues. This has implications for the level of detail needed for future strategic plan-making as well as the scoping which needs to be done prior to development of proposals and alternatives (Partidario, 1996; Therivel and Partidario, 1996).

The time taken between the implementation of the MSDF and its elaboration was too long, as the substantive data used changed rapidly due to new trends, new issues and new problems. This emphasises the need for plans to be implemented at an earlier stage in the development cycle. To achieve this in the MSDF a normative approach should have been adopted, as in the case of New Zealand (Fookes, 2001; Healey et al, 1997; Interview 1).

The MSDF case study shows that it focussed on the spatial integration of issues. However, as a result of political and institutional transformation, the need for integrated development planning was identified. There was thus a shift from spatial integration to integrated planning, as has been identified in the literature (Patel, 2000).

5.2.2 Methodological Integration

There was slight methodological integration throughout the process (Table 5.1).

It was found that the assessment tools used were mainly spatially related. This biased emphasis on spatial assessment gave the impression that a range of alternatives had been evaluated and that a rational choice had been made (Watson, 2002). The case study however indicates that although there was a process, this did not determine the product. The MSDF was a preconceived scenario, (Curitiba) and its adoption was justified by “playing it off” against other development scenarios.

It was also found that spatial analysis and representation tools including GIS were used to integrate various aspects of the planning process (Watson, 2002; Interview 2), although GIS was used more effectively later on. The databases that existed then were crude and incomplete (Interview 2). On examining both the New Zealand and Switzerland case studies, it was noted that GIS had been fully integrated as a method (Fookes, 2001; Schultz, 2001).

The MSDF referred to IEM and cost/ benefit methods, but only as they needed to be applied at project level (CMC, 1996), which implies that they were relevant mainly at that particular level of
the development cycle. The causes, impacts and solutions to the many environmental problems are difficult to predict without accurate information. For instance, setting environmental target limits and determining ecological carrying capacity or biodiversity requires appropriate information, and this can be achieved through a myriad of methods (e.g. GIS) (Therivel et al, 1994). A range of such techniques and methods has been cited in the literature, but these were not used in the MSDF (Therivel and Partidario, 1996; Therivel, 1998; Therivel, 1993; Verheem, 1992; Marden, 1998; Eggenberger and Partidario, 2000).

Evaluation criteria for the purpose of monitoring the MSDF were identified (CMC, 1996). However, there was no evidence to suggest that they had been implemented. It was only when SOE reporting was introduced in 1997 that indicators for monitoring certain aspects of the MSDF were developed (Table 4.1). Target-and-limit setting for carrying capacity is highlighted in the literature as one of the appropriate methods, though it was not used in this case study. However, evidence in the latest redraft of the MSDF in 2001 indicates that it is a method that will be used in future (CoCT, 2001). On the other hand, setting targets and limits for carrying capacities does have possible adverse implications for the poor: they could be further marginalised, since they do not have equal access to environmental resources (Patel, 2000). This implies that careful consideration should be given to the socio-economic context before using particular methods and techniques. The MSDF has evolved by linking its objectives to indicators through SOE reporting and thus monitoring the effectiveness of its proposals. Evidence suggests that the process is taking on some of the characteristics of SEA as outlined by Therivel and Partidario (1996).

New policy is implemented through government intervention, which requires the development of new tools and techniques (Devas and Rakodi, 1992). The case study illustrated that new policy was generated at national level, which was part of the political and institutional transformation. At times there was a lack of parity in prescribing tools and methodologies in policy and legislation - for example, the comprehensive IEM checklist for the preparation of structure plans (Table 4.1) was not prescribed and was not used in the MSDF process. This implies that at times it would be necessary to legislate certain methodologies to ensure that they would be applied where appropriate.

The Brundtland definition of sustainable development was adopted as the core definition in the MSDF, i.e. the weak approach (Figure 2.5) (Partidario and Clark, 2000). The lesson from this implies that there is a need for Spatial Planning processes to take on a stronger and more proactive approach to allow the potential of the environment to shape development. Strategic Environment
Assessment can play an effective role in doing this (Wiseman, 2000; Healey et al., 1997; DEAT, 2000).

5.2.3 Procedural Integration

The results in Figure 5.1 illustrate that there was slight procedural integration throughout the planning process. The fact that this integration was only slight was a constraining factor: it meant reduced status for the MSDF as far as its goal of becoming an approved structure plan was concerned.

At the beginning of the process, the establishment of a multi-sector mandate from various civil society stakeholder groups strengthened procedural integration. Stakeholder involvement in the MSDF was perceived initially to be fully integrated, but this waned towards the end of 1996, as the institutions became more democratic. This implies that the role and nature of participation in the context of democracy need to be clarified in order to achieve more sustainable development (Patel, 2000). The case study confirms that the involvement and role of democratically-elected councillors (politicians) in public participation and decision-making process need to be clarified. Interviewee No. 8 sums this point up by stating "… democracy … dilutes the power of centres to such an extent that a very articulate minority can come in and do its thing" and by so doing, manipulates the process. A further factor, which promoted procedural integration was the sharing of information and resources with other sectoral initiatives. This included the establishment of databases and the collation of spatial information via the use of GIS.

During the analysis phase of the MSDF, the procedures for EIA were not well established and as a result, no integration of spatial planning and environmental assessment methods or procedures occurred. This lack of procedural integration continues today, and is attributable to the separation of the institutional and policy frameworks for spatial planning and the environment. The conclusion is that a greater effort needs to be made to ensure co-operative governance and to enhance intergovernmental relations.

Although a SEA was not undertaken in the MSDF process, a metropolitan-level environmental evaluation was perceived as being a key input into the analysis phase, and is a successful example of integration in the Spatial Planning process. The environmental evaluation provided vital information in a usable form for the spatial plan, including identification of environmental issues relevant to the formulation of the spatial proposals. However, the environmental evaluation stopped
short of identifying or assessing alternative scenarios and was not subject to public participation or systematic review. It therefore does not fully address the SEA guidelines which exist today (DEAT, 2000); nevertheless it is a valuable example of integration in the Spatial Planning process.

In chapter four it was found that procedural integration was difficult to achieve because of compartmentalisation within institutions. Each sector was using its own procedures to promote its own goals and objectives. The implication is that ways must be found either to restructure institutions or to encourage the different departments to work together in an integrated manner. The case study indicated that Spatial Planning is a means for the co-ordination of all sectors.

The tiering of plans, via the “package of plans” approach identified in the case study, created a vehicle for the integration of other processes, such as in SEA. However, the sector approval and licensing processes in the tiers of the MSDF were applicable mainly to lower-level plans and projects. This implies that there is a need for processes which are applicable either at strategic or project level. Furthermore, there is a question as to whether stakeholders will accept the outcomes that are being promoted through tiering in perhaps five or more years time, as was the case in the MSDF, or whether the issues will need to be re-addressed. This has clearly become an issue in the MSDF case study.

The lack of institutional integration has had an effect on the procedural approval process - that of obtaining statutory approval of the MSDF plan itself. This confirms that institutional integration is necessary to achieve procedural integration.

5.2.4 Institutional Integration

Institutional integration was slight throughout the process and deteriorated over time (Table 5.1).

The MSDF has not yet reached its objective in terms of becoming a statutory plan, although it has been implemented by some of the local government institutions in the Cape Town area. This uneven implementation is a consequence of the varying degrees of institutional integration that occurred during the plan preparation process.

These ongoing divisions are largely a result of the lack of an early commitment to institutional integration in the process. Prior to the establishment of the new Cape Metropolitan Council in 1995, there was institutional jealousy over the metropolitan planning function and the perceived
enhanced status and resources that accompanied it (Watson, 2002). This caused considerable conflict between the two leading agencies that were to produce the MSDF. The implication of this is that the introduction of, for example, an agreement amongst the participating leading authorities could have been established to overcome these institutional difficulties. This happened in the New Zealand case where a memorandum of understanding was agreed to by the participating authorities (Fookes, 2001). Perhaps the goals of the MSDF could have been reached sooner if such an agreement had been entered into from the outset.

Whether the MSDFs' spatial objective of restructuring the city has been met is too early to tell. However, the establishment of a single metropolitan authority, the City of Cape Town, will mean that decision-making should become more consistent, and that therefore the chances of implementing the MSDF evenly across the CMA will be improved.

The case study has shown that the lack of institutional integration was a constraint to an effective and integrated approach. Institutional integration appears to be crucial at the higher, conceptual and “policy” levels of planning, such as at the metropolitan scale of Spatial Planning. During later or lower-order stages of an integrated process, such as at the level of detailed projects (site development plans) or the application of sectoral regulations and strategies, other forms of integration may be more important. For example, at the detailed site development scale, substantive and methodological integration may be paramount. Successful integration at these lower scales would nevertheless be dependent on the level of integration achieved in the earlier, higher levels of Spatial Planning.

Political transformation brought about institutional restructuring and policy development. These changes meant that new skills would be required to manage emerging issues (Devas and Rakodi, 1992). The case study showed that the leading agency, instead of forging closer ties with fellow institutions like the CCC that had the capacity and skills to contribute to the process, deliberately rejected the opportunity to reinforce collaborative and co-operative institutional integration by the buying-in of private sector skills (Interview 5). At a national level there was no institutional integration after the first democratic elections in 1994, this is evident in the misalignment of policy, for example LUPO and the EIA regulations. This implies that not all spheres of government have observed or achieved the principle of co-operative governance. Also, compartmentalisation within institutions leads to the development of separate policy functions that produce a vertical logic of decision-making, thus limiting horizontal linkages (Therivel et al, 1994; Healey et al, 1997). Institutional integration was also weakened by the compartmentalisation (e.g. separate
functions/sectors) within local authorities in the case study. This was entrenched by the proclamation of new policy and legislative requirements after the 1994 national elections. After the local elections the CMC created separate directorates, and each one generated its own policies (Table 4.1) and identified programmes and projects on its own business plans to execute these policies. It was only after the introduction of IDP through the Municipal Systems Act (RSA, 2000) that departments were forced to prepare joint business plans (Interview 4; Watson, 2002). The implication is that the mechanisms have been put in place for institutions and sectors within it to work in an integrated way, but that these have not yet been put into practice.

Intervention by other institutions such as NGOs, and their participation in the process, was difficult, because of the manner in which the information was presented. It was too abstract to understand. This meant that the spatial proposals made were unchallenged and became a “blueprint” for decision-making. This is contrary to the literature which holds that empowerment and capacity-building should take place in a participative way. The conclusion drawn from this is that for participative stakeholder involvement to take place there should be consensus-based participation and/or conflict resolution mechanisms; should the stakeholders not be capable to negotiate the proposals presented, the process would be flawed.

Democratisation and decentralisation of local government has led to a shift in the power of decision-making from the technocrats (officials) to politicians (Healey et al, 1997; Patel, 2000). The case study confirms this shift in that up until 1996 the process was managed with relative autonomy by the RSC planners; after the first democratic elections the politicians took the process back and made all the decisions (Interview 6).

An explicit vision developed within the MSDF process could be seen as an institutional builder (Interview 1; Healey et al, 1997). The idea of a compact, integrated and efficient city could easily be embraced by all sectors “...everybody knew exactly what we did not want and what we wanted to get away from ... there was agreement .. [in] .. principle ...of what we wanted to achieve” (Interview 1). This implies that vision and principles can serve, politically and socially to legitimise the priorities of the development proposed and to pull institutions together; this was certainly the case in New Zealand (Fookes, 2001).
5.2.5 Policy Integration

Policy integration remained slight throughout the process, as a policy vacuum existed when the process was initiated (Figure 5.1).

Little policy integration happened either locally or nationally in the time period during which the MSDF was developed, as environmental, social and economic policies remained separate from those for spatial planning and development.

Chapter four showed sustainable development was a guiding principle in the process, although the meaning of this changed over time. However, the MSDF kept the Brundtland definition as a core feature whilst changing the emphasis from poverty to management and then to the inclusion of ecosystems. This shift in the definition concurs with what has been discussed in the literature (Drakakis-Smith, 1995; McCamney, 1995; RSA, 1998a; RSA, 1995; WCED, 1987; Patel, 2000, Marsden, 1998).

Political transformation necessitated the development of new national policies and accompanying legislation. Each national sector developed its own separate policies, which tricked down to the local government sphere. The outcome of this was a tendency to generate conflict between sectors like planning and environment; it also had an influence on integrating procedures and methods such as in land-use planning and EIA processes. Furthermore, to implement policies in an integrated fashion was difficult, as different spheres of government were responsible – e.g. local government for planning and provincial government for environmental issues. This implies that policy integration is dependent on institutional integration, and these findings are reflected in the literature (Marsden, 1998).

Some national interventions for example the RDP and GEAR, had a lesser effect on the MSDF. This was due to the fact that they came at a time when the spatial proposals had already been debated with the stakeholders. This has implications regarding the accountability of the sphere of government that generates policy as far as its integration and implementation are concerned.

Transformation and restructuring were required to make government institutions more accountable, especially at the local level, but even in the pre-interim transformation phase, the MSDF team adopted the principles of openness and accountability. Later, the Constitution (RSA, 1996b) made
In summary, this research has made five contributions to existing theory. Firstly, it has confirmed that Spatial Planning, by its very nature, has integrated biophysical, social and economic issues, but at a spatial level only. Full integration in Spatial Planning processes can be measured by assessing its institutional, policy, methodological, procedural and substantive aspects. Secondly, the research has shown that institutional integration is difficult to achieve in a period of transformation and democratisation; this difficulty was exacerbated due to a change of duties and powers of institutions. A useful institutional builder is an overarching vision with a set of principles. Thirdly, transformation and democratisation affects policy integration. Policy formulation sets out the processes and methods needed to implement it, but to do so institutional integration is a prerequisite. Fourthly, substantive integration requires screening and scoping of issues at an appropriate level, in terms of the type and detail of information. Timeframes over which spatial frameworks are developed can have an effect on substantive integration. Fifthly, methodological and procedural integration is easier to achieve at the project level, but is still reliant on the institutional and policy integration achieved at higher strategic levels.

5.3 Limitations

One limitation of this research is that it was focussed on the strategic level of planning in terms of the development cycle hierarchy, as discussed in chapter two, and did not include the full spectrum of PPP and projects in the assessment. It is recommended that case studies which cover the full development cycle be selected. This would greatly improve the understanding of the vertical integration of tiering and would have the advantage of repeating the method used in other provinces of South Africa.

Another limitation is that the case study was based in Cape Town within the Western Cape Province, one of the nine in South Africa. To a degree, the Western Cape is anomalous in terms of its environmental, social, economic and political contexts (e.g. it is under the political control of the Democratic Alliance rather than the ANC). Even though national government sets the legal framework, there are slight differences amongst the provinces.
5.4 Recommendations for Further Research

An emerging approach to the procedural integration of Spatial Planning exists in the Western Cape – that is known as the “package of plans”; this has been developed to facilitate large land development proposals. It is tiered in the sense that spatial frameworks (e.g. the MSDF), as the highest level of the strategic planning process, inform lower-level planning such as Site Development Plans (project specific). This “package of plans” approach integrates the required statutory procedures for Spatial Planning approvals. Integrated Environmental Management (IEM) also has a tiered approach in that it incorporates several instruments for environmental assessment. In addition, the literature shows that SEAs are hierarchical in providing the context for lower-level, more detailed tiers of planning and assessment of project EIAs. The opportunity exists for further research to explore ways of integrating and streamlining these two sectors procedurally and methodologically.

Yet another issue highlighted through this research is the necessity for investigating what the desired timeframes for metropolitan planning and SEA processes should be.

Finally, the literature suggests that sustainable development can be achieved through an integrative approach. Integration is complex and difficult to explain and therefore an exact definition does not exist, but it is essential to achieve some level of it in order to move towards sustainable development. This research has illustrated that the level of integration is dependent on circumstances; as these change, so too do policy contexts and organisational structures, and thus the environmental setting may be altered over time. This confirms that integration should not be seen as the sum of parts that make up a whole, but rather as new relationships with specific characteristics, which, in combination, behave in a different way to produce an outcome - ideally one that is more dynamic and sustainable.
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Interview 1, 2000: Cecil Madell, then part of the consulting firm of MLH planners, now a partner in MCA planners.

Interview 2, 2000: Peter Tomalin, then Deputy Chief Director of Planning, Western Cape Regional Services Council, now Executive Director: Planning, Environment and Housing, Cape Metropolitan Council.

Interview 3, 2000: Khalil Mullagie, then Administrative support to the Western Cape Economic Development Forum and Urban Development Commission, now Provincial Co-ordinator, National Business Initiative.

Interview 4, 2000: Vanessa Watson, then with Urban Problems Research Unit affiliated to University of Cape Town, now Associate Professor, School of Architecture and Planning, University of Cape Town.

Interview 5, 2000: Jane Burnette Prinsloo, then Assistant Director of Planning, Cape Town City Council, now Head of Economic Development, Economic and Social Development Directorate, Cape Metropolitan Council.

Interview 6, 2000: David Shandler, then partner with Ziller Shandler Associates the process facilitators, now partner with Common Ground Consultancy.

Interview 7, 2000: Peter de Tolly, then Deputy City Planner, Cape Town City Council, now Director: Special projects and Acting Director: Economic Development, Cape Town Municipality.

Interview 8, 2001: Simon Nicks, then planner with Chittenden and Associates, now Director with Chittenden Nicks de Villiers Planners.
Interview 9, 2001: Kim van Deventer, then employed as planner by a non-governmental organisation the Development Action Group, she is now Executive Director: Economic and Social Development, Cape Metropolitan Council.

Interview 10, 2001: Basil Davidson, then member of African National Congress Western Cape Executive and employed as planner by the Development Action Group, he is now Head of Housing Department, Planning, Environment and Housing Directorate, Cape Metropolitan Council.


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Regional Services Council File: 30/15/9/19/7: Metropolitan Development Framework: Environmental Issues.


APPENDIX 1
QUESTIONNAIRE
INTRODUCTION

I am busy with a research project for my thesis on Strategic Environmental Assessment (SEA). My case study is on the MSDF process and on trying to identify the key forms of integration between planning and impact assessments at a strategic level. This research project is also linked to an international study. The CMC Administration is a corporate member of the International Association for Impact Assessment (IAIA) who were invited to serve on an International Advisory Board for an IAIA endorsed research programme entitled “Integration of Environmental, Social and Economic Issues in Spatial Planning”. This study involves the preparation of a report analysing the environmental, social and economic context of spatial planning in order to develop an integrated planning approach that will contribute to the development of an integrated planning framework that will satisfy the following objectives:

(i) To ensure early consideration of environmental, social, economic and institutional issues in the planning process, enabling more sustainable planning practices,
(ii) To improve the links between integrated (spatial) planning and (formal and informal) Impact Assessment instruments, notably, SEA.

It is assumed at the outset that spatial planning and SEA have many overlaps and that both are instrumental in achieving sustainable development; but that the potential synergies are as yet not sufficiently explored. On the other hand, the reality and contours of integration is still debatable, even in planning and decision-making. In brief, I am looking at spatial planning, and how it considers key-forms of integration (e.g. substantive, methodological, procedural, institutional and policy), and also at how planning and decision-making are linked and making use of SEA in the process of achieving integration and establishing sustainable development trends. I am seeking to extract experience from a real case to support the development of the intended framework and as such have selected the MSDF as a case study. By looking at key-elements, opportunities and constraints of integration in this case study I hope to be able to contribute to the understanding of the fundamental issues in the process of integration.

Interview date: ________________________________________________________

Name of Respondent:____________________________________________________

Current Position:________________________________________________________

Position/ role during process: ____________________________________________

Period involved in the process: ____________________________________________
QUESTION 1

I NEED TO OBTAIN SOME IDEA OF THE MSDF PROCESS AND HOW IT RELATES TO THE DIFFERENT FORMS OF INTEGRATION DISCUSSED AT THE BEGINNING.

1.1 Why and how was the MSDF developed and what were the objectives of the initiatives i.e. what were the main elements?

1.2 Do you believe it was an integrative process?

1.3 Who was involved in this process and who were the stakeholders? (who initiated it, who were the key actors, who was the responsible authority)

1.4 I need to identify in your opinion which forms of integration are relevant to the MSDF process and will ask you a set of questions that will inform my evaluation of your answers later on in my analysis of this questionnaire.

1.4.1 What sectoral issues were integrated e.g. Social, economic and environment? (could you include any documentation to verify this)

1.4.2 What emerging issues were integrated with the MSDF e.g. Health, risks, bio-diversity, climate change etc? (they can be principles, studies or actions)

1.4.3 What integration and local issues was taken into account?

1.4.4 Were any environmental, economic and social (impact) assessment approaches applied, if so, which were applied? (EIA, SEA)

1.4.5 Were any other applications applied with the use of particular tools such as GIS?

1.4.6 Were environmental, social, economic planning/ assessments and spatial planning ever integrated in this process?
1.4.7 Were other sectoral approval systems integrated in this process? (e.g. air, water, traffic)

1.4.8 Were the affected stakeholders integrated into the decision making process, if so how and at what stages?

1.4.9 Were all professionals integrated in a truly interdisciplinary team?

1.4.10 Was there capacity to cope with the emerging issues and duties?

1.4.11 The managing authority was the RSC, did they ensure integration?

1.4.12 What kind of exchange of information was there and was there an opportunity for intervention between the different sectors?

1.4.13 Was there a clear definition of leading and participating agencies and their respective duties and responsibilities?

1.4.14 What do you understand by or how would you define sustainable development and was it used as an overall guiding principle?

1.4.15 Can you identify some of the sectoral regulations and strategies at the time and were they successfully integrated into the MSDF process?

1.4.16 How were the timing and provisions for political interventions integrated? (e.g. RDP)
1.4.17 Do you think the government of the day was accountable to integrated planning?

QUESTION 2

I NEED TO UNDERSTAND WHAT THE FUNDAMENTAL ELEMENTS WERE IN THIS PROCESS IN TERMS OF INTEGRATION.

2.1 Firstly, do you think the implementation of this initiative was successful, i.e. did it reach its objectives? (what does projects like century city mean?)

2.2 Which elements in this process do you think are crucial for the successful implementation of an integrated approach (participation, information sharing, multi-sectoral team, planning assessment and formal/informal procedures)?

2.3 Has the MSDF ensured better or integrated decision making, if so how? (conformance, package of plans i.e. "Cascade" effect)

QUESTION 3

I WOULD LIKE TO HAVE A DISCUSSION ON THE POSITIVE AND NEGATIVE EFFECTS YOU HAVE ENCOUNTERED IN THIS PROCESS.

3.1 Which were the difficulties you encountered in this process and how were they overcome (setting goals, involving stakeholders, conflicting interest, defining methodology and approach, collecting data, implementing the initiative etc.)?

3.2 What are the implications for planning processes in future (and should SEAs specifically be integrated)?
3.3 What are the links to other sustainable planning procedures in place of SEA? (LA 21 as a philosophy etc.)

3.4 What are the challenges (opportunities and constraints) of an integrated planning approach in general and for studies like the MSDF?

3.5 What do you think are the consequences of capacity building in processes such as these?

3.6 What would you recommend to other local authorities if they wanted to embark on a similar approach?
APPENDIX 2
INTERVIEW MATRIX
<table>
<thead>
<tr>
<th>Interviwees</th>
<th>Integration of bio/physical issues with social &amp; economic issues</th>
<th>Integration of emerging issues e.g. health, bio-diversity, climate change, etc.</th>
<th>Appropriate integration of global &amp; local issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All were included. Issues and Problem document indicates that transport, environmental, economic, ethics, principles and management issues were included.</td>
<td>Physical manifestations of biosphere into spatial operation of the city. MSDF a spatial programme to address spatially-related issues.</td>
<td>International comparative studies used – Curitiba, Los Angeles, Sao Paolo. Integration was at broad level, not detailed localised issues such as pollution.</td>
</tr>
<tr>
<td>2</td>
<td>Issues of mobility, poverty, social upliftment, job creation, existing environmental information included - not confined to spatial issues only.</td>
<td>These are all new concepts. Issues addressed included an inefficient city, poverty, high travel reduction, reduction of pollution via public transport.</td>
<td>Curitiba – environmental capital of Brazil via public transport. Use of corridors and open spaces adopted from global examples. Global warming falls within ambit of national realm, not MSDF level.</td>
</tr>
<tr>
<td>3</td>
<td>Different stakeholders gave inputs e.g. labour and economic issues (creating jobs). Integration of communities; integration of residential areas with work-places, green organisations via agricultural inputs. However there was not enough emphasis on people.</td>
<td>The debate was about space, not the other emerging issues.</td>
<td>Curitiba's spatial growth model was a global aspect that was integrated.</td>
</tr>
<tr>
<td>4</td>
<td>Environment considered an important aspect</td>
<td>There were such no such informants.</td>
<td>National issues e.g. RDP (1993/4) on</td>
</tr>
<tr>
<td>Interviewees</td>
<td>Integration of bio/physical issues with social &amp; economic issues</td>
<td>Integration of emerging issues e.g. health, bio-diversity, climate change, etc.</td>
<td>Appropriate integration of global &amp; local issues</td>
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<tr>
<td>5</td>
<td>Spatial perspective through GIS layers e.g. environmentally sensitive areas, environmental potential, areas of hazards, historical and cultural resources, transportation, public facilities and resources.</td>
<td>There was environmental mapping indicating environmental hazards.</td>
<td>Global warming was an issue but not integrated. Global economy had an influence but not integrated. Curitiba was used as growth model – but understanding of local government functions incomplete in of this model, thus spatial concepts out of touch with South African transformation.</td>
</tr>
<tr>
<td>6</td>
<td>The integration was very simplistic. Did not look at business flows, energy flows and how</td>
<td>None of these was discussed – MSDF addresses equity, poverty elimination and</td>
<td>MSDF emerged at the same time as Rio Convention; no reference to this or LA 21.</td>
</tr>
<tr>
<td>Interviewees</td>
<td>Integration of bio/physical issues with social &amp; economic issues</td>
<td>Integration of emerging issues e.g. health, bio-diversity, climate change, etc.</td>
<td>Appropriate integration of global &amp; local issues</td>
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<tr>
<td>7</td>
<td>Environmental analysis – balance of conservation and development. Transport corridors – areas of strategic intensification. Nodes – hierarchy of centres – but not enough info on retail dynamics.</td>
<td>Localised hazards were e.g. water quality (study on False and Table Bays), catchment areas, water supply and aquifers; not integrated. Bulk services were not evaluated. No evaluation on environmental trade-offs.</td>
<td>“Globalisation” was big at time – MSDF did not mention role it needs to play in this. Curitiba was used as a spatial model. Curitiba was used as a model without understanding the context which makes it successful.</td>
</tr>
<tr>
<td>8</td>
<td>All integrated; managing urban growth and poverty, economic competitiveness, the people and who they were, the natural environment, job creation, home and movement patterns, service infrastructure, vacant land, urban management, agriculture.</td>
<td>These concepts were not on the agenda. The MSDF is a metro-wide document and did not go further than creating space. Thus no explicit statements on bio-diversity, only creation of green corridors within which to implement bio-diversity.</td>
<td>The concept of sustainable development was integrated.</td>
</tr>
<tr>
<td>9</td>
<td>Hexagram in document was superficially addressed – no dynamics and links between them as it was a spatially-driven process.</td>
<td>RDP, DFA, IDP were the emerging issues that happened over time, and were superficially integrated.</td>
<td>Working with concepts today not thought of then e.g. <a href="http://WWW">WWW</a>. Local issues are mismatched with global solutions; indicates no understanding of these</td>
</tr>
<tr>
<td>Interviewee</td>
<td>Integration of bio/physical issues with social &amp; economic issues</td>
<td>Integration of emerging issues e.g. health, bio-diversity, climate change, etc.</td>
<td>Appropriate integration of global &amp; local issues concepts before applying them (Curitiba model).</td>
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<tr>
<td>10</td>
<td>Pathologies on poverty levels, crime, access to services, socio-economic conditions, lack of economic development, lack of economic opportunities, job opportunities, polarisation of communities. The MSDF is perceived as the integrative planning intervention to address social and economic conditions and disparities across the city.</td>
<td>None of these was integrated.</td>
<td>Using Curitiba as a model is perceived as a global issue – appreciation of what a country can do with limited resources, but did not look at the institutional structures that made it succeed in Curitiba.</td>
</tr>
<tr>
<td>Interviee</td>
<td>Integration of impact assessment approaches e.g. cost-benefit, risk</td>
<td>Integration of different applications and tools e.g. GIS</td>
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<tr>
<td>1</td>
<td>These approaches were not known then by the team members. SEA and EIA only came much later in the process. They should be applicable only at the implementation stage of MSDL.</td>
<td>GIS was not used in the early days; sketches and overlays were used mostly. The McHargian approach was used as a tool to analysis sectoral issues. Capturing of information electronically came only later on in process.</td>
<td></td>
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<tr>
<td>2</td>
<td>None of these was used as they are relatively new concepts.</td>
<td>GIS was used only much later in the process (1995) e.g. showing layers of steep land, wetlands, river systems.</td>
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<tr>
<td>3</td>
<td>None of these was used.</td>
<td>MLH and CCC (urban studies unit) had just started using GIS when the process was initiated.</td>
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<tr>
<td>4</td>
<td>None of them was used; performance indicators were introduced only in 1999/2000.</td>
<td>Existing information generated by UCT (UPRU) and Wesgro was used.</td>
<td></td>
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<tr>
<td>5</td>
<td>Environmental – mapping assessment in terms of environmental sensitivity, hazards, historical and cultural resources. Transport – transport modelling using an economic model developed by the CSIR.</td>
<td>Only later on in process were transport and environmental issues captured on GIS.</td>
<td></td>
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<tr>
<td>6</td>
<td>None of them was used. There was no scoping, no generation of alternatives, no policy impact assessments, no cost benefit analysis.</td>
<td>Don’t know.</td>
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<tr>
<td></td>
<td>The MSDF was an ideological process, not a scientific process.</td>
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<td>7</td>
<td>There was a bio-regional environmental analysis, but not enough information was generated for the understanding of trends/dynamics. The Environmental Evaluation determined direction of urban expansion (no trade-offs or options considered)</td>
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<tr>
<td></td>
<td>McHarg analysis was used.</td>
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<tr>
<td>8</td>
<td>None of these was used. The MSDF was intended to offer spatial solutions. Assessment was about understanding the previous impacts on city development; this was done through comparative study of Curitiba, Los Angeles and Sao Paolo.</td>
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<tr>
<td></td>
<td>No primary research was done. Other tools used were: socio-demographic analysis to understand movement patterns of people, trip generations from home to work, photographic analysis of different living environments.</td>
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<td>9</td>
<td>Not around at the time process got underway. Inadequate attention given to these topics later on.</td>
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<tr>
<td></td>
<td>GIS was not used to its full potential due to the institutional jealousy that existed.</td>
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<tr>
<td>10</td>
<td>None of these was addressed.</td>
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<td></td>
<td>A “broad brush” superficial analysis was done on generalised information rather than at a detailed level intended for implementation. The tools were not adequately used; not sure if using GIS would contribute to the understanding of the dynamics.</td>
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<tr>
<td>Interviewees</td>
<td>Integration of SEA (environmental, social, economic assessment), spatial planning and EIA</td>
<td>Integration of sector approval/licensing processes, spatial planning and EIA</td>
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<td>--------------</td>
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<tr>
<td>1</td>
<td>Not addressed - the primary objective was to prepare a spatial plan.</td>
<td>MSDF did not focus on legal processing of sectoral applications.</td>
<td></td>
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<tr>
<td>2</td>
<td>Not addressed.</td>
<td>Mainly from transportation side – they realised they could not keep on approving and building roads as they had an impact on the land use around it.</td>
<td></td>
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<tr>
<td>3</td>
<td>Not addressed.</td>
<td>MSDF addressed broader spatial issues only and it needed to be taken to a next level of planning for this integration to happen.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>No assessments were done – this is a recent concept.</td>
<td>Traffic issues were integrated to a degree.</td>
<td></td>
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<tr>
<td>5</td>
<td>There was an Environmental Evaluation but not on the MSDF plan itself.</td>
<td>Traffic issues were addressed at a broad level, other sectors were not. The principles should have been tested on the ground prior to implementation, e.g. corridors.</td>
<td></td>
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<tr>
<td>6</td>
<td>Not addressed.</td>
<td>It was prominent on transport and traffic issues; however the debate was on substance rather than procedural issues as this fell firmly in the planning realm via LUPO.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>There was a desktop bio-regional environmental analysis that was integrated into the MSDF, but no trade-offs were considered.</td>
<td>The “package of plans” approach was recognised as vehicle for this.</td>
<td></td>
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<tr>
<td>8</td>
<td>Not addressed.</td>
<td>Yes; it was addressed. The Airport 17dB noise contour and water demand management were examples.</td>
<td></td>
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<tr>
<td></td>
<td>It was not fully understood.</td>
<td>The MSDF was a visionary document and its implementation plan was missing so it never included sectoral approval systems and it never addressed things such as air pollution approval systems.</td>
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<tr>
<td>10</td>
<td>Planners did not apply their minds to it.</td>
<td>Not addressed. This has not been raised even in the Unicity transformation process. There are too many institutions involved that don't have the same interests at heart as the city e.g. Spoornet, airport and harbour authorities.</td>
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</tbody>
</table>
## PROCEDURAL INTEGRATION INTERVIEW SUMMARY

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Integration of affected stakeholders in decision-making process</th>
<th>Integration of professionals in a truly interdisciplinary team</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A decision was made at the Caledon Conference that all players should be involved – the UDF was the vehicle that ensured this integration. Some stakeholders did not have capacity to make substantive contribution and some did not have mandates in place with proper report-back lines.</td>
<td>There were multi-disciplinary stakeholders in the CWG as well as at the steering committee level. The core group consisted of spatial planners who took all the issues to the CWG and UDC.</td>
</tr>
<tr>
<td>2</td>
<td>All stakeholders were involved from outset of Caledon Conference, an inclusive process was followed due to unbanning of ANC.</td>
<td>The “driving team” were planners but they cannot be boxed as spatial planners only. There was a commitment to integration and sustainable solutions.</td>
</tr>
<tr>
<td>3</td>
<td>The WCEDF was the vehicle to develop sectoral strategies and the process was consensus-based, which involved all stakeholders. The Steering Committee itself was representative of all stakeholders e.g. labour, politicians, business, Chamber of Commerce. The UDC was specifically elected to manage the MSDF.</td>
<td>The technical team were planners who obtained inputs from various sectors, such as transport planners.</td>
</tr>
<tr>
<td>4</td>
<td>The planning approach had changed, due to the political change. In theory it was an inclusive process, but organisations such as CBO and NGOs did not have the capacity to participate, which led to a “rubberstamping” of the process. Business stakeholders did not make any demands on the process. Also the form of communication with Post-1995 the CWG consisted of planners from all local authorities and other officials from other sectors such as transport, environment, and the economic sector but individuals from other sectors did not attend the meetings.</td>
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<tr>
<td>stakeholders changed after 1996 to leaflets etc.</td>
<td>There were definitely people from different disciplines who could influence the process, bar people from the health sector.</td>
<td></td>
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<tr>
<td>5</td>
<td>Yes it was addressed; stakeholders were involved from the outset – there were a lot of workshops and lots of communication with the stakeholders.</td>
<td>The core group consisted of planners. Only the process facilitator was not a planner.</td>
</tr>
<tr>
<td>6</td>
<td>They were involved from the outset. The process was a big issue. Consultants were brought in and outside stakeholders were included for the first time. This was a learning process as it unfolded – a collective learning process by all involved. There was commitment to an inclusive process by buying in the right expertise.</td>
<td>Consisted of planners only.</td>
</tr>
<tr>
<td>7</td>
<td>This was first city partnership with WCEDF. The steering committee included organisations such as NGOs, ANC, DAG and the WCEDF. They had different commissions and looked at different sectors.</td>
<td>Consisted of planners only.</td>
</tr>
<tr>
<td>8</td>
<td>The WCEDF had 4 metropolitan stakeholder groups and a very representative steering group.</td>
<td></td>
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<tr>
<td>9</td>
<td>The involvement was uneven depending on the dynamics involved. Different stakeholders were involved at different points, either through choice or by design of the process.</td>
<td>MSDF did play a role in getting different professions to work together, e.g. land-use and transport planners worked together for the first time.</td>
</tr>
<tr>
<td>10</td>
<td>They were involved from the outset. People participated, but their level of participation should be questioned due to limited capacity and education and ability to express their views.</td>
<td>Physical planners “drove” the process.</td>
</tr>
<tr>
<td>Interviwees</td>
<td>Provision of Capacity to cope with emerging issues</td>
<td>Ensuring of integration by RSC</td>
</tr>
<tr>
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</tr>
<tr>
<td>1</td>
<td>There was no capacity from NGOs for comment on substantive issues.</td>
<td>The RSC and CCC together did what they could to integrate. The RSC planners were perceived to be good with procedures, processes and systems whereas CCC planners were more critical thinkers.</td>
</tr>
<tr>
<td>2</td>
<td>Institutional and technical capacity were there to address emerging issues.</td>
<td>The RSC officials did ensure integration.</td>
</tr>
<tr>
<td>3</td>
<td>There was enough technical capacity, but maybe it was not fully utilised. There were not enough resources available to get people to participate fully.</td>
<td>The RSC officials did not ensure integration because the technical input was limited to planners only, due to tight deadlines and pressure to produce a product.</td>
</tr>
<tr>
<td>4</td>
<td>There was never a shortage of resources e.g. MLH consultants were employed for 10 years. There was a lack of capacity to ensure integration of new information.</td>
<td>No; the RSC officials did not ensure integration as councillors had no direct role in the process and there was also no attempt made to integrate sectoral departments. Only when the IDP was introduced did the different sectoral departments consider working together.</td>
</tr>
<tr>
<td>5</td>
<td>Yes; there was capacity as individuals were involved. However not all the issues were addressed.</td>
<td>No; the RSC officials did not ensure integration; this relates specifically to how the consultants were appointed and used and how they were being managed by RSC planners. It caused conflict as they were working to different sets of criteria and they had to produce a document.</td>
</tr>
<tr>
<td></td>
<td>There was a willingness and openness, but not the right expertise.</td>
<td>From substantive aspect, no integration was achieved. From process and institutional aspect, yes.</td>
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<tr>
<td>7</td>
<td>NGOs had capacity problems attending meetings.</td>
<td>No; the RSC officials did not ensure integration; the CCC planners wanted a RGS which included a process designed to integrate all sectors.</td>
</tr>
</tbody>
</table>
| 8 | Transport planners felt that some of the transport issues were being neglected.  
There was visionary capacity, but officials had fear of being bold or maybe they did not understand the dynamics, which implies that there was a lack of good urban management skills. The city is being managed for short-term gains (e.g. Century City location). | Under the circumstances the RSC planners did a good job, since it was an inclusive process. |
| 9 | Professionals involved had capacity but not the will to integrate. | The RSC planners had an agenda, so at times it was suitable to integrate and other times not. Integration was not a guiding force in the process. Integration was uneven; there is a long list of issues that could have been integrated. |
| 10 | Yes, they tried to integrate; however the institutional environment was still very fractured and thus they did not have the ability to make a binding decision. | The RSC officials did what they could in context of limited capacity in their own and other organisations. |
## INSTITUTIONAL INTEGRATION INTERVIEW SUMMARY

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Exchange of information and possibilities of interventions between different sectors</th>
<th>Defining leading and participating agencies and their respective duties and responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Working documents on each issue were distributed for comment. There was no system in place to obtain agreement on issues. Deadlines had an effect on quality of information as no resolution could be obtained on issues; the consultants took best line of defense.</td>
<td>Political leadership was lacking/absent during the process.</td>
</tr>
<tr>
<td>2</td>
<td>Yes, information was shared, particularly on transport and mobility issues. Environment was not a very strong discipline in those days. At key points workshops were held with sectoral groupings. Transport issues were difficult and lots of bilaterals were held.</td>
<td>Yes; these roles were clear. There was also a clear understanding between political and stakeholder decision-making. A diagram was prepared to show this relationship and was recognised as pioneering material.</td>
</tr>
<tr>
<td>3</td>
<td>The WCEDF could intervene if there was not enough information circulated or shared. The local authorities had all the information and the WCEDF had to ensure that the info was shared with broader stakeholders. Workshops were one way of sharing information. If the WCEDF had had more resources it could have done more to share the info more broadly.</td>
<td>Leading agencies changed from CCC to WCEDF to RSC.</td>
</tr>
</tbody>
</table>
| 4           | Draft reports were circulated, especially later on with some new studies being initiated post-1996, e.g. Space economy study, SOE, Housing. However the information was not integrated into MSDF document. | Leading agency was RSC (CMC). Earlier on it was blurred with both RSC and CCC having joint responsibility. The CMC had financial resources and appointed consultants; this caused conflict between the RSC and the CCC. When the new structures (post-
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<tbody>
<tr>
<td>5</td>
<td>Yes; lots of work sessions were held where people could talk freely and share information.</td>
<td>1997) were in place the blurring fell away and the CMC became the clear leader. But new conflicts arose over metro functions and hierarchy of institutions between the MLCs and the CMC. The RSC and the CCC were supposed to be joint leaders, but the RSC had the funding. The CCC remained part of the process as the community motivated a joint process (Caledon Conference) and the CCC had special expertise to contribute to the process.</td>
</tr>
<tr>
<td>6</td>
<td>Information exchange happened in terms of dialogue at workshops, meetings and presentations, including reports. The interpretation was problematic due to lack of experience by stakeholders regarding the abstract quality of the info.</td>
<td>There was conflict between the RSC and the CCC regarding the direction of the process, form of the plan and substantive detail. Leadership was blurred when WCEDF took over at one stage. Caledon Conference identified it to be a joint process between the CCC and the RSC. The RSC appointed MLH consulting town planners, which resulted in conflict, as there were philosophical differences with regard to the product and approach to be followed.</td>
</tr>
<tr>
<td>7</td>
<td>Yes, information was shared, but there was a lack of detailed information spelling out the dynamics of how things work on the ground.</td>
<td>The leader was the RSC with support form the CCC, as these local authorities had the most capacity in the CMA. Stakeholders were the participating agency which came to workshops and commented on the proposals presented. The WCEDF also had clear responsibilities.</td>
</tr>
<tr>
<td>8</td>
<td>Yes, information was shared, especially through workshops. What is needed though is a good database system to understand patterns and trends across sectors.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>The process did allow for information sharing. However, the timing of intervention was a concern; issues were consistently being raised</td>
<td>No; there was not any clear definition as there was a power struggle between the RSC and the CCC. There was also a power struggle</td>
</tr>
<tr>
<td></td>
<td>by individuals but were not heard by the team e.g. socio-economic issues were constantly overridden by land-use and transport issues.</td>
<td>between CBOs and local authorities, due to the lack of resources and technical expertise.</td>
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<tr>
<td>10</td>
<td>Yes; there was a large amount of information that was shared, but one needs to ask if it added any value to the process.</td>
<td>Leadership changed over time. Participation and attendance also changed over time - this is part of civil and political life.</td>
</tr>
</tbody>
</table>
## POLICY INTEGRATION INTERVIEW SUMMARY

<table>
<thead>
<tr>
<th>Interviewees</th>
<th>Integration of sustainable development as overall guiding principle in planning and EIA</th>
<th>Integration of sector regulations and strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sustainable development was used as an overall guiding principle in MSDF - it addressed the retention of our resources and protection of cultural land.</td>
<td>The MSDF is a spatial strategy with 4 structuring elements. There was recognition of necessity to integrate non-spatial issues but it did not materialise - it was not the focus of this process. There was a lack of information and thus strategies on sectoral issues were only developed much later.</td>
</tr>
<tr>
<td>2</td>
<td>Sustainable development was labelled differently back in 1991; it only gained popularity in last 4 years.</td>
<td>There was a transport component on mobility issues. Environmental issues were integral with planning issues e.g. MOSS and Urban Edge. None on social or economic issues, but the thinking was that one should to be aware of these issues.</td>
</tr>
<tr>
<td>3</td>
<td>It was the “buzzword” at the time e.g. issues dealt with protecting agricultural land and containment of urban sprawl.</td>
<td>There was not enough information for sectoral strategies thus there were none at the time. Sectors were fragmented and the MSDF process was too fast for other sectors to formulate strategies and regulations. Transport was the only sector which advanced at all far.</td>
</tr>
<tr>
<td>4</td>
<td>Sustainable development was addressed in the Principles and Goals document. It was not spelt out what is meant by “sustainable development”. The idea was to put in place a more sustainable city form using fewer non-renewable sources by putting work areas closer</td>
<td>Transport and environment were the only sectors integrated.</td>
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<tr>
<td>5</td>
<td>Sustainable development was used as overall guiding principle, but had to have an integrated approach to achieve it.</td>
<td>The environmental strategy was clear because of the mapping exercise that was done. The transport strategy was to link road and rail issues with spatial land-use issues within corridors.</td>
</tr>
<tr>
<td>6</td>
<td>At the time there was no definition for sustainable development.</td>
<td>There was a policy vacuum. Most strategies were to emerge out of WCEDF process. There was some very &quot;broad brush&quot; information, but were only really developed much later in the process when policies were being formed.</td>
</tr>
<tr>
<td>7</td>
<td>Yin-yang idea (early version of MSDF) of bringing balance to ongoing management of growth and change and conservation. This was developed through the EE research and translated into MOSS and Urban Edge.</td>
<td>No comment.</td>
</tr>
<tr>
<td>8</td>
<td>Yes, there was a sense of trying to find a balance back then. Now there is more information at our disposal.</td>
<td>Transport issues were integrated as were some of Wesgro's information on economic issues. There was no detailed information and so policies were only developed much later in the process.</td>
</tr>
<tr>
<td>9</td>
<td>It was taken up in the Principles and Guidelines document.</td>
<td>Transport and planning were the only issues addressed at the time as all other sectors were considered new.</td>
</tr>
<tr>
<td>10</td>
<td>The primary principle was to get socio-economic development in the south-east. Sustainable development was a term used by affluent communities wanting to oppose development.</td>
<td>There was some kind of economic strategy, i.e. the Wesgro study.</td>
</tr>
<tr>
<td>Interviewees</td>
<td>Timing of and provisions for political interventions</td>
<td>Accountability of government</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>The WCEDF played a role in integrating political issues.</td>
<td>New policy documents were introduced by GNU, but integration appeared only in the last few years.</td>
</tr>
<tr>
<td>2</td>
<td>Political interventions were part of the process e.g. Wetton-Lansdown corridor via a national initiative through the provision of funding.</td>
<td>There is no integration at the national level e.g. EIA regulations were not discussed with local and provincial authority officials and were simply imposed on provincial governments. The EIA regulation process was non-consultative and top-down in its approach. Another issue is alignment of land-use planning processes in terms of LUPO with the EIA regulation process.</td>
</tr>
<tr>
<td>3</td>
<td>There was no political intervention from local authority politicians, This occurred only after the 1996 elections when inputs were made by newly-elected politicians. The RDP forums had an effect on the MSDF as their establishment delayed the process whereby its role was established.</td>
<td>No; the government of the day was not accountable as they were segregating communities.</td>
</tr>
<tr>
<td>4</td>
<td>From 1991 the MSDF was an open process which included non-statutory bodies. However post-1995/6, the planners were trying to win councillors over.</td>
<td>In 1994 the RDP mentioned the need to redress the spatial heritage and to integrate the city. This was taken up in the DFA principles, in line with the MSDF principles. GEAR focussed on market forces and global positioning rather than spatial issues.</td>
</tr>
<tr>
<td></td>
<td>There was no strong impression that councillors or politicians intervened in this process.</td>
<td>No; national government was not bound by the MSDF.</td>
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<tr>
<td>6</td>
<td>Officials were reporting to councillors on a need-to-know basis during the early period. After CMC was established there was a shift in power and councillors took over the process. Involvement of the facilitator was “sidelined” as the process was narrowed down to follow a political agenda.</td>
<td>No; the government of the day was from the “old school” in the formation stages of the MSDF.</td>
</tr>
<tr>
<td>7</td>
<td>No comment.</td>
<td>No comment.</td>
</tr>
<tr>
<td>8</td>
<td>There was a window of opportunity to produce a document prior to the 1996 elections.</td>
<td>Yes; they were accountable, because they went out of their way to include everyone.</td>
</tr>
<tr>
<td>9</td>
<td>The RDP and DFA were national interventions; however the MSDF did not fully integrate these because it lacked an implementation plan.</td>
<td>There was a growing commitment to integrated planning in words but not in actions.</td>
</tr>
<tr>
<td>10</td>
<td>The WCEDF made sure the process included politicians. It did change over time e.g. civics became politicians and representatives of government got caught up in the war between the spheres of government i.e. CMC and MLCs.</td>
<td>No comment.</td>
</tr>
</tbody>
</table>
APPENDIX 3
SUMMARY OF ENVIRONMENTAL ISSUES
### SUMMARY OF ENVIRONMENTAL ISSUES

<table>
<thead>
<tr>
<th>Environmental Issues</th>
<th>Source: Adapted from CCC (1992)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productive capacity of Agriculture</td>
<td>Access to Basic Needs</td>
</tr>
<tr>
<td>Productive capacity of the Fishing Industry</td>
<td>Inadequate Housing</td>
</tr>
<tr>
<td>Objectives of implementing policies of sustainable</td>
<td>Access to potable water</td>
</tr>
<tr>
<td>development</td>
<td></td>
</tr>
<tr>
<td>Policies relating to Agriculture</td>
<td>Lack of Access to Sewage Services</td>
</tr>
<tr>
<td>Policies relating to the granting of fishing quotas which</td>
<td>Collapse of Refuse Removal Services</td>
</tr>
<tr>
<td>favour big business</td>
<td></td>
</tr>
<tr>
<td>Need for Regional Water Policy</td>
<td>Lack of Electrification</td>
</tr>
<tr>
<td>Incidence of Poverty in Hinterland Towns and on Farms</td>
<td>Cape Flats Environment</td>
</tr>
<tr>
<td>Uniqueness of the Hinterland Landscape</td>
<td>Urban Sprawl and Motor Vehicle</td>
</tr>
<tr>
<td>Predicted rise in Sea Level</td>
<td>Urban Sprawl and the Loss of</td>
</tr>
<tr>
<td>Environmental Cost of Local Electricity Provision</td>
<td>Natural Areas</td>
</tr>
<tr>
<td>Air Pollution</td>
<td>Waste Water Output</td>
</tr>
<tr>
<td>Increasing Generation of Solid Waste</td>
<td>Solid Waste Sites</td>
</tr>
<tr>
<td>Lack of Agreement on Environmental Planning Priorities</td>
<td>Major Site Specific Environmental concern e.g. Koeberg Nuclear power station, Caltex Oil Refinery, Athlone Sewage Works, Slopes of Devils Peak etc.</td>
</tr>
<tr>
<td></td>
<td>Environmental Management by a single co-ordinated body.</td>
</tr>
</tbody>
</table>
APPENDIX 4
ENVIRONMENTAL EVALUATION RECOMMENDATIONS
## ENVIRONMENTAL EVALUATION RECOMMENDATIONS

<table>
<thead>
<tr>
<th>POLICY</th>
<th>ACTIONS</th>
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</thead>
</table>
| Every effort should be made to improve the quality of life of those living in areas of concentrated poverty | • metropolitan planning and fiscal resources should be directed to areas with environmental problems to meet basic and broader developmental needs  
• planning efforts should be directed into upgrading services, facilities and open space. New urban development should respond appropriately to local environmental conditions including natural and built resources and constraints. Urban design guidelines should be developed for this process. |
| Every effort should be made to minimise the loss of moderate to high value resources | • adopt an outer limit of development  
• permit development in areas of lowest resource value  
• permit new development only in areas as identified by the EE (contiguous to existing development)  
• identify short-term actions required to review implementation of metropolitan proposals, structure plans and new development proposals.  
• Adopt a medium term strategy for urban land management including:  
• establishing fiscal and institutional structures to consider metropolitan area as one entity  
• considering urban edge management mechanisms within MDF process  
• promote an efficient and equitable urban structure e.g. provide affordable access to well located land, especially the poor  
• promote higher densities through structure plan reviews. |
| Every effort should be made to identify, maintain and develop the essential qualities of sites or areas which are of particular importance to long term viability of the region’s key economic sectors | • adopt the land use compatibility map as an environmental basis for the allocation of land uses to specific areas  
• conserve and develop the major scenic, historical, biological and primary productive resource areas of value (plan 1 in report)  
• develop specific resource management policies for resources identified in plan 1  
• direct attention to specific resource areas and edges which require particular attention as identified in open space proposals plan 7 and broad sub regions plan 8 |
| Every effort should be made to overcome the projected potable water shortage | • manage water demand and water resources more effectively  
• investigate alternative water supply options |
| Every effort should be made to create a co-ordinated, equitable MOSS | • undertake more detailed research  
| | • investigate joint partnerships for management of MOSS as part of MDF process |

Source: Adapted from CCC (1993)