PLANNING THE PORT OF DURBAN

A CASE STUDY OF POTENTIAL INTEGRATED MANAGEMENT

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<tr>
<td>BAT</td>
<td>Bartle Arts Trust</td>
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<td>CBD</td>
<td>Central Business District</td>
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<td>IEM</td>
<td>Integrated Environmental Management</td>
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<tr>
<td>Integrated planning</td>
<td>The co-ordinated planning of a number of elements to create a unified &quot;whole&quot;.</td>
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<td>Non-shipping uses</td>
<td>Activities of a recreational and leisure nature, such as yachting, boating, angling, shopping, residential.</td>
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<td>PMAESA</td>
<td>Port Management Association of Eastern and Southern Africa</td>
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<td>Port</td>
<td>The entire area comprising the bay, harbour and port of Durban. The Point and Victoria Embankment bound the port to the north, Maydon Wharf to the west, Congella to the south, and Bluff Headland to the east.</td>
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<td>SADC</td>
<td>Southern African Development Community</td>
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<td>SATS</td>
<td>South African Transport Services</td>
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<td>Shipping uses</td>
<td>Activities and uses within the port oriented towards shipping, which may include boat building, ship building, fish landing quays, storage, etc.</td>
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<td>SDI</td>
<td>Spatial Development Initiative</td>
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<tr>
<td>TEU's</td>
<td>Twenty-Foot Equivalents (in reference to the size of a container)</td>
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<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
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CHAPTER ONE: INTRODUCTION AND OVERVIEW

1. INTRODUCTION
The port of Durban has long been recognised as the life-blood of this city for without it, Durban as we know it would not exist. The growth of the harbour in the last century has been remarkable, transforming Durban from a marshy merging of rivers to the largest port on the African continent. Although the port and adjacent city are inextricably linked with the city playing a supporting role to the port, expansion has largely occurred beyond the control of local government. The practice of separated port planning without due consideration for the city has inevitably resulted in the build-up of tension between the Durban Local Government and port authorities over the years. The port's separatist mode of planning has given rise to conflicts over land use issues and the manner in which port planning was undertaken.

This study examines international ports and their management structure to facilitate comparison with the South African situation. This study highlights the main themes pertaining to planning and management of ports focusing on efforts at co-ordinated port planning between authorities and organisations. In doing this, the comparatively weak management and planning of Durban port is highlighted. Very little integration occurs between the port authority and local government to ensure the integration of proposals within the port and between the port and city. This study looks at the relationship between the Durban Local Government and Portnet through a brief analysis of past and present development proposals for the port. The relationship between the two bodies clearly illustrates the lack of integrated planning in the past. The conflict between current proposals highlights the necessity of creating a body or authority to integrate proposals. In line with this, the national port policy of South Africa is reviewed and potential changes pointed to.

The Department of Transport has recently prepared a white paper on transport, which outlines the vision for the country's transport systems. The White Paper stipulates strategic and flexible planning for ports, as well as greater co-ordination and involvement between port authorities and local governments. It furthermore lays out the future division of Portnet into port operations and a port authority.

There is a trend towards privatisation of operations within ports, with the establishment of a port authority being the responsibility of a national organisation, or even provincial or local government bodies. The study examines the possibility of establishing a port authority at the level of the Durban Local Government. The basis for this study is the apparent need for integrated planning of developments within Durban port and between the port and the city.

It is expected that from this study it will be possible to argue for the establishment of a single authority, responsible for the integrated planning of the port and adjacent city.
1.1 OBJECTIVES AND SCOPE OF STUDY
This dissertation examines the plans and management structure for the port to establish the level of integration between developments in the port and between the port and the adjacent city. Precedent from international ports serves the study because it identifies port management and planning approaches which underlie integrated planning and management of ports. Following on from this the management structure of the Durban situation is examined to assess the opportunities that exist for integrating planning of developments within the port and city. This dissertation explores the possibility of giving authority of the port to the Durban Local Government. In essence then, this study is "problem-solving", applying precedence from a comparative study of international ports which establishes how those ports and developments within them, are managed. Examples of such ports include England, Hong Kong, Australia, Singapore and Canada amongst others. Running concurrently with this study is the Durban Local Government's initiative, which is examining the need for integrated planning in the port.

1.2 REASONS FOR THE STUDY AND PROBLEMS WITH THE SUBJECT
Globalisation is a trend having a profound effect on cities throughout the world. Within the context of globalisation cities have had to, and are continually, identifying and refining their comparative advantage to improve their competitive edge with other cities, nationally and internationally. Durban's port confers tremendous economic significance to the Durban area, largely because of its strategic position on the Indian Ocean and the growing economic importance of containerised shipping. The port and the city are highly dependent upon each other. The city is dependent on the port for its direct and indirect employment opportunities - approximately 24000 jobs - and the resulting revenue-generation. The city is also important to the port as it supports shipping and related activities through provision and maintenance of infrastructure and services.

The global importance of Durban's port, however, forms a backdrop to the issues facing Portnet and the Durban Local Government. The port enjoys stronger linkages with the international context, through shipping routes and rail and/or road linkages than the city (Portnet, "IEM Information Document 2" 1996: 3). Not only is the port spatially isolated from the Durban area, but planning for the future growth of the port in terms of shipping-related developments is undertaken solely by Portnet.

The port has historically concentrated on shipping-related activities with little attention being given to the other activities in and around the harbour. Added to this, Portnet has never developed a broad vision for the port, nor have they ever attempted to locate the role of the port in the broader region. This has resulted in incompatible activities within the port over time. These factors, combined with the port's previous protectionist approach has effectively
marginalised the port from the city and caused conflict between developments within the port. The port authorities have minimal policy for creating recreational and tourist friendly developments, and in the past, plans for public use have tended to be ad hoc and disjointed. Many of the public uses in the port are now incompatible with proposed and existing shipping activities.

Over time, port authorities have systematically undermined the public recreational role of the port, showing a general disregard for the people of the city and Durban Local Government. Public access to the Esplanade was severely damaged in 1936 with the construction of the railway line along the Esplanade (Pearson, 1995: 147) whilst Salisbury Island was destroyed as a recreational area in the 1960's (Pearson, 1995: 143). A similar fate awaited Farewell Island in the 1960's and 1970's (Pearson, 1995: 144). The port authorities have a notorious track record in their dealings with the local government. For example, the Victoria Embankment Agreement signed between the Natal Government and the Durban Local Government Council in 1904 and later between the South African Government and the Durban Local Government Council in 1931 (Pearson, 1995: 146) was totally ignored in 1921 when the then Harbour Engineer proposed the construction of additional berths along the Embankment. This showed a blatant disregard for previous agreements with the local government, as well as a lack of vision for the integrated planning of port activities with the city (Pearson, 1995: 146). Recent proposals for a container terminal (the proposed Pier 3) on the sandbanks facing the Embankment in the bay reinforce Portnet's apparent lack of attention to integrated planning within the port, and between the port and adjacent city fabric.

Durban's port has better economies of scale in terms of overland transport and its proximity to Gauteng compared to other ports in South Africa have made it the largest port in the country. As a result, the port underwent massive growth and development between the 1940's and 1970's. Although the port authorities have, over time, irreversibly changed the face of the port, their actions have been controlled in part by the national port policy on shipping in South Africa, and in part by market forces. Final decisions regarding developments within the port are still made at Portnet's head office in Johannesburg. No mechanism exists for the people who are affected by these decisions at the local level to voice their concerns and decisions were (and still are) made with little understanding of the local context.

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1 The Agreement resulted out of an ownership dispute of the Bay Reserve in the area between Cato Creek and Albert Park between the Durban Local Government Council and Natal Government Harbour Board (Pearson, 1995:146). A condition of this Agreement is the banning of construction into the Bay along the length of the Embankment until 2030 (Pearson, 1995:146).
In the context of rapid growth of the port, many of the actions taken by Portnet (and previous port authorities) have been "reactive" in that they have attempted to resolve problems only once they emerged and in the immediate to short-term, with no guiding vision for the future. An example is the current proposal for the creation of Pier 3 on the sandbanks. Since containerisation facilities in the port have reached a ceiling, Portnet has attempted to resolve the issue in their Future View by proposing the reclamation of the central sandbanks for the construction of Pier 3. The uproar over this proposal resulted in an IEM study in 1996 of possible alternative locations for the container terminal. This highlighted the need for integrated planning of developments within the port, and called attention to the fact that the container proposals are short term solutions (Watermeyer Prestedge Retief, 1996: 6) and that further solutions will have to be investigated.

The responsibility for the inadequate ad hoc planning that has directed port development does not lie with Portnet alone. The Durban Local Government has failed to outline a vision for the port or formulate integrated plans, which incorporate recreational, and tourism uses in the port. It is arguable that Durban Local Government's integration of developments within the port has been constrained by the national port policy and ownership. National ports policy has historically been protectionist and non-participatory having little to facilitate discussion between the port authorities and local government. Added to this, the Durban Local Government has largely been powerless to control developments because ownership of the port is vested with Transnet.

Planning for and management of the port is inherently problematic in that fragmented approaches, rather than holistic planning have been the rule. The growth, development and future of Durban is however intertwined with the port, as the port has the potential to position Durban as the "gateway" to sub-Saharan Africa and the East. Considerable opportunity therefore lies in spatially integrating developments within the port. There is also the possibility for the Durban Local Government to take on the responsibilities of the port authority and draw much needed profit from port activities.

1.3 HYPOTHESIS

The future success of Durban's port lies with both Portnet and the Durban Local Government, both of whom, lack a cohesive management structure to guide the future growth of the port in an integrated manner.

1.4 HISTORICAL CONTEXT

Durban Bay was named "Ponta da Pescavia" (the Point of Fishes) by Vasco da Gama in 1497, although the indigenous population referred to the Bay as "Ulungula" (Borthwick, 1993: 12). By the 1800's, however, the Bay was commonly known as "Thekwini" (still
lagoon) by the local people (Portnet, "IEM Information Document 4", 1996: 9). In 1689, the crew of the ship De Noord purchased the Bay of Natal for the Dutch East India Company, but the deeds of sale were later lost in a shipwreck and British settlers eventually claimed ownership of the Bay (Borthwick, 1993: 12).

James Saunders King charted the Bay in 1823 mapping nine islands and the constantly changing sandbanks in the Bay (Pearson, 1995: 20). He painted a picture of mud flats, elephants, flamingos and hippopotamuses which together with the islands mapped by King eventually disappeared due to port construction and increasing levels of pollution (Pearson, 1995: 20).

It could be argued that unchecked developments in the port effectively marginalised recreational activities in the port, the adjacent city and the environmental integrity of the Bay. Although this study focuses on the degree of integration applied to developments within the port, it is worth noting changes to the environment because they represent the severity of port expansion. A number of rivers, the Umgeni, Cato Creek, Congella, Umbilo, Umhlatuzana and Amanzimnyama Rivers originally emptied into the Bay via a vlei. The profusion of rivers emptying into the Bay gave the Portuguese the idea of calling the Bay "Rio Natal" (River of Natal) (Pearson, 1995: ). When Durban was formally laid out in 1835, the marshes and river mouths were infilled leaving only two rivers, the Umhlatuzana and the Umbilo which still empty into the Bay (Borthwick, 1993:).

Historically, the Bay was used for pleasure and recreation in addition to shipping activities and all three operated comfortably side by side. The increasing importance of the port necessitated the expansion of its shipping activities and one, which was implemented with total disregard for the 'public' character of the port. The encroachment of shipping activities incrementally eroded public facilities. The water's edge of the Victoria Embankment was originally a popular bathing area, and the construction of the railway line put an end to this. Bathers then moved to Fynlands Beach, but increasing pollution rendered the area unpopular (Pearson, 1995: 143). Recreational activities at Salisbury Island ended due to the construction of a naval base and the construction of Pier No 1 in the early 1960's (Pearson, 1995: 143). Farewell Island, once a popular recreational spot was reclaimed to create Pier No2 and the Container Terminal in the late 1960's and early 1970's (Pearson, 1995: 144). The above illustrate the means by which public facilities in the port were neglected and eroded over time.

1.5 LAND OWNERSHIP

This study emphasises the importance of land ownership in facilitating the implementation of developments. In many respects, the Durban Local Government's ability to ensure
integrated planning of developments for the port is restricted by the fact that it does not own
the land. The precedent study undertaken in this dissertation clearly demonstrates that the
involvement of the landowner in port developments is crucial in gaining their acceptance of,
and working towards a common vision.

King Shaka allegedly gave Francis Farewell the area comprising the port and the
surrounding land as a gift in 1824 (Pearson, 1995:22). Farewell later proclaimed the land
as belonging to Britain and in 1835, settlers requested that the surrounding town become part
of the British Colony and be named D'Urban (Pearson, 1995:24). Ownership and control
of the port was first vested in the Natal Government Harbour Board, and then in the South
African Government in the form of the South African Transport Services. The South
African Government established Transnet Ltd. in the mid-80's with the government as the
sole shareholder. Transnet is an umbrella company, of which subsidiary companies, South
African Airways, Spoornet and Portnet amongst others form a part (Portnet, "IEM
Information Document 2", 1996: 6). Whilst ownership of the land is retained by Transnet,
Portnet manages all of South Africa's ports with current responsibilities being: forward
planning of the port, provision of infrastructure, navigation control, lighthouses, marine
services, operations of cargo terminals, and marketing of the port (Portnet, "IEM Information

The management structure of Portnet is currently in a state of flux because of national
proposals for dividing Portnet's functions into a port authority to manage ports, and port
operations, which are to be privatised (Portnet, "IEM Information Document 2", 1996: 6).
This process was put on hold in 1994 subject to the outcome of the government's proposals

Although the present national ports policy makes provision for the port authority to be vested
in an alternative body to Portnet, many believe that Transnet will not relinquish ownership
of the port because of it being such a lucrative\(^2\) asset (Dr D Retief, 3/10/97). Portnet's
business imperative means it is focused on profit making and financial gain (du Cray,
Interview: 10/11/97). As such, immediate transformation of the port authority from its
present structure seems unlikely at the least and potentially conflictual.

1.6 THE GROWTH OF THE PORT
The beginnings of the harbour took the form of one warehouse, a Customs House and a
soldier (Pearson, 1995:28). These small beginnings grew in the 1850's as the newly arriving

\(^2\) Portnet subsidise other sections of Transnet such as Spoornet and South African Airways (Dr D Retief,
3/10/97).
immigrants to Durban looked to the potential of the port for their financial success (Pearson, 1995:29). The growth in Durban paralleled the increase in port activities, and between 1889 and 1910, the harbour experienced large amounts of wharf and jetty construction (Pearson, 1995:86). Additional growth and construction resulted in the disappearance of most natural islands in the 1940's and 1970's (Pearson, 1995: 20).

To illustrate the growth of the port, 539 steamships and 222 sailing ships entered the port in 1897, which handled 513 029 tons of cargo (Pearson, 1995: 92), whereas in 1994 the port was visited by 3 000 ships, which handled 25 million tons of cargo (Pearson, 1995:92). Portnet have completed a study of the future growth of the port, which estimates that by 2000, 40 million tons of cargo is expected to pass through the port, and 51 millions tons in 2015 (Pearson, 1995: 252). The future growth of the port is inextricably linked with the increase of containerised shipping. Projections by Portnet and their consultants indicate that in the immediate to short term, the port needs to expand container-handling facilities and construct a terminal for this purpose. Indications are however, that in the long-term, the port has a serious problem in terms of absorbing container growth and alternate solutions are imperative to the economic sustainability of the port, and therefore of the adjacent urban fabric.

1.7 THE NEED FOR INTEGRATED PLANNING

The world in which we live has been characterised as being "post-modern" in that it is made up of a fragmented global economy with weakened national powers and powerful transnational corporations which span the globe and quite beyond the control of any government (Harrison, 1995: 12,23). It is a time of uncertainty and people are increasingly having to turn to new forms of employment, such as part-time and flexi-time (Harrison, 1995: 26).

Cities have all been affected by globalisation, the weakened power of national governments and the establishment of "supranational economic blocs" (Harrison, 1995: 11), so much so that some theorists believe planners should utilise more flexible planning approaches to cope with the post-modern society of today (Harrison, 1995: 12).

Admittedly, the devolution of power from state structures to local governments has affected the ability of the state to effectively guide and control planning (Harrison, 1995: 10), and increasingly the skills of planners are changing to those requiring communication, negotiation, mediation and strategizing abilities (Harrison, 1995: 27). Post-modern approaches look to deregulation, decentralisation and the local context, which are flexible and incrementalist by nature (Harrison, 1995: 35-36), whilst planners are increasingly involved in the local economic development and competitiveness of cities and areas.
Harrison, 1995: 36, 39). Harrison therefore questions whether planners should be preparing carefully rationalised long-term planning in a world that is constantly changing and calls for flexible institutions functioning along task-related lines, rather than inflexible bureaucratic institutions (Harrison, 1995: 37, 40).

In this time therefore, is it appropriate to recommend holistic and integrated approaches to ensure integrated planning? Integrated approaches suggest the implementation of modernist approaches, which has long been criticised for being too rationalistic, simplistic, and "top-down". The rationalistic modernist approach however, is too narrow and should take additional factors into account, such as communities and their needs, environmental aspects and agencies implementing plans and proposals. In this regard, although integrated development approaches seem to contradict the post-modern world characterising our society, it is the best choice for Durban at this time. In line with the new realism characterising urban management, the integrated approach combined with holism and entrepreneurialism is a broad and flexible approach, one that takes differentiated needs into account. The adoption of such an approach would ultimately benefit the proposed developments within the port in the long-term.

1.8 VISIONS OF THE DMA
Reflecting national changes to the political system, the local government of Durban has also changed dramatically. The previously known Durban City Council and numerous other municipalities in the region have been replaced with a metropolitan form of government, comprising a metropolitan council overseeing the area and providing the strategy and long term planning for the region. The Durban Metropolitan Area (DMA) has been divided into six local authorities, who are responsible for implementing policies made by the Durban Metropolitan Authority. In terms of defined boundaries, the North Central Council and South Central Council are responsible for the port, as the boundary between the two areas bisects the middle of the Bay.

As previously stated, the future of Durban is interrelated with the future of the port. Researchers have indicated that Durban's future within the new international order lies in the positioning of Durban as the "gateway to the east", and the "gateway to Africa" etc (Centre for Development and Enterprise, 1996). In addition to the pressure of locating Durban as a "gateway city" because of its port, the Durban Local Government also aims to sustainably ensure the economic growth of the metropolitan area.

Both the Durban Local Government and Portnet have recognised the importance of the port, although both organisations have different visions of uses within the port. Portnet have proposed the upgrading of Durban's port to that of a "hub-port" and possible transhipment
harbour related to increased containerisation. Although the establishment of Durban as a "gateway" to the East and Africa in terms of an economic manufacturing and trading centre, would positively impact on the region, the Durban Local Government have questioned the benefits of Durban as a transhipment port (Urban Strategy, Economic Unit, 1996: 8). In addition, the Durban Local Government differs in their vision of the port, and is examining the harbour as a potential focus for tourist and public friendly activities, which are economically sustainable. This dissertation argues for the integrated planning of both shipping and non-shipping uses in the port, so that the port can once again function as a multi-functional area. The diversification of the port makes economic sense, as well as being economically sustainable.

1.9 GOALS

The goals of this dissertation are therefore to:

1. Illustrate that the planning of the port has been and is influenced by the national ports policy with little regard for non-shipping uses.
2. Undertake a precedent study of national ports policies and developments in ports in other countries to compare with South Africa.
3. Briefly examine past and present proposals for developments in the port to illustrate the lack of integrated planning.
4. Recommend the establishment of a single management structure for the port to ensure holistic and well-informed planning of developments in the port and adjacent areas.

1.10 QUESTIONS

To achieve the goals outlined above, the dissertation is framed by a number of questions, which will elucidate issues pertinent to the examination of integrated planning of developments within the port.

(a) What is the role of Portnet on an international, national, regional and local level?
(b) Is Portnet's planning controlled at the national level?
(c) How much attention do Portnet planners pay to the local context in which the port is situated?
(d) How do Portnet and the local government departments manage the planning of this asset for the sub-region?
(e) Does Portnet pay rates to the North and South Central Local Authorities?
(f) What percentage of profits derived from the port is channelled into the region?
(g) What is the nature of the relationship between the Durban Local Government and Portnet?
(h) What form could a proposed single structure managing the integrated planning of the port take?

1.11 ASSUMPTIONS
The assumptions underlying the dissertation are the following:
1. Transnet will remain an important institution at the national level
2. Portnet and the Durban Local Government have historically followed separate planning processes, and often not seen eye to eye. As such, no single management structure has guided the planning for the port, as well as the port and adjacent city.
3. Portnet have a history of acting without permission from the Durban Local Government, and have only recently started to inform the Durban Local Government of their decisions pertaining to port activities.
4. The port is rapidly approaching a ceiling to its container capacity.
5. Because of its geographic location, the port has regional hub status handling most of the African East Coast traffic.
6. The limited amount of recreational, leisure and tourist facilities within the port could be increased and integrated with shipping developments in a compatible manner.
7. The port enjoys a relatively healthy ecology compared to other estuaries and bays in KwaZulu Natal.
8. The port authorities have historically established a hostile attitude to tourist and public facilities.
9. There is a long history of non-operation and consultation between Portnet and the Durban Local Government.
10. The potential for cooperation between Portnet and the local government structures is good.
11. The Durban Local Government is currently examining the issue of integrated planning with the port.
12. Tourism is a growing economic trend and pertinent in terms of its economic sustainability.

1.12 METHODOLOGY
There are three threads running through the methodology, and include reference to primary and secondary sources, through precedent studies and the use of interviews to support the conclusions obtained from the precedent study.

a) To gain an understanding of theoretical concepts underpinning planning approaches relevant to integrated planning, this dissertation examines strategic planning as the approach adopted by the Durban Local Government; master planning as the
approach used by Portnet, and new realism, a pragmatic approach to urban management. The second section of this study examines the planning of developments in international ports to assess the levels of integration achieved in these ports. The precedent study refers to secondary sources and makes extensive use of periodicals and the Internet. The study of precedent is useful, because it facilitates a comparative analysis of Durban's port in terms of integration of different developments within the port.

b) The second component of the dissertation examines past and previous development proposals in the port to facilitate an assessment of their levels of integration. To this end, the study refers to primary sources of previous development proposals, and secondary sources of material assessing the location of proposed developments. Linked with the use of these sources of information, the dissertation maps the area defining the 'Port of Durban' and identifies both non-shipping and shipping-related development proposals.

c) The third part of the dissertation examines the Department of Transport's White Paper, which recommends the establishment of a port authority be separated from the port operations. The impacts of this policy paper are potentially enormous, as local authorities are able to gain control of ports in their jurisdiction. Emanating from this policy, this study examines the possibility of establishing a single port authority under the control of local government. In this regard, the conclusion of the dissertation assesses the feasibility of the Durban Local Government undertaking responsibility for the port.

1.12.1 INTERVIEWS
Supporting evidence to the facts researched above are provided by interviews. Interviews were conducted with a variety of different users within the port.

1.12.1.1 Development Companies
Interviews were held with the developers who are proposing the current non-shipping developments in the port. The interviewees comprised the following:

a) Peggy Daley - Anglo American Property Services (AMPROS) packaging the Wilson's Wharf development
b) Simon Stockley - Bluff Development Company
c) Willy Vandeverre - consultant for the Point Waterfront Development
The developers were asked to explain the reasons for proposing their particular development in the port as opposed to anywhere else. The interviews established the procedures they followed for obtaining permission for their proposal, and what stage they were at in terms of implementing their development.

Developers were asked if they were aware about other proposals in the port, both shipping and non-shipping. In terms of shipping proposals, the interviews outlined their views as to the container terminal proposals, and on non-shipping proposals, the developers were asked to explain the planning process used, i.e. to clarify whether they were planning within a framework or on an individual site-specific basis. Interviewees were also asked whether the other developments in the port were perceived to be conflicting or complementary.

The last section of the interviews dealt with previous or current problems experienced with Portnet, and their perspectives on the issue of integrated planning and how important they felt integrated planning would be for the port. Related to this, the interviewees were asked their views on the establishment of a port authority for Durban.

1.12.1.2

Existing Users
Interviews were held with existing non-shipping users. The users interviewed were:

a) David Booth, Commodore - Point Yacht Club
b) Phillipa Hartley, Manager - BAT Centre
c) Willy Vandeverre - ex-Commodore - Royal Natal Yacht Club

The existing users were asked why they chose their particular location in the port, and the length of time they had been situated there. Questions established the nature of their tenure and the length thereof. The existing users were requested to outline their perceptions on the different development proposals in the port (both shipping and non-shipping) and highlight any problems with them. Interviewees were also asked if they had experienced any
problems with Portnet. The last section of the interviews dealt with their concerns regarding proposals in the port. The interviewees were also asked to comment on the establishment of a port authority and what this authority should comprise of.

**1.12.1.3**

**Durban Local Government**

Semi-structured discussions were held with the following officials at the Durban Local Government.

- a) Arthur Gammadge - Principal Urban Planner
- b) Glen Robbins - Planner
- c) Nick Webb - Manager: Urban Planning and Design

The interviews queried Durban Local Government's perceptions as to the importance of integrated planning of developments in the port, and between the port and neighbouring city structure.

The interviewees were asked how they planned for the port, and what plans had been formulated for developments in the port. The interviews also covered the issue of co-operation between Portnet and the Durban Local Government, and the relationship experienced between the two organisations. In addition, the Durban Local Government officials were asked about previous or present alliances between the two bodies to establish any efforts at joint planning. In relation to this, the Durban Local Government was asked how they thought Portnet undertook planning for the port.

The last section of the interviews dealt with the possible creation of a single port authority and the impacts thereof.

**1.12.1.4**

**Portnet**

Present employees of Portnet, and a person previously employed by Portnet (and the previous port authorities) who has been involved with port planning and is able to provide the history behind certain decisions.

- a) Dorian Bilse - Deputy Port Engineer
- b) Neil du Cray - Manager, Planning
c) Dave Rice - previous Manager of Property Portnet, now employed by Rocpoint (Pty) Ltd

The three interviewees were asked to explain the planning approaches used by Portnet, and the levels of integration between non-shipping developments and shipping developments, as well as the port and the adjacent city. Respondents were also asked who undertook planning for the port and where final decisions are made. Portnet interviewees were also asked to explain their relationship between the Durban Local Government and themselves. Discussion to this end focused on possible port authority structures and the differing roles of the port. The last section of the interviews dealt with Portnet’s vision for the future and future expansion of the port.

1.12.2 CHAPTERISATION
The chapterisation of the dissertation closely follows the methodology outlined in this chapter.

1.12.2.1 Chapter Two
Chapter Two briefly examines the different planning approaches used in the port, which include Outline Development Plans, Strategic Planning, and Master Plans. The chapter illustrates the fragmented nature of the plans guiding the growth and developments within the port. Although the Outline Development Plans provide a guide for developments, the Outline Development Plans themselves lack a broader framework in which to locate themselves.

Portnet currently utilise the master planning approach, which is a rigid blueprint approach. In contrast to both Outline Development Plans and master plans, strategic planning is a recently adopted approach being applied to the Durban metropolitan area as a whole. This approach proposes the creation of a vision for the area and outlines strategies for meeting the vision.

Chapter Two points to the absence of such a forward-looking plan for developments in the port, as being the reason for development occurring in an ad hoc manner. In response to this, the chapter
calls for the adoption of a new realism - a pragmatic approach that identifies practical solutions to the problems experienced in the port.

1.12.2.2 Chapter Three
Chapter Three is primarily a precedent study, examining international examples of national ports policies, as well as the methods used to incorporate non-shipping developments in ports. Chapter Three pulls out the common threads and concerns from these examples to illustrate how other ports dealt with particular issues.

1.12.2.3 Chapter Four
Chapter Four moves from the international scale to the local context, whereby previous and present development proposals are examined to determine the level of compatibility (or incompatibility) achieved between shipping and non-shipping uses.

The study of development proposals for the port brings under consideration the relationship between the Durban Local Government and Portnet. This section reveals the relationship to be tense and conflictual.

1.12.2.4 Chapter Five
The political transformation of this decade affected dramatic changes in policies pertaining to national transport. The White Paper on Transport proposes the division of functions within Portnet, that is the privatisation of port operations and the establishment of a port authority. The policy suggests the transfer of port responsibilities to a national authority, but also gives attention to the possibility of handing over responsibility to a provincial or local government. This could have profound consequences for Durban's port in that its planning and management could become the responsibility of the Durban Local Government. The possibility for and implications of this occurring will be examined in this chapter.

1.12.2.5 Chapter Six
The first section of Chapter Six briefly concludes that
developments within the port require integrated and forward planning to ensure their compatibility, market absorption and phased land release. Emanating from this, recommendations to guide the future growth of developments within the port are outlined. The last section of the chapter assesses the strengths and weaknesses of the dissertation as well as outlining areas requiring future study.
CHAPTER TWO : CONCEPTUALISATIONS OF PLANNING

2. INTRODUCTION

This dissertation examines the planning policies applied to the port to assess whether the planning approaches and resulting plans are integrated in a meaningful manner. Planning approaches for the revitalisation of waterfront areas abutting city areas have largely occurred without a guiding framework. Most of the tourism and recreation developments along urban edges of waterfronts have been led by master planning methods, and as such, these methods will be briefly examined in the first section of this chapter. This section of the dissertation illustrates the dearth of planning frameworks to guide urban waterfronts. Portnet are still utilising the master planning system in their planning of the port, and this method of planning creates a blueprint and is highly rigid.

In contrast to this, the Durban Local Government has undertaken vast amounts of research, approached the communities of Durban for their input as to the future of Durban, and established a set of planning guidelines for the city. The resulting planning process is that of strategic policy formulation against a backdrop of economic and environmental sustainability. It is a process-oriented approach, creating flexible frameworks rather than a rigid blueprint approach. The second part of the chapter will examine the process of strategic planning as adopted by the Local Government and assess to what extent strategic planning has been formulated for urban waterfront areas in the port.

The third section of this chapter will examine possible planning techniques that may be implemented within the urban areas of the port, and as argued in this chapter, should be encompassed as part of a "new realism", a new pragmatism that is increasingly being applied to cities around the world.

2.1 PLANNING APPROACHES TO WATERFRONT DEVELOPMENTS

Between 1966 and 1975, international tourist visits throughout the world increased at an average of 5.7% per year (Lawson & Baud-Bovy, 1977: 6), with a concomitant growth in recreation and physical activities, due to the increasing numbers of people enjoying more leisure time (Breen & Rigby, 1996: 16). KwaZulu Natal attracts 24.6% of the domestic tourism market, 18.5% of the domestic business travellers and 26% of the foreign visitors to South Africa (Urban Strategy, Tourism Development, 1996).

Whilst this trend has been increasing, the processes of decentralisation have negatively affected inner core areas of most large cities - especially in the United States (Hoyle et al, 1994: 147). These factors, combined with technological changes in shipping have had profound impacts on ports. Containerisation has largely replaced the traditional general
cargo operations in ports (Breen & Rigby, 1994: 13) with increasing areas becoming obsolete. The barren derelict areas in ports attracted the unemployed homeless, and prostitutes, and in the 1950's the fear of the waterfront was epitomised in the film "On the Waterfront"\(^3\). Container ports increasingly require large tracts of flat land, back up and turning space for ships, deeper and wider channels in ports and access to good transportation networks (Breen & Rigby, 1994: 13). As such, the functions of many international ports are relocating to larger and deeper areas (Hoyle et al, 1994: 13) for the easier handling of containers. As the ports retract, they abandon huge areas of derelict space (Hoyle et al, 1994: 4).

The retraction of port areas, combined with the decentralisation of retail and office sectors, have forced local governments to find ways of reversing the decline of inner city areas adjacent to waterfront areas because of the loss of rates and local taxes (Hoyle et al, 1994: 148). In light of this, local governments have proposed the redevelopment of deserted inner city areas abutting waterfront edges into urban waterfronts (Hoyle et al, 1994: 4, 13).

Increasing numbers of cities are realising the significance of waterfront developments as catalysts for the revitalisation of city centres and downtown areas in terms of economic and social benefits (Hoyle et al, 1994: 61, 148). The planning and development of waterfront areas for the public however, should be integrated so as to ensure a coherent and logical sharing and use of resources within a wider area (Lawson & Baud-Bovy, 1977:13). The Economic Commission states:

\[
\text{It is of the greatest importance that recreational policies should be formulated within a framework of comprehensive, physical, economic and social policies.}
\]

(Lawson & Baud-Bovy, 1977:13).

Many recreational and leisure development plans have been guided by the master planning approach. This approach argues that comprehensive plans of these urban waterfront development areas should include the adjoining areas to ensure the integration of the area as an entity rather than undertake developments in isolation of each other (Lawson & Baud-Bovy, 1977: 133). In addition, other studies should be undertaken to determine economic feasibility, as well as the creation of a physical master plan detailing strategies, objectives, phases and detailed plans (Lawson & Baud-Bovy, 1977: 135).

\(^3\)A film made in 1954 about the docks of New Jersey focusing on the workers, bosses, criminals and their families. Directed by Elia Kazan.
2.2 PLANNING APPROACHES

Within this master planning approach to leisure and recreational development are five planning methods applied to the planning of recreational and tourist areas, which are: a) the physical approach; b) unit use standard approach; c) economic policies approach; d) systems models approach and; e) products analysis sequence for outdoor leisure planning [PASOLP] (Lawson & Baud-Bovy, 1977: 138-142).

The physical approach utilises a physical survey of the area to determine which path to follow, but is deficient in terms of market information (Lawson & Baud-Bovy, 1977: 138). Standards in terms of areas required per person per activity to determine present and future demand are used in the unit use standard approach (Lawson & Baud-Bovy, 1977: 139). A stronger emphasis is placed on economic feasibility and impacts in the economic policies approach (Lawson & Baud-Bovy, 1977: 139). Not only does this approach undertake a market assessment, but it also examines development possibilities in other locations (Lawson & Baud-Bovy, 1977: 139). The fourth approach applies computer models to recreation and tourism - two economic sphere in which no clearly defined rules exist (Lawson & Baud-Bovy, 1977: 139).

The fifth approach, PASOLP, requires the collaboration of all interested parties and uses the notion of 'recreational products' dependent on attractiveness and implementability (Lawson & Baud-Bovy, 1977: 139). Briefly, this approach synthesises the above approaches to present an understanding of the proposed plan. Firstly, surveys and analyses of policies, strategies and demand are undertaken to ensure that the proposal fits in with broader plans for a wider area (Lawson & Baud-Bovy, 1977:142). The feasibility of development proposals are assessed in terms of the plan to identify priority developments. Once these studies have been completed, a physical plan and a strategy for its implementation is drawn up to identify main uses and whether additional facilities are required (Lawson & Baud-Bovy, 1977: 142). The fourth phase of this approach studies the impacts in terms of resource usage and land controls. The master plan is then drawn up (Lawson & Baud-Bovy, 1977: 142). The advantages of this approach are that all interested parties are brought together to discuss the recreation plan and how to make the best use of resources in the area, whilst consideration is also given to other developments to ensure economic viability in terms of thresholds (Lawson & Baud-Bovy, 1977: 142).

These approaches to waterfront developments are however outdated to a large extent, and perhaps not relevant to the Durban context. Despite the sheer numbers of waterfront developments and their subsequent revitalisation of inner city areas abutting waterfronts, little research has been carried out on this revitalisation trend providing little in the way of planning frameworks and guidelines (Hoyle et al, 1994: xviii).
The phenomenon of waterfront developments as revitalising agents for adjacent inner city areas has primarily occurred in developing countries such as Europe, Canada, and the United States (Hoyle et al., 1994: xviii). Indeed, the formative years of urban waterfronts can be traced to the USA and Canada in the 1960's and 1970's (Hoyle et al., 1994: xviii). Although the revitalisation of waterfront edges and the neighbouring inner city have been implemented through a wide variety of processes, the common patterns of waterfront developments provide a commonality underlying the evolution of such developments (Hoyle, et al, 1994: 16).

A common framework in all waterfront developments abutting ports occur in the following generalised process. Firstly the urban fabric of the city is separated from the port functions by a transitional area of decline and decay. This interface zone is often characterised conflict and tension (Hoyle et al, 1994: 13). The second common characteristic is the migration of port developments to new sites or deeper water (Hoyle et al, 1994: 13). Thirdly, the now vacant land previously used for port functions experiences increasing competition for the redevelopment of the land and water (Hoyle et al, 1994: 13). In a reactive fashion, local governments often apply controls to the area to integrate development proposals and prevent pollution or other hazardous activities (Hoyle et al, 1994: 13). The entire process described above, however is impacted to a large degree by political, economic and national factors (Hoyle et al, 1994: 13).

Developing countries are increasingly aware of the need for policy formulation with regard to the establishment of waterfront developments (Hoyle et al, 1994: 14). And developments throughout the world are replacing uses within the embattled interface zone with recreational, rather than shipping uses, although local authorities have been notoriously slow at taking up development opportunities (Hoyle et al, 1994: 15).

The frameworks guiding urban waterfront developments have been influenced by a number of international factors. The first element is that of rising economic standards and the subsequent increase in disposable income (Hoyle et al, 1994: 40). Related to this, the character of urban waterfronts are increasingly being influenced by the trend towards maritime-focused leisure and living, such as marinas and yachting berths (Hoyle et al, 1994: 40). The creation of politico-economic trading blocs, such as the EEC in Europe and the SADC in South Africa also impact on the nature of the urban waterfront, if located adjacent a port because of the impacts from a national level (Hoyle et al, 1994: 40, 41).

The reality is that local councils, which often enter into partnerships with the private sector facilitate local economic development initiatives (Hoyle et al, 1994: 45). The nature of local economic developments therefore reflect local government structures and nature of control,
the local government economic structures and control wielded by certain individuals (Hoyle et al, 1994: 45). In this fashion, local governments can be proactive and may be described as "waterfront gatekeepers" combining national top-down approaches with local bottom-up approaches to create an overall holistic approach (Hoyle et al, 1994: 45).

Precedent has clearly shown that developments in waterfront areas require integrated planning to ensure economic sustainability, as well as the control of those developments, yet in a broader sense than afforded by traditional planning approaches (Breen & Rigby, 1996:20). One of the reasons for the failure of Canary Wharf in the London Docklands, was the adhoc approach to its development and the lifting of all planning controls in the area so that the development was purely market driven (Breen & Rigby, 1996:20). In addition, the Canary Wharf development did not take cognisance of the broader context in which it was located, and has been severely criticised for planning in isolation4 (Breen & Rigby, 1996:20).

Although the Durban Local Government has a number of development plans for the bay area, the planning approaches have been incremental and ad hoc. In terms of its planning approach, one could argue that the Durban Local Government has only outlined proposals for developments that should be elements of a broader plan. It would appear that attempts have been made to achieve some level of integration between plans, although it is also apparent that they lack the necessary supporting market information. These development plans aim to integrate the port and city, and include the Outline Victoria Embankment Development Plan; The Point; and the Bluff Headland Development Plan. (Webb, Interview: 22/10/97). Although these development plans acknowledge each other, as well as the need for a continuous urban waterfront development along the northern edge of the port (Webb, Interview: 22/10/97), they have not been formulated within a broader framework plan for the port area. None of the plans included feasibility studies to assess the overall economic viability of the development of the northern edge of the port (Robbins, Interview. 12/11/97).

2.3 MASTER PLANS
Within the town-planning ambit, master plans were traditionally used to "plan" towns and control growth, particularly amongst developing countries, where still today this practice continues to some extent (Devas & Rakodi, 1993: 72). Master planning has been criticised for its preoccupation with the preparation of the report and plan rather than the implementation of proposals (Devas & Rakodi, 1993: 72). Master plans have been critiqued for not focusing on key issues, and their tendency to concentrate on long term aspects akin to national development plans (Devas & Rakodi, 1993: 72). Other criticisms levelled at the

4The development company of Canary Wharf eventually went bankrupt. It should be noted that Canary Wharf has only recently experienced economic growth.
master planning approach is its fixation with cities as mere spatial entities and large scale ignorance of the broader context. Master plans tend to disregard the social, environmental, political and economic contexts in which the city functions.

Master planners have traditionally viewed cities, their urbanity and their growth as negative, and have sought to control their expansion through regulation (Devas & Rakodi, 1993: 72). The master planning process is characterised by the division of the plan creation process from the decision making process in relation to budgets, infrastructural development and services. As such, proposals may not be implementable due to financial constraints. Most of all, master plans are notable for being detailed and rigid, totally unrelated to the forces shaping city life, which include social, economic, environmental and political factors (Devas & Rakodi, 1993: 73).

2.4 PLANNING APPROACHES WITHIN THE PORT

Interviews with Mr D Bilse, Deputy Port Engineer at Portnet and Mr N du Cray, Manager Planning Department, Portnet (10/11/97) indicated that the planning method applied to the port is that of master planning, as outlined by the United Nations Conference on Trade and Development (UNCTAD, 1985). The master plan, Future View, which was drawn up in 1992 clearly follows the guidelines stipulated by UNCTAD.

UNCTAD strongly recommend that developing countries should embrace a national ports plan, which encompasses national transport issues, as well as outlining the specialisations of various ports throughout the country (UNCTAD, 1985: 5). A national ports plan stipulates that port planners and managers create master plans to guide long-term development of the port. In addition to the port master plan, the preparation of project plans (medium term plans) is required to "turn each part of the master plan into reality at the right time, and in the right form" (UNCTAD, 1985: 5).

Secondly, UNCTAD suggest the establishment of a national ports authority to establish port priorities and other responsibilities related to port planning (UNCTAD, 1985: 7). In effect, port policies are co-ordinated and regulated from a national level, whilst the operational decisions of ports are made locally (UNCTAD, 1985: 7). The responsibilities of the national ports authority are seen to be that of: investment, financial policy, tariff policy, labour policy, licensing, information and research, and legislative (UNCTAD, 1985: 7). It is envisaged that the national ports authority will develop a broad national policy to co-ordinate port facilities and functions between different ports (UNCTAD, 1985: 7).

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5No time limits are to be stipulated in terms of possible developments within the port (UNCTAD, 1985:5).
The long-term planning of facility provision is contained in the "master plan", and outlines the "view of the future situation" (UNCTAD, 1985: 7). It is recommended that more detailed project plans be drawn up within the framework of the broader master plan. Planners for ports are entreated to examine the roles of ports, the extent of the port's responsibility for infrastructure, the land use policies for the port and financial policies. Once again, no mention is made of the need for studies into impacts on adjacent communities in terms of economy, social amenity, or infrastructural invasions in terms of roads, increased road traffic, accidents, etc. The most important aspect of port planning are the land-uses and the future development of water areas and channels (UNCTAD, 1985: 7, 8).

UNCTAD's principles used to guide port planning are largely focused on engineering concerns. Some of these principles which give attention to the planning of ports are:

a) objectives, b) the investment plan, c) terminal design principles, d) berthing capacity, e) costing, f) berth occupancy, which also includes g) planning for variations in traffic, h) co-ordinated contingency planning and i) examination of uncertainty (UNCTAD, 1985: 27-39). In terms of these principles, UNCTAD highlight the significance of objectives, which are to be applied to master plans and development plans. An important objective is that development plans, which emanate from master plans, are to be flexible to adapt to differing demands. Planners are also reminded that plans can only be drawn up if they correspond to the broader national plan and master plan for the port (UNCTAD, 1985: 27).

The approach recommended by UNCTAD posits the decision making power for port policies and strategies at a national level. It is a fixed model and should be responsive to local variation. At this national level, the impacts of decisions on the populations of cities and on the cities themselves are not afforded adequate consideration, and as such, the process sets the tone of a planning policy for ports that ignores socio-economic impacts, as well as the local political setting in which the ports are located.

2.5 STRATEGIC PLANNING

The trend towards strategic planning reflects increasing dissatisfaction with traditional planning methods, such as the above rigid regulatory approach. In 1989, the structure plan guiding the growth of London was replaced by a broad declaration of policies, which together would provide "strategic guidance" for the city (Cadman & Austin-Crowe, 1991: 85). Although this strategic policy has since been admonished for being too general (Cadman & Austin-Crow, 1991: 85) it indicated an increasing aversion to traditional, rigid types of planning and an increasing focus on local planning initiatives (Cadman & Austin-Crowe, 1991: 86). The revival in strategic planning, especially in Europe provided

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6Hence "Future View", the title of the 1992 Master Plan for the Port of Durban.
a means of allowing adequate flexibility in the implementation of plans (Healey et al, 1995: 252, 253). Developed in the United States of America, the strategic approach influenced the British planning system from the 1960's (Healey et al, 1995: 253) but waned within the 1970's and 1980's (Healey et al, 1995: 262). The adoption of the new environment agenda and sustainable development also contributed to the resurgence of strategic planning as a means of integrating the economic and environmental aspects of city management (Healey et al, 1995: 263).

The strategic planning approach is an integrated approach. It is a discourse combining all aspects of human life: mythology, folklore, history and linguistics with the science of planning, and rationality to create a holistic process (Friedman, 1987: 415). Strategies allow planning agencies to make rational decisions by paying attention to the limitations of their ability (Faludi, 1973: 107). The strategic planning process firstly defines the nature of the problem and identifies objectives by which planning problems are to be resolved. A rational programme is then prepared by which the methods used to resolve the problem are outlined, and lastly, the plan is implemented with a feedback process (Faludi, 1973: 81). Planning problems are resolved when solutions are found to the objectives emanating out of the planning problem (Faludi, 1973: 88). Simply put, the method of strategic planning:

- combines relevant technical information
- identifies the major constraints to the implementation of the strategic plan
- distinguishes all political options and costs and benefits to implementing the plan
- is continuously informed of new trends, etc. (Friedman, 1987: 401).

There are three planning processes within the strategic planning system: a) routinisation; b) sequential decision-making, and; c) mixed scanning (Faludi, 1973: 109). As its name suggests, routinisation is a form of planning in which task are repeated so many times they become automatic and rarely veer from established rules (Faludi, 1973: 110). Sequential decision-making is an approach whereby choices are evaluated and arranged sequentially to reduce the demands on the information handling capacity of planning agencies (Faludi, 1973: 111). The third approach, mixed scanning, is regarded as the most versatile strategy (Faludi, 1973: 111) because broad surveys of the overall pattern are undertaken, followed by a detailed investigation of specific areas (Faludi, 1973: 113). Mixed scanning allows for public participation (Faludi, 1973: 120) and is flexible enough that the framework of strategies can be easily changed or adapted should they become out-dated or cumbersome (Faludi, 1973: 112).

Strategic planning is a process mode of planning and is easily adapted to the circumstance during the implementation of plans (Faludi, 1973: 132). Other features
characterising the process mode of planning are that the final document is not the most important product, and the process is an iterative one with changes being effected through feedback mechanisms (Faludi, 1973: 132). Strategic planning works across several time horizons using, for example, long term strategies and short-term actions (Faludi, 1973: 132). Urban renewal is a good example of process planning, because it epitomises the realisation that planning of cities and spaces extend beyond the physical realm and include social issues, and quality of life (Faludi, 1973: 136). Planning of this nature is comprehensive and approaches planning problems holistically (Faludi, 1973: 156).

The Durban Local Government is (recently) an example of an institution that uses the mixed scanning approach, which establishes the framework in which other agencies operate (Faludi, 1973: 212). The mixed scanning approach identifies goals and limitations in terms of powers and resources (Faludi, 1973: 213) and manages resource budgets and other planning agencies whose focus is on particular areas of concern or routine tasks (Faludi, 1973: 220). Thus, the strategic planning authority (the metropolitan level of the Durban Local Government) sets the framework in which other departments plan, and the implications of decisions made by the strategic planning agency are experienced by the lower tiers carrying out planning within the framework (Faludi, 1973: 213).

Three approaches guide strategic planning and these may be classified into: a) the management of urban areas by performance criteria and output targets, b) by partnership, and c) by argumentation (Healey et al, 1995: 264). The management of cities by performance criteria allows representation and challenges to decision making by differentiating between procedural and substantive performance criteria (Healey et al, 1995: 271). Management by argumentation allows the storage of the rationale for decisions (Healey et al, 1995: 269). Management by partnership permits a cohesive set of development principles amidst a backdrop of community/business/public coalitions (Healey et al, 1995: 266). These three approaches are often used by strategic planners in terms of trade-offs and partnerships to foster development.

A criticism of the strategic planning approach is that its holistic view of society is unrealistic as all members of society do not share the same goals and ends (Faludi, 1973: 295). The all-encompassing approach of cohesive plans have been criticised for limiting diversity within society and thereby reducing planning options (Healey et al, 1995: 258). It is imperative that city governments mobilise to seize opportunities and integrate activities at the urban level (Healey et al, 1995: 278). This will facilitate the repositioning of the urban region within new transnational and political relations (Healey et al 1995: 278-279). Although institutions are capable of ensuring coherence, their implementation
of agendas and processes through partnerships and coalitions are critical to the future growth of the region (Healey et al, 1995: 279). The policies of strategic planning should identify what aspects of society are to be integrated and how these can be achieved through government-led interventions, and secondly, the process by which integrated plans will be implemented (Healey et al, 1995: 281, 282).

In practice, local governments respond to a broad ranges of issues through "visions", key directions, and implementation as in the Strategic Framework for the Durban Metro Area. The strategic planning approach was adopted by the New South Wales Government of Australia in 1993. This strategic planning system provides a useful comparison with the Durban's evolving strategic plan.

The integration of broad land uses and transportation plans are posited within an Integrated Urban Management strategy in Sydney, in addition to objectives related to environmental and non-spatial issues, as well as action programmes allocating tasks to appropriate agencies (New South Wales Government, 1993: 2). This approach also identifies the process by which meaningful integration across all spheres of city life are implemented (New South Wales Government, 1993: 2). Strategic plans are viewed as frameworks for the management system of the city, as well as for its policies and directions (New South Wales Government, 1993: 3).

Informing goals of equity, efficiency, environmental quality, liveability and community values are integral to the successful formulation of a strategic plan (New South Wales Government, 1993: 3). Significantly, strategic plans encourage public participation, as well as the integration of city plans with other plans such as those dealing with provincial goals or transport policies (New South Wales Government, 1993: 3). Most importantly, however, strategic planning facilitates forward planning in a positive and sustainable manner and examines not only spatial aspects of city life, but also socio-economic, transport, poverty and unemployment aspects.

The Durban Local Government is aiming to positively position the Durban Metropolitan Area within an era characterised by chronic unemployment and poverty (Urban Strategy Department, Tourism Development, 1996). Tourism has been identified as a primary potential economic opportunity in this regard. Policy makers have acknowledged the importance of formulating a strategy wherein public and private sector groupings, stakeholders and interest groups are committed to the same vision of tourist generation. Tourism, however will not only benefit the Durban Metropolitan Area, it is also likely to generate substantial income for the provincial and local governments. As such, the national government has called upon cities to be proactive in attracting tourism and in its
White Paper on the Development and Promotion of Tourism in South Africa, it identifies the following roles (amongst others) for local governments:

- to ensure responsible land use planning
- provide and maintain tourist services, sites and attractions, and

In light of the roles of local governments in terms of tourism provision, the strategic planning approach would be the most effective. This is because the Durban Local Government can establish the policy to guide the integration of land uses, infrastructure provision and transportation links.

### 2.6 DEVELOPMENT PLANS

Strategic plans are generally applied through development plans (Healey et al, 1995: 251) which explicitly guide legislative and investment decisions through a base policy, and goals and objectives which "guide but not determine regulatory decisions" (Healey et al, 1995: 252, 253). The overall objective guiding strategic planning is that of flexibility and being sufficiently capable of uniting different interests into a single approach (Healey et al, 1995: 2543). Development plans co-ordinate a number of different decisions and actions and are highly effective at translating policy into action (Healey et al, 1995: 255).

The development plans in Britain have gained increasing importance, and are regarded as having the ability to combine different interests of the city into an effective management tool (Healey et al, 1995: 254).

### 2.7 THE NEW REALISM

There are constraints to the formulation of integrated plans for the port, and the practicalities of these plans should be contextualised within the "new realism". The new realism characterising planning is giving planning an urban management focus (Stren, 1991: 9). Urban management is holistic and integrated in its approach and seeks to ensure the economic sustainability of developments within a fragmented local government system (Stren, 1991: 10). In addition, urban management encourages an acceptance of the public realm and move away from the isolation of private developments (Healey et al, 1995: 47). These are important factors to be applied when considering the urban waterfront of the port, and proposed developments should ensure the primacy of the public realm. The implication of these trends is that planning for the port should embrace

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7 Stren also argues that urban management practices include finding “alternative means of organising and financing urban services” and the need to ensure local community participation for the “sources of support for urban services and infrastructure” (Stren, 1991:10).
A realistic urban management process, and that tourist and recreational developments in the port should be aimed at the broad public rather than an elite few (Booth. Interview: 24/11/97).

African cities on the whole, have experienced varying levels of economic depression and decline during the 1970's and early 1980's (Stren, 1991: 13). This economic recession has impacted significantly on the ability of local governments to meet the service needs of their communities (Stren, 1991: 14). The persistence of local governments to meet their service provision responsibilities will eventually have repercussions for the national economy, as has been the case in other African countries (Stren, 1991: 14, 15).

Increasingly, and as a response to the inadequacies of the central planning system, African countries have sought to devolve political and economic power to local governments in various forms. As a result, this has encouraged communities' interest in and increasing concern with city management, the quality of life afforded them by their cities and increasing interest and participation in the running of their cities (Stren, 1991: 19). Running parallel to this devolution of power and its associated positive impact on community participation, has been the increase in the deputisation of state-controlled facilities to private companies and/or individuals (Stren, 1991: 21).

The management of urban areas should be flexible and responsive to the needs of the city (Stren, 1991: 22). Planning approaches to modern cities today encompass the notions of a new realism, a realism about city growth and the acceptance thereof (Devas & Rakodi, 1993: 100).

Increasingly, individuals and private groups influence the nature and size of cities over local governments, whilst society is accepting more and more the reality that local governments are unable to intervene in urban systems as effectively as they did in the past (Devas & Rakodi, 1993: 100). In terms of strategic processes of planning, local governments are increasingly realistic about resource constraints and their ability to meet the needs of the communities they represent (Devas & Rakodi, 1993: 100). This has necessitated their embarking on partnerships between themselves and business, or themselves and other hierarchies of government, embracing more flexible planning processes (Devas & Rakodi, 1993: 100). A main advantage of the new realism is that local governments can still effectively plan for communities and implement visions, although the methods and finances for doing so may have been changed (Devas & Rakodi, 1993: 101).
2.8 CONCLUSION
The planning theories and concepts above illustrate the increasing inability of local
governments at meeting local needs and the ineffectiveness of blueprint approaches such
as master planning at realistically planning cities. There is a need for increasing
pragmatism and flexibility within planning, and it is with this in mind that this chapter
suggests the framework for this dissertation.

The management of cities is increasingly about how communities, public agencies and
business groups jointly identify common problems (Healey et al, 1995: 284), and evolve
strategic ideas and policies to establish integrated forms of urban management. As part
of the strategic plan, development plans should be created for proposed tourist and
recreational areas within the port. Existing development plans for the urban waterfront
were formulated without such a framework being in place, and as a result are ad hoc.

South Africa as a developing country faces problems of poverty, unemployment, scarce
financial resources, and a widening gap between the wealthy and poor. In addition to
these profound issues, there is an ever increasing number of proposals being put forward
for recreational and tourist uses along the urban waterfront of the port. The proposals
are fragmented and overall lack a clear vision for the uses in this area of the port. In
addition, no economic study has been undertaken against which the feasibility of these
developments may be determined. Most importantly however, the land on which these
developments have been proposed, on the whole, does not belong to the developer, and
secondly, the landowner is not involved in the planning of the proposals. A new realism
is clearly required for the planning of the Durban port's urban waterfront. A realism that
accepts the constraints of integrated planning, while ensuring the involvement of Portnet
to ensure the legitimisation of the proposals located along the urban waterfront of the
port. Trade-offs may need to be made, or perhaps alternative solutions found, but overall,
the planning process of the port requires a clear vision, sound strategies and a new
pragmatism to the resolution of problems.

Durban Local Government has initiated the process of strategic planning as the guiding
planning apparatus for the Durban Metropolitan Area. This flexible approach, combined
with the objectives of local economic development and sustainable development is,
however, not being applied to the port. There are three reasons for this.

2.8.1 The first is that the current development plans for the urban waterfront edge of
the port are not located within an overall guiding framework. The "outline
development" plans are in reality, policy documents suggesting possible uses and
identifying brief limits and constraints, but generally the plans are not
development plans in the true sense of the word. According to strategic planning, a broad strategic plan guides the overall growth of the area, and development plans put those strategies into action. These development plans have been created in the absence of such a guiding strategic plan. Furthermore, no studies of the economic feasibility of the numerous developments in the area have been carried out to assess the viability of the plans.

2.8.2 The second reason relates to the national ports system, which determines policies and strategies for the port based at the national level. Historically, the port management structure and planning approaches have not facilitated the integrated planning of port areas, because they have not been able to. The planning system adopted at a national level, was characterised as being blueprint masterplans, highly rigid and inflexible in their approach.

2.8.3 A third reason deals with land ownership. Port land is owned by the state, which understandably limits the ability of the local government to effectively plan for the area. On the other hand however, the Durban Local Government, not Portnet (Stockley, Interview: 19/11/97) has a mandate to the citizens of Durban to protect their interests. In light of this responsibility therefore, the Durban Local Government should endeavour to formulate a plan for the urban waterfront edge of the port.
CHAPTER THREE: INTERNATIONAL PRECEDENT OF PORT DEVELOPMENTS

3. INTRODUCTION
Chapter Two examined the planning theories and methods that have been applied to planning ports, and included a discussion on planning approaches to recreation and tourism. Planning theory is particularly relevant to this chapter which undertakes a brief study of other ports and developments in ports to establish the main planning and management themes used. This precedent study is useful in its illustration of what previous methods were followed, allowing us to learn from the best examples of the past. This chapter examines precedent from a number of perspectives as well as national strategies, which affect ports and their management thereof. Furthermore, this chapter highlights the degree of integrated planning. The second aspect examined is of port specific developments and the planning structures that facilitated the implementation of these developments. The third aspect explored covers the planning approaches applied to ports and developments within them. Although many of these perspectives overlap to some extent, it is hoped that differentiation in this manner will allow an easier understanding of the concepts that could be applied to Durban.

3.1 NATIONAL PORTS STRATEGIES
On a worldwide scale, ports are subject to a wide range of strategies and policies, from privatisation to the transfer of port responsibilities to local governments (see Appendix A). This section examines strategies implemented in other ports around the world to illustrate the complexities involved in the planning and management thereof.

3.1.1 PRIVATISATION
Although a growing proportion of ports are being privatised, many have been privatised for a number of years (du Cray, Interview: 10/11/97). A case in point is Great Britain's ports. The authorities responsible for British ports are however, members of broader organisations, which outline broad strategies for the ports. Such institutions include: The British Ports Association and British Ports and Harbours ("British Ports and Harbours", http://www.ships.co.uk/ports/index.html).

The examination of various port management styles throughout the world shows that national governments privatised ports to encourage their modernisation, or to relieve themselves of an economic burden. The Argentinian government is encouraging the privatisation of Buenos Aires port, and has recently ratified the
private-sector dominated port administration body. Along with the privatisation of the Panama Canal, a number of other ports will also be privatised, including the Port of Cristobal and the Port of Balboa (King, 1996: 24). Indicating the seriousness of the privatisation process, the Japanese International Co-operation Agency submitted a master plan for the two ports in 1993 (King, 1996, 25). Considering the long-term impacts of monopolies, it is interesting that little opposition to this privatisation of national assets by foreign countries has been expressed in the literature.

Similarly, Brazil's ports are undergoing large-scale liberalisation and privatisation (King, 1996: 35). Santos Port in Brazil is to be privatised by 1998 with a separation between port operations and its administration (King, 1996: 37). Privatisation is being viewed as the most rapid form of development for port modernisation in Brazil (King, 1996: 39). The privatisation of ports is a topical issue, giving rise to the question of whether such a national asset should be privatised at all. The Irish community of Shannon are resisting the creation of a single port authority amidst fears of privatisation and monopoly control. The question of a public asset being owned by private companies is contentious (Japan owning the Argentinian ports for example) in relation to a port's status and the benefits from a port which can accrue to the local community or the nation overall.

Similarly state governors in Sao Paulo and Rio de Janeiro ports are resisting privatisation of the ports because of the potential economic and political ramifications for citizens of their states, which include the loss of public national assets and the establishment of monopolies with repercussions in terms of profits only benefiting the port owner and not filtering through society.

### 3.1.2 AUTONOMOUS PUBLIC BODIES

Ports such as Lisbon and Antwerp are the subjects of national strategies whereby land ownership is retained by the national government, but the responsibility for and management of ports are transferred to autonomous public bodies. The membership of such bodies generally comprise representatives from all tiers of government, as well as business and professional sectors. The broad membership is advantageous in achieving integrated management and planning of ports. Added benefits include improved accountability and financial success of ports.
In the case of Lisbon, local government has welcomed this move because profits will be kept by the local government instead of being diverted to national government.

3.1.3 CORPORATISATION

Corporatisation is a common national ports policy applied throughout the world. It is currently being implemented in the larger ports of Australia and Indonesia, and has been in effect in South Africa for over a decade. The main aims of this strategy are to commercialise state responsibilities and in so doing improve their efficiency and economic success, whilst retaining ownership of the ports by national government. The corporations established are parastatals, an example of which is Transnet in South Africa.

The parastatals however, often represent the interests of the government hierarchy rather than local or regional concerns due to their role of co-ordinating the management and operations of ports at a national or regional scale. Corporatisation has been applied by central and state (or provincial) governments, and more often than not, shares are owned solely by these levels of government. In Russia, local governments actively seek international investment to upgrade ports, because of the importance of the ports to their local economics.

3.1.4 PORT DIFFERENTIATION

Port differentiation refers to the categorisation of ports into different levels or scales of status. In combination with Australia changing its national ports policy from state-managed ports to corporate-managed ports, they are also privatising smaller ports.

Canada is introducing a similar strategy, but one which restructures the ports and management thereof according to the size and role of the port, so that the port system is divided into national ports, regional/local ports and remote ports. Responsibility of larger ports have been devolved to semi-autonomous, not-for-profit port authorities, whilst ports of local importance fall under the jurisdiction of local governments, and federal government undertake responsibility of remote ports. What is significant about this method is that the responsibility of national government decreases with the importance and economic sustainability of the port.

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*Smaller ports are being privatised.
It would seem that this approach would be beneficial for Durban in that its national importance could imply that the Durban Local Government undertake control of the port, whilst smaller ports such as Cape Town and East London are national concerns.

3.1.5 LOCAL GOVERNMENTS
A number of local governments are responsible for the management, planning and economic viability of ports, although it should be noted that national governments do play important roles in terms of policies and strategies.

Although port planning and management is often a local or municipal responsibility, examples from Rotterdam and Iceland illustrate the advantages of retaining control of port operations through a port authority. As in the case of Rotterdam, this management structure can result in conflicts between the local government and port authority departments, but commitment to a shared vision have resolved previous problems to the benefit of all concerned. Spanish towns have welcomed responsibility for their ports because of the associated economic gains, and serves to illustrate possible paths for other countries to follow. An added benefit of management and ownership being vested in local authorities is that public interests often have input into port policies, which can improve public amenity of a port. The port of Reykjavik illustrates the success of proactive planning for the port, minimising wasted space and ensuring the integration of the port with the city.

3.1.6 PROVINCIAL/STATE GOVERNMENTS
Examples of such systems are illustrated in the United States, as well as Australia where the provinces or states manage ports. Most American federal states are responsible for the management and planning of their ports, although national strategies are given due consideration.

A regional port authority, as in the case of the American federal states who retain ownership and management of ports, allows for integrated port planning across a region. This however, encourages regional competition, which can be detrimental to some states. The potentially negative effects of regional competition have been ameliorated to some extent in America by the establishment of organisations that set guidelines for the shipping industry throughout the United States. These guidelines indicate trends and educate ports as to new management structures and/or processes, as well as all aspects of shipping, i.e. information on ships, draughts, capacities, lengths, etc. The
organisations do not compel port authorities to operate in a specific manner, nor do they co-ordinate port operations on a regional scale. They are advisory boards.

3.1.7 NATIONAL GOVERNMENTS
Although this section has illustrated the many partnerships undertaken in managing ports, a few governments retain the responsibility and management of ports at a central level and include Singapore and Hong Kong. The research in this sphere of management indicates the declining number of nationally-managed ports. The ports that remain under national government control are primarily weak ports, such as ports in small countries (Cyprus) and developing countries (Kenya), and in city-states (Singapore and Hong-Kong).

3.2 PORT SPECIFIC DEVELOPMENTS
Although the national ports policy influences shipping developments within ports, this section will endeavour to separate out the responsibilities for and methods applied to non-shipping waterfront developments to gain an understanding of the common concepts underpinning urban waterfront developments (see Appendix B).

3.2.1 PUBLIC/PRIVATE PARTNERSHIPS
It is increasingly apparent that successful developments within ports are the result of public/private partnerships, and examples where such partnerships occur include ports such as: Baltimore, Birmingham, San Francisco, Rowe's Wharf, and Yokohama. As outlined in Chapter Two, the increasing inability of governments to fulfil planning functions and development obligations has resulted in numerous partnerships. Increasing community involvement in city decisions has also influenced significant changes in ports and the way they operate. An example of a community-led partnership has been that of the San Francisco Planning and Urban Research Association, which have effected significant and meaningful changes in the port to benefit the people of the city.

3.2.2 LOCAL GOVERNMENTS
In many cases, developments within ports have been led by local governments and some examples include: Battery Park; Swansea and Toronto. A positive benefit of local government involvement is the preservation and often creation of the public realm. The long-term benefits of this approach are illustrated in Toronto, who have preserved the mixed uses in the port from 1912. Their comprehensive plan was undertaken to ensure the sympathetic developments of shipping, expansion and the public realm. The success of this forward,
comprehensive plan is that the public has always enjoyed access to the water's edge and the activities within the port.

3.2.3 LOCAL GOVERNMENT AND PORT AUTHORITIES

Partnerships between local government and port authorities are increasingly necessary for the implementation of developments in ports. Examples of partnerships between local authorities and port authorities include: Charleston, Rotterdam and Cape Town ports. A characteristic of the partnerships evolved, is that they require the support of a number of public groupings, such as the local community, political groupings, labour and shareholders. In addition, partnerships of this kind serve to preserve the sanctity of the public realm, as well as ensuring ordered developments.

Although Rotterdam is the busiest port in Europe and experiencing huge expansion proposals, the partnership between the City of Rotterdam and the Port of Rotterdam has ensured the comprehensive planning of the port, taking local needs into account and ensuring a holistic and representative planning process.

3.2.4 NATIONAL/FEDERAL GOVERNMENT AND LOCAL GOVERNMENT

Partnerships between National/Federal and Local Governments are common in nationally important ports such as in Rotterdam, although such partnerships have also occurred in smaller developments such as Granville Island. The partnerships in these developments achieved the resolution of local problems that were increasingly becoming national concerns in light of decaying areas, slum conditions and unemployment such as Salford Quays.

3.2.5 STATE OR PROVINCIAL GOVERNMENT

Similarly, tiers of government responsible for regions, such as state governments (USA and Australia) or provincial governments, may undertake the redevelopment of decaying waterfront edges. Reasons for this often include a commitment to redevelopment for economic gain and stimulation of tourism. An example of such a development is Darling Harbour in Sydney.

3.2.6 PRIVATE

A number of developments have been led solely by private companies. Examples have been hailed to include: Hong Kong and the London Docklands, but studies of these areas indicate a facilitatory role of national government. Both Hong-Kong and the London Docklands were initiated by national government, which created development companies to undertake the developments in a
market-led manner. In Hong-Kong, little forward planning for the port had been formulated and as such, developments were un-co-ordinated.

In the London Docklands Development, the residents and institutions are not integrated with the surrounding communities, nor did the Docklands give attention to social needs. Although previous governments retained the operational land of ports for pragmatic reasons, the Thatcherist government created the London Docklands Development Company to develop the Docklands (Hoyle et al, 1994: 223). The Development Company developed the area without any planning approach, which was demand-led. The resulting economic failure of Canary Wharf and the highly fragmented developments within the Docklands area point to the failure of pure market-led planning. The resulting developments within Hong Kong also illustrate the need for comprehensive planning as the port is highly fragmented and lacks complementary planning with the surrounding areas.

3.2.7 NATIONAL GOVERNMENT

Although most examples of waterfront developments rely on public funding from local, state or national to lead the development, this section aims to examine national government-led waterfront developments. To protect valuable national assets, national governments sometimes undertake responsibility for developments within ports. Although this section only reflects one example of this, Singapore, the lack of examples proves to some extent the popularity and efficiency of partnerships in creating waterfront developments.

As illustrated in this section, the management structure of ports and developments within ports require careful forward planning in a comprehensive manner. It would appear that an awareness of the importance of integrated port planning is gaining ground. For example, the International Association of Ports and Harbours recently called on the Port of Osaka, which is a municipal department, to co-operate with city and national governments in formulating its port development plan. The Association recommended that the plan be formulated from a wider perspective of urban development (The International Association of Ports and Harbours, December, 1994: 6). The Association stated that the plan should also be compatible with municipal, industrial, commercial and residential interests (The International Association of Ports and Harbours, December 1994: 6).

Successful urban waterfront developments consist of a number of common threads. The most successful concept pertaining to revitalised waterfront developments is
that of partnerships. The partnerships may comprise a number of forms, such as the business-led example in Baltimore, or the coalitions across different hierarchies of local government, such as Granville Island or Salford Quays. Precedent consistently proves that partnerships, as well as vision are vital to the implementation of successful developments. In combination with the notions of vision and partnerships, forward planning is also a vital ingredient of urban waterfronts' success. The story of the San Francisco Waterfront illustrates the power of a community-led partnership with local government, visions and forward planning.

Thriving urban waterfront developments ensure public access to the development, as well as an integrated planning approach so that the development complements the adjacent fabric. The proposed plans in ports are the results of different processes, and include planning approaches that look to manifesting visions in the future via broad concept plans, development plans or detailed master plans. The Victoria and Alfred Waterfront in Cape Town fostered a hierarchy of plans that set the context for the development, ultimately resulting in detailed building plans. This precedent study has also indicated that the most successful waterfront developments are those with a mix of land uses, have particular themes (such as the historical Victoria and Alfred Waterfront) and ensure the primacy of the public realm.

Of these underlying concepts however, the issue of land ownership is integral to the success of urban waterfront developments. It is imperative that the landowner is committed to the urban waterfront development, which is particularly significant if the landowner manages the operations of the port. Precedent has clearly indicated that the port operators, owners and those wishing to undertake the developments working together to a common vision ultimately achieve the most successful urban waterfronts.

3.3 CONCLUSION

The precedent study indicated that many ports followed the same protectionist processes as that of the South African port authorities, whereby shipping uses only were planned for. In a similar process as that experienced internationally, ports throughout the world are changing in terms of their national ports polices and accepting and encouraging a number of different uses in ports.

To facilitate this change, many governments are devolving power to separate organisations, such as autonomous bodies, local authorities and even private companies. Each country is adopting a structure and planning solution believed to be the most beneficial for that
particular situation, and the studies indicate that once port authorities of some kind have been established, the degree of integrated planning improves.

The planning procedures and structures in ports however, require careful forward planning and cannot be left to the whims of free market forces, as indicated by the failure of the Canary Wharf development in the London Docklands. Although the creation of a set of criteria applied to individual developments and the broader planning system to assess their suitability and success is contentious, there is a need for new planning approaches.

The planning approach should ensure that the development, which occurs in the waterfront, should take cognisance of the wider environment, as well as ameliorating socio-economic disparities (Hoyle et al, 1994: 230). In the absence of such a checklist, however, there are a number of common concepts that may be applied to waterfront developments throughout the world to assess their suitability and success.

Many of the plans proposed in ports include a mixture of land uses such as museums, historical; residential; aquariums; commercial; offices; recreational; festivals; and recreation. It is therefore important that proposals include a balance of mixed uses, as well as ensuring that the plans are not aimed only at one socio-economic group to the detriment of others (for example, marinas for private yachts). The development should seek to benefit all members of society as well as being financially profitable, with a maximum utilisation of land.

The concepts underpinning many of the successful developments in ports are those of:

- the adoption of a national ports policy conducive to shipping and non-shipping developments within ports
- participation by all stakeholders and interest groups
- the willingness of the land owner to develop the land
- public access and;
- a set of plans guiding the growth and development of the area to ensure an integrated set of developments within the port.
CHAPTER FOUR : DEVELOPMENT PROPOSALS FOR THE PORT OF DURBAN

4. INTRODUCTION

Mirroring international changes in leisure and functions of ports, the Port of Durban is the focus of an increasing number of proposals. Many of the proposals are related to the growth of tourism and recreation, as well as the expansion of containerisation in the port. Although many proposals have been considered over the years, few concrete plans for developments within the port have been implemented. This chapter briefly examines past and present shipping and non-shipping related to ascertain the focus and nature of these.

This chapter undertakes a study of shipping-related proposals to examine the planning approaches to developments in the port. These approaches are characterised as being master plans concentrating solely on shipping and related uses in the port. The most recent master plan formulated by Portnet, Future View, briefly touched on uses peripheral to shipping activities, such as the Point and Victoria Embankment waterfronts, Cato Creek and the Natural Heritage site. The focus of this plan however, was still on shipping and related industries, ignoring the broader context of the port.

In line with international trends in the early 90's, Portnet shifted their focus slightly, and opened increasing areas to non-shipping uses. Portnet also examined the possibility of establishing leisure-based developments in the Victoria Embankment, and although this was never implemented, Portnet have implicitly encouraged non-shipping developments and sold the land on which the Point and Wilson's Wharf developments are proposed. In addition, Portnet have leased land to the BAT Centre and Bluff Development Company in line with their more public policies. These positive attempts at opening the port up to the public has been marred by Portnet's current container-handling proposals, which being incompatible with neighbouring recreational uses, contradict their policy encouraging the public into the port. In this regard, this chapter recommends an integrated plan be formulated for the port ensuring that both shipping and non-shipping uses are taken into account.

4.1 THE MOFFATT PLAN

This section examines the first major plan guiding the growth and expansion of the port, which occurred in the 1950's. The Moffatt Plan was prepared in response to increased congestion and shortages of space due to the expanding shipping industry and gold mining in the Transvaal (Pearson, 1995: 229). The plan guided the necessary growth of the port, and was the blueprint for the development of new quays and other major expansions (du Cray, Interview: 10/11/97). At that time, the Port of Durban was managed by the South African Railways and Harbours, which was characterised as being protectionist and
non-participatory (Pearson, 1995: 229). This government department was not compelled to obtain approval from the local authority for any plans or developments nor submit building plans to local authorities (Rice, Interview: 7/11/97). In this era of non-communication and non-accountability, the Moffatt Plan was implemented without any participation by interest groups, such as the local government and existing users. The plan was clearly intended to guide the growth and development of shipping-related uses only.

4.2 OTHER PLANS AND DEVELOPMENT PROPOSALS
In the years following the Moffatt Plan, the port lacked an integrated scheme to guide the growth and development of the port, their approach being ad hoc and reactive (Rice, Interview: 7/11/97). During this time, proposals for shipping-related developments in the port were submitted to the Durban Port Executive, who in turn submitted the proposals to the Portnet Head Office in Johannesburg for a decision and final approval (Rice, Interview: 7/11/97). Although this piece-meal process was cyclical and iterative (du Cray, 10/11/97), the port lacked an overall plan not only to guide the expansion of the port's shipping functions, but the integration of non-shipping uses within the port.

4.3 VICTORIA EMBANKMENT WATERFRONT PROJECT
In line with increasing recreational uses proposed for ports throughout the world, Portnet underwent a major policy shift in the early 90's and began assessing potential developments of an increasing leisure-based character (Hartley, Interview: 18/11/97), (Stockley, Interview: 19/11/97). In 1990, Portnet requested a planning study for the Victoria Embankment area to transform it from it's "unattractive and uncoordinated form...into a leisure and recreation facility of which the City may be proud" (refer Figure I) (Campbell Bernstein & Irving, 1990:i). The proposal recommended three development nodes with a variety of land uses (see Figure 1). These development nodes and suggested land uses were:

a) Festival Island: Proposed land uses included speciality shopping, cinemas, restaurants, festival arena for markets, offices, hotel, conference centre, aquarium, maritime museum, active and passive recreation areas and commercial marinas (Campbell Bernstein & Irving, 1990: iv).

b) Club Island: Suggested uses for the area remained linked to sailing clubs and moorings (Campbell Bernstein & Irving, 1990: iv).

c) West Island: Proposed land uses included rustic shopping, arts and craft stores, galleries, offices; studio/residential; office park; waterfront dwellings with private moorings (Campbell Bernstein & Irving, 1990: iv). It was envisaged that West Island would be accessed via a drawbridge (Campbell Bernstein & Irving, 1990: iv).
Figure 1: Model of Portnet’s proposed Victoria Embankment Waterfront Development
The proposal undertaken by Campbell Bernstein & Irving in conjunction with other private consultants, stresses the importance of pedestrian access and integration with the adjacent city fabric. In addition, the proposal incorporates wider issues into planning the development, such as marine engineering impacts, environmental considerations, local government planning proposals, and market studies for shopping, offices and marinas (Campbell Bernstein & Irving, 1990).

A Liaison Body led the planning for the Victoria Embankment Waterfront Development and comprised representatives from port users and city organisations, such as the Chamber of Commerce (Campbell Bernstein & Irving, 1990: 35). The planning approach proposed flexibility and an "evolutionary planning process" along the lines of a "package of plans" (Campbell Bernstein & Irving, 1990: 40, 66). Furthermore, the proposals encouraged mixed land uses (Campbell Bernstein & Irving, 1990: 40). In summary, the plan attempted to create the Victoria Embankment Waterfront Development as an interface zone with the city, and integrate the proposal into the urban fabric of the city in an acceptable manner⁹ (Campbell Bernstein & Irving, 1990).

The Victoria Embankment Waterfront Development was however never implemented due to opposition from the Durban Local Government (Bilse, Interview: 10/11/97) (Gammadge, Interview: 19/11/97). Criticism levelled at the proposal raised concerns as to the scale, encroachment into the bay, and unacceptable traffic solutions (Gammadge, Interview: 19/11/97).

Briefly, studies of the proposal indicated that views from the Victoria Embankment would be impacted and the development proposed too many uses in relation to the area. Secondly, implementation of the plan would have required considerable reclamation, thereby reducing the surface area of the water. Proposed uses and intensity thereof necessitated the resolution of traffic problems, which was unacceptable to the then Durban City Council. Proposals to this end required the realignment of the Victoria Embankment. Furthermore, the proposals envisaged residential with private berths - a very elite trend occurring overseas. The then Durban City Council also opposed the indifference to the public at large, although because the firm was locally based, there were a number of proposals that were sensitive to the local conditions. In addition, the proposal ignores adjacent incompatible land uses such as the proposed Pier 3 terminal and the general cargo facilities, which would negatively impact on the development in terms of noise and views.

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⁹For example, the views from the city should not be broken (Portnent, 1990: 84).
4.4 FUTURE VIEW

The proposal for the Victoria Embankment above, relates to Portnet’s attempt at planning for uses other than shipping. In response to the lack of guidance for shipping uses in the port, Portnet undertook a planning exercise in 1992. Planning to this end culminated in the master plan Future View, which is in accordance with UNCTAD’s Port Development Guidelines (UNCTAD, 1985) to guide the long-term growth of the port (Portnet, 1992). The vision in Future View concentrates on shipping related activities within the port until 2015, but fails to contextualise the proposed shipping developments within the broader area of the port, and with other uses in the port. Furthermore, Future View disregards the impacts of its proposals on adjacent urban areas in terms of amenity and environmental effects, such as Portnet’s proposed Victoria Embankment Waterfront Development. Portnet’s master plan, Future View was generally influenced by shipping-related factors such as:

a) the dominating trend of containerisation
b) upgrading out-dated cargo facilities
c) increased capital intensive harbour operations and the creation of terminals at berths
d) an increase in chemical storage requirements
e) growth of agricultural imports
f) the need for deeper berths and;
g) the urban waterfront developments of the Point and Victoria Embankment (Portnet, 1992:10).

The master plan aims to establish Durban as a hub port and transhipment node for the remainder of Africa (Portnet, 1992: 11).

The only reference the plan makes to developments other than shipping are those of Cato Creek, the Point Development and the Victoria Embankment (Portnet, 1992: 39). Possible uses for Cato Creek included warehousing and distribution parks; commercial complexes; offices and a possible convention/exhibition centre (Portnet, 1992: 39). The impacts on the Point and Victoria Embankment developments however, are largely ignored because their activities would not affect commercial activities of the port (Portnet, 1992: 44). In contradiction, Future View proposes the construction of Pier 3 (a new container terminal) directly opposite the Victoria Embankment Waterfront on the central sandbanks (Portnet, 1992), which would destroy potential views from Portnet’s proposed Victoria Embankment Waterfront Development. The only other non-shipping use proposed in the port is the creation of a Natural Heritage site and represents Portnet’s attempt at placating environmentalists’ concerns (Portnet, 1992: 62).
Moodley critiqued Future View in his thesis (1994), and clearly illustrated the focus of the plan to be on port issues, neglecting the wider environment in which the port is located. Future View makes no attempt to integrate the city with the port, and potential possibilities of improving or creating such linkages between the city and port or other areas were determined to not be of any commercial value to the port and ignored in the master plan. The possibilities included the notion of a bridge over the bay connecting the Bluff with the city (Portnet, 1992: 39); a possible vehicular crossing over the harbour entrance in the form of a bridge or tunnel (Portnet, 1992: 39), a vehicular crossing between T-Jetty and Pier 1 (Portnet, 1992: 41), a rail tunnel crossing connecting the Bluff with the Point (Portnet, 1992: 41), and a train ferry crossing the entrance channel between Point and West stations to replace the railway line along Victoria Embankment (Portnet, 1992: 41). It is clear that the master plan Future View ignores the possibilities of improving connections between the city and the port, or even the linkages of the city with other parts of the city, because of its preoccupation with the shipping functions of the port.

The master plan was used to guide the growth of uses in the port, and because the focus of the plan was shipping-related, many of the proposals have been, or are currently underway (Bilse, Interview: 10/11/97). One of the proposals made in Future View is the creation of Pier 3 on the central sandbanks of the port (Portnet, 1992: 63), which was thought to solve the port's growing container demands. Although Future View is now largely obsolete (Bilse, Interview: 10/11/97), it has guided the planning of uses in the port with numerous attempts at updating it (du Cray, Interview: 10/11/97). As a consequence of the subsequent lack of planning initiatives for the port, the port of Durban currently lacks an overall plan to guide its growth and development. In terms of shipping-related uses however, a number of ad hoc, short-term proposals have been suggested, especially in regard to the expansion of the container terminals. The following section will examine the shipping and non-shipping related proposals to indicate the suggested location of the shipping developments in relation to other activities in the port. This will facilitate a comparison of the developments to assess the incompatibility thereof.

4.5 PRESENT DEVELOPMENT PROPOSALS
4.5.1 SHIPPING RELATED PROPOSALS

The development of container facilities in 1977 grew into a thriving activity with the annual growth in container imports and exports averaging between 7% and 8% per annum (Portnet, "Decision Document", 1996: 12). Critics of the port's planning
processes have blamed the port's knee-jerk reactions and short term ad hoc planning (Webb, Interview: 22/10/97) for the decreasing capacity of the port to handle its containers. The growing pressure for the provision of new container handling facilities have resulted in a number of proposals (refer Figure 2). These are:

a) Extensions and infill along the Point and T-Jetty, with a proposed reclamation of 51.3 ha (Portnet, "Decision Document", 1996: 15)

b) Expansion of Maydon Wharf by extending the existing berths 25 to 30 metres into the channel (Portnet, "Decision Document", 1996: 17)


d) Extension and increased use of Bayhead Marshalling Yard in addition to the construction of a turning basin (Portnet, "Decision Document", 1996: 19).


g) Expanding Salisbury Island to open the island up to four possible proposals ranging from no loss of water area to 12 ha (Portnet, 1996: 23).

Interviews with a number of respondents consider the issue of a deep-water harbour being constructed on the current airport site to be a realistic proposal. Although this is not located in the current port (and shall not be discussed further), the reasons behind the proposal relate to the ceiling reached in the port for shipping activities, the anticipated growth of containers and increasing pressure for tourism and recreational uses, which use up land that could be potentially used for containers (Bilse, Interview: 10/11/97), (Daley, Interview: 21/11/97), (du Cray, Interview: 10/11/97), (Retief, Interview: 3/10/97), (Webb, Interview: 22/10/97).
Figure 2: Proposed Locations for Non-Shipping Proposals

1 - Wilson's Wharf
2 - Victoria Embankment
3 - Cato Creek
4 - Point Development
5 - Bluff Development

Proposed Locations for Container Terminals
1 - Point & T-Jetty
2 - Maydon Wharf
3 - Congella Basin
4 - Bayhead Marshalling Yard
5 - Salisbury Island

Opposed Locations for Container Terminals
- Point & T-Jetty
- Maydon Wharf
- Congella Basin
- Bayhead Marshalling Yard
- Salisbury Island

The map shows the layout of the Port of Durban, with various proposed and opposed locations for shipping and non-shipping proposals.
4.5.2 NON-SHIPPING PROPOSALS

In addition to the shipping related proposals for the port, a number of leisure-based development proposals have been mooted primarily by private development companies. Such examples have included Wilson's Wharf, as well as the Natal Building Society (NBS) Development in the area between the Yacht Basin and Wilson's Wharf in the past. Present proponents of development proposals include: Rocpoint (Pty) Ltd., the Durban Local Government, the Bluff Development Company and, Ampros. The development proposals generally propose public, tourist and recreation facilities, including marinas, shopping, restaurants, residential and hotels amongst others.

4.5.2.1 WILSON'S WHARF DEVELOPMENT

Wilson's Wharf (refer to Figure 3) has been the subject of a number of proposals, which were rejected because of the scale and/or problems related to access (Gammadge, Interview: 19/11/97). The current proposal however, has been approved by both Portnet and the Durban Local Government, and shall be implemented once financial backing has been finalised (Daley, Interview: 21/11/97). The developers chose the Wilson's Wharf site because of its proximity to the water's edge, and the neighbouring commercial activity, which provides interest. Proposed land uses for this 22,000m$^2$ site include a marina, craft centre, cinema complex, lifestyle and fashion stores, and gourmet restaurants.

Economic feasibility studies of these uses were undertaken to ensure the viability of the development and use common thresholds to the city, namely numbers of visitors to Durban, socio-economic groupings of the local population, present demand for yachting berths, population growth, etc. These thresholds however do not take into account the possibility of other development proposals in the port being developed (Daley, Interview: 21/11/97).

\[\text{The land on which the proposed development is located was purchased from Transnet. The real estate had been leased by the Wilson family in terms of a 99 year lease, and approval for the purchase of land was granted on that basis (Daley, Interview: 21/11/97).}\]
4.5.2.2 VICTORIA EMBANKMENT WATERFRONT DEVELOPMENT

In response to a number of unsuccessful proposals for the Victoria Embankment\textsuperscript{12}, the Joint Planning Forum\textsuperscript{13} requested the preparation of a Development Framework Plan in 1993 for the Victoria Embankment, by the then Durban City Council in conjunction with Portnet (Physical Environment Service Unit, 1996: i). The Outline Development Plan used the rejected plan (Victoria Embankment Waterfront Development) as a starting point, suggesting smaller nodes (Gammidge, Interview: 19/11/97).

The aim of the Outline Development Plan (refer Figure 4) is to provide a framework to guide integrated development within the Victoria Embankment area (Physical Environment Service Unit, 1996: i). Although the Outline Development Plan formulates policy to guide future developments in the area, the Plan concentrates only on that particular area and operates outside of a broader plan to guide all the developments along the northern edge of the port. The Outline Development Plan for the Victoria Embankment stresses the importance of public accessibility to the area (Physical Environment Service Unit, 1996: i). Furthermore, the Outline Development Plan stresses the role of the Victoria Embankment as an interface between the CBD and the port, arguing for the strengthening of this quality.

A main concept underlying the development of Victoria Embankment advises the integration of the Victoria Embankment with the CBD, as well as the integration of the Victoria Embankment with the port (Physical Environment Service Unit, 1996: i). In addition, the Outline Development Plan argues for the accommodation of the shipping related functions within the port to secure the port's competitiveness\textsuperscript{14}. Furthermore, the Outline Development Plan proposes access to a broader spectrum of users in the port (Physical Environment Service Unit, 1996: i).

The Outline Development Plan suggests that five precincts are developed from west to east within the Victoria Embankment area: Fisherman's Wharf, Broad Beach, the Yacht Basin, Waterfront Gardens and the Craft

\textsuperscript{12}Especially the Victoria Embankment Waterfront Development proposed by Portnet.

\textsuperscript{13}A joint planning initiative between the then Durban City Council and Portnet to inform each other of developments within the port and city areas (Webb, Interview: 22/10/97).

\textsuperscript{14}This is the only plan to not only accept other uses in the port, but encourage them as well.
Harbour (Physical Environment Service Unit, 1996: 2). A broad mix of land uses are proposed within the following precincts:

a) Fisherman's Wharf on the Wilson's Wharf site: commercial, retail, office, entertainment, the integration of fishing activities, retention of yacht moorings, and encouragement of public boating. It is envisaged that this area be a waterfront development node (Physical Environment Service Unit, 1996: 2, 4).

b) Broad Beach: rehabilitation as a marine sanctuary with passive recreation provided for as a proposed waterfront park (Physical Environment Service Unit, 1996: 2, 5).

c) Yacht Basin: centralised moorings for a variety of water craft; public waterfront park, low-rise developments with a focus on public uses and a waterfront park including a promenade and cycle track as a potential waterfront development node. In addition, the development of low-rise retail and office uses of a marine nature, and a low-rise hotel (Physical Environment Service Unit, 1996: 2, 6).


e) The Craft Harbour: expansion of maritime museum and establishment of open-air museum as a possible waterfront development node (Physical Environment Service Unit, 1996: 8).

The Outline Development Plan raises concerns about the decreasing water surface area of the port, and proposes the re-creation and increase of water surface area (Physical Environment Service Unit, 1996: 1). In line with the proposal for improved integrated planning of this area, the Durban Local Government and Portnet have both recently undertaken a joint effort at evolving a planning framework for the Victoria Embankment (du Cray, Interview: 10/11/97).
Figure 4: Conceptual diagram of the Victoria Embankment Outline Development Plan
4.5.2.3 CATO CREEK

Cato Creek is roughly situated at the "elbow" of land connecting the Victoria Embankment with the Point (see Figure 1). Plans for this area recognised the potential scope provided for re-development, hoping to transform the area from railyards to high density, mixed income housing (Rice, Interview: 7/11/97). However this proposal was shelved when the key proponent for the development, Sipho Nyawo, relocated (Rice, Interview: 7/11/97). This issue indicates the shortage of long-term plans for the port, pointing to the tendency of accepting ad hoc development proposals. Portnet have since initiated construction of a car import and export terminal in the area and this is currently underway, although the impacts of this on the city are enormous. Costs incurred by the city include the increased numbers of trucks, the effect of increased numbers of trucks on the road in simple terms of damaging road surfaces, and related impacts of car accidents, accidents with pedestrians and congestion (Webb, Interview: 22/10/97). Although a traffic engineering study was undertaken (Bilse, Interview: 10/11/97), the study failed to take cognisance of the hidden costs mentioned above.

4.5.2.4 THE POINT DEVELOPMENT

The consolidated area of 55 ha comprising the Point Development was purchased from Portnet, Transnet and other landowners by Rocpoint (Pty) Ltd. to develop the area. The narrow strip along the entrance channel has been excluded from the area purchased by Rocpoint (Pty) Ltd. to allow for the proposed widening of the entrance channel for post-Panamax ships. The area south of Point Road has not been sold and is currently used for the handling of general cargo, namely scrap metal and granite blocks. These cargo handling facilities could impact on the future Point development because of the incompatibility of recreational uses and these particular shipping activities in terms of noise, views and land values in the Point.

Two development proposals are currently being formulated. It is envisaged that the short-term temporary development (see Figure 5) situated on the Point leasehold land with an area of 12.6 ha will be developed over the next five years. Possible land uses include
retail, entertainment and leisure, food and beverages, arts and crafts, and traditional and cultural uses. Included in these uses is the construction of a 5 000 capacity concert venue. The aim of the short-term development is the regeneration of the Point whilst the planning processes for the long-term framework plan are completed.

The long-term framework plan (see Figure 6 for broad area) proposes a number of mixed land uses, including high class hotels, hotel-resorts, offices, commercial, high class residential, marina and private moorings, speciality shopping, cinemas, restaurants, festival market, international cruise liner terminal, light industrial and other uses related to the historical and cultural diversity of the area (Vandeverre, Interview: 25/11/97). The uses for the area have not been finalised as yet, because the planning for the area is still continuing. The planning approach applied to the Point was in accordance with the requirements outlined by the Durban Local Government. These required the preparation of an Integrated Development Framework Plan and the identification of "precincts" - essentially a similar "package of plans" applied to the Victoria and Alfred Waterfront in Cape Town (Vandeverre, Interview: 25/11/97).

In essence, the proposals aim to integrate the Point with the Golden Mile and CBD thereby taking cognisance of the broader area. The developer has strived to inform the public of proposals, and is currently undertaking market studies in terms of the office and residential take-up rates. Once again however, this market assessment is only based on the Point Development being implemented, and ignores the potential of other developments occurring in the port (Vandeverre, Interview: 25/11/97).
4.5.2.5 BLUFF HEADLAND DEVELOPMENT

The Bluff Headland, a steep sand ridge, frames the southern edge of the port and entrance channel. The Bluff ridge is approximately 80 metres high and serves as a major landmark for Durban, as well as affording unbroken views across the harbour entrance channel. Although not easily accessible to the public, the development of the Bluff could allow a spatial linkage to the port, as well as the CBD.

Operation Jumpstart provided the impetus for both the Point and Bluff Developments (Stockley, Interview: 19/11/97). The Durban community recognised the potential in developing both the Point and Bluff as a means of kick-starting investment in the urban edges of the port (Stockley, Interview: 19/11/97). The Bluff Headland Outline Development Plan proposed by the Durban Local Government encourages the development of the Bluff Headland as a multifunctional destination point integrated with the natural environment. The Outline Development Plan proposes the integration of the Bluff's topographic prominence and panoramic views with its rich history comprising of cultural, military and economic aspects (Bluff Development Company, 1996: 7). The Outline Development Plan identifies four precincts: the Crest View site, Bluff Slopes, Channel Wharf and Beach Head (Bluff Development Company, 1996: 7).

Following with the proposals of the Outline Plan, the Bluff Development Company is proposing a multi-functional destination node (see Figure 7).
Figure 7: Artists Impression of the Bluff Development
Suggested uses include a resort hotel, aquarium, restaurants, bars, music venues, speciality shops and a museum integrated with the environment of the area (Bluff Development Company, 1996: 5). In this manner, the proposal uses the Outline Development Plan as a policy document, positioning the development within this framework. Access to the Bluff Development is proposed via a water transport system (Bluff Development Company, 1996: 7) between T-Jetty, the Point and the Bluff (Bluff Development Company, 1996: 11) thereby aiming to spatially integrate the Bluff and Point. In concert with other proposals in the port, the developers undertook a market feasibility study for the Bluff Development only, ignoring other proposals in the port.

4.5.2.6 BAT CENTRE

Flowing out of Portnet's changing policy towards the acceptance and promotion of different activities within the port, Portnet offered the premises adjacent the Maritime Museum to the public, leasing the site to the Bartle Arts Trust for 20 years [BAT]15 (Hartley, Interview: 18/11/97). The Trustees chose the location for this arts centre because of its proximity to the CBD, and accessibility to tourists and public (Hartley, Interview: 18/11/97) (see Figure 1). Although the BAT Centre is within walking distance of the CBD, pedestrian access to the site is only via an underpass, and perceived by the public to be dangerous. This underpass is located below the railway line that connects Maydon Wharf with the Point. Vehicular access to the BAT Centre is afforded over one level crossing located between the Point Yacht Club and Royal Natal Yacht Club. The lease was therefore signed on the proviso that the difficult access to the Centre be resolved through the construction of a level crossing connecting the BAT Centre with the Victoria Embankment (Hartley, Interview: 18/11/97). In 1995 however,

15 The BAT Centre is used as an arts centre, providing studios and teaching to artists as part of the RDP philosophy (Hartley, Interview: 18/11/97).
Transnet reneged on the agreement and as a result, access to the area remains difficult and potentially dangerous (Hartley, Interview: 18/11/97).

Additional problems are experienced by the BAT Centre and relate to inadequate parking facilities, an inadequate provision of public toilets and the incompatibility of adjacent uses in the area; the general cargo uses to the north and the marine services on the site (Hartley, Interview: 18/11/97).

This example highlights the ad hoc approach used by Portnet. The land was offered to the public for a public development, but in doing so ignores surrounding land uses\textsuperscript{16}, the necessity of easy access and the provision of parking and public facilities such as toilets, which befit a public place.

4.6 EVALUATION OF PROPOSALS AND DEVELOPMENTS

Plans formulated by the port authorities (South African Rails and Harbours, South African Transport Services, and Portnet) have logically focussed on the shipping activities related to the port. Recent trends in Portnet however indicate an increasing acceptance of leisure and tourist uses in the port. Although the policies to integrate the uses are in place at a national level, it would appear that the mechanisms and will to implement policies are not (Hartley, Interview: 18/11/97) (Stockley, Interview: 19/11/97). The pressures on Portnet to accept and encourage recreation within the port, in addition to resolving critical issues related to space requirements for containerisation, are becoming increasingly visible through incompatible proposals and short-term solutions.

The proposals for shipping-related activities involve the upgrading and extension of areas for container handling in the port. The proposals for non-port related developments in the harbour, on the other hand, aim to improve the wider area for present user groups as well as attracting new user groups to the water's edge. The planning policies outlined by the Durban Local Government guide the non-shipping related developments and encourage urban renewal, integration and interconnectivity of activities to ensure a sustainable use of the port vital to the long-term success of the port.

\textsuperscript{16}The loading of scrap metal occurs to the north of the BAT Centre, whilst Portnet’s tug operations are located to the south.
The implications of the container proposals resulted in an Integrated Environmental Management study in 1996. The effects of the container proposals on the non-shipping development proposals and surrounding city range from negative impacts on amenity, to severe environmental impacts in terms of an extinction of breeding facilities on the central sandbank, to a declining water surface area of the port. These impacts indicate the growing need for integrated planning of both shipping and non-shipping developments and activities within the port. The impacts of shipping-related proposals on recreation-centred developments are as follows:

a) Wilson’s Wharf Development: The proposed development would be negatively affected by the construction of Pier 3 on the central sandbank, due to the bright lights required for 24 hour activities, and the noise generated by container-handling facilities (Watermeyer Prestedge Retief, 1996: 43).

b) Victoria Embankment Waterfront: The proposal to construct Pier 3 on the central sandbank would impact on public uses in terms of collecting bait, angling and sailing (Watermeyer Prestedge Retief, 1996: 40). The lights and noise generated by the proposed container handling facilities on both Pier 3 (central sandbank), Point, City and T-Jetty will also impact on residents and businesses along the Esplanade (Watermeyer Prestedge Retief, 1996: 43). Not only would these impacts affect the amenity of the surrounding area, but they would also diminish the views of the bay from the Esplanade, resulting in declining land values (Watermeyer Prestedge Retief, 1996: 40). Furthermore, the proposed Point, City and T-Jetty container terminals would result in increased traffic generation along the Victoria Embankment, thereby degrading the amenity of the road as well as that of the city, and broader metropolitan area (Watermeyer Prestedge Retief, 1996: 42).

Affecting not only the Victoria Embankment, but the entire port, the proposed Pier 3 on the central sandbank would effectively transform the Bay into a channel (Portnet, "Decision Document", 1996: 46). Not only would this decrease available space to water users (yachting, dinghies, etc), but it would also prevent any future integration of the port with the city because of the proximity of shipping activities to the CBD, and the large-scale destruction of the area from a bay to a channel (Watermeyer Prestedge Retief, 1996: 46).

c) Cato Creek: The construction of the car import-export terminal will destroy the integration of waterfront developments along the northern edge of the port. Not only will this destroy potential linkages between the Point and Victoria Embankment developments, but it will also seriously impact on the city's road infrastructure.
d) Point Waterfront Development: The proposed container terminal at the Point, City and T-Jetty locations would negatively impact on the Point Development in terms of lights, noise and traffic, thereby reducing the value of the land threatening the development of the area (Watermeyer Prestedge Retief, 1996: 43).

e) Bluff Headland Development: The Point, City and T-Jetty container proposals will reduce the high-class value of the proposed development through noise and bright lights. This could result in the failure of this development.

As indicated earlier, the proposed locations of the container-handling facilities required an Integrated Environmental Management Study, which was undertaken by Watermeyer Prestedge Retief. Their study highlighted the impacts listed above, as well as indicating that the proposed expansion of container handling facilities in the Congella Basin would prevent future southward expansion of the Bay (Watermeyer Prestedge Retief, 1996: 45). Considering the seriousness of these impacts (both short-term container solutions, and long-term expansion of the port), it is increasingly imperative that all plans and proposals for the port are integrated as fully as possible.

The analysis of each proposed non-shipping development illustrates the overlap of uses throughout the port. Each development is proposing recreation, entertainment, tourism, commercial, retail, etc. in isolation from each other. This could have severe implications on the success of the developments. Should every development go ahead, the question of economic sustainability would be an issue because no economic study has been undertaken. Each development argues for similar uses and integration is required to ensure that the population can support all developments in the port. In conjunction with the need for an integrated process is the need for a logical phasing of all developments. This will ensure that each development is implemented in accordance with applicable take-up rates and thresholds.

4.7 CONCLUSION

This chapter illustrated the two pressures currently being exerted on Portnet. One aspect has to do with shipping related uses, and the other with non-shipping uses. Portnet have reached a ceiling in terms of space provision for container handling, and are encountering increasing pressure from the citizens of Durban to provide public facilities and recreational waterfront developments. As such, they are examining the possibility of developing a deep-water container harbour on the current airport site. Although Portnet have in principle acknowledged the suitability of developing the northern edge of the port as an urban waterfront (du Cray, Interview: 10/11/97), many of Portnet's proposals and actions contradict their commitment to the implementation of this notion.
As indicated in the Moffatt Plan and Future View, previous plans undertaken by the port authorities concentrated on shipping-related uses attempting to meet goals rather than following suitable processes. Although the current construction of the Cato Creek car export and import terminal is a short-term solution (du Cray, Interview: 10/11/97), it has severely damaged potential spatial linkages along the northern edge of the port between the Point and Victoria Embankment and highlights the reactive approaches adopted by Portnet.

Many of the non-shipping proposals encouraged by Portnet are located adjacent incompatible uses. An example of this is the BAT Centre, which fronts the general cargo facilities of scrap metal and granite loading. Bounded by the railway line and general cargo loading facilities, the area in which the BAT Centre is located is difficult to access and conflicts often arise. Similarly, the southern edge of the Point Development borders the loading area of granite blocks, which, if not moved, could impact on the property values of the area, retarding the potential of the development. This chapter has clearly illustrated how most proposed developments in the port would be negatively impacted by the construction of Pier 3 for container handling, as well as a number of other container proposals.

The Durban Local Government and members of the public acknowledge the vital role of the port in Durban's (and the country's) economy, yet Portnet do not concede to the significance of urban waterfront developments sitting side by side with the working activities of the port. In light of these factors, it is clear that a new realism is required in terms of planning for and of the port. An integrated management system within the port is imperative for the economic sustainability of Durban as a Port City, and it is vital that Portnet and the Durban Local Government resolve a long-term vision for the port, as well as integrating and co-ordinating long-term plans with each group. Related to this issue, it is also clear that a market study of the entire port area should be undertaken to assess the viability of all developments in the area. Not only would such a study indicate the massing of developments, but could facilitate a phasing process by which certain developments are constructed assuming take-up rates over a number of years.

Although Portnet and the Durban Local Government have historically experienced a tense relationship in terms of planning (Webb, Interview: 22/10/97), the two bodies have attempted to work together in the past. An example is the Point proposal, whereby the South African Transport Services (SATS) and the then Durban City Council together made a number of proposals for the Point area in 1984 (Borthwick, 1993: 15). In 1986, these proposals were extended to produce the 1987 Structure Plan (Borthwick, 1993: 15). Although development did not occur in the area for some time, the Point Steering Committee initiated a number of workshops in 1990/1991 whereby members of the community participated (Borthwick, 1993: 15). Thus, it is clear that the two bodies can work together for a common vision.
The combined forces of the Durban Local Government will ensure effective multifunctional linkages between the port and city, e.g. tourism, leisure, recreation, transport and shipping activities. And as such, Portnet and the Durban Local Government could separate formal industrial harbour activities of shipping and containers from the recreational activities. It is self evident that the heavy industrial areas in the southern locality of the port are ideally suited to absorb further similar high impact activities, and the availability of suitable land, good road and rail access, must be seen as reasons to expand the port southwards, perhaps leaving the northern edges of the port open to recreational and tourist uses.
CHAPTER FIVE: POLICIES DETERMINING MANAGEMENT OF PORTS IN SOUTH AFRICA

5. INTRODUCTION

Chapter Four outlined the shipping and non-shipping related proposals in Durban port to compare the levels of integration achieved by them. In conclusion, it was argued that the proposals made by Portnet, other organisations and businesses were often incompatible and lacked an integrated focus.

This chapter will firstly explore the different roles of the port at the macro global scale ranging through to its local, metropolitan role to illustrate the port's significance as an economic and developmental asset. The second component of this chapter will examine current national policy applicable to the port, as outlined in the White Paper on Transport (1997). The White Paper is a policy document that clearly illustrates the transformation of the role of government in transport from the "provider of infrastructure, dominant operator and regulator of bureaucratic detail", to an organisation emphasising policies and strategic planning (Department of Transport, 1995-1996. Internet: http://www.transport.gov.za/doc). The study of the White Paper examines how the broad national policies affect the Port of Durban in terms of the differentiation between port operations and port authorities.

Extending then from policies and strategies, this chapter looks at the present working relationship between Portnet and the Durban Local Government to facilitate the comparison of any changes in policy. The chapter then identifies any possible future changes in the relationship between the Durban Local Government and Portnet.

5.1 ROLE OF THE PORT

The port fulfils a range of roles within different contexts and is subject to international, regional and national influences. The port has extensive linkages with the international arena, at the sub-global scale, across the national scale, and within the province. In comparison, the spatial linkages are weaker with the metropolitan and local areas within Durban.

5.1.1 INTERNATIONAL

The port is well located along the international shipping routes connecting the United States, South America, Western Europe, Asia, Australia and the Far East. It is the busiest port in the African continent handling in excess of 5 000 ships and 25.3 million tons of cargo per annum with an estimated value of R50 billion (Portnet, "IEM Information Document 2", 1996: 2). The port is undoubtedly an integral component of the global economy because it provides a transhipment node
for East African shipping traffic, as well as traffic from other countries within the Indian Ocean Rim.

The Far East is thought to hold the greatest potential for economic growth - nearly 40% of export and import cargo handled in the port in 1994 was destined for, or from the Far East (Portnet, "IEM Information Document 2", 1996: 2). This is important when considering the emergent economic power of the Indian Ocean Rim, of which, South Africa, India, Singapore, Oman, Kenya, Mauritius and Australia form a core membership. The implications of this Indian Ocean Rim include the tremendous increase in trade between the member countries, as well as a parallel increase in Durban's port and shipping activities. The pressures on the port are already apparent: the increases in trade and shipping require extended and improved facilities to efficiently handle the greater loads, which in turn requires additional land or sea space in the port.

5.1.2 SUB-GLOBAL

In light of South Africa's regional economic strength and efficient transport networks linking it to Sub-Saharan Africa, South Africa is a key member of a number of sub-global groupings, namely the Port Management Association of Eastern and Southern Africa (PMAESA) and, the Southern African Development Community (SADC). These trade linkages are similar to the economic unions of European countries and represent an attempt at consolidating economic power to ensure greater leverage in global markets.

The port is increasingly regarded as a gateway into Sub-Saharan Africa because of its direct links with other African ports such as Maputo, Beira, Dar-es-Salaam and Mombassa from which cargo is transported to and from Zimbabwe, Zambia and Malawi (Portnet, "IEM Information Document 2", 1996: 5). Because of the port's strategic location on international shipping routes, the port forms a shipping hub for East African ports, as well as Indian Ocean Island ports and is expected to develop into the hub port for Africa.

5.1.3 SOUTH AFRICA

Seven commercial ports currently serve South Africa, namely: Durban, Richards Bay, East London, Port Elizabeth, Mossel Bay, Cape Town and Saldhana Bay (Portnet, Internet: http://gandalf.castcoast.co.za/users/portnet/portnet.htm). Of these ports, 67% of the total revenue generated in 1995 was from Durban (Portnet, 1996: 8). Durban's primacy has been attributed to its flexibility and the port's ability to
handle a range of different cargoes, as well as to its proximity to the economic power of Gauteng - something which has given Durban considerable comparative advantage over other South African ports.

The role of the port could however be eroded in the long term by the Maputo Corridor Development, which will provide shorter transport access between the Maputo Port and Gauteng than that between Durban's port and Gauteng. The container handling IEM Study by Portnet identifies the potential workload of the Maputo Port in terms of TEU's (Twenty Foot Equivalents), claiming that Maputo is expected to handle 100 000 TEU's in the next four years, whilst its potential in handling 1 million TEU's is presently under investigation.

5.1.4 KWAZULU NATAL

Two of the country's busiest export and important ports are located in KwaZulu Natal, namely Durban and Richards Bay. Durban's port services the Durban/Pinetown/Pietermaritzburg activity corridor as well as the Gauteng area (Portnet, "IEM Information Document 2", 1996: 4). Richards Bay presently handles approximately 1% of the country's container traffic, but could increase this capacity with the extension of a quay presently being constructed to handle an additional 700 000 TEU's annually. In addition to the two ports, KwaZulu Natal consists of a number of developing areas and growth points, examples of which are Pinetown and Pietermaritzburg. The port is therefore located in a rapidly expanding activity corridor, which is attracting further industrial and commercial development. Shipping activity in the port is thus expected to increase significantly in the near future.

5.1.5 DURBAN METROPOLITAN AREA

The port is located within the Durban Metropolitan Area (DMA), the second largest economic node in South Africa after Gauteng. The DMA also forms the economic heartland of the province and the eastern coast. Thus, the port forms an integral part of the DMA economy, which is highly dependent on the economic well-being of the port (Portnet, "IEM Information Document 2", 1996: 5). It is estimated that more than 23 000 direct jobs are linked to port activities, representing an estimated R920 million per annum (Portnet, "IEM Information Document 2", 1996: 5). The port is located in the downtown CBD area of Durban, only two blocks away from the core of the city. In terms of the port being so spatially central, the port plays an integral part of "propping up the CBD" (Daley, Interview: 21/11/97).
This section has clearly described the current role of the port in a number of different contexts, as well as pointing to potential competition provided from other ports. The port is undeniably the economic powerhouse of the Durban area, and economic gateway to the rest of the country. As such, national ports policies formulated at a national level, will undoubtedly affect the port in numerous ways. The following section therefore examines the White Paper on Transport, which outlines national policy for the transport sector of the country to guide the future growth of the transport sector and the port.

5.2 WHITE PAPER ON TRANSPORT

The role of the Department of Transport has historically been that of a "regulator of bureaucratic detail, a provider of infrastructure and a transport operator" (Department of Transport, 1997: http://www.polity.org.za/govdoc). The role of the Department of Transport now is to reverse this style of management and concentrate on the transformation of the transport sector with a reduced involvement in operations and provision of infrastructure and services (Department of Transport, 1997: http://www.polity.org.za/govdoc).

A significant shift in the White Paper policy is the recognition of the need for a flexible public transport policy that will continuously be revised (Department of Transport, 1997: http://www.polity.org.za/govdoc). The goals of transport institutions are to ensure "outward looking" policies, shaped by the users, and supporting the economy and broader society. In line with this, the policy encourages public participation in major projects (Department of Transport, 1997: http://www.polity.org.za/govdoc). In addition to these broad goals, the policies in the White Paper are striving for an environmentally and economically sustainable transport operation (Department of Transport, 1997: http://www.polity.org.za/govdoc). To this end, the policy commits the Department of Transport to an integrated environmental management approach in the provision of transport (Department of Transport, 1997: http://www.polity.org.za/govdoc).

The White Paper proposes the integration of planning, institutional matters, spatial aspects and modal means of transport to ensure an efficient transportation system (Department of Transport, 1997: http://www.polity.org.za/govdoc). The Department of Transport will co-ordinate transport policy and formulate and implement strategies to this end (Department of Transport, 1997: http://www.polity.org.za/govdoc). This is expected to foster improved co-operation between transport and land use planning, as well as increased collaboration between different levels of government (Department of Transport, 1997: http://www.polity.org.za/govdoc).
In addition to restructuring the transport sector, the Department of Transport is assessing methods of improving South Africa's competitiveness within both the international economic sphere and locally (Department of Transport, 1997: http://www.polity.org.za/govdoc). In 1997 South Africa became a member of the Southern African Development Community (SADC), and in this regard national government's role is to co-ordinate and promote transportation linkages between South Africa and other neighbouring countries (Department of Transport, 1997: http://www.polity.org.za/govdoc).

Within the integrated transport sphere of South Africa, Schedule 4 of the Constitution of South Africa dated May 1996 notes the possibility of shared responsibility for a number of transport areas, including harbours (Department of Transport, 1997: http://www.polity.org.za/govdoc). Taking into account the significant roles that metropolitan areas have in terms of ports and shipping, the White Paper recommends that institutions recognise the concern of metropolitan governments and encourage their participation (Department of Transport, 1997: http://www.polity.org.za/govdoc).

5.3 TRANSPORT INFRASTRUCTURE

The investment of large amounts of capital by national government in the fixed assets related to transport necessitates the careful management of this infrastructure (Department of Transport, 1997: http://www.polity.org.za/govdoc). Transport infrastructure is defined as "physical elements upon which transport operations take place", which therefore includes harbours (Department of Transport, 1997: http://www.polity.org.za/govdoc). The careful management of this resource is essential to the advancement of socio-economic development, if South Africa is to become the "hub of transport" within the SADC area (Department of Transport, 1997: http://www.polity.org.za/govdoc).

The potential wastage of scarce resources in the uncoordinated planning of transportation has led the Department of Transport to recognise the imperatives of drawing together public sector bodies and private sector interests to maximise resource utilisation (Department of Transport, 1997: http://www.polity.org.za/govdoc). In a similar vein, the White Paper recommends an increasingly balanced approach to transport, by integrating transport management with matching land use and transport demands (Department of Transport, 1997: http://www.polity.org.za/govdoc). In addition, the White Paper states that the status of particular ports and airports will be promoted to "hubs" and will be "properly equipped to maximise South Africa's participation in the global economy" (Department of Transport, 1997: http://www.polity.org.za/govdoc).
5.4 NATIONAL PORT POLICY

The White Paper proposes the establishment of a port authority (or authorities) regulated by an independent body responsible for the maintenance and development of port infrastructure (Department of Transport, 1997: http://www.polity.org.za/govdoc.). The proposed port authority will be separate from the port operating entity, and will involve key role players, such as metropolitan governments, in strategic planning (Department of Transport, 1997: http://www.polity.org.za/govdoc.). The port operating entity will become increasingly privatised to encourage competition within ports (Department of Transport, 1997: http://www.polity.org.za/govdoc.).

Because shipping is an international activity, it is subject to immense competition and economic pressure from foreign competitors. As such, the White Paper aims to ensure an effective environment in which South African shipping can compete with international carriers (Department of Transport, 1997: http://www.polity.org.za/govdoc.). One of the ways in which it hopes to achieve this is by proposing a clearly defined regulatory and flexible framework within which maritime activities can occur. The policy stresses the importance of flexibility to allow for changing needs and circumstances. In addition, a strategic objective of seaports is to follow an "open ports" policy rather than the previous protectionist method of operation (Department of Transport, 1997: http://www.polity.org.za/govdoc.). The White Paper also aims to encourage the "expansion of international trade and tourism" (Department of Transport, 1997: http://www.polity.org.za/govdoc.).

The recognition of ports as strategic national assets, serving the entire country, will undoubtedly influence the structure of a port authority and the administration thereof. The White Paper examines the possible shifting of port authority from the existing body (Portnet) to a national level, or possibly even to the provincial or local government levels (Department of Transport, 1997: http://www.polity.org.za/govdoc.). In any event, the functions of a port authority will be to administer port infrastructures and ensure that the long-term development of the port is tailored to meet the needs of the economy (Department of Transport, 1997: http://www.polity.org.za/govdoc.).

National transport policy clearly indicates a shift in priorities at a national level and a move towards long term visions and strategies. Other aspects of transportation also being restructured include the potential differentiation between port operations and port authorities as well as co-ordinating transportation between South Africa and its neighbouring states.
5.5 IMPACTS ON PORTNET

The formulation of the transport policy was undertaken by national government, and the implementation thereof in the port of Durban will be through Portnet (until a final decision has been made concerning the differentiation of a port operator and port authority). The impacts on Portnet will be profound and their direct involvement in port operations are likely to decline considerably. Uncertainty surrounds Portnet's possible role in a port authority for Durban. Until the decision is made regarding the division of port operations from a port authority, national policy will continue to affect the day to day management of Portnet in a number of ways.

Portnet are increasingly having to adjust to the nationally formulated "outward looking" policy, which encourages public participation in major projects and developments. The method of management is already changing from the former bureaucratic and rigid styles to a more flexible approach, and Portnet have had little choice but to transform their approach to a forward-looking one, that includes long term visions and goals. In light of these changes, Portnet (or the proposed port authority) will have to increasingly accommodate key role players, namely the Durban Local Government and other stakeholders, in strategic planning of the port. This represents a drastic shift from the protectionist practices of a bygone era.

According to national directives, Portnet are now required to ensure that the management of their organisation follows the principles of the IEM approach, which implies greater accountability to the broader socio-economic, political and environmental arena. This, combined with increasing public involvement will inevitably transform the management structure of Portnet to an increasingly co-operative and transparent organisation.

In the context of increasing political openness, and until a decision is made regarding the establishment of port authority, Portnet will have to ensure that shipping-related activities are co-ordinated nationally and provincially, as well as between neighbouring countries. Portnet therefore still have to operate with other transport divisions within Transnet in addressing inefficiencies of resource utilisation through co-ordinated management. In light of Durban's port being recognised as a "hub port", because of its participation in the global economy, and the additional expansion of the port, increasing co-ordination between intermodal\(^\text{17}\) systems are required.

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\(^{17}\) Different types of transport used in the transportation of goods from container ships i.e. trains, container trucks, etc.
Changes in policy have occurred at a national level, against a backdrop of political transformation. Although the changes to be implemented by Portnet are positive, forward thinking, and sustainable, they have a way to go in moving from past practices and forward into this new era of port management and planning.

5.6 PORTNET AND DURBAN LOCAL GOVERNMENT RELATIONSHIP

With the decision for the transformation of Transnet's structure and policy occurring at a national level, many people believe that its employees have not been adequately informed of reasons for the changes, and this has resulted in a resistance and resentment on the part of employees towards non-shipping users in the port (Hartley, Interview: 18/11/97), (Stockley, Interview: 19/11/97), (Webb, Interview: 22/10/97). This discontentment as well as an historically unhappy relationship between the Durban Local Government and Portnet will need to be resolved within Portnet as an organisation and between the two organisations.

The primary reason for the difficult and, sometimes, turbulent relationship of the Durban Local Government is that the port has historically been managed by a national body as a private concern, interested only in their needs and not those of the public, and within a city which has had different priorities and needs. Although Portnet and the Durban Local Government undertook separate planning and development projects, the two areas are inextricably linked and their success is depends on the efficient functioning of one another. Reports about conflicts between Portnet and the Durban Local Government are numerous. This section will examine some of the primary examples of such conflicts in the past.

In 1921, the Harbour Master proposed the construction of shipping developments on the Victoria Embankment (Pearson, 1995: 146) indicating a potential breach of the Victoria Embankment Agreement. Although this proposal was never implemented, it represented a disregard for such agreements and treaties by the port authorities, and in this way, fostered the beginning of along history of tension in relation to the port.

The Moffatt Plan formulated of the 1950's was later implemented without any consultation with the then Durban City Council, and it transformed the port dramatically from a public facility to a restricted, shipping area (Physical Environment Service Unit, 1997: unpublished notes). In the years following the Moffatt Plan, the port underwent major transformations in terms of vast expansions and growth, infilling, reclamation, and the destruction of recreation areas, as presented in Chapter One.

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18 Please refer to Chapter One.
The caveat between the Durban Local Government and Portnet was reinforced in 1995/6 when relations between Portnet and the Durban Local Government deteriorated further still. The issue arose out of Portnet's dumping of rubble in the Natural Heritage site and extension to Berth 205 without the Durban Local Government's knowledge (Webb, Interview: 22/11/97). In the early 1990's, Portnet and the Durban Local Government met once every 2 months to discuss and inform each other of significant proposals and issues (Rice, Interview: 7/11/97) (Webb, Interview: 22/11/97). Portnet's failure to mention these developments at the meetings served to fuel the mistrust between the two bodies (Webb, Interview: 22/11/97).

The Integrated Environmental Management (IEM) process undertaken in 1996 to resolve the location of a proposed container terminal was marked by three ambiguous effects:

- it contributed to the tension between the Durban Local Government and Portnet,
- it provided a platform for facilitating a greater understanding of the roles of each organisation,
- and it provided a way forward for the two organisations to work together.

The IEM process served to aggravate the relationship between Portnet and the Durban Local Government in that Portnet breached the IEM process several times before the consultative process had completed, insisting on the construction of Pier 3 on the central sandbanks (Webb, Interview: 22/10/97). Portnet acknowledge this transgression, and managed to salvage the entire exercise through careful mediation (Bilse, Interview: 10/11/97).

The conflict between Portnet and the Durban Local Government stems in part from conflicts between local and national interests (du Cray, Interview: 10/11/97) as well as arising from planning issues (Bilse, Interview: 10/11/97).

The element of distrust in the relationship between the Durban Local Government and Portnet may be traced back to the disjointed planning processes undertaken by both organisations, who lack a vision and solution to the function of the port as both a shipping hub and recreational area (Bilse, Interview: 10/11/97) (Physical Environment Service Unit, 1997: unpublished paper).

As a national asset, Portnet has to make decisions based on the implications for the hinterland and national issues when planning port developments. As such, profits derived from the port are often channelled into these areas for upgrading (du Cray, Interview: 10/11/97). Although shipping activities in the port are dependent on the city for the provision of infrastructure and services, the city receives no monetary gain from the port.
This fact is an additional reason for the conflicts between the Durban Local Government and Portnet, which arise from budgetary issues (du Cray, Interview: 10/11/97). The net profits from the port's shipping activities generates an annual income of R700 million for Portnet, which is ultimately destined for national government (du Cray, Interview: 10/11/97). (Physical Environment Service Unit, 1997; unpublished notes). The only real benefits Durban gains from shipping activities in the port are related to employment generation and indirectly beneficial activities (du Cray, Interview: 10/11/97). Although studies by Prof. T. Jones (Portnet, "Information Document 4", 1996: 17-20) highlight the significance of these benefits, the issue of no profit accruing to the city may become problematic as the Durban Local Government undertake to meet the infrastructural and socio-economic needs of its community (Physical Environment Service Unit, 1997: unpublished notes).

Although the White Paper allows for the possibility of a metropolitan government owning and deriving economic benefit from the port, this would be in conflict with the national concerns of a developing country. As a developing country, South Africa can ill afford city, provincial or regional competition at this stage (du Cray, Interview: 10/11/97). The shipping activities of the port serve the national economy far beyond the borders of local and provincial economies, and planning from a national level protects against the duplication of facilities and the wastage of scarce resources (du Cray, Interview: 10/11/97).

The relations around technical matters between Portnet and the Durban Local Government, i.e. the day to day operations, sand pumping scheme, etc. have been amicable. However, in terms of forward planning and key developments, the seriousness of the unhealthy relationship between the two bodies has become clearly evident over the last few years. Portnet have tended to ignore local government concerns, indicating a lack of vision and sensitivity as to what contributes to a successful Port City. In line with previous national policies, Portnet have historically made knee-jerk, short-sighted responses rather than long term visions for the port, focusing on the port merely as a facility for the shipment of cargo rather than contextualising it within the city.

Joint planning between the Durban Local Government and Portnet has been minimal and has impacted negatively on the port, causing, for example, ecological damage and a significant reduced water surface area through infilling. Other impacts have been the large-scale destruction of flora and fauna, as well as the destruction of the port's recreational uses. It is thus vital that the Durban Local Government and Portnet resolve their differences and undertake to jointly plan for the port, as an asset not only to the country, but to the people of Durban as well.
The IEM process in 1996 illustrated Portnet's first attempts at including public participation. It was an indication that Portnet's modus operandi was changing and that they were attempting to be more visionary in their planning. The visions from the IEM study identified the importance of integrating shipping-related uses in the port with a variety of other uses, such as tourism, the maintenance of the natural environment and opening the Bay up to the general public by increasing opportunities for recreational activities such as sailing, cycling and walking. The IEM process was beneficial then in that it allowed a forum for the exchange of information and the fostering of a greater understanding between each organisation.

Although it is likely to be impractical for the Durban Local Government to take on the extensive responsibilities of managing, maintaining and developing port infrastructure, it is a possibility that Durban Local Government officials desire (Physical Environment Service Unit, 1997: unpublished notes), (Bilse, Interview: 10/11/97), (Webb, Interview: 22/10/97).

The IEM process provided a platform for interested and affected parties to contribute to planning issues related to the future planning of the port. These issues pertain to the need for integrated planning to occur at three levels:

(a) the national level where port and economic planning takes place;
(b) the local level to integrate the port and city activities and functions, and;
(c) the port-specific level where all activities of the port are integrated and managed together, and where the port is as seen more than a facility for the offloading and loading of cargo.

The IEM process also highlighted the need for the principle guiding the future development and planning of the port to ensure economic and environmental sustainability. It is positive to note that a number of initiatives for the joint planning of the port and adjacent city have since been established. Such examples include the Spatial Development Initiative (SDI) - a national government initiative focused on transport issues to identify potentially beneficial areas of growth. Another example of joint collaboration is the Inner City Development Framework Plan, whereby Portnet and users of the port and inner city area of Durban aim to integrate planning proposals. Although the Port City Joint Planning Forum has been in existence for some time, the Port City Consultative Forum has recently been created to resolve specifically planning problems between the Durban Local Government and Portnet (Physical Environment Service Unit, 1997: unpublished notes).
The Port City Consultative Forum comprises representatives from Portnet, and councillors from the Durban Local Government (including the Metropolitan Council, North Central and South Central Local Councils) (Webb, Interview: 22/10/97). The aim of the Consultative Forum is to understand the roles, authority and purpose of each organisation and to formulate a common vision and mission (Webb, Interview: 22/10/97). The Forum is also tasked with creating a framework detailing how the Port and Durban Local Government bodies might co-operate to achieve the common vision (Webb, Interview: 22/10/97).

Additional goals of the Forum are to create a joint development and planning mechanism, and act as a dispute resolution mechanism (Webb, Interview: 22/10/97). The Consultative Forum is currently considering its joint vision and mission (Webb, Interview: 22/10/97).

Although most of these plans and processes are evolving continuously, they represent a concerted effort by both parties to resolve their differences and collectively create a vision to guide the future of Durban and its port.

5.7 CONCLUSION

The port plays a significant role locally and internationally. Locally, the port is the economic powerhouse of Durban, whilst nationally, Durban is a hub port, an integral component of the region. Although the roles of the port will not change in any drastic fashion, the management, administration and functioning of it will. National policy dictates that the transport sector as a whole is to implement strategic planning and policies. The effects of the national policy on the ports system has huge ramifications. The operations, currently carried out by Portnet, will be increasingly privatised, whilst the establishment of a port authority, divided from operations will be established. The composition of this authority is still unclear, and possibilities include a national ports authority, or a devolved structure to provincial or metropolitan levels of government.

Against a backdrop of uncertainty however, the maritime functions of the port are to continue. The complexities evolving from this chapter indicate the historically tainted relationship between Portnet and the Durban Local Government. Although many of the tensions are inherited, mistrust between the organisations is still rife. One could argue however, that the IEM process was a milestone in that for the first time, both organisations gained a full understanding of each other in terms of roles, functions, and responsibilities. The IEM process illustrated the tensions between national interests and local interests, but also paved the way for a proactive relationship. The IEM process highlighted the tension between the two organisations, but also provided a platform from which the two bodies could overcome historical grievances, and move forward.
The current initiatives of joint forums and task forces indicate a willingness from both parties to work together in establishing a vision for the port and city, to implement the policies outlined in the White Paper and accept accountable, transparent and responsible planning in conjunction with the Durban Local Government.
CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6. INTRODUCTION
This chapter of the dissertation integrates the main arguments running through the conclusions of the study to highlight the practical implementations guiding the future growth and development of the port. The chapter then assesses to what degree the objectives outlined in Chapter One have been met and identifies areas requiring future research.

6.1 INTEGRATION OF FINDINGS
The precedent study clearly illustrates that all ports are subject to national ports policies which guide shipping activities. The study also indicates that many ports have dealt with developments in a similar vein to Portnet, and can largely be attributed to the adoption of UNCTAD's port policies worldwide. Increasingly, mechanisms by which non-shipping developments are integrated into ports, are being implemented according to processes dependent on the managing structure that may combine a number of different stakeholders and partnerships. The precedent study explains by example that once port authorities or partnerships are established, and particular polices adopted, developments within ports become increasingly integrated. Although these policies and processes cannot simply be transposed to the port of Durban, the different policies allow an understanding of different port management functions so that we can apply the positive aspects to Durban port.

In many senses, the possibility of integrated planning occurring in the port of Durban has been expedited by the new political dispensation. National government has recognised the significant role of ports within the country, and the policy document formulated by the Department of Transport (the White Paper on Transport) allows for integrated planning of ports. Durban port is now party to a flexible rather than bureaucratic framework within which shipping activities are to function in an "open ports" manner.

The White Paper on Transport raises an important issue regarding the management structure of ports. Although the national ports policy foresees the port authority establishing at a national level, there is a possibility that such responsibilities could be devolved to provincial or metropolitan governments.

The possibility of undertaking port responsibility as the port authority for Durban has been welcomed by certain officials at Durban Local Government, as they see the possibility of accruing some financial benefit from the port to assist them in meeting the socio-economic needs of the region. Certain problems however, arise with regard to the nature of the port
authority. The responsibilities for the maintenance and development of port infrastructure is financially impractical for a local authority, especially in the context of South Africa being a developing country undergoing significant socio-economic restructuring. Logistical problems would be faced by the Durban Local Government in terms of co-ordinating shipping with other modes of transport throughout the country, as well as with other ports in neighbouring countries. These responsibilities are too large for a local authority such as the Durban Local Government to manage. Furthermore, the port should be managed by experts with experience in shipping. The sudden handing over of control to an inexperienced organisation could have severe economic repercussions on the efficiency of this national asset.

The reality indicates that in the meanwhile, it would be prudent for the Durban Local Government to rather undertake joint planning of all uses in the port in alliance with a port authority. The creation of a successful urban waterfront in the port is highly dependent on the establishment of partnerships sharing a common vision and applying forward-planning methods. This pragmatic form of urban management is pertinent to the local context and vital to the economic sustainability of the port as a multi-functional place.

6.2 RECOMMENDATIONS

Emanating out of the study on the need for integrated planning of developments in ports, are a set of recommendations pertinent to the port of Durban.

1. The port authority for Durban should implement the national ports policy of strategic and integrated planning.

2. Considering the strong linkages between the city and port, it is imperative that the Durban Local Government and Portnet jointly plan all developments in the port. It is therefore recommended that, until such time as the Durban Local Government are able to, maintenance and management of the port be vested in a port authority, whilst integrated forward-planning be vested in a joint planning authority. The members comprising this joint planning authority would be officials from the Durban Local Government, Provincial Government, Portnet (until national ports policy has finalised the establishment of a port authority), stakeholders and representatives from interest groups, and would represent a partnership of groups and organisations undertaking responsibility for the forward planning of the port.

This joint planning authority would be tasked to implement the national ports policies of flexibility and strategic planning, thereby undertaking integrated planning of developments within the port and between the port and city. The joint planning
authority would formulate a common vision for the port and Durban as a Port City and outline the goals and strategies by which the vision is to be implemented.

The joint planning authority would also have to ensure accountability, transparency and undertake their planning activities in a responsible manner. To this end, they would be answerable to the Durban Local Government in terms of planning control, and would therefore be compelled to obtain permission from Durban Local Government for the implementation of plans.

3. The joint planning authority would actively encourage the concentration of recreational and leisure activities along the northern edge of the port. Not only is this logical in terms of separating maritime activities from recreational activities, but the commitment of developing the northern edge abutting the CBD supports the CBD in a potentially revitalising manner. This may encourage the revival of the CBD, which is desirable in the long term, as businesses that are currently planning on decentralising may reconsider, or those that have already, may return.

4. The joint planning authority would outline a clear plan for all proposed uses in the port, namely shipping-related uses and non-shipping activities. In light of this, the northern edge of the port would be planned for non-shipping uses, whilst the shipping uses would concentrate on the southern edge of the port. An integrated plan of the entire port would be formulated to ensure the compatibility of uses throughout the area.

In addition to physically integrating the developments, an economic feasibility study of all non-shipping developments would be undertaken to gain an understanding of the economic viability of these developments and ensure the economic sustainability of such developments. The plan would be guided by the city's absorption rate for all non-shipping developments in the port to ensure a co-ordinated and phased approach, thereby protecting the economic sustainability of the urban waterfront edge.

5. Because the joint planning authority would be responsible for the management and forward planning of the port, it is recommended that a portion of the profits accrued by the port be channelled into the city. If, in the future, Durban Local Government is able to take control of the port authority function, it is suggested that the profits derived from the port functions should be apportioned between the Durban Local Government, provincial government and national government.
6. These recommendations have recognised the incompatibility of developments within the port. In light of this, existing shipping-related uses along the northern edge would be re-assessed and relocated. The break-bulk handling facilities along the Point and T-Jetty would be relocated to the southern edge of the port, because of the potential dangers posed to the public, and impact on the recreational character of the northern edge.

7. The railway line has been accepted as a "given" by the Durban Local Government, but the removal thereof, would improve access to the recreational and tourist developments along the Victoria Embankment. If this was not possible, the joint planning authority would seek to establish an acceptable compromise, such as the creation of several level crossings and over-passes. Linked to this, the railway line could be used for after-hours shunting and movement of goods, as well as being used for the transportation of people during the day.

8. Furthermore, the joint planning authority would prioritise non-shipping developments along the northern edge of the port. In reality, the Victoria Embankment abuts the CBD, and the development of a waterfront along this edge would strengthen the linkages between the CBD and port, whilst the investment of public resources in the Bluff and Point Developments pose threats to the vitality of the CBD if not well managed. As such, it is recommended that the nodal developments along the Victoria Embankment be prioritised with phased development occurring in the Point and Bluff at a later stage.

9. Although this dissertation acknowledges the inappropriate time for the establishment of a single port authority under the control of the Durban Local Government, it is recommended that the Durban Local Government should ultimately strive to achieve this status.

6.3 ACHIEVEMENT OF GOALS AND OBJECTIVES

In light of the considerable scope of work outlined at the beginning of this study, this dissertation has achieved some success, positively indicating future directions by which Portnet and the Durban Local Government could follow. Through a comparative study of proposals in the port, this dissertation proves the hypothesis outlined in Chapter One to be true: the Durban Local Government and Portnet together are responsible for the economic

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19. The future of Durban's port lies with both Portnet and the Durban Local Government, both of whom, lack a cohesive management structure to guide the future growth of the port in an integrated manner.
sustainability of the port. Furthermore, it is clear that no cohesive plan or management structure is currently in place to guide the future growth of the port in an integrated manner. The material covered in the study does however point to new directions followed by the two organisations, which have recently committed themselves to preparing an integrated plan for the port.

By and large, the study has achieved the goals outlined in Chapter One. This dissertation detailed how the port has been influenced solely by the national ports policy, with little regard for non-shipping users or the Durban Local Government. The disregard of other activities in the port besides shipping has manifested in the large-scale downgrading of the area as a recreational node. In addition ad hoc planning approaches created a situation whereby harbour activities of the port are now "boxed in" amidst increasing pressure for tourism and recreation.

It is important at this juncture however, to re-visit Goal No. 4 outlined in Chapter One. This goal recommended the establishment of a single management structure for the port to ensure holistic and well-informed planning of the port and urban waterfront edges. Although such a process would be efficient in terms of facilitating integrated developments within the port, maximising efficiency and carefully co-ordinating the utilisation of resources, it would appear that as a developing country, South Africa simply cannot afford to allow ports to compete with each other for scarce resources. Linked with the competition between ports, the lack of national co-ordination could result in national and regional inefficiencies, such as both Richards Bay and Durban competing for container ships.

In light of the goals outlining the dissertation therefore, this study has been unsuccessful in arguing for the immediate establishment of a single port authority responsible for planning of developments within the port. The possibility of establishing a port authority for Durban should however, not be shelved, as potential exists for the establishment of such an authority in the future.

Although most of the goals and objectives outlined at the beginning of this dissertation were met, the study undertaken in this dissertation is by no means complete. The dissertation was marked by a number of difficulties encountered, and several flaws, which in retrospect could have been dealt with differently.

The first difficulty experienced dealt with the dearth of literature (and out-of-date literature) available on the processes of integrating developments within ports. In response to this problem, an in-depth Internet search was undertaken, which although useful, lacked much of the theoretical analysis. As such, this dissertation has concentrated more on teasing out
common threads from international case studies rather than referring to a sound body of literature. As a result, a set of loose principles has been formulated without much comparison to theoretical debates, and could be regarded as being inconsequential and unclear. The linkage of the theoretical study with a precedent study could possibly have been improved by a greater number of inter-library searches.

Related to the theoretical study, the dissertation does not provide an in-depth assessment of the application of strategic planning principles, as adopted by the Durban Local Government, which in retrospect, could have provided a relevant comparison to masterplanning in the port.

In addition, the dissertation is very broad and covers a number of port issues rather than focusing on one aspect related to integrating developments in the port. In hindsight, the strength of the dissertation would have been greatly enhanced if it had concentrated on a single issue rather than several.

The limited time period to undertake a study of this magnitude posed problems in that the depth required has not always been that successful. Ideally, the dissertation should present an in-depth analysis of the existing management systems of the Durban Local Government and Portnet. In addition, it should detail the comparisons of integration achieved for developments by each organisation, as well as comparisons with international examples. Furthermore, the study should explore possible choices for the establishment of a single port authority in great depth and outline possible processes by which developments within the port could be integrated.

The difficulties experienced by the broad nature of the topic and the limited time period restricted the number of issues covered in the dissertation. For example, the case studies of port developments were limited to those proposals presented in a formal plan. Many proposals for the port have been reported in the newspapers over time, and interesting nuances could have been provided with the study of each proposal, rather than limiting the study to these formal proposals.

An additional problem was the limited number of interviews carried out. The twelve interviews held were limited to representatives of stakeholders and users, and overlooked members of the public, "ordinary" users, councillors, politicians, the business community of the CBD, shipping companies and port workers. Although the interviews provided valuable insights into the workings of the port and agreement on the problems in the port, in retrospect, a greater number of interviews could have outlined various allusions related to the need for integrating port developments. Possible examples include the long-term support
given by the Victoria Embankment to the survival of the adjacent CBD, the confusion of the roles of Durban and Richards Bay, and the importance of the port as perceived by the shipping companies.

6.4 FUTURE AREAS OF RESEARCH

This chapter has concluded that the long term spatial and economic viability of developments within the port are inextricably linked with the need for integrated planning to ensure their suitability and long-term sustainability. The research undertaken on the topic of the port is most certainly not complete, and the above mentioned faults and weaknesses of the dissertation are useful in that they illuminate possible areas of research that could be applied to studies of the port. Potential studies to this end are listed below:

1. The applicability of strategic planning to the port.
2. The actual centralisation of control versus the theoretical fragmentation thereof. Post-modern theory highlights the increasing fragmentation of political structures, but there appears to be a centralisation of power in certain aspects. An example of this is the White Paper on Transport's notion that the port authority functions be vested at a national level.
3. An academic study of the processes of integrating developments to formulate a sound body of knowledge that can be implemented.
4. An examination of the port's planning methods in light of environmental sustainability.
5. The significance of developing a waterfront along the Victoria Embankment and its impacts on the CBD in terms of its possible revitalising properties.
6. The applicability of encouraging the Point and Bluff Developments in terms of their competition with the CBD.
7. The impacts of the proposed deep water harbour on the present airport site.
8. The levels of integrated planning between Richards Bay and Durban's ports in light of their differing roles.
9. The lack of linkages across the port and proposals attempting to remedy the situation, such as bridges and tunnels that could link the north and south parts of the port.
10. The applicability of "multi-using" existing transport infrastructure, such as the railway lines along the Victoria Embankment for both goods transport and people movement.
11. As a member of SADC, examine the role of the port at a sub-regional scale and the impacts of the growing Maputo Corridor.
APPENDIX A: NATIONAL PORTS STRATEGIES
PRIVATISATION

Abu Dhabi

The Government in Abu Dhabi is presently privatising state-run enterprises, which will be transferred to the private sector in phases. This programme of privatisation is applicable to most aspects of the transport sector and includes harbour management within marine services. The real estate comprising ports will be sold at a later stage (Arab Emirates, "The Non-Oil Sector". http://www.ecssr.ac.ae/00uae.2industry.html).

AUTONOMOUS PUBLIC BODIES

Antwerp, Belgium

The Municipal Authorities of the City of Antwerp are responsible for the management of the Port, while the city central government owns the docks, port and surrounding industrial areas (Antwerp Quarterly Review, 1989:15). In 1988, the management and administration of the port became the responsibility of the autonomous Municipal Port Management, which then set up a company to purchase land, undertake site preparation and sell land for a profit20 (Antwerp Quarterly Review, 1989:15). The board members of this corporation, who comprise representatives from the municipalities, City of Antwerp and Belgian State ensure that management of the port is integrated (Antwerp Quarterly Review, 1989:15). This corporation plays a central role in planning infrastructure, industrial zoning, development of the area, as well as promoting development (Antwerp Quarterly Review, 1989:15).

Ireland

The Irish Government is trying to establish a single port authority in Shannon Port against growing public concern that private interests will gain control over the Ports Authority (Hobbs, Austin. http://homepages.iol.ie/(galvo/port.htm). The Government's objective is to reduce control over Ireland's ports and in so doing, increase accountability for the ports operational and financial performance. A ports authority is expected to achieve a greater degree of success in running the ports (Hobbs, Austin. http://homepages.iol.ie/(galvo/port.htm). The proposed Ports Authority will comprise a number of "ministerial directors" who will be appointed from the professional and business community (Hobbs, Austin. http://homepages.iol.ie/(galvo/port.htm).

Lisbon, Portugal

In 1907, the State entrusted the commercial management of the Port of Lisbon in an autonomous body, which would be responsible for its planning and management (Porto de Lisboa, July/September 1992:6). The variety of land uses in the Port have increased over time, and now include recreation,

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20 This company is called the Company for Management and Industrialisation on the Left Bank of the River Scheldt.
tourism, water sports, a marina and an auditorium, in addition to the shipping uses (Authority of the Port of Lisbon, December 1992:6).

CORPORATISATION

Australia

As with many ports around the world, Australia's ports are being restructured from state-run entities to more customer-oriented semi-private organisations, as is the case in Melbourne and Sydney (The International Association of Ports and Harbours, December 1994: 6).

In Melbourne, the state government is transferring the responsibility of the ports to the Melbourne Port Corporation and Victorian Channels Authority (Seatrade Review, September 1995: 37). In 1997, the responsibilities of the Port of Melbourne Authority were divided and two new companies formed: a) the Victorian Channels Authority and; b) the Melbourne Port Corporation (Seatrade Review, September 1995: 38). The ports in Australia are rapidly being corporatised, whilst retaining state assets in public ownership (Seatrade Review, September 1995: 38).

The State of Victoria has privatised the ports of Geelong and Portland, whilst the corporatisation of other ports in the state has resulted in the Sydney Ports Corporation; Newcastle Ports Corporation and Port Kembla Ports Corporation (Port Development International, Jan/Feb 1996: A9). The Ports Corporation of South Australia is responsible for Adelaide and nine other satellite ports, and will remain state government-owned corporations (Port Development International, Jan/Feb 1996: A9).

Indonesia

Ownership of ports in Indonesia is vested in a parastatal under the control of the central government (Indonesia Ports, Internet: http://www.ipc2.co.id/history.htm). Between 1983 and 1992, the functions of this parastatal were differentiated between commercial and non-commercial ports, with the five commercial ports being managed by their different corporations. The non-commercial ports are controlled by the Port Operational Unit of the Directorate General of Sea Communications (Internet). In 1992 the responsibility for all commercial ports was vested in the Public Port Corporation, a limited company (Indonesia Ports http://www.ipc2.co.id/history.htm). The government has recently undertaken the development of a master plan, economic feasibility studies and development plans for major container ports (The International Association of Ports and Harbours, June 1996: 17). In 1983, four regional state port corporations were formed to manage the ports (The International Association of Ports and Harbours, June 1996: 18). In 1992, the status of the ports was changed to common-stock corporations, with the Government of Indonesia as the sole shareholder (The International Association of Ports and Harbours, June 1996: 18).

Russia

The northwest ports of Russia are changing from public to private companies with a substantial

PORT DIFFERENTIATION

Canada
The Canadian federal government undertook to modernise Canada's transportation system and reduce inefficiencies and financial burdens on taxpayers by implementing a comprehensive national ports strategy (The International Association of Ports and Harbours, May 1996: 8). In light of this, national subsidies have been reduced and the ports system restructured (The International Association of Ports and Harbours, May 1996: 8). The federal government divided the existing port system into the three categories of: national ports; regional/local ports; and remote ports (The International Association of Ports and Harbours, May 1996: 9).


As not-for-profit corporations, the Canada Port Authorities are required to abide by strict principles of public accountability (The International Association of Ports and Harbours, May 1996: 11). The public accountability aspect of the Authorities will be the mandatory production of: an annual public report, an annual public audit, an annual land use plan and annual meetings open to the public (The International Association of Ports and Harbours, May 1996: 11).

Regional/Local ports will be transferred to provincial governments, municipal authorities, community organisations, private interests and other federal groups over six years, and are to be managed in a
manner that is more responsive to local needs (The International Association of Ports and Harbours, May 1996: 9). The Government of Canada will maintain the remote ports in Canada (The International Association of Ports and Harbours, May 1996: 9).

The transformation of the existing system in Vancouver has been questioned in terms of how the establishment of a semi-autonomous not-for-profit organisation will impact on the city and the operation of the ports as commercial entities (City Manager, Vancouver 24/9/96. http://www.city/vancouver.bc.ca/ctyclerklcclerkl960926/csb4.htm). The concerns deal with the inconsistencies of the new legislation in terms of providing port authorities with greater autonomy, but at the same time, limiting their activities in the port. In addition, the legislation places inappropriate restrictions on land use within the port and does not provide for the development of land other than for port-related uses (City Manager, Vancouver 24/9/96 http://www.city/vancouver.bc.ca/ctyclerklcclerkl960926/csb4.htm).

LOCAL GOVERNMENTS

Iceland
Planning for the Port in Reykjavik is a Municipal responsibility with port functions being the responsibility of a Port Authority. The partnership between the Port Authority and the Reykjavik Municipality ensures the proactive planning of the port, which contributes to minimal wastage of space (Port of Reykjavik. "Planning for the Future". http://www.arctic.is/fin/port/rvik/planning.html). In line with this planning partnership, a master plan was drawn up by the Municipality to guide the growth of the port between 1990 and 2010 (Port of Reykjavik. "Planning for the Future". http://www.arctic.is/fin/port/rvik/planning.html).

Rotterdam, The Netherlands
Rotterdam is the largest container harbour in Europe handling about five million containers annually (Port of Rotterdam, 1996: 11) and is often referred to as the "mainport of the European continent" (Port of Rotterdam, undated pamphlet). The municipality owns the Port of Rotterdam and the port authority manages the port operations (Hoyle et al, 1994: 116). Central government (the Ministry of Transport, Public Works and Water Management) is responsible for national seaport policy (Port of Rotterdam. "Maasvlakte II. Expanding the Port of Rotterdam". Undated information pamphlet).

Because the port has global status and is an integral component of the country's economy, planning for the port can be at odds with the city in which it is located (Rotterdam City Development Corporation, 1997: 12). Conflicts may arise out of the fact that the municipality is bound by local planning controls, whilst the port authority is exempt (Hoyle et al, 1994: 118). In addition to planning for the expansion of the port, the municipality undertook a waterfront development to provide housing and establish mixed uses such as marinas and entertainment areas (Hoyle et al, 1994: 121-122).
Analogous to the Port of Durban, the Port of Rotterdam is expecting phenomenal growth in the transport and related industrial sector, and has anticipated a shortage of space in the port by 2000 (Port of Rotterdam. "Maasvlakte II. Expanding the Port of Rotterdam". Undated information pamphlet). In an attempt to hold onto its position as the mainport of Europe, Rotterdam is aiming to expand the port to:

a) strengthen the port’s competitive position
b) reinforce the metropolitan and national areas in which the port is situated and
c) improve the spatial quality of the metropolitan and national areas. Consequently, the port will reclaim 2000 hectares of additional land (Maasvlakte II) from the sea (Port of Rotterdam. "Maasvlakte II. Expanding the Port of Rotterdam". Undated information pamphlet).

The sheer magnitude of the Port of Rotterdam expansion project and its pertinence to national interests has made it necessary for the process of policy development to be as open as possible (Port of Rotterdam, undated information pamphlet). All stakeholders are involved in the development of physical planning and environmental policy related to the port. Stakeholder groups include: national government; provincial government; municipalities; and trade and industry (Port of Rotterdam. "Maasvlakte II. Expanding the Port of Rotterdam". Undated information pamphlet).

Spain
The local government in Spain is responsible for the management, financial success and planning of ports (Carruthers, 1996:93). The transfer of responsibility from the national level was facilitated in an attempt to improve Spain's public finances, to meet one of the requirements of the Maastricht Agreement for European Monetary Union (Carruthers, 1996:93). Spain has ten maritime regions, with 26 port authorities responsible for 44 ports (Carruthers, 1996:93). Although the regions control the management of the ports, the lands remain in national government ownership (Carruthers, 1996:93). The regions nominate the boards of directors for ports, as well as the president of each port authority. Maintaining control of local ports in this way is important to the local governments who prefer port profits to remain in the region (Carruthers, 1996:95).

PROVINCIAL/STATE GOVERNMENTS
North Carolina
The ports in North Carolina are owned by the federal state and operate as "economic engines" for North Carolina (North Carolina State Ports Authority: http://www.ncports.com). Although responsibility for port management is in the hands of the state government, the federal government fulfils certain tasks, such as upgrading navigational channel requirements (North Carolina State Ports Authority: http://www.ncports.com/news). The reason that the federal government invests money in state ports is due to the national and regional importance of ports.
NATIONAL GOVERNMENTS

Cyprus
Cyprus Port is controlled by the Cyprus Ports Authority, a public authority responsible for both the management and operation of the ports throughout the country (Cyprus Ports Authority. http://www.kypros.org/CPA/intro.htm). The location of the ports of Cyprus makes them a transhipment and cruise liner hub (Cyprus Ports Authority. http://www.kypros.org/CPA/intro.htm).

Kenya
The Kenya Ports Authority manages the Port of Mombassa. The Board of Directors of the Kenya Ports Authority formulates strategies and policy for the port. The Minister for Transport and Communications appoints the Chairman and members of the Board of Directors (Port of Mombassa. http://arcc.or.ke/port.htm).

Taiwan
Historically, Taiwan's provincial government administered its five international ports. However, increasing conflict between the provincial governments and local governments gave rise to the recommendation that the ports be directly managed by the central government agency. It was also recommended that a co-ordinating board be established to manage the ports (Taiwan Ports, http://expo96.org.tw/motec/iot/english/research/re124.htm).
APPENDIX B: PORT SPECIFIC DEVELOPMENTS
PUBLIC/PRIVATE PARTNERSHIPS

Baltimore, Maryland, USA
In 1964, the local government and businesses in the area created the plan for the Inner Harbour to attract the people back to the city centre (Hoyle et al, 1994: 153). The redevelopment had a tremendous impact on the city and wider metropolitan area as local residents and tourists came to experience the waterfront (Hoyle et al, 1994: 157).

Birmingham, United Kingdom
The Birmingham waterfront development was the result of a partnership between the Birmingham City Council, the British Waterways (a parastatal) and a private development company. The three parties joined to upgrade and revitalise the canal waterways in this historic crossroads (Breen & Rigby, 1996:52-54).

Port of San Francisco
A community grouping, the San Francisco Planning and Urban Research Association (SPUR) in partnership with the local government undertook to purchase the obsolete port areas of the Port of San Francisco from the federal state government (Spur: http://www.spur.org/history.shtml). San Francisco gained control of its port in 1969 and modernised the port in line with the demands of international shipping (Spur: http://www.spur.org/history.shtml). Although the port had improved its cargo handling capacities, SPUR undertook a study of the port's operations in 1985. The recommendations emanating from the study included financial, administrative and managerial changes, but most importantly, it was recommended that non-shipping uses were to be afforded equal importance as shipping uses (Spur: http://www.spur.org/history.shtml). In line with these proposals, the port is currently updating its strategic plan to include shipping and non-shipping projects, whilst the local government has undertaken to develop an urban waterfront connecting the Bay with the City (Spur: http://www.spur.org/history.shtml). In this way, the community group, partnered with the local government and the port have effected significant and meaningful changes in the port to benefit the people of the city.

Rowe's Wharf, Boston, Massachusetts
The city government, in the name of the Boston Redevelopment Authority owned the land, which was the site of a proposed redevelopment. Rowe's Wharf was completed in 1987 as a result of a partnership between the city government and other building industry individuals (Breen & Rigby, 1996:61).
Yokohama, Japan
The Japanese government gave financial backing to the waterfront development of Yokohama Port, with planning for the area being undertaken by a public-private partnership (Breen & Rigby, 1996:26).

LOCAL GOVERNMENTS
Battery Park, New York
Although a master plan for the state-owned land of Battery Park was prepared in 1968, it was replaced with a new plan in 1979, which focused on the public realm (Breen & Rigby, 1994:279). The plan promoted integration between the buildings and developments so creating a more cohesive entity (Breen & Rigby, 1994:280).

Toronto, Canada
A waterfront plan for the Toronto port was created in 1912 by the Toronto Harbour Commission, which included a number of seemingly incompatible uses in the port, namely, major port facilities, docks, general commerce, and park areas with a public boulevard along the water's edge (Breen & Rigby, 1994:287). The different uses in the port have functioned compatibly since 1912, indicating that shipping and non-shipping uses may sit comfortably within a port. The significance of this 1912 development was that the Toronto Harbour Commission embraced the vision and objectives of creating new harbour land whilst ensuring the sanctity of the public realm within the harbour (Breen & Rigby, 1994:287).

LOCAL GOVERNMENT AND PORT AUTHORITIES
Charleston Waterfront Park, South Carolina
The city government purchased the land for the Charleston Waterfront Park development in 1979, and joined the Port of Charleston to plan for the development (The International Association of Ports and Harbours, December 1994: 28). The plan was approved in 1980 and illustrates the positive benefits of different organisations working together (Breen & Rigby, 1994:208).

Seattle, Washington
Seattle is undertaking a flexible, holistic and comprehensive type of planning for its port as a means of ensuring the success of Seattle within the global market (The International Association of Ports and Harbours, December 1994: 10). This planning process has the support of the local community, political groupings, labour and shareholders as the Port is involved with expanding shipping activities as well as playing a proactive role in economic development (The International Association of Ports and Harbours, December 1994: 10).
Victoria & Alfred, Cape Town, South Africa

South African Harbours initiated the Victoria and Alfred Waterfront Development in the late 1980's in an attempt to counter the loss of money from the increasingly obsolete break-bulk shipping (Harbour News, June 1989:9). The Victoria & Alfred Waterfront (Pty) Ltd is a subsidiary company of Portnet (Breen & Rigby, 1996: 56), and is listed on the Johannesburg Stock Exchange with public shares (Harbour News, June 1989:9). The company operates independently of the parastatal, and has been accorded powers, responsibilities and opportunities akin to private companies (Harbour News, June 1989:9). Membership of the company is made up of three representatives from Transnet, four directors from the local business community, a member of the Cape Town City Council, with the chair being an academic (Jack, 1993: 5).

The Victoria and Alfred Waterfront Company undertook to ensure that the port retained its maritime image, as well as the working harbour activities (Jack, 1993: 6). The current land uses include hotels and speciality shopping, as well as portions of the port remaining a working harbour, with tugs, pilot, fishing and charter boats (Harbour News, June 1989:9). The planning process for the waterfront development consisted of a package of plans ranging from a macro scale to the more specific (Jack, 1993: 6). These plans include:

(a) a contextual framework, which examines broader concerns,
(b) a development framework,
(c) precinct plans,
(d) development area or site development plans, and
(e) building plans (Jack, 1993: 6).

The broad strategy outlined in the contextual framework was undertaken by the local government and serves as their policy statement for the entire area (Jack, 1993: 7). The Victoria and Alfred Waterfront Company (Jack, 1993: 7) determined the planning tasks undertaken at the more specific levels. Much criticism has been levelled at the Waterfront, which many felt, was developed without due regard of the surrounding landuses, for example, Seapoint has been severely affected by the Waterfront.

NATIONAL/FEDERAL GOVERNMENT AND LOCAL GOVERNMENT

Granville Island, Vancouver, Canada

The Federal Government of Canada, who owned the land on which the proposed development was to occur, undertook the Granville Island waterfront development according to a city-approved concept plan drawn up in 1976 (Breen & Rigby, 1994: 159). The waterfront development comprised activity zones on a peninsular, with mixed land uses (Breen & Rigby, 1994:159).
Salford Quays, Manchester

Although Salford Quays is not located in a port, the example illustrates the importance of partnerships. In 1984, the Salford City Council purchased the derelict Salford docklands from the ship canal company owner in an attempt to increase the population and employment facilities in the area (Hoyle et al., 1994: 159). With some financial assistance from national government, a master plan for the property was drawn up to ensure integrated and logical growth of the area (Breen & Rigby, 1994: 140). This plan covered the following uses: one third residential; one-third leisure and recreation; and one third employment (Hoyle et al., 1994: 161). The plan was adopted in 1985 (Breen & Rigby, 1994:140). The mixed land uses included in the development, together with private developments created a popular development that is currently expanding (Breen & Rigby, 1994:141).

STATE OR PROVINCIAL GOVERNMENT

Darling Harbour, Sydney

This harbour was an industrial and railway area until 1982 when the State Government ordered the relocation of the rail facilities, and redevelop the derelict area in 1984 along the line of mixed uses (Breen & Rigby, 1994:144). The State Government established the Darling Harbour Authority in 1984 and gave it considerable powers (Breen & Rigby, 1994:144).

PRIVATE

Hong Kong

Pacific Rim countries, such as Hong Kong undertook major reclamation projects in the ports as they underwent huge economic advances (Hoyle et al., 1994: 167). Hong Kong harbour was expanded for business, port and airport growth, and often hailed as a positive example of encouraging market-led expansion and development, although the port evolved out of both public and private inputs (Hoyle et al., 1994: 67). Though the Hong Kong government actively intervened in the urban renewal processes in 1965, their unwillingness to commit themselves to major financial commitments produced minimal results (Hoyle et al., 1994: 170).

The Hong Kong government established the Land Development Corporation in 1987 to purchase obsolete areas in the port, consolidate them and sell the serviced pieces of land to private companies (Hoyle et al., 1994: 170). The Hong Kong government's role was largely that of a facilitator providing land, sites and services, transport and infrastructure and housing and social services (Hoyle et al., 1994: 171). Very little forward planning was provided by the Hong Kong government, who tended to react to market-led development (Hoyle et al., 1994: 171,172). Annual land-sales encouraged developments in the port, and was used by the government in this manner (Hoyle et al. 1994: 171). The simple land use zoning system applied to land uses allowed developers to influence the developments (Hoyle et al., 1994: 171). Development approvals occurred on an individual basis.
with scant regard for the wider context, and due to the lack of integrated planning, the development schemes did not always relate well to each other with no sense of co-ordination (Hoyle et al, 1994: 177, 181).

The planning environment within which the developments occurred were largely absent of strategic plans for the entire harbour area. The mid-80's saw the application of statutory planning to the harbour area for the very first time (Hoyle et al, 1994: 177). Thus, the lack of public plans created a situation in which private developers could impose their ideas with little opposition from the public body (Hoyle et al, 1994: 177).

Many arguments for the demand-led waterfront developments point to the Hong Kong example as being successful at seizing initiatives for entrepreneurs with the local governments playing a facilitatory role and assisting private developers by continuously releasing land (Hoyle et al, 1994: 180, 181). Problems related to this system, however are the rapid changes within the developmental sphere, which are based on market needs, and the fragmented approach to the planning of the area (Hoyle et al, 1994: 181). On the positive side, the demand-led approach encourages the continuous utilisation of vacant space and the renewal of existing buildings as new ideas are proposed for them (Hoyle et al, 1994: 181).

**London Docklands, United Kingdom**

In 1974, the Greater London Council and Dockland boroughs established the Docklands Joint Committee to prepare an overall plan and co-ordinate planning and development in the area. The overall objective was to "...use the opportunity provided by large areas of London's Docklands becoming available for development to redress the housing, social environmental, industrial, economic and communications deficiencies of the Docklands." (Naib, 1990:31). In 1981, the London Docklands Development Company (a statutory body appointed and funded by central government) was established to regenerate the area (Hoyle et al, 1994: 219) (Nair, 1990:31). The development is one of the largest in the world with the London Docklands Development Company undertaking demand-led planning and a free market philosophy highly reflective of the conservative Thatcherist government of the time (Edwards, 1992:xi) (Hoyle et al, 1994: 20-206).

The Docklands was the result of infrastructure provision than municipal planning, as no planning approach was applied to the area. The outcome of this is that the London Docklands area is highly fragmented (Edwards, 1992: xii 6,7). The fragmented nature of the development is worsened by the distrust between the London boroughs and the London Docklands Development Company and between the local community groups and the London Docklands Development Company (Edwards, 1992: 8). In addition, the residents and institutions are not integrated with the surrounding communities, nor did the Docklands give attention to educational or social needs (Edwards, 1992:9).

The London Docklands Development Company is responsible for the implementation of development
schemes of which the most ambitious was Canary Wharf (London Port Promotion Association, 1988/89:23). The land uses in the Canary Wharf area include: leisure, retail, high class office accommodation, housing, airport, light industry, commercial, warehousing, distribution, marina, retail/leisure complex and indoor fun park (London Port Promotion Association, 1988/89:24).

NATIONAL GOVERNMENTS

Singapore

The waterfront development was led by the city-state and involved major environmental improvements (Breen & Rigby, 1996:122-125).
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