

**COASTALSTRATEGY  
TOPIC PAPER**

**Draft for Public Consultation  
DECEMBER 2001**

ã **Planning Authority**

# 1 **Objectives of the Topic Study**

1.1 The purpose of this Topic Paper is to identify coastal issues that can be managed through the development planning process within the revised Structure Plan and to provide a strategic direction towards sustainable development within the Maltese coast, within the broader concept of Coastal Zone Management.

1.2 Coastal zone management is multidisciplinary and spatial planning is one tool that can assist in identifying a strategic approach towards sustainable development of the coastal environment. The management of the coastal zone is the remit of several agencies and institutions having jurisdiction over particular geographical areas or uses within the coast.

1.3 Very broadly the coastal zone can be defined as ***a geographical space incorporating land and sea areas within which the natural processes interact to create a unique dynamic system. It also incorporates those activities on land and at sea where human activities are directly influenced by or can influence the quality of the natural resources***”.

## 2 Coastal Zone Boundary for Malta

2.1 ***A coastal boundary for Malta has been identified*** on the basis of ecological, physical and administrative criteria. Consequently there are variations in the coastal widths between one area and another. The coastal zone boundary is significantly close to the coastline within coastal settlements and towns and is limited to the first road aligning the coast. In rural areas however, the boundary is predominantly characterised by ecological systems and extends further inland.

2.2 The seaward limit of 12 nautical miles has been chosen since national sovereignty extends to the territorial sea and under the Amendments to the Development Planning Act, 1997 the Planning Authority has jurisdiction to regulate development at sea.

2.3 The total land area of the Maltese Archipelago is approximately 315.4km<sup>2</sup> excluding the small islets. The coastal zone as identified on the basis of the above-mentioned criteria incorporates a land area of approximately 61.8km<sup>2</sup>, making up 19.6% of the total land area (Table 1).

**TABLE 1 LAND AREA WITHIN THE COASTAL ZONE**

	Land Area (km <sup>2</sup> )	Coastal Zone Area (km <sup>2</sup> )	Coastal Zone %
Malta	246.8	39.8	16.1
Gozo	65.8	19.2	29.2
Comino	2.8	2.8	100
<b>TOTAL</b>	<b>315.4</b>	<b>61.8</b>	<b>19.6</b>

### 3 Coastal Issues

The **natural resources** within the Maltese coastal zone are diverse but their occurrence is not abundant due to the limited size of the islands. The impacts resulting from years of unmanaged development limit this abundance further. Legal protection has been effective in controlling the types and level of activities permissible in ecologically and scientifically important areas at a strategic level. Similar protection of the remaining areas, particularly on Gozo and within the marine environment is necessary. Areas that are not of Ecological or Scientific Importance but play a role in coastal processes need to be safeguarded from inappropriate development as well.

3.2 With respect to **cultural resources** legal protection has been effective in controlling the types and level of activities permissible within Scheduled Areas. Similar protection of other areas, particularly within the marine environment is necessary, following the compilation of a detailed inventory. The cultural heritage along the coastal zone, including that found underwater, has to be safeguarded within a framework that acknowledges the presence of other legitimate coastal activities

and uses. Any coastal uses present in the vicinity of such remains have to be regulated so as to preserve such structures as well as their contextual landscape. This would have to apply also for rehabilitation projects of derelict waterfronts where the maritime activities that characterised the area need to be incorporated within the new projects in order to retain the vitality of our heritage.

3.3 Issues concerning **tourism** that need to be addressed by a coastal strategy need to primarily safeguard popular tourist areas, including dive sites, from incompatible uses. Measures to protect existing sandy beaches and low-lying rocky shorelines within popular bathing areas from development are necessary. The provision for and protection of access within the coast is another issue which has to be provided in recreational/touristic areas with due consideration of other legitimate coastal uses to avoid unnecessary negative impacts. Additionally, areas where potential off-shore development related to tourism is possible may be identified.

3.4 Abandonment of **agriculture** in coastal areas will accelerate the rate of soil erosion and consequently lead to land degradation and a change in the coastal landscape. The main issue with respect to

coastal agriculture is the protection of this type of use through measures that facilitate farmers to continue to cultivate such land. The rehabilitation of abandoned fields should be favoured to the practice of soil deposition on garigue. As with other legitimate coastal uses, agriculture activity should be safeguarded from incompatible development. Compatible uses that benefit from the continued practice of coastal agricultural should be encouraged.

3.5 With respect to **aquaculture**, the ecological and geomorphologic characteristics and the presence of other users within such a limited coastline make it practically difficult for this industry to expand unless the cage units are taken further offshore within sites primarily zoned for this type of activity.

3.6 The main strategic issues relating to **fisheries** are the relocation of the fish market to a suitable site and the protection of coastal areas used by the registered fishing fleet from other types of development.

3.7 **Maritime activities** are still expected to continue within both the Grand Harbour and Malta Freeport. Therefore the spatial requirements for these

activities need to be safeguarded but not at the expense of the coastal characteristics both from a natural as well as cultural perspective. Other legitimate uses that take place within both harbour areas need to be safeguarded as well. Similar considerations need to be taken with respect to the **yachting** industry and the development/maintenance of Cirkewwa and Mgarr harbours, so as not to displace activities such as diving and fishing. The selection of **bunkering** sites as well as offshore spoil grounds need to be considered within a much broader context than solely safety to navigation, in order to safeguard the natural resources as well as existing and potential coastal and marine uses.

3.8 The main issues relating to **mineral extraction** are related to the different stages of quarry development and abandonment. The selection of sites for future quarry operation has to consider that impacts associated with the natural environment. Implementation programs for restoration schemes for both existing and future quarries need to be developed in line with the existing characteristic of the adjacent coastal areas, in terms of topography, resources and uses with the objective of rehabilitating these sites for multiple uses. Areas known to have mineral reserves should as far as possible be protected

from certain types of development. With respect to salt production the main concern is related to lack of adequate protection and the identification of suitable alternative use

3.9 Issues relating to **infrastructure** development on the coast relate to the following:

**Thermal power stations:** with no plans for new spatial requirement the main issues relate to the engineering works associated with jetties and quays as well as the impacts related to the marine environment with respect to the proposed Marine Conservation Area in Delimara.

**Desalination plants:** as the current infrastructure is envisaged to satisfy future demands the main issues are related to safeguarding the coastal waters from degradation by other uses.

**Sewage:** the provision of a suitable location for the proposed sewage treatment plants needs to ensure that impacts on other uses as well as the coastal resources are minimised. From a strategic point of view this is translated into the prevention of incompatible development from taking place in the vicinity of the proposed locations.

**Waste:** the main issue is the location of new waste dumps or engineered land fills on the coast and any impacts that may result on the coastal as well as marine environment from inappropriate waste management strategies, particularly disposed of at sea.

**Land reclamation:** the small size of the Maltese Islands and the intensity of coastal uses put an immediate limitation on the extent of development projects necessitating land reclamation from the marine environment.

**Roads:** although access to the coastline, particularly in urban areas is essential, land take up from undeveloped low-lying shorelines is not to be used for this purpose. Small carpark facilities need to be identified along certain coastlines, following consideration of the environmental and amenity characteristics of each particular area.

**Pipelines and cables:** the main issue is related with safeguarding these structures from incompatible development that requires works such as dredging and placement of moorings.

3.10 The major issue concerning **oil exploration** relate to the potential impacts arising from the industry with respect to coastal and marine resources as well as uses.

3.11 Development of **residential units** as well as **industrial estates** along the relatively **undeveloped coastline** should be restricted within the existing boundaries zoned for such development. Additional measures to mitigate against the impact of such development on the coastal landscape need to be introduced to safeguard the variety of coastal features.

3.12 The main issues that emerge from the review of development applications can be listed as follows:

- **demand** for development is concentrated in areas that have easy access to the sea and granted development is mostly restricted to those areas us directed by the Temporary Provisions Scheme, i.e. not within ODZ. However these two factors are intensifying development in already developed coasts. The only remaining open space provided by the coast is being taken up by structures restricting the available space for public use and sometimes even blocking views, in already congested areas as St.Julians and Bugibba.

- the **major type of use** requesting development and also granted are uses that do not necessarily need a coastal location to function such as commercial, retail and mixed developments. This has introduced conflicts between users, particularly in coastal areas that were predominantly used by legitimate coastal activities such as fisheries and bathing. The placing of chairs and tables along waterfronts is taking up space for hard-standing of fishing boats, such as in M'xlokk and Spinola.

- **conflicts** arise even between legitimate uses where these are not compatible, such as the port extension in Cirkewwa which has restricted diving and bathing.

- the **zoning for dwellings** along the coastal zone has not considered the relatively undeveloped character of the surrounding area, thus introducing the urban fabric in areas predominantly rural, e.g. Xlendi, Marsalforn, Mellieha, at the expense of landscape features which provide a heterogeneous element to the Maltese coastline.

3.13 The existing **planning policies** address specific coastal issues and features without taking enough consideration of the interactions that exist between

coastal uses and the natural and cultural resources. Similarly, the Temporary Provisions Schemes are not specific enough to minimise the presence of incompatibilities and conflicts between coastal uses. A coastal strategy should build upon the existing planning policy framework by introducing adequate policies to protect legitimate coastal uses from incompatible development and directing where they are applicable, based on the issues that are relevant today.

- 3.14 With respect to **illegal development**, this is mostly present in areas designated as ODZ, reflecting the fact that some form of activity takes place in these areas. With no alternative and adequate solutions provided, for example for campsites and beach facilities, illegal development mushroomed. Other forms of illegal development such as illegal extensions to quarries cannot be solved through a coastal strategy but reflect the need for stronger enforcement measures.

## **4 Coastal Strategy**

- 4.1 Coastal uses within the Maltese coastline vary from structural development that requires such a location for its operational purposes (e.g. thermal power station, ports) to structural development that benefits from a coastal location but does not necessitate such space for its operation (e.g. hotels, non-water related sports grounds). There are uses found on the coast simply because the nature of the exploitable resource happens to be on the coast (e.g. mineral extraction). The majority of these uses, whether they necessitate a coastal location or not, have been developed in a manner that has not considered the implications they may have on natural resources, processes and ultimately, other uses. The major infrastructure uses requiring a coastal location have all been established to a certain extent, and no future development is envisaged within the next Structure Plan period.
- 4.2 Another major coastal use is that associated with informal recreation particularly related to water-sports and coastal walks. Some form of development is associated with such activities to provide adequate facilities namely related to access (footpaths, emergency vehicle access,

telephones). There are other structural developments associated with coastal activities that by their excessive number create cumulative pressure on resources and in taking up land, limit further the space available for public use (kiosks, hunting and trapping hides, boathouses). The availability, location and design of these facilities have not been regulated and have also led to conflicts with landscape and the natural environment.

4.3 The main theme that emerges from the Topic Paper is that the coastal zone within the Maltese Islands is perceived as a limitless resource that can accommodate all types of uses, in particular the marine environment, which is not covered by a property management system. Consequently this has given rise to conflicts as the limited coastal space has been gradually taken up by uses that do not necessitate a coastal location, to the detriment of the legitimate coastal uses as well as the natural and cultural resources. In the case of the marine environment new developments were introduced with very little consideration to the impacts on both the natural resources and the adjacent marine and coastal activities.

4.4 One issue that has not been given adequate attention is the **rehabilitation** of coastal areas in terms of suitable alternative uses. Options for sustainable use of areas where the predominant use has been abandoned or will be abandoned in the time frame of the Structure Plan need to be identified. These include abandoned agricultural land and quarries.

4.5 The major infrastructure development that requires a coastal location has already taken place, with the exception of the proposed Sewage Treatment plants. Additional development requiring large areas of the coast is not envisaged within the next Structure Plan period.

4.6 The other major legitimate coastal use which requires a coastal location is recreation, and the demand for free access and use of coastal areas for such purposes is not expected to decline.

4.7 From the review on development trends it is clear that most development types requiring a coastal location are requesting the same space that is being sought by both locals and tourists alike for informal recreation. The current policy is not sufficient to protect coastal areas, even along

urban areas, for public use. If no policy changes are made, coastal areas available for informal recreation will continue to decrease. In addition the loss of coastal heritage, both natural and cultural, will be irreversible.

4.8 With the potential of marine related development still not fully exploited, it is possible that future development proposals for marine use will also increase. In the absence of a holistic policy direction, the potential for conflicts between marine uses as well as coastal activities, is high.

4.9 It is evident that the natural characteristics as well as the type and level of development present have created differences within the coastal zone on the Maltese Islands. As a result of the small size and high population there are no places in the Maltese Islands that can be considered to be remote and unaffected by humans. This statement also applies to the coast. A strategic approach is required to ensure that this variety is retained within a framework that safeguards both the natural and cultural heritage as well as ensures adequate use of the coast by legitimate coastal uses.

## Objectives

4.10 The proposed coastal strategy is based on a refined zoning scheme building upon the existing Temporary Provisions Scheme which directs development in accordance with the following set of objectives:

- ***protect coastal and marine habitats and biodiversity***
- ***protect cultural heritage***
- ***protect coastal uses that necessitate a coastal location***
- ***protect public access and use***
- ***minimise existing and potential user conflicts***

## Zoning Scheme for the Coastal Zone

- 4.11 From the review carried out in this Topic Paper the terrestrial coast can be classified into two general categories, **predominantly urban** and **predominantly rural**, depending upon the prevailing characteristics and scale of uses. A large part of the coast is considered to be of ecological and/or scientific importance and is either already **protected** or is still awaiting protection. These include most of Gozo and part of the coast along the eastern shore of Malta.
- 4.12 The marine environment is dominated by different characteristics than those present on the terrestrial part of the coast. Since biological productivity is predominant in the relatively shallow coastal waters it is possible to use bathymetric data to guide a development strategy at sea. The available information on the marine environment indicates that the main benthic communities are located up to depths of 50m and therefore the coastal areas up to this depth are the most susceptible to impacts arising from development or uses. ***This does not imply that no measures are taken to regulate development and activities further offshore.***
- 4.13 In directing what type and scale of development can take place and where, the proposed strategy is envisaged to provide a policy direction within the revised Structure Plan that safeguard the coastal zone in the Maltese Islands from losing their varying characteristics, both natural and cultural while retaining, encouraging and safeguarding legitimate coastal uses that depend and rely upon this diversity.

## The Predominantly Rural Coast

### Definition

This type of coast incorporates those areas that to date have very limited structural development, if any. These are the areas where **ecological and/or geomorphologic features dominate** the coastal stretch and any uses undertaken within it. The main form of development in these areas is mainly agriculture, which attributes a type of landform that characterises the local coastal landscape. Other forms of development are related to specific uses within particular geographical pockets, such as tourism along sandy beaches, quarries where mineral resources are present and accommodation units in areas zoned for Dwelling by the Temporary Provisions Scheme.

### Protected Coast

Most of this coast includes areas of ecological and/or scientific importance, as well as areas with cultural heritage. Whilst the majority of them have already been given legal protection and designation, other areas still merit such designation.

## Strategy

*The primary objective of the strategy for the predominantly rural coastline is to safeguard the natural and cultural heritage, including landscape. The type and level of new development acceptable within these areas should be minimal. Only development that is directed towards improving degraded areas and enhancing informal recreation, in conformity with the objective of safeguarding the coastal characteristic and heritage of such areas, will be acceptable.*

### Policy Direction

1. For **protected areas** the aim is to safeguard and promote their natural and cultural value. Current measures adopted through the Scheduling Processes still apply over and above the provisions given for the predominantly rural coastline. Areas of known ecological, scientific and/or cultural importance that have not yet been given such protection are to be safeguarded until such protection is afforded to them.

2. For predominantly **agricultural areas** the aim is to encourage the continuation of this type of use. Any activities or uses that are compatible with agriculture and may promote the continuation of this industry are also encouraged.
3. For predominantly **quarried areas**, the aim is to restrain mineral extraction from extending towards the coastline. Other types of uses should be prohibited from being developed within the vicinity of such quarries whilst these are still operating or are known to have mineral reserves.
4. For **recreational/urban pockets**, development should be limited to improving beach facilities and public access through appropriate measures that conform to the characteristics of the surrounding coastline; the introduction of urban waterfront furniture should be prohibited.
5. New development that may be considered in the predominantly rural coastal areas is related to the rehabilitation of abandoned

agricultural fields or spent quarries. Proposals for rehabilitation that promote informal recreation would be considered favourably.

6. Development related to improvement of **public access** for informal recreation should be encouraged.

## The Predominantly Urban Coast

### Definition

This type of coast is **predominantly developed for urban and/or industrial purposes**. In certain areas, the coastline itself has been modified for such purposes with the construction of wharves, jetties and seawalls. The natural element is very limited. Urban waterfronts and industrial waterfronts reflect the historical development of urban settlements and harbours and provide an element of open space in such densely developed areas.

### The Protected Coast

Areas of ecological and/or scientific importance and cultural heritage are also present within this type of coastline. Whilst the majority of them have already been given legal protection and designation, other areas still merit such designation.

## Strategy

***The primary objective of the strategy for the developed coastline is to safeguard the existing legitimate coastal uses and to minimise existing and potential conflicts. Another objective is to prevent the loss of open space for public use.***

### Policy Direction

1. For ***urban areas*** development of the coastal zone should promote multiple use of the coast and not displace legitimate coastal uses; visual access from promenades should be safeguarded. In bathing areas, development should be limited to enhancing public use and associated facilities provided that they are small-scale interventions preferably of a temporary and/reversible nature.
2. For ***industrial areas*** development should be restricted to maritime/industrial related uses. Multiple and compatible uses that require port/harbour facilities within these areas are encouraged. Where appropriate public access should be safeguarded even if this may be limited to views of ports or harbours.

3. For **protected areas** the aim is to safeguard and promote their natural and cultural value. Current measures adopted through the Scheduling Processes still apply over and above the provisions given for the predominantly urban coastline. Areas of known ecological, scientific and/or cultural importance that have not yet been given such protection are to be safeguarded until such protection is afforded to them.

## **The Marine Environment**

The lack of a property management system similar to that adopted on land has led to a perception that the marine environment is an open resource and free-for-all. The majority of marine development and uses were introduced with very little consideration to impacts on both the natural resources and adjacent marine and coastal activities. This strategy applies to the marine environment up to the 12 nautical mile limit even though most activities are located in the coastal waters.

## **Strategy**

***The objectives for the marine environment are to safeguard the natural and cultural heritage present; safeguard legitimate marine uses, and minimise existing and potential conflicts.***

## **Policy Direction**

1. The candidate **Marine Conservation Areas** identified within the current Structure Plan should be afforded legal protection to allow better management of activities within and adjacent to them. Such protection should extend to other areas since important habitats are also found beyond the 50m-depth contour. Until more detailed information is available on the natural characteristics, a precautionary approach towards development should be taken.
2. In general the development of marine uses should consider the resulting impacts on both the marine environment and other coastal and marine uses. As much as possible new development at sea which does not necessitate contiguous coastal land area for operation, (such as aquaculture) should be located beyond the 50-m depth contour.