Development of Yachting Facilities in Malta
IDENTIFICATION OF POTENTIAL SITES FOR ALL-WEATHER MARINAS AND TEMPORARY MARINAS
APRIL 2009
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INTRODUCTION AND METHODOLOGY
INTRODUCTION

The Malta Maritime Authority’s (hereinafter referred to as MMA) objective is to implement Government’s vision to establish Malta as a centre of excellence in maritime services by 2015. The yachting industry has been identified as one of the maritime clusters which offers potential to Malta complementing Government’s vision.

The yachting industry in Europe is still in a growth phase and offers great opportunity to maximize Malta’s strengths in this field including but not limited to its strategic location, its skilled and specialized human resources and professional intermediaries and its economic services. The provision of further infrastructure within the yachting industry is a challenge which needs addressing within the short term in order to fulfil Government’s objectives in this area.

1.1 SCOPE

It is the intention of Government to provide the right infrastructure for the yachting industry to grow and prosper. The scope of this report is to identify sites that can be considered for new permanent yacht marinas and sites for seasonal or temporary marinas.

The report provides an analysis of current demand for this infrastructure and considers the criteria for selection for these facilities and also discusses relevant issues.

Chapters 4, 5 and 6 consider sites for permanent marinas in the Grand Harbour, Marsamxett Harbour and other locations respectively, and Chapter 7 proposes a number of sites for temporary marinas from many sites that are considered. Chapter 8 provides a summary of findings and recommendations.

1.2 POLICY SETTING

Whilst applying ambitious aims, one needs to apply a pragmatic approach in identifying solutions in order to maintain focus on the execution. The key policy principles are the following:

a) A broad vision

The provision of new yacht marinas has to complement Government’s holistic programme which takes into account initiatives including:
- Government’s vision for the Grand Harbour and Marsamxett Harbour as well as the development of Smart City Malta.
- The privatisation of Malta Shipyards which aims to establish Malta’s potential in the yacht repair sector.
- The privatisation of the yacht marinas operated by the MMA which will ensure that the facilities are substantially upgraded in infrastructure and management.

Apart from taking cognisance of the various planning guidelines provided by the Malta Environment and Planning Authority (MEPA), the development of new marinas will adhere to the principle of sustainable development in order to address this development from an environmental as well as from a socio-economic perspective.

b) An economic opportunity

The yachting industry presents a unique opportunity in terms of value added to the economy. The coastal and land limitations need to be maximised. It is for this reason that space needs to be created for larger boats in order to establish the islands as a hub for temporary stop overs within this specific niche market.

c) Government as a regulator not an operator

New yacht marinas are an important infrastructural building block towards this end. However, success in this sophisticated market is also dependent on excellent repair facilities, effective regulation, ancillary services such as transport and entertainment, and the development of a cluster of services that support the industry in ICT, training and professional services.

Government will have two roles in the process of developing and administering the new facilities. It will identify potential sites for marinas as well as regulate the activities generated by this development.

The actual development of the marinas, the repair facilities and the temporary pontoons, their space planning and management will be left for private sector. Privatisation within the maritime sector is bound to repeat the success stories already experienced in other sectors over the last few years.
d) No room for speculation
The development of new yacht marinas should not be accompanied by large real estate projects. With the exception of sites readily available and earmarked within a development zone, any new yacht marinas should function in a commercially viable way without the dependency for revenue from associated property.

e) A challenge
Apart from limitations in terms of land and coast, there are also significant constraints resulting from technical and environmental requirements. Posidonia meadows grow where light can reach them i.e. at shallow depths. Unless there are specific circumstances preventing growth, Posidonia (and possibly other protected species) will be found around most of our coastline where the sea depth is less than 20 metres. Posidonia is a genus of flowering plants containing two to nine species of marine plants found only in the Mediterranean and around the south coast of Australia. This plant is protected so any development resulting in the loss of Posidonia will be objected to on environmental grounds. On the other hand, the cost of construction of a breakwater increases exponentially with depth of water. Construction beyond approximately 15 metres enters exorbitant cost levels. Hence there are environmental constraints against major interventions at depths of less than 20 metres and significant cost constraints on interventions at depths of more than 20 metres. Consequently the locations identified for permanent marinas are those within existing harbours.

1.3 METHODOLOGY

Literature Review & Stakeholder Meetings
The MMA has considered various options for marinas and as such various reports and studies have been carried out. The first step in the preparation of this report was to review the previous studies on the subject. The reports that have been reviewed are listed at the end of this chapter.

The most significant is a study commissioned by the MMA and MEPA on Yachting Development in Malta prepared by Deloitte and Touche in July 1996 (hereinafter referred to as D&T report). Apart from identifying a number of potential sites, the D&T report had provided a useful reference to MMA and to Government for the various works carried out on yacht marinas in Malta in subsequent years. The D&T report is also a useful reference in the preparation of this report.

The methodology adopted in developing this report included a number of meetings with key stakeholders in the sector as well as a review of the situation in the region.

As outlined further on, this report also takes into account the recommended options for harbour breakwaters carried out by Colin Toms and Partners in April 2008.

1.4 HIERARCHICAL CRITERIA FOR ALL-WEATHER MARINAS

This report takes a slightly different approach from the D&T report in terms of the use of criteria. The D&T report places the various criteria in site selection on the same footing and, in allocating points for ranking it does not give more weight to some criteria as opposed to others.

The overriding principle in this exercise in the identification of sites for permanent marinas is environmental. This will be tackled further in Chapter 3 of this report.

Temporary marinas involve the placing of pontoons for yacht berthing during the summer (see Chapter 3). The nature of temporary marinas, as well as the financial implications and environmental impact, are different from all-weather marinas. Numerous locations for temporary marinas are considered in this report, included sites which were suggested in the D&T report for temporary pontoons.

1.5 REVIEWED DOCUMENTS

Technical Reports*

Yachting Development in Malta - Deloitte and Touche Consulting Group July 1996

Feasibility and Environmental Impact Studies for Maritime Transport Infrastructural projects – Malta Phase D report – Part 2; Strategic development planning and Grand Harbour zoning plan - ECORYS Netherlands November 2006


Xemxija Bay A Yacht Marina Strategic Assessment - Deloitte, AP and ADI Associates December 2005

Marsascala Harbour Strategic Planning Assessment for Marina Facilities - Deloitte, Adi Associates, April 2006


Marsascala Marina Breakwater J.A Sciortino, September 2007

* All technical reports listed above were prepared for the Malta Maritime Authority except for the Yachting Development in Malta 1996 study which was prepared for MMA and Planning Authority.

**Other Reports and Studies**


Management Guide for Marine Protected areas of the Mediterranean Sea - Permanent Ecological Moorings Francour P et al - Universite de Nice-Sophia Antipolis & Parc national de Port-Cros, Nice

Vizjoni Ghall-Port il-Kbir ta’ Malta - Ministeru ghall-Investiment u Teknologija ta’ l-Informazzjoni Settembru 2007


Fort St. Elmo and Marsamxetto harbour Report - MIMCOL Malta Investment Management Co Ltd., Ministry for Investment and Information Technology, November 2007

Vizjoni Ghall-Port ta’ Marsamxett u Forti St. Iermu - Ministeru ghall-Investiment u Teknologija ta’ l-Informazzjoni – Novembru 2007

A Code of Practice for the Design, Construction and Operation of Coastal and Inland Marinas and Yacht Harbours - Yacht Harbour Association Ltd. 2007
Chapter 2

SITUATION ANALYSIS AND POTENTIAL DEMAND
OVERVIEW OF THE YACHTING SECTOR

The Mediterranean has a long-standing maritime tradition. The suitable climate and attractive cruising grounds make it a hive of yachting activities and the yachting industry is a well established and important contributor to many Mediterranean economies. Some of the best known cruising grounds in the world are located in the Mediterranean; these include the South of France, the Italian Riviera, Sardinia, and the Greek islands all being important yachting destinations of international repute. In addition, there are significant amounts of yachting activities in Spain, Croatia and Turkey which are typically complementary to coastal tourism activity.

2.1 YACHTING MARKET IN EUROPE

12% of all of the 6 million boats in Europe are of a size that typically requires a marina\(^1\).

Boat ownership in Europe as at 2004 stood at 1.3 boats per 100 members of the adult population with Scandinavia as the highest region with a per capita boat ownership (10 boats per 100 members of population), nearly 10 times higher than in other countries.

The Mediterranean boat ownership is typically slightly lower at 1.1 boats per 100 adults, with Italy and France having a higher average as indicated in Table 1. Boat ownership per capita in Malta presently stands at around 4.1 boats per 100 persons.

Out of the 2 million boats on the Mediterranean coast, around 233,110 are boats over 25 feet (7.62 metres) and therefore have a propensity to travel overseas to destinations within the same Mediterranean. Out of these boats of 'marina size' around 90% fall within 7.6 to 12 metres (25 to 40 feet), with just 10% being represented by larger boats (12 to 24 metres or 40 to 80 feet) and a much smaller portion being represented by super yachts.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>938,000</td>
<td>2.0 per 100</td>
</tr>
<tr>
<td>Italy</td>
<td>800,000</td>
<td>1.7 per 100</td>
</tr>
<tr>
<td>Spain</td>
<td>160,000</td>
<td>0.5 per 100</td>
</tr>
<tr>
<td>Greece</td>
<td>68,200</td>
<td>0.8 per 100</td>
</tr>
<tr>
<td>Turkey</td>
<td>56,400</td>
<td>0.1 per 100</td>
</tr>
<tr>
<td>Croatia</td>
<td>52,800</td>
<td>1.5 per 100</td>
</tr>
<tr>
<td>Mediterranean Sub Total</td>
<td>2,075,400</td>
<td>1.1 per 100</td>
</tr>
<tr>
<td>Total Europe (30 countries)</td>
<td>5,990,000</td>
<td>1.3 per 100</td>
</tr>
</tbody>
</table>

Source BMF 2004

\(^1\) Deloitte & Touche 2005. Although 4 years have passed since this study the trends still apply.
2.2 THE SUPER YACHT INDUSTRY

The super yacht industry (defined as ocean going yachts typically over 24 or 30 metres) is also experiencing growth, as the fleet doubles in size each decade. The total number of boats larger than 24 metres is claimed to be 3,800 (split up approximately into 34% in the 24-30 metres range, 40% in the 30-40 metres range, 15% in the 40-50 metres range and 11% over 50 metres in length).

A report by Campers & Nicholsons (May 2008) confirms that there are approximately 4,000 super yachts on the market with orders of approximately 500 new boats over 24 metres (250% since the year 2000). At this rate the fleet of super yachts is expected to grow to 5,000 by 2010.

The research by Economics Research Associates indicates that when it comes to new orders, 62-65% of orders are for boats 25 to 37m. The orders for boats over 100m range from 1% to 3% of boats.

The Campers & Nicholsons study concluded that 1,000 out of the total of 3,800 super yachts available are presently on the brokerage market and 20% of the total fleet is available for charters with 60% of such charters involving boats that range between 30 to 50 metres in length. 70% of these charters are sold in the Mediterranean.

Whilst the industry has continued to expand, the traditional cruising grounds have changed over the last 30 years. This means that at certain times of the year and in certain areas, seas and marinas are becoming crowded and the limited supply of berths available is a serious issue. The Mediterranean cruising season typically runs from April/May to September/October and comprises both itineraries in the Western Mediterranean (west of Malta and Sicily) and the Eastern Mediterranean.

The most popular itineraries in the Western Mediterranean typically include the following destinations: Cannes, Antibes, Monaco, Nice, the Italian coastline, Sardinia and the Balearics. Over recent years there has been a marked increase in the popularity of cruising routes in the Eastern Mediterranean mainly routes along the Dalmatian Coast of Croatia, the Ionian Sea to the west of the Greek mainland, the Cyclades Islands to the southeast of Athens and the Aegean Sea comprising the Greek Islands and the Turkish Coastline (primarily from Bodrum to Gocek).

2.3 POTENTIAL FOR MALTA

Strategically located in the heart of the Mediterranean, Malta is well placed to provide easy access to both itineraries in the Eastern and Western regions and draw demand from vessels migrating between the two. In fact 85% of the global population of superyachts pass through the Mediterranean at any one time with all yachts over 30m able to reach Malta from any end of the Mediterranean Sea.

Quite apart from the presence of super yachts in the Mediterranean there is growing demand for berthing space for boats that are just under the low end of the super yachts category (20 to 24m). The growth here is explained by the fact that leading countries such as Spain and France are building substantial marina capacity to cater for super yachts, pushing the smaller boats to seek berths further down the region.

The added value that the yachting industry contributes to the economy is unquestionable. Stakeholders within the local industry estimate that a local yacht owner spends an average of €15,000 on a 15m boat per year; a 15 to 20m visiting yacht spends between €4,000 and €6,000 in a week while a super yacht on charter typically spends anything around €100,000 excluding refits or internal transport. The rule of thumb used in the yachting industry is that 10% of the original value of a boat is spent in maintenance and operation.

Malta is facing a supply problem when it comes to available berths. This is hindering the growth of the industry. The total number of yachts registered in Malta and likely to require a local berth as at September 2008 was 2,284 (excluding visiting yachts), while the total supply of berthing spaces stood at 1,511.
2.4 CURRENT SUPPLY

Malta has six main yacht marinas. The Msida, Ta’ Xbiex and Gozo marinas are to date still managed by the Malta Maritime Authority. The other three marinas are privately run.

In terms of the expected expansions in present yacht marinas, the Manoel Island Marina is expected to increase to 400 berths in the next few years. Thus, considering these potential expansions in the next few years, Malta’s capacity should grow to a maximum of 1,800 berths.

2.5 POSITIONING AND UTILISATION OF THE PRESENT MARINAS

The Msida and Gozo marinas are essentially currently designed to accommodate the lower end of the market, mostly made up of local owners of relatively small boats. The prices are low and the facilities are very basic. The Ta’ Xbiex marina does not have pontoons but is a stern-to facility with 57 berths catering for larger boats.

The Portomaso marina (which opened in 1999) forms part of the Hilton and Portomaso complex and mainly caters for apartment owners within the adjoining development. The marina’s space is confined and does not present any competition to the marinas presently managed by the MMA.

The Manoel Island marina which forms part of the Manoel Island Tigne Point (MIDI) project (marina berths extended in 2002) has made available some 120 berths (to be increased to 400) capable of accommodating various sizes of yachts, including super yachts. The MIDI project aims at transforming Manoel Island into an up market tourism development which includes the establishment of a five star hotel together with additional residential and commercial facilities.

The main attraction of this marina is undoubtedly its location sited between the historic Fort Manoel and the Valletta peninsula.

The Grand Harbour Marina (opened in 2002) forms part of the Cottonera Waterfront development and is currently managed by Camper and Nicholsons providing 286 berths on the Vittoriosa side, with plans for additional berths on the Senglea side.

The marina consists of floating pontoons for berths in the size range 8 - 25m, stern-to berthing for boats of 20 - 25m, and finger pontoons for yachts up to 15m. The marina also boasts berthing facilities for super and mega yachts in the length range of 30 to 100m. These super and mega yacht berths are divided into three sections. One group of berths lies beneath the bastions of Fort St. Angelo, another section of berths lies along the wide and landscaped Vittoriosa Wharf, and the third group on Oil Wharf. As a matter of fact the Grand Harbour Marina is being marketed as being one of the largest “Big Boat Marinas in the World”.

All berths up to 18m in all locations are taken up with only a few super yacht berths still available.

Portomaso has 2 spaces for boats over 20 m. The numbers do not add up because the marina has some berthing spaces that do not fit the categories in this table.

### Table 2 - Number of Berths in Yacht Marinas in Malta

<table>
<thead>
<tr>
<th>Yacht Marinas in Malta</th>
<th>Msida</th>
<th>Ta’ Xbiex</th>
<th>Gozo</th>
<th>Portomaso</th>
<th>Manoel Island</th>
<th>Grand Harbour</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total No. of berths</td>
<td>734</td>
<td>57</td>
<td>204</td>
<td>110</td>
<td>120</td>
<td>286</td>
<td>1,511</td>
</tr>
<tr>
<td>Up to 12m</td>
<td>551</td>
<td>20</td>
<td>194</td>
<td>79</td>
<td>15</td>
<td>138</td>
<td></td>
</tr>
<tr>
<td>Up to 16m</td>
<td>183</td>
<td></td>
<td>10</td>
<td>79</td>
<td></td>
<td>15</td>
<td>104</td>
</tr>
<tr>
<td>Up to 20m</td>
<td></td>
<td></td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 24m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>104</td>
<td></td>
</tr>
<tr>
<td>Over 24m</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>21</td>
<td>44</td>
</tr>
<tr>
<td>Total No. of berths</td>
<td>734</td>
<td>57</td>
<td>204</td>
<td>110</td>
<td>120</td>
<td>286</td>
<td>1,511</td>
</tr>
<tr>
<td>Max. boat length</td>
<td>16m</td>
<td>40m</td>
<td>16m</td>
<td>16m</td>
<td>85m</td>
<td>100m</td>
<td></td>
</tr>
</tbody>
</table>

Source: Respective websites of the yacht marinas as quoted by MIMCOL report (2008)
2.6 PRIVATISATION OF THE MMA YACHT MARINAS

The most significant recent development in the sector is the decision by Government to privatise the Msida, Ta’ Xbiex and Gozo marinas. The Privatisation Unit is expected to publish a Request For Proposals and the privatisation process will be concluded during 2009.

The objective sought by Government in the privatisation of the marinas is to attract investment that will go into the upgrading of the infrastructure, to upgrade the service and space management as well as to create a competitive situation. The market will continue to be closely monitored by the MMA in its capacity as the regulator.

2.7 APPLICATIONS FOR MARINAS BEING CONSIDERED BY MEPA

MEPA is presently considering the application for a project in Qala, Gozo as well as an application by the MIDI consortium both of which include small marinas.

2.8 SUPPLY VS DEMAND

The supply problem is evident if one uses the same rationale as that applied in previous studies. The D&T study (1996) had established a benchmark based on engine power to decipher the number of boats likely to require a berthing space in a marina. This was that 10% of boats of 50-75 HP, 15% of boats of 75-100 HP and 25% of boats of over 150 HP require a berth. With this rationale, there are around 503 boats on the Small Ships Register that require a marina berth. In the case of the yacht register, the Merchant Shipping Directorate of the MMA calculates\(^3\) that at present there are around 1781 yachts requiring a berth in Malta.

With this rationale, 1781 yachts and 503 on the small ships register would require a berth at present, totalling 2,284. Thus present demand already exceeds supply without considering any visiting yachts that have averaged around 1,000 per annum.

The yearly average increase in yachts and boats seeking permanent berthing in Malta is of around 107, as explained in Table 3.

### TABLE 3 - REGISTRATION OF YACHTS AND BOATS IN MALTA 2005-2007

<table>
<thead>
<tr>
<th>REGISTRATION OF YACHTS BOATS IN MALTA</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>Total</th>
<th>Av. Yearly growth(^4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yachts locally registered with an address in Malta</td>
<td>53</td>
<td>93</td>
<td>94</td>
<td>240</td>
<td>93.5</td>
</tr>
<tr>
<td>Small ships of marina engine size</td>
<td>14</td>
<td>16</td>
<td>11</td>
<td>41</td>
<td>13.5</td>
</tr>
<tr>
<td><strong>Total yearly increase</strong></td>
<td>67</td>
<td>109</td>
<td>105</td>
<td>281</td>
<td>107</td>
</tr>
</tbody>
</table>

2.9 SHORTAGE

As explained, Malta has a present local demand of around 2,284 berths excluding requests from foreign visiting yachts, compared to the present supply of 1,511 berths.

With the present supply all marina berths up to 18m in Malta and Gozo are taken up. The only available supply refers to a limited number of super yacht berths. The shortage of berthing space is the single most pressing issue the yachting sector is facing in Malta today.

The MMA calculates that its realistic\(^5\) waiting list from local owners is of around 250 berths, however in 2008 the Authority received around 200 requests for long term berthing by foreign clients, all of which had to be refused due to lack of capacity.

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\(^3\) Pleasure yachts registered having their owner’s address registered in Malta, company or individual, with no local/resident agent representing their owners.

\(^4\) Eliminating the year 2005 due to the effect of the one-off VAT advantage of 2004.

\(^5\) Calculated as the overall waiting list less those boats that are likely to have berthing space in the private marinas but are on the MMA waiting list only because of the price difference. Refer to Table 5.
2.10 COMPETING COUNTRIES BUILDING CAPACITY AGGRESSIVELY

If one takes Italy’s Southern region, including Sardinia, Campagna, Calabria and Sicily, the total number of spaces is over 45,000, with over 17,000 berths for boats of 10m and over. In Sicily alone there are presently 14,000 berths with approximately 4,200 berthing spaces for boats of 10m. Croatia carries over 16,000 berths in 53 marinas and Tunisia with just over 3,000 berths in around 28 marinas. Moreover, fully aware of the economic potential of the sector, the main competition countries are building numerous new marinas. In Southern Italy there are over 4,800 berths being provided in the next few years through a project championed by the central Government called Italia Navigando.

2.11 DECLINING FOREIGN MARKET

Malta’s main opportunity in terms of economic added value lies in the possibility of attracting international yachtsmen to cruise in summer, berth and repair in winter or use Malta as a hub for charters. The number of visiting yachts per year has been declining since 1994. This decline correlates to the constant increase of locally registered yachts which have taken up berthing spaces throughout the years. The main reason behind this is the fact that temporary space for visiting yachts is not available.

TABLE 4. FOREIGN REGISTERED YACHTS IN MALTA

<table>
<thead>
<tr>
<th>Year</th>
<th>Foreign Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>1463</td>
</tr>
<tr>
<td>1995</td>
<td>1458</td>
</tr>
<tr>
<td>1996</td>
<td>1307</td>
</tr>
<tr>
<td>1997</td>
<td>1307</td>
</tr>
<tr>
<td>1998</td>
<td>1175</td>
</tr>
<tr>
<td>1999</td>
<td>1186</td>
</tr>
<tr>
<td>2000</td>
<td>1170</td>
</tr>
<tr>
<td>2001</td>
<td>1196</td>
</tr>
<tr>
<td>2002</td>
<td>954</td>
</tr>
<tr>
<td>2003</td>
<td>596</td>
</tr>
<tr>
<td>2004</td>
<td>635</td>
</tr>
<tr>
<td>2005</td>
<td>803</td>
</tr>
<tr>
<td>2006</td>
<td>650</td>
</tr>
<tr>
<td>2007</td>
<td>618</td>
</tr>
<tr>
<td>2008</td>
<td>680</td>
</tr>
</tbody>
</table>

The above table accounts for the MMA marinas only. Consultation with at least one other main marina serves as a basis to conclude that Malta presently receives around 1,000 visiting yachts on short term visits each summer.

MARKET ASSESSMENT

A demand assessment was conducted in the 1996 Yachting Development in Malta carried out by Deloitte & Touche (D&T report).

2.12 ALL-WEATHER (PERMANENT) BERTHS

D&T had projected a need for 600 new berths (after taking into account Manoel Island and Portomaso marinas) for the period ending 2007. If one takes the 600 to be the base amount which is still a requirement, since no marina developments were carried out since 1997, a simple proportion of the requirement for the next seven years (2009-2015) would amount to 1,020 berths. This is a conservative estimate and the estimated requirement for berths can be taken to be as high as 1,240 if one uses the same methodology but starting from a base of 900, which was the figure suggested by D&T before taking into account the berths available at the Manoel Island and Portomaso marinas. Therefore demand for permanent berths for the next seven years is between 1,020 and 1,240.

\[\text{Calculated as the overall waiting list less those boats that are likely to have berthing space in the private marinas but are on the MMA waiting list only because of the price difference.} \]

\[\text{\textsuperscript{1}Projected growth in demand per year 107 berths x 7 years.}\]
The figure of around a 1,200 to 1,300 new berths is corroborated when one uses a different methodology. Assuming that at present around 2,284 yachts and boats registered in Malta require a berth, and extrapolating the annual growth in demand in the last 3 years, will give a demand of 3,034 berths by 2015. The demand for new berths by 2015 will be 750 berths.

The MMA estimates that the realistic waiting list is approximately 250 boats.

The MMA forecasts an increase in foreign visiting yachts (for a temporary period) to grow from current 1000 to 3000 each summer by 2015.

In addition one needs to account for at least part of the 200 requests by foreign yachts for berthing in winter (long stays).

The number of berths required using this methodology is summarised in Table 5 below:

**TABLE 5: NUMBER OF NEW BERTHS REQUIRED IN MALTA**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Berths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected growth in demand from locally registered yachts for new berths</td>
<td>750</td>
</tr>
<tr>
<td>Current Waiting List by local yachts at MMA</td>
<td>250</td>
</tr>
<tr>
<td>Request for winter berths by foreign yachts</td>
<td>150</td>
</tr>
<tr>
<td>Temporary visiting foreign yachts(^a)</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,300</strong></td>
</tr>
</tbody>
</table>

Out of a 1000 new permanent berths, around 10% need to be able to accommodate super yachts. This is based on initial consultation with the industry. Apart from this, the desirable situation is that visiting yachts are larger boats, implying higher added value to the economy.

**2.13 HARD-STANDING FACILITIES**

Initial consultation with key players in the yachting industry in Malta confirms that the lack of hard-standing facilities is acting as a barrier to the growth of this sector in Malta. The Yachting Development Subject Study (1997) had identified the lack of land facilities where boats can be stored and maintained as one of the main weaknesses. Since then, the supply of hard-standing space remained approximately the same while the number of boats continued to grow.

It is acknowledged by all players in the industry that hard-standing facilities are essential if the industry is to grow because there is a requirement for each boat to be taken on land for a short period each year for necessary repairs and maintenance. Hard-standing facilities, together with seasonal marina facilities and permanent marinas, are seen as complementary pillars of the yachting sector.

**2.14 TEMPORARY BERTHS**

The number of foreign visiting yachts in summer in total (including private and government owned marinas) was 1,000 in 2007. The likelihood is that the projection could not be realised because of a lack of capacity, since the sector was experiencing growth internationally. If one assumes that the demand increases by 20% each year from 2010, the demand at the end of the 7-year period will be around 3,000 visiting yachts during the 10-weeks of summer, resulting in an average of 300 boats per week. Assuming a peak in demand during August of around 600 visiting yachts (20% of total visiting yachts) in the same week and assuming 150 yachts are accommodated in permanent marinas the requirement for temporary berths is 450.

\(^a\)The assumption taken is that out of the total projected visiting yachts of around 3,000 each summer, around 300 will require a space in each of the 10 weeks of summer. It is further assumed that out of the 300 visiting boats per week, 150 would require a berth while 150 will be accommodated on temporary berths. Refer to 2.14.
2.15 OTHER FACTORS THAT INFLUENCE FUTURE DEMAND

Local increase in registration of commercial yachts (+)
The MMA has a clear objective to increase the number of large yachts on its register. Though yachts already make up a substantial part of the Malta register in general, the increase in registration of yachts is likely to make owners more aware of the benefits of wintering in Malta and/or of visiting in the high seasons.

Capacity building in France and Spain for larger vessels (+)
The traditional yachting hubs in France and Spain are building substantial capacity to address the increasing demand from super yachts. The facilities they are building make them expensive for small yachts that might be tempted to look for berths further to the South, like Italy and Malta.

Supply affecting demand (+)
The number of visiting yachts was highest when new marinas came onto the market. The number of visiting yachts declines with the rise of the problem of space. Therefore the supply of new marina space is a factor that influences demand.

Fuel cost (-)
Indications are that the increase in the price of fuel is leading owners of medium sized boats to restrict travel to shorter journeys. Motor boat sales in marinas in Italy have decreased by 20% according to major builder Azimut-Benetti. These trends might deter international visitors, though the impact on super yachts is not likely to be significant.

Increase in congestion increases demand for local small boats (+)
Malta’s roads are some of the most congested in Europe. In line with Government’s modal shift from private land transportation use Government has identified water taxis and water ferries within its national public transport reform.

Bunkering advantage (-)
The duty free bunkering that used to be available prior to Malta’s accession into the EU is now no longer available. This factor is relevant because competing countries like Tunisia offer such benefits because of lower regulation.

Malta as a quality of life destination (+)
With the richness of its history, its climate, language proficiency, low crime rate and the proliferation of high quality entertainment services, Malta is becoming an attractive quality of life destination. In the last few years, these factors had a sizeable number of foreign persons who either came to settle/retire in Malta or include Malta in their yachting itinerary.

Branding (+)
This is a very brand sensitive industry and successful branding by the operators and successful branding of Malta as a yachting destination will have an impact on future demand.

Other national developments (+)
Two major Government-championed initiatives are worth mentioning in this sense. Firstly, the development of Smart City as a regional ICT Hub attracting high quality visitors, and secondly, the planned reforms in public transport and the road network.

Global economic slowdown (-)
The condition of the global economy at present is surely a factor that has implications on the demand for berthing spaces. While the indications in the international media seem to be that the economic slowdown is unlikely to affect the market for super yachts, the demand for yachts less than 24m in length has been negatively impacted. Having stated this, it needs to be said that the provision of berthing spaces is a long term project, likely to be fully implemented by the time the world economy would start moving out of the recession.
Chapter 3
CRITERIA AND ISSUES FOR SITE SELECTION
ALL-WEATHER MARINAS AND TEMPORARY MARINAS
3.1 ALL-WEATHER (PERMANENT) MARINAS AND TEMPORARY MARINAS

In this chapter, the criteria for site selection of all-weather (permanent) marinas and temporary marinas are considered.

Whereas up to now discussion on berthing has always considered one option namely all-weather marinas, in this report two scenarios are envisaged namely:

1. Use of all-weather marinas providing permanent berths all year round; and
2. Use of temporary marinas providing seasonal berths during the summer season from June to mid September.

ALL-WEATHER MARINAS

3.2 HIERARCHICAL CRITERIA

A simplified schematic illustration of the hierarchical decision criteria for all-weather marinas is given below.
ALL-WEATHER MARINAS - ENVIRONMENTAL AND SOCIAL CRITERIA

3.3 ENVIRONMENTAL CRITERIA

When considering environmental criteria, it is useful to distinguish between two “types” of coastlines. There are stretches of coastline which are in their natural state and which have not been impacted by development and there are areas of the coast which have been impacted and transformed by development.

The environmental criteria used in the site selection process takes into account the policy context as set out in the Coastal Strategy paper issued by MEPA (see next section). For natural coastlines, the main environmental concerns would be urbanisation of the coast and the loss of habitat. The development of an all-weather yacht marina may necessitate the provision of land based facilities and eventually provide justification for further development and urbanisation of the coast. For an area as yet in its natural state, even limited facilities will have a high impact.

The development of a yacht marina along a natural coastline will result in the loss of flora and fauna, possibly Posidonia meadows, which are considered to be the most important ecosystem along the Mediterranean coastal waters.

The environmental considerations take an even higher priority if the site is designated for protection for conservation, ecological, scientific or archeological reasons. The same applies if a nearby designated site could be impacted by the construction of a breakwater.

In this report, sites involving the natural coastline are not considered for all-weather marinas, unless they were previously considered in some other report.

There are also environmental concerns for coastlines which are already impacted by development, albeit to a much lesser degree compared to the undeveloped coastal zone. Yacht marinas could result in increased traffic in already established urban areas causing congestion, delays and pollution. For some seafront residents, marinas could also be a nuisance because of noise and pressures for parking.

Another environmental consideration is the visual impact of a yacht marina. This is dependent on many factors including the context within which the marina is built, the size of the marina and the extent and size of structures that go with it. Visual impact can be highly subjective. The presence of yachts and boats in a sea inlet may be a visual intrusion to some and a visual enhancement to others. For this reason, at this preliminary stage, there is little or no consideration of visual impacts in this report.

3.4 ENVIRONMENTAL CRITERIA - POLICY CONTEXT

The Coastal Strategy Topic Paper provides the most up-to-date policy on coastal development. The strategy is envisaged to provide a policy direction within the revision of the Structure Plan, a process which is still underway. The strategy aims at safeguarding the characteristics of the coastal zone, both natural and cultural, while retaining, encouraging and safeguarding legitimate coastal uses that depend and rely upon this diversity.

The objectives for the strategy are:

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

The Topic Paper classifies the terrestrial coast into two general categories, predominantly urban and predominantly rural, depending upon the prevailing characteristics and scale of uses.
The Predominantly Rural Coast incorporates those areas that to date have very limited development, if any. These are the areas where ecological and/or geomorphologic features dominate the coastal stretch. According to the Topic paper:

“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. Existing legally approved uses and development within protected areas should be allowed to continue, provided that the value of the protected coast is not affected negatively.”

The Predominantly Urban 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. 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. According to the topic paper:

“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. The protection of open space for public use is to be safeguarded. Existing legally approved uses and development within protected areas should be allowed to continue, provided that it does not affect the value of the protected coast negatively.”

### 3.5 LOSS OF AMENITY

Some stretches of coastline are used extensively for leisure uses particularly swimming. The development of a yacht marina could result in the loss of amenity, in that a stretch of coastline is rendered unsuitable for swimming. This could be either due to the loss of direct access to the water or to the degradation of the water quality.

The loss of coast for swimming should, as far as is practicable, be avoided especially if the stretch of coast is popular and extensively used for swimming.

### 3.6 RELOCATION OF EXISTING USES/ COMPETITION WITH OTHER USES

Within the protected waters of harbours, the competition for uses is intense. The berthing of cargo ships, passenger ferries and cruise ships requires substantial space and quays. When considering yacht marinas within harbours, the current and potential use of the shoreline and area of sea need careful consideration.

In some locations there may also be the need to relocate current users.

### ALL-WEATHER MARINAS - ECONOMIC AND TECHNICAL CRITERIA

#### 3.7 ECONOMIC AND TECHNICAL CRITERIA

The main costs of developing a new yacht marina relate to the infrastructure costs associated with the development of the breakwater and the quay walls. The costs involved in the construction of any marine structure such as breakwaters and quays is significant. It is therefore inevitable that the overriding criteria as to whether a site will be appropriate for a yacht marina will be the cost associated with the development of the required infrastructure.

Another consideration related to cost is the size of marina that will result from the capital investment. The lower the infrastructure cost per berth, the more attractive will the potential site be for a marina. Using these criteria, the development of a small permanent marina which necessitates the construction of a breakwater may almost definitely be excluded from further consideration. Conversely, where the construction of a breakwater enables the provision of hundreds of berths, the potential marina/s will merit further consideration.

#### 3.8 ACCESSIBILITY AND PARKING PROVISION

The availability of parking is one of the considerations referred to when considering whether a site is suitable for a yacht marina. In fact international standards recommend 0.75 car parking spaces per berth. Apart from the consideration relating to convenience for yachtsmen to get to their boat, there is also an issue related to the impact that the increased demand for parking and the increased traffic generation will have on the area surrounding the marina.

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10A Code of Practice for the Design, Construction and Operation of Coastal and Inland marinas and Yacht harbours, Yacht Harbour Association Ltd. 2007
ALL-WEATHER MARINAS - MARKET-RELATED CRITERIA

3.9 MARKET-RELATED CRITERIA

The service provided to yachtsmen is a factor which impacts demand and hence a marina would be more in demand if the following criteria are satisfied:

- On-shore facilities providing good social infrastructure for marina users – hotels, restaurants
- Yachting services readily available
- Quiet – not impacted by traffic noise
- Close to popular cruising areas
- Close to hard-standing/ repair and maintenance facilities
- Close to main residential conurbation of Malta and therefore close to the main source of domestic boat owners
- Close to tourist attractions – for example historic towns

The economic and environmental criteria will ultimately determine whether a site is appropriate or not to develop as a yacht marina. Inevitably, market-related criteria are given lesser priority in the sense that if economic and environmental criteria are satisfied, it is very unlikely that a site is not recommended solely on the basis of market-related criteria. At best, measures are taken to maximise the potential of a site in terms of marketability.

TEMPORARY MARINAS

3.10 REQUIREMENTS FOR TEMPORARY MARINAS

Temporary marinas refer to seasonal marinas for between 50 and 100 boats. The pontoons are normally installed for the summer season and are stored away on land during the winter.

Temporary marinas are ideal to cater for the spike in demand experienced during the high season as a result of demand from visiting boats and demand from smaller boats which are stored at a hard-standing facility during winter. Temporary marinas tend to be located in popular bays close to areas of high entertainment value thus appealing to visitors. Depending on layout of pontoons, between 65 and 85 berths can be provided per hectare.

DIAGRAM 1: TEMPORARY MARINAS

The drawing above is an illustration of temporary berthing at Ta’ Xbiex. Note the connection to land and the provision of a sizeable platform with an office.
3.11 CRITERIA FOR SITE SELECTION

As temporary marinas are used in the summer, the requirement for protection is limited to the protection from the prevailing summer winds and therefore naturally protected bays are ideal sites for temporary marinas.

The sites identified in this report all have a reasonable level of protection and in all cases, exposure to the open sea (i.e. without protection from land masses even if at some distance) is limited to a maximum of 90 degrees.

The use of temporary berths is dependent on the insurance cover that is offered. In fact, insurers provide cover for boat moorings in selected bays from as early as May up to 15th September.

In summary the criteria for the identification of sites for temporary marinas are:

- A reasonable level of protection from prevailing winds by surrounding terrain;
- Proximity to amenities and facilities (restaurants, hotels etc.);
- Proximity to car parking facilities;
- Proximity to popular tourist areas; and
- Proximity to popular bays.

3.12 ENVIRONMENTAL IMPACTS OF TEMPORARY MARINAS

The environmental impact associated with the development of temporary marinas is minimal as such marinas do not require development of permanent marine structures and the concept is based on the installation of temporary floating pontoons and platforms which are installed during the summer season and removed during the winter season.

The potential environmental impacts relate to:

- The fixing techniques used to fix the pontoons and moorings to the sea bed;
- The impact on fauna as a result of the shade created by the marina;
- The visual impact on the coastline; and
- The impact of waste management associated with waste generated by visiting boats.

3.13 DEVELOPMENT PERMITS AND ENVIRONMENTAL IMPACT ASSESSMENTS

According to Section 30 of the Development Planning Act 2001, any development requires a permission of the Authority (MEPA). Development is defined as “...the carrying out of building, engineering, quarrying, mining, or other operations for the construction, demolition or alterations, in, on, or under any land or the sea or the making of any material change of use of land or building...” In this regard the development of temporary marinas require a development permit, issued by MEPA.
3.14 PARKING REQUIREMENT FOR TEMPORARY MARINAS

The number of parking spaces required for a temporary marina is likely to be very low as the temporary marinas are intended for visiting yachts and for summer berthing of local yachts.

3.15 TEMPORARY MARINA AND BOAT MOORINGS

It is useful to distinguish between temporary marina and fixed moorings. Temporary marina involves the placing of pontoons. Within a temporary berth, the yachtsman will be able to step off onto a pontoon and walk to land. On the other hand, fixed moorings involve mooring the boat from both ends at sea with access to land by means of a shuttle boat.

Another distinction worth making is that between swing mooring and fixed moorings. The former involves mooring a boat to a single buoy thus allowing it to swing around the buoy and effectively occupying a circular area around the buoy. The latter involves mooring a boat to two fixed points (fore and aft) hence reducing the space occupied. It is estimated that an area organised with fixed moorings can cater for as much as three times the number of boats compared to swing moorings.

3.16 TEMPORARY MARINAS IN GOZO

In considering sites for temporary berths, the specific circumstances of Gozo need to be kept in mind. Gozo lacks harbours and bays where, at a reasonable cost, a permanent marina can be developed and therefore the requirement for temporary marinas in Gozo are all the more important.

Gozo is an ideal yachting destination, popular with both Maltese and foreigners. However, currently there are only 25 temporary berths for visitors at the Mgarr marina and therefore the provision of good temporary marinas for short stays is likely to increase the number of visitors to Gozo.
Chapter 4

POTENTIAL SITES FOR PERMANENT YACHT MARINAS

MARSAMXETT HARBOUR
4.1 POTENTIAL MARINA SITES CONSIDERED IN THE DELOITTE & TOUCHE REPORT

The D&T report considers 3 options for marinas in Marsamxett harbour; namely Lazzaretto creek, Sliema creek, and Pieta creek (Refer to Map 4/0). The report evaluates several potential sites on the basis of technical, environmental/social and market/financial/economic criteria. The Lazzaretto Creek marina scored well on environmental/social and market criteria and not so well on technical grounds. Eventually it was ranked as the second best site for a marina (after Dockyard creek). Lazzaretto creek marina was eventually granted by concession to MIDI as part of an overall development of Manoel Island and Tigne Point.

Similarly, the Sliema Creek and Pieta creek also scored well on environmental and market criteria. The two sites scored poorly, however, on technical criteria, the main constraints being the relative high cost of infrastructural works and the lack of space for associated infrastructure; car parking, hard-standing, boatyard.

Policy NHRL04 of the local North Harbours Local plan confirms that Pieta Creek and Sliema Creek can be developed for yacht marinas subject to a number of constraints.

The MMA commissioned Colin Toms and Partners to evaluate a number of breakwater options at the mouth of Marsamxett Harbour to provide protection to the harbour. This would allow various locations within the harbour to be developed into all-weather marinas. The conclusions from the study are that the construction of breakwaters at the mouth of Marsamxett Harbour could cost up to €100 million. Hence, the development of marinas within Marsamxett Harbour can best be achieved by the construction of local breakwaters i.e. smaller sized breakwaters within the harbour which provide protection for the specific site which is to be developed as a marina.
Chapter 4

Potential Sites for Permanent Yacht Marinas - Marsamxett Harbour

Page 25

PotentIal all-weather MarinaS In Marsamxett harbour area

Ref: Map 4/0

All-weather marinas recommended for further consideration

Sliema
Required Breakwater at Tigné (1)

Pietà Creek/Sa Maison
Option A
Required breakwater at Hay Wharf + extension of breakwater at Ta’ Xbiex (2)

Ta’ Xbiex
Dependent on breakwater of Manoel Island (3)

Proposed temporary marinas not shown.

Pietà Marina/Sa Maison Option B not shown.
4.2 Sliema

An all-weather yacht marina can be developed between Sliema and Manoel Island only subject to the construction of a 120 metre breakwater off Tigné Point.

The capacity of the proposed marina is 496 berths (265 berths for 10m and 12m boats; 200 berths for 16m and 20m boats and 31 berths for 30m to 40m boats) as detailed in map 4/1 and Table 6 below.

The development of the marina will require further action as detailed below:

- The reorganisation of small boat moorings close to Manoel Island Bridge.
- The relocation of berthing of the 25 registered boats operated by leisure cruise operators from the current location at Ferries to a location along Gżira Strand.
- Land reclamation to provide limited parking and some facilities for the marina.

The Sliema seafront particularly near the Ferries is subject to intense pressure for parking. The provision of 86 parking spaces is being proposed by means of the land reclamation, however this is not deemed to be sufficient and therefore such a development is likely to increase pressure on the existing parking infrastructure.

The cost of the Sliema breakwater alone is estimated to be €27 million and the cost of land reclamation and the provision of facilities as indicated above is estimated at €5 million. The total cost of infrastructural works is estimated at €32 million.

**TABLE 6: Sliema Marina Berths**

<table>
<thead>
<tr>
<th>Location</th>
<th>Breakwaters/Infrastructure Works</th>
<th>Cost</th>
<th>10m to 12m boats</th>
<th>16m to 20m boats</th>
<th>30m to 40m boats</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sliema Marina</td>
<td>120m breakwater off Tigné + Land Reclamation</td>
<td>€32 million</td>
<td>265</td>
<td>200</td>
<td>31</td>
<td>496</td>
</tr>
</tbody>
</table>

4.3 Ta’ Xbiex

The current marina at Ta’ Xbiex (adjacent to the Gżira Gardens) can be expanded subject to protection provided by means of a breakwater which will be constructed as part of the MIDI project off Manoel Island.

In the eventuality of breakwater protection being provided, additional berthing can be created by the installation of pontoons (as shown in map 4/2), providing 156 berths (142 for 16m and 20m boats and a further 14 stern to berths for 35 and 45m boats).

**TABLE 7: Ta’ Xbiex Marina Additional Berths**

<table>
<thead>
<tr>
<th>Location</th>
<th>Breakwaters/Infrastructure Works</th>
<th>Cost</th>
<th>10m to 12m boats</th>
<th>16m to 20m boats</th>
<th>30m to 40m boats</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ta’ Xbiex Marina</td>
<td>Breakwater to be built by MIDI plc</td>
<td>57 + 85*</td>
<td>14*</td>
<td></td>
<td></td>
<td>156</td>
</tr>
</tbody>
</table>

*New berths

As the Ta’ Xbiex marina currently provides 57 berths, the 156 berths would replace the current berths and hence the net increase will be 99 berths.
### 4.4 PIETÀ CREEK / SA MAISON

In order to develop Pietà Creek/Sa Maison as a marina, local breakwater protection is required for which Colin Toms and Partners considered two variants as detailed in map 4/3 option A and option B and Table 8 below.

**TABLE 8: PIETÀ CREEK/SA MAISON PERMANENT MARINA BERTHS**

<table>
<thead>
<tr>
<th>Location (Map)</th>
<th>Breakwaters/ Infrastructure Works</th>
<th>Cost</th>
<th>10m to 12m boats</th>
<th>16m to 20m boats</th>
<th>30m to 40m boats</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option A (Map 4/3)</td>
<td>85m breakwater near Excelsior and 50m extension of Msida breakwater</td>
<td>€9 million (€6 and €3 million resp.)</td>
<td>291</td>
<td>179</td>
<td></td>
<td>470</td>
</tr>
<tr>
<td>Option B (Map 4/4)</td>
<td>115m breakwater off Haywharf</td>
<td>€11 million</td>
<td>291</td>
<td>117</td>
<td>25</td>
<td>369</td>
</tr>
</tbody>
</table>

The added advantage of this site is that extensive quay space is available for land-based support facilities for the marina, including parking.
Development of Yachting Facilities in Malta

- Area allocated for small crafts
- Proposed Breakwater
- Pier A
- Pier B
- Pier C
- Pier D
- Pier E
- Pier F
- Pier G
- Pier H
- Area 1
- Berths for leisure cruise berths
- Marina offices/facilities Building
- 86 parking spaces
- Total area of land reclamation
  - 8,750 sq.m
- Public transport ferry Berth
- Manoel island
- SlieMa

- SlieMa - all-weather Marina

- Location:
  - Pier A: 30
  - Pier B: 18
  - Pier C: 44
  - Pier D: 27
  - Pier E: 65
  - Pier F: 49
  - Pier G: 62
  - Pier H: 24
  - Area 1: 111
  - Total: 496

- Area of Yacht Marina: 75,900 sq.m
Chapter 4

POTENTIAL SITES FOR PERMANENT YACHT MARINAS - MARSAMXETT HARBOUR

Chapter 4

PotentiaL SiteS foR PeRmanent yAcht MARInaS - MarSaMxett harBour

T'A' XBIEX - all-weather Marina

Ref: Map A2

Area of Yacht Marina - 27,430sq.m

Note: Assumed marina area to be protected by a breakwater.

<table>
<thead>
<tr>
<th>Pier</th>
<th>Area (sq.m)</th>
<th>Area (sq.m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>C</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>D</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>E</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>156</td>
<td>156</td>
</tr>
</tbody>
</table>

Area designated for small boats.
Development of Yachting Facilities in Malta

PIetÀ Creek/SA MAISON
All-weather Marina Option

Area of Yacht Marina - 60,605sq.m / Area of Fairways - 25,455sq.m
### Chapter 4: Potential Sites for Permanent Yacht Marinas - Marsamxett Harbour

#### Pieta Creek/SA Maison All-Weather Marina

<table>
<thead>
<tr>
<th>Location</th>
<th>(3.5mx10m)</th>
<th>(4.5mx12m)</th>
<th>(5.0mx16m)</th>
<th>(5.5mx20m)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pier A</td>
<td>88</td>
<td></td>
<td></td>
<td></td>
<td>88</td>
</tr>
<tr>
<td>Pier B</td>
<td>51</td>
<td>30</td>
<td></td>
<td></td>
<td>81</td>
</tr>
<tr>
<td>Pier C</td>
<td>35</td>
<td>32</td>
<td></td>
<td></td>
<td>67</td>
</tr>
<tr>
<td>Pier D</td>
<td>5</td>
<td>32</td>
<td>26</td>
<td></td>
<td>63</td>
</tr>
<tr>
<td>Pier E</td>
<td>9</td>
<td></td>
<td>27</td>
<td></td>
<td>36</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>153</strong></td>
<td><strong>74</strong></td>
<td><strong>64</strong></td>
<td><strong>53</strong></td>
<td><strong>344</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>(6.0mx25m)</th>
<th>(7.0mx30m)</th>
<th>(8.0mx35m)</th>
<th>(9.0mx40m)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 1</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Area 2</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>369</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Area of Yacht Marina - 50,170sq.m / Area of Fairways - 9,055sq.m
4.5 MANOEL ISLAND

The CT&P report considers other potential sites for permanent marinas at Manoel Island as detailed in Table 9.

**TABLE 9: MANOEL ISLAND PERMANENT MARINA BERTHS**

<table>
<thead>
<tr>
<th>B/W Option</th>
<th>Location of marina</th>
<th>Area</th>
<th>No of berths</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tigné Point</td>
<td>North side of Manoel Island</td>
<td>16,602 m²</td>
<td>115</td>
<td>New quay required along coast.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>New road required.</td>
</tr>
<tr>
<td>Harbour Entrance</td>
<td>East side of Manoel Island</td>
<td>72,625 m²</td>
<td>420</td>
<td>New quay and road required.</td>
</tr>
<tr>
<td>MIDI</td>
<td>South side of Manoel Island</td>
<td>63,000 m²</td>
<td>380</td>
<td>Breakwater to be built by MIDI</td>
</tr>
</tbody>
</table>

The south side of Manoel Island was granted in concession to MIDI in terms of the emphyteutical deed for Manoel Island and Tigné Point. This area is currently operating as a yacht marina catering for 120 yachts and this will expand to its full capacity of 400 berths once the breakwater at Lazzaretto point is constructed by MIDI, as contemplated in the outline development permit issued by MEPA.

As the north and east side of Manoel Island can only be developed if breakwaters are constructed at the mouth of Marsamxett Harbour, these sites are being excluded from further consideration.

4.6 VALLETTA SITES

The possibility of developing a yacht marina on the Marsamxett side of Valletta was also considered by CT&P as detailed in Table 10 below.

**TABLE 10: VALLETTA MARSAMXETT HARBOUR MARINA BERTHS**

<table>
<thead>
<tr>
<th>Location</th>
<th>Breakwaters/ Infrastructure Works</th>
<th>Cost</th>
<th>No. of berths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waterpolo Pitch to Excelsior Hotel</td>
<td>Breakwater below Mandragg + Land Reclamation</td>
<td>€23 million</td>
<td>304</td>
</tr>
</tbody>
</table>

In order to achieve the required conditions, a local breakwater below Mandragg at an estimated cost of €20 million will be required. A further estimated €3 million is required for land reclamation bringing the total cost to €23 million.

4.7 ADVANTAGES AND DISADVANTAGES OF MARSAMXETT HARBOUR MARINA SITES

The advantages of sites within Marsamxett harbour are:

1. The potential exists to provide a significant number of berths, therefore the unit cost per berth for breakwater protection will be comparatively lower.
2. The environmental impact will be limited given that all the harbour shoreline is committed to some form of development and the coastline in the area is not in its natural state.
3. The harbour is already extensively used for boating and parts of it are already established yachting centres. It is considered as a very desirable location by yachtsmen given its proximity to Sliema and Valletta and central location for cruising.
4. The main outlets for chandlery and yachting supplies are located in close proximity.
5. The containment of yachting activity in one area would emphasise the destination value of Malta for international yacht visitors and would help provide an effective level of service to visitors.
The disadvantages of sites within Marsamxett harbour are:

1. There is limited possibility to provide for more area for hard-standing for yachts within Marsamxett harbour. More hard-standing could be provided if land is reclaimed within the harbour but this is costly and the opportunities for such land reclamation are very limited.
2. Parking areas are very limited, in particular on the Sliema side.
3. A substantial increase in berths is likely to increase traffic around the harbour, in an area which is already subjected to congestion.
4. Potential conflicts exist between competing uses.
5. The noise and air pollution from busy nearby roads make the marinas less attractive options.
6. Noise from yacht marina may be considered as a nuisance by seafront residents.
Chapter 5
POTENTIAL SITES FOR PERMANENT YACHT MARINAS
GRAND HARBOUR
Development of Yachting Facilities in Malta
5.1 **ALL-WEATHER MARINAS IN THE GRAND HARBOUR**

The breakwaters at the mouth of the Grand Harbour provide a good level of protection within the harbour. This notwithstanding there is still, in most cases, the need for additional local breakwaters to provide full protection for any new marina. The exception to this is the Menqa where no additional protection is required.

5.2 **MENQA, MARSA**

The Menqa at Marsa provides protection for boats without the need to construct any protective breakwater. The Menqa is located at the inner part of the Grand Harbour and Flagstone Wharf is currently the only deep water quay equipped to handle petroleum products discharged at Enemalta and MOBC.

The main disadvantages of locating a marina in the inner parts of the Grand Harbour is that the area is highly industrialised and as such it will not be seen favourably by boat owners for the berthing of yachts. However, given the plans to regenerate the area and discontinue the generation of electricity from the Marsa power station, the development of a yacht marina is compatible with the long term plans for the area. As detailed on Map 5/2 and Table 12, the area can be developed into a yacht marina to accommodate up to 170 yachts.

The opportunity to develop this site into a yacht marina is dependent on relocating the loading / discharge points for Enemalta and MOBC to Deep Water Quay as part of the works being carried out by MMA to upgrade Deep Water Quay.

**TABLE 11: VALLETTA GRAND HARBOUR MARINA BERTHS**

<table>
<thead>
<tr>
<th>Location</th>
<th>Breakwaters/Infrastructure Works</th>
<th>Cost</th>
<th>No. of berths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grand Harbour Menqa</td>
<td>None/Requires regeneration of area</td>
<td>Nil</td>
<td>170</td>
</tr>
</tbody>
</table>

5.3 **KALKARA CREEK**

The possibility of developing a yacht marina at Kalkara creek is considered in detail in the D&T report and at the time the site was ranked third. The report states that the development of the marina can be part of a “carefully managed tourism development programme” involving restoration of historic features and improving the local economy. According to the report, “for yachtsmen, Kalkara would offer a marina environment to rival and beat most in the Mediterranean and could have international drawing power and prestige.”

A technical report was prepared by CT&P\(^\text{11}\) to assess the wave environment for five different options namely the provision of a new breakwater, wave screen, floating breakwater, spending beach at Fort St. Elmo and the extension of Ricasoli breakwater. Although recommended as being the best technical solution by CT&P, the extension of the Ricasoli breakwater is not considered appropriate as it may limit the movement of cruise ships entering the Grand Harbour.

The construction of a fixed breakwater will provide all-weather protection at an estimated cost of €20 million. CT&P concludes that a floating breakwater is unlikely to provide the required level of protection from a critical 1 in 50 year wave with a period of 12.6 seconds (wavelength of 170 metres). However, the floating breakwater option (estimated to cost €7 million) may, subject to further studies, provide sufficient protection for a marina on the Kalkara side of the creek.

As detailed in Map 5/1 and Table 13 below, the Kalkara marina can be developed to provide an area for mooring of 38,730 sq.m., providing approximately 250 berths on the Kalkara side. Use of the quay below Birgu for yacht berthing is not recommended because of the extensive use of this waterfront by local boat enthusiasts.

**TABLE 12: VALLETTA GRAND HARBOUR MARINA BERTHS**

<table>
<thead>
<tr>
<th>Location</th>
<th>Breakwaters/Infrastructure Works</th>
<th>Cost</th>
<th>No. of berths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalkara</td>
<td>Temporary breakwater</td>
<td>€7 million</td>
<td>250</td>
</tr>
<tr>
<td>Kalkara</td>
<td>Permanent breakwater</td>
<td>€20 million</td>
<td>250</td>
</tr>
</tbody>
</table>

\(^\text{11}\)Report on Feasibility Study and Conceptual Design for a New Breakwater at Kalkara Creek Preliminary Issue Colin Toms and Partners, October 2008
Development of Yachting Facilities in Malta

Kalkara All-Weather Marina

Location: (4.5mx12m)(5.0mx16m)(5.5mx20m) total

Pier A: 58
Pier B: 58
Pier C: 2926
Pier D: 2018
Pier E: 42

Total: 4216544251

Area of Yacht Marina - 38,730sq.m
Chapter 5
POTENTIAL SITES FOR PERMANENT YACHT MARINAS - GRAND HARBOUR

MENQA, MARSA
ALL-WEATHER MARINA

<table>
<thead>
<tr>
<th>Location</th>
<th>6.5mx13m</th>
<th>5.5mx16m</th>
<th>7.5mx20m</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area A</td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Area B</td>
<td>7</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pier C</td>
<td>14</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pier D</td>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Pier E</td>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Pier F</td>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
<tr>
<td>Pier G</td>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>119</td>
<td>36</td>
<td>15</td>
<td>170</td>
</tr>
</tbody>
</table>

Area of Yacht Marina - 25,495 sq.m
Chapter 6

POTENTIAL SITES FOR PERMANENT YACHT MARINAS

OTHER LOCATIONS
SITES OUTSIDE THE MARSAMXETT AND THE GRAND HARBOUR

In this chapter, sites along the coastline other than Marsamxett and Grand Harbour are reviewed. Most of them are sites which were considered at some stage in previous reports/studies.

6.1 STUDIES OF MMA STEERING COMMITTEE

In 2005, MMA appointed a steering committee to oversee studies for the development of marinas and related facilities. The steering committee considered four options in St. Paul’s Bay, namely St. Paul’s Bay (Fekruna - 2 options), St. Paul’s Bay (Veccja), St. Paul’s Bay (Gillieru) and one option in Marsascala. The findings of the steering committee together with relevant studies carried out are detailed in reports prepared for MMA.

6.2 ST. PAUL’S BAY (FEKRUNA)

Given the deep water and natural protection, the Fekruna area was identified as an ideal location for a yacht marina. In this regard, two alternatives were considered both of which involved the development of residential units on reclaimed land. The first option provided up to 275 berths with some 140 dwellings built on 3.3 hectares of reclaimed land and the second option provided for a marina for up to 400 berths with the provision of 534 dwellings built on 7.1 hectares of reclaimed land. The reports conclude that the first option, detailed in diagram 2, is preferable because it provides an all-weather marina with a lower impact on the Posidonia meadows compared to the second option. However, due to the scale and location of the proposed residential development and as the area is outside the development zone, this proposal is deemed to be environmentally unacceptable.

DIAGRAM 2: ST. PAUL’S BAY (FEKRUNA)

12Xemxija Bay A Yacht Marina Strategic Assessment (December 2005); Marsascala Harbour Strategic Planning Assessment for Marina Facilities (April 2006) and Marsascala Harbour & Xemxija Development Studies (July 2008) prepared for MMA by Deloitte, AP and ADI Associates
Chapter 6  POTENTIAL SITES FOR PERMANENT YACHT MARINAS - OTHER LOCATIONS

6.3  ST. PAULS BAY (VECCJA)

The proposal at Veccja, as detailed in diagram 3, involves the extension of the existing breakwater and the construction of a second breakwater, creating sufficient shelter for 173 berths. The design, following MEPA’s direction, does not include any residential development nor any allowance for ancillary uses.

PHOTO 2: ST. PAUL’S BAY (VECCJA)

The estimated capital expenditure for the marine structures and work (including breakwaters and dredging) is €10 million whereas a further €2.5 million is required for the marina itself.

TABLE 13: ST. PAUL’S BAY (VECCJA) BERTHS

<table>
<thead>
<tr>
<th>Location</th>
<th>Breakwaters/Infrastructure Works</th>
<th>Cost</th>
<th>No. of berths</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Paul’s Bay - Veccja</td>
<td>Permanent breakwater</td>
<td>€10 million</td>
<td>173</td>
</tr>
</tbody>
</table>

DIAGRAM 3: ST. PAUL’S BAY (VECCJA) LAYOUT
6.4 ST. PAUL’S BAY (GILLIERU)

The proposal at Gillieru involves the extension of the existing breakwater to create a marina that can accommodate 160 - 195 berths, as detailed in diagram 4. However, the works require substantial dredging which, given the presence of Posidonia, is environmentally unacceptable.

PHOTO 4: ST. PAUL’S BAY (GILLIERU)

DIAGRAM 4: ST. PAUL’S BAY (GILLIERU) LAYOUT
6.5 MARSASCALA

The possibility of developing a marina at Marsascala was considered in the D&T report and ranked 11th amongst the various locations considered. The report indicates that a short rubble breakwater will suffice but lists as disadvantages the reflective properties of the rocky shore and unavailability of land for shore side facilities.

The possibility of developing a marina within Marsascala was also considered in some detail by a steering committee appointed by the MMA with representatives of MEPA and Malta Tourism Authority (MTA). A Strategic Planning Assessment (SPA) study was carried out for Marsascala Bay. The SPA identified a number of alternatives including the need to minimise dredging and land reclamation, the need to protect Posidonia meadows, the need to protect areas with potential underwater archeological remains, the need to minimise the breakwater footprint and issue related to water quality.

Following the SPA, MMA commissioned further studies to investigate the construction of a breakwater to create an all-weather marina. The layout of the proposed marina and the position of the breakwater within the bay are indicated in Diagram 5.

Based on this study the infrastructural cost to develop a marina with a capacity of 380 boats is estimated at €24 million, including breakwater, quay, dredging and backfill and hard standing.

**TABLE 14: MARSASCALA BERTHS**

<table>
<thead>
<tr>
<th>Location</th>
<th>Breakwaters/Infrastructure Works</th>
<th>Cost</th>
<th>No. of berths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marsascala</td>
<td>Permananet Breakwater, Quay, Dredging</td>
<td>€24 million</td>
<td>380</td>
</tr>
</tbody>
</table>

**DIAGRAM 5: MARSASCALA MARINA PROPOSED LAYOUT**

---

6.6 ST. JULIAN’S

The possibility of developing a marina in St. Julian’s Bay was assessed by Colin Toms and Partners (CT&P). Of the three alternative options presented by CT&P, the option detailed in Diagram 6 (270 metre breakwater) is preferred as it provides a reasonably protected area without having to construct excessively large/expensive breakwaters.

**Diagram 6: Layout as Proposed by Colin Toms and Partners (Option B)**

The area protected by this proposal is 6.73 hectares providing up to 470 berths. However, the environmental impact associated with the construction of the breakwater is envisaged to be unacceptable and the proposal will involve a loss of bathing areas along the rocky coastline.

**Table 15: St. Julian’s Permanent Marina**

<table>
<thead>
<tr>
<th>Location</th>
<th>Breakwaters/Infrastructure Works</th>
<th>Cost</th>
<th>No. of berths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spinola</td>
<td>Permanent breakwater</td>
<td>€30 million</td>
<td>470</td>
</tr>
</tbody>
</table>

6.7 SAN GORG, BIRZEBBUGA

The proposal in the D&T report considers extending the existing breakwater to double the existing berthing area (see map 6/1). Although the area is already provided with some level of protection by the breakwater protecting Marsaxlokk Bay, the site is exposed to south westerly swells. The proximity to the container terminal and the power station makes the site less attractive for international yachts and therefore it will act to serve the requirements of boat owners living in the south of the island.

**Table 16: Birzebbuja Marina**

<table>
<thead>
<tr>
<th>Location</th>
<th>Breakwaters/Infrastructure Works</th>
<th>Cost</th>
<th>No. of berths</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Gorg</td>
<td>Extension of Permanent breakwater</td>
<td>€32 million</td>
<td>263</td>
</tr>
</tbody>
</table>
BIRZEBBUGA

BIRZEBBUGA, SAN GORG
ALL-WEATHER MARINA

<table>
<thead>
<tr>
<th>Location</th>
<th>4.5mx13m</th>
<th>5.0mx16m</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pier A</td>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pier B</td>
<td>55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pier C</td>
<td>65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pier D</td>
<td>42</td>
<td>41</td>
<td>83</td>
</tr>
<tr>
<td>Pier E</td>
<td>41</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>119</strong></td>
<td><strong>82</strong></td>
<td><strong>263</strong></td>
</tr>
</tbody>
</table>

Area of Yacht Marina: 239,610sq.m
Table 17: Sites Considered for Marinas in the 1996 Deloitte and Touche Report

<table>
<thead>
<tr>
<th>Site name</th>
<th>Considered for Company</th>
<th>In D&amp;T Report</th>
<th>Ranking in D&amp;T Report</th>
<th>Location</th>
<th>Assessment in Deloitte &amp; Touche Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Rocks</td>
<td>No</td>
<td>13</td>
<td>Considerable breakwater costs</td>
<td>White Rocks</td>
<td>Yes</td>
</tr>
<tr>
<td>Outside north breakwater</td>
<td>Yes</td>
<td>9</td>
<td>Deep water</td>
<td>Outside north breakwater</td>
<td>Yes, provision for morning coffee</td>
</tr>
<tr>
<td>Mellieha Bay</td>
<td>Yes</td>
<td>5</td>
<td>Very exposed</td>
<td>Mellieha Bay</td>
<td>No</td>
</tr>
<tr>
<td>Santa Venera Hotel</td>
<td>Yes</td>
<td>5</td>
<td>In bay behind Santa Venera Hotel</td>
<td>Santa Venera Hotel</td>
<td>Yes</td>
</tr>
<tr>
<td>Ramla Bay</td>
<td>No</td>
<td>12</td>
<td>Located in restricted area for development</td>
<td>Ramla Bay</td>
<td>No</td>
</tr>
<tr>
<td>Mistra Bay</td>
<td>No</td>
<td>15</td>
<td>High impact on the environment</td>
<td>Mistra Bay</td>
<td>No</td>
</tr>
<tr>
<td>Cirkewwa Ferry Harbour</td>
<td>Yes but not recommended</td>
<td>16</td>
<td>Recreational use required, conflict with infrastructure works would be substantial setback and costs incurred</td>
<td>Cirkewwa Ferry Harbour</td>
<td>No</td>
</tr>
<tr>
<td>Ramla Bay</td>
<td>No</td>
<td>16</td>
<td>Considerable breakwater costs</td>
<td>Ramla Bay</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 17 features a few sites considered for marinas in the D&T report. In this report, they are definitively excluded due to financial and environmental considerations and considerations re loss of leisure amenity for swimming.
Chapter 7

POTENTIAL SITES FOR TEMPORARY MARINAS
7.1 SITING OF TEMPORARY MARINAS - SOME CONSIDERATIONS

The sites considered suitable for temporary marinas are listed in Table 18, together with the relevant plans. The sites chosen benefit from natural protection from the prevailing north westerly winds and, as far as possible, conflict with other uses is avoided.

Most of the temporary marinas being proposed occupy an area of less than 1 hectare, thus limiting their environmental impact. For Mgarr Gozo, a larger area is being proposed as additional locations in Gozo are deemed to be unsuitable for temporary marinas.

The geographical locations of the sites considered are:

<table>
<thead>
<tr>
<th>Location</th>
<th>Berths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gozo (Mgarr)</td>
<td>148</td>
</tr>
<tr>
<td>North (Cirkewwa, St.Paul’s Bay and Qalet Marku)</td>
<td>254</td>
</tr>
<tr>
<td>Harbour Areas (St. Julian’s)</td>
<td>78</td>
</tr>
<tr>
<td>South (Marsascala and Birzebbuġa)</td>
<td>230</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>710</strong></td>
</tr>
</tbody>
</table>

7.2 TEMPORARY MARINAS PENDING PERMANENT DEVELOPMENT

Two of the locations being proposed for temporary marinas, namely Pietà/Sa Maison and Kalkara, are also being considered for permanent all-weather marinas, subject to the provision of the necessary breakwater protection. The development of a permanent marina, should it happen, will take up to 2 years to carry out the detailed technical and environmental studies required to obtain the development permits. It is therefore envisaged that pending the commencement of the required infrastructural works the sites can be operated as temporary marinas.

As detailed in Table 19 the total number of berths which could potentially be provided at these three temporary marinas is 349.
Chapter 7  POTENTIAL SITES FOR TEMPORARY MARINAS

Ref: Map 9/0
<table>
<thead>
<tr>
<th>Site name and location</th>
<th>Map</th>
<th>Advantages</th>
</tr>
</thead>
</table>
| Mgarr                  | ![Map](Mgarr.png) | - Protected from the prevailing winds by the port of Mgarr.  
- Parking available at the existing marina.  
- Restaurants are within walking distance.  
- Proximity to hotel.  
- Proximity to existing yacht marinas.  
- Proximity to the popular cruising areas of Comino and Gozo. |
| CirqueWWa              | ![Map](CirqueWWa.png) | - Protected from the prevailing winds by the infrastructure built for the ferry terminal.  
- Good parking area is available nearly.  
- Paradise Bay hotel and Riviera hotel are within walking distance.  
- Proximity to the popular cruising areas of Comino and Gozo. |
| VeCCja, St Paul's bay on outside of breakwater | ![Map](VeCCja.png) | - Protected from the prevailing winds by the coastline.  
- A small parking area is available near.  
- Hotels and restaurants are within walking distance.  
- Cozy beach area is available near.  
- Proximity to the popular cruising areas of Comino and Gozo.  
- Proximity to popular touristic areas.  
- Proximity to summer residential areas. |
| Qalet Marku            | ![Map](Qalet Marku.png) | - Protected from the prevailing winds by the coastline.  
- A small parking area is available near.  
- Hotels and restaurants are within walking distance.  
- Cozy beach area is available near.  
- Proximity to the popular cruising areas of Comino and Gozo.  
- Proximity to popular touristic areas.  
- Proximity to summer residential areas. |
| St Julian's on outside of breakwater | ![Map](St Julian's.png) | - Protected from the prevailing winds by the coastline.  
- A small parking area is available near.  
- Hotels and restaurants are within walking distance.  
- Cozy beach area is available near.  
- Proximity to the popular cruising areas of Comino and Gozo.  
- Proximity to popular touristic areas.  
- Proximity to summer residential areas. |
| MasSMaCa               | ![Map](MasSMaCa.png) | - Naturally protected from the prevailing winds.  
- On street car parking available nearby.  
- Proximity to restaurants.  
- Proximity to summer residential area.  
- Proximity to summer residential area.  
- Proximity to the proposed Wied Bini slipway allowing for use of temporary berthing in conjunction with proposed hard standing at Hal Far. |
| BireBBuca San Gorg     | ![Map](BireBBuca San Gorg.png) | - Naturally protected from the prevailing winds and also offered further protection.  
- On street car parking available nearby.  
- Proximity to restaurants.  
- Proximity to summer residential area.  
- Proximity to the proposed Wied Bini slipway allowing for use of temporary berthing in conjunction with proposed hard standing at Hal Far. |

**Table 18: Proposed Temporary Marinas Berths**
## Table 19: Temporary Marinas Pending Permanent Development

<table>
<thead>
<tr>
<th>Site name and location</th>
<th>Advantages</th>
<th>Proposed no. of temporary berths</th>
<th>Map</th>
</tr>
</thead>
</table>
| TA’XBIEX below ir-rampa | ■ Protected from the prevailing winds by Manoel Island.  
 ■ On street car parking available nearby.  
 ■ Restaurants are within walking distance.  
 ■ Proximity to existing yacht marinas and yacht chandlers. | 84 | 9/8 |
| PIETÀ/SA MAISON | ■ Protected from the prevailing winds as it is well within Marsamxett harbour.  
 ■ Proximity to historic Valletta and to restaurants and shops. | 198 | 9/9 |
| KALKARA | ■ Protected from the prevailing winds by the Grand Harbour breakwaters.  
 ■ On street car parking available nearby.  
 ■ Proximity to yacht yard.  
 ■ Proximity to Grand Harbour yacht marina. | 67 | 9/10 |
| | | **349** |   |
Mgarr, Gozo
Temporary Marina

Sizes of Berths:
- (2.5m x 8m) 9
- (3.5m x 10m) 25
- (4.5m x 12m) 73
- (5.0m x 16m) 22
- (5.5m x 20m) 19

Total: 148

Area of Yacht Marina: 12,650 sq.m
Chapter 7  POTENTIAL SITES FOR TEMPORARY MARINAS

CIRKEWVA

**CIrkewva Temporary Marina**

Ref: Map 9/2

Size | No. of Berths | Total
--- | --- | ---
(4.5mx12m) | 23 | 23
(5.0mx14m) | 42 | 65
(5.5mx16m) | 21 | 86

Total Area of Yacht Marina: 9,240sq.m
Area of Brock Ness - 10,000sq m
Chapter 7  POTENTIAL SITES FOR TEMPORARY MARINAS

QALET MARKU

TEMPORARY MARINA

REF: MAP 9/4

Size

(5.0mx16m)

No. of Berths

84

Area/Plot/Plota - 10,000sq.m

QALET MARKU

Platform

57
Development of Yachting Facilities in Malta

St. Julian’s Temporary Marina

Area: 9,940 sq.m

<table>
<thead>
<tr>
<th>Type</th>
<th>Size</th>
<th>No. of Berths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pontoons</td>
<td>5.0mx16m</td>
<td>78</td>
</tr>
</tbody>
</table>

Total: 78 berths
Chapter 7  POTENTIAL SITES FOR TEMPORARY MARINAS

Marina: Marsa Scalara
Temporary Marina
Ref: Map 9/6

Size  No. of Berths  Total
15m x 16m  80  80

Area: 9,699 sq.m
Area of Yacht Marina - 13,820 sq.m
Development of Yachting Facilities in Malta

Pietà Creek / Sa Maison

Temporary Marina

Location:
- Pier A: 56
- Pier B: 31
- Pier C: 24
- Pier D: 20
- Total: 117

Area of Yacht Marina: 19,045 sq.m
Chapter 7  POTENTIAL SITES FOR TEMPORARY MARINAS

KALKARA

Id-Dahla
tal-Kalkara

It-Logba

BIRGU

<table>
<thead>
<tr>
<th>Type</th>
<th>(5.0mx16m)</th>
<th>(5.5mx20m)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Births</td>
<td>51</td>
<td>16</td>
<td>67</td>
</tr>
</tbody>
</table>

Area of Yacht Marina - 8,763sq.m

Ref. M199/70
7.3 SITES CONSIDERED BUT NOT RECOMMENDED FOR TEMPORARY MARINAS

A number of other sites were considered for use as temporary marinas. However, as detailed in Table 20 they are not deemed to be suitable.

#### TABLE 20: NOT RECOMMENDED TEMPORARY MARINA SITES

<table>
<thead>
<tr>
<th>Sites</th>
<th>Berths</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marsalforn</td>
<td>60</td>
<td>The site is not adequately protected from the prevailing winds to provide the required shelter for a temporary marina.</td>
</tr>
<tr>
<td>Dwejra</td>
<td>30</td>
<td>The environmental impact associated with operating a temporary marina from this site is deemed to be high.</td>
</tr>
<tr>
<td>Xlendi</td>
<td>30</td>
<td>These sites are considered too exposed, making use as a temporary marina difficult.</td>
</tr>
<tr>
<td>Mellieha</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Qawra</td>
<td>80</td>
<td>Additional investment would be required to resolve parking and ferry boat berthing.</td>
</tr>
<tr>
<td>Bugibba</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>Sliema</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Marsa, off Menqa</td>
<td>60</td>
<td>The poor quality of the environment, together with the presence of the power station, currently makes this site unattractive.</td>
</tr>
<tr>
<td>Marsascala San Tumas</td>
<td>70</td>
<td>The site requires significant intervention to the land side and therefore the capital costs are high.</td>
</tr>
</tbody>
</table>

#### DIAGRAM 7: MELLIEHA

![Diagram 7: Mellieha](image1.png)

#### DIAGRAM 8: QAWRA

![Diagram 8: Qawra](image2.png)
Chapter 8

SUMMARY OF FINDINGS
8.1 CURRENT SUPPLY OF YACHT BERTHS

(a) The existing supply of berths, at Malta’s six yacht marinas, totals approximately 1,500 berths compared to an estimated 2,300 yachts/boats based in Malta which require a berth, thus implying a theoretical shortfall of approximately 800 berths, compared to the realistic waiting list, estimated by the MMA, for 250 berths.

(b) The average increase in the number of yachts/boats based in Malta requiring a berth is 107 per annum.

(c) Each summer approximately 1,000 yachts visit Malta and this is projected to increase to 3,000 over the next 7 years, thus implying that at the peak 600 berths are required of which it is assumed that 150 visitor berths will be provided at permanent marinas and 450 visitor berths will be provided at temporary berths.

(d) Demand Berths

<table>
<thead>
<tr>
<th>Demand Berths</th>
<th>Current Demand</th>
<th>Projected Demand 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Berths</td>
<td>1,500</td>
<td>1,500</td>
</tr>
<tr>
<td>Waiting List</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Growth in Demand</td>
<td>750</td>
<td></td>
</tr>
<tr>
<td>Winter Berths</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Temporary Berths</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Total</td>
<td>2,050</td>
<td>2,800</td>
</tr>
</tbody>
</table>

8.2 PERMANENT MARINAS

The locations suitable for the development of permanent marinas and the associated infrastructural costs are detailed hereunder:

**Marsamxett Harbour**

<table>
<thead>
<tr>
<th>Location</th>
<th>Infrastructure Costs</th>
<th>Berths</th>
<th>Cost/Berth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sliema</td>
<td>€32 million</td>
<td>500</td>
<td>€64,000</td>
</tr>
<tr>
<td>Ta’ Xbiex</td>
<td></td>
<td>100 additional</td>
<td>NIL</td>
</tr>
<tr>
<td>Sa Maison “A”</td>
<td>€9 million</td>
<td>470</td>
<td>€19,000</td>
</tr>
<tr>
<td>Sa Maison “B”</td>
<td>€11 million</td>
<td>370</td>
<td>€30,000</td>
</tr>
<tr>
<td>Manoel Island South</td>
<td></td>
<td>280 additional</td>
<td>NIL</td>
</tr>
<tr>
<td>Valetta</td>
<td>€23 million</td>
<td>300</td>
<td>€77,000</td>
</tr>
</tbody>
</table>

**Grand Harbour**

<table>
<thead>
<tr>
<th>Location</th>
<th>Infrastructure Costs</th>
<th>Berths</th>
<th>Cost/Berth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalkara Option 1 (Temporary Breakwater)</td>
<td>€7 million</td>
<td>250</td>
<td>€28,000</td>
</tr>
<tr>
<td>Kalkara Option 2 (Permanent Breakwater)</td>
<td>€20 Million</td>
<td>250</td>
<td>€80,000</td>
</tr>
<tr>
<td>Menqa</td>
<td></td>
<td>170</td>
<td>NIL</td>
</tr>
</tbody>
</table>

**Other**

<table>
<thead>
<tr>
<th>Location</th>
<th>Infrastructure Costs</th>
<th>Berths</th>
<th>Cost/Berth</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Paul’s (Vecija)</td>
<td>€10 million</td>
<td>170</td>
<td>€58,850</td>
</tr>
<tr>
<td>Marsascala</td>
<td>€24 million</td>
<td>380</td>
<td>€63,000</td>
</tr>
<tr>
<td>St. Julian’s</td>
<td>€30 million</td>
<td>470</td>
<td>€64,000</td>
</tr>
<tr>
<td>Birzebbuga (San Gorg)</td>
<td>€32 million</td>
<td>270</td>
<td>€119,000</td>
</tr>
</tbody>
</table>
8.3 TEMPORARY MARINAS

The locations suitable for temporary marinas, which can operate between June and September, are detailed hereunder:

<table>
<thead>
<tr>
<th>Location</th>
<th>Berths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mgarr – Gozo</td>
<td>148</td>
</tr>
<tr>
<td>2 Cirkewwa</td>
<td>86</td>
</tr>
<tr>
<td>3 St. Paul’s – Veccja</td>
<td>84</td>
</tr>
<tr>
<td>4 Qalet Marku</td>
<td>84</td>
</tr>
<tr>
<td>5 St. Julian’s</td>
<td>78</td>
</tr>
<tr>
<td>6 Marsascala</td>
<td>80</td>
</tr>
<tr>
<td>7 Birzebbuga – San Gorg</td>
<td>150</td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td><strong>710</strong></td>
</tr>
<tr>
<td>8 Ta’ Xbiex</td>
<td>84</td>
</tr>
<tr>
<td>9 Pieta/Sa Maison</td>
<td>198</td>
</tr>
<tr>
<td>10 Kalkara</td>
<td>67</td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td><strong>349</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,059</strong></td>
</tr>
</tbody>
</table>

Notes:
1. The infrastructure costs associated with the land side arrangements are not expected to be significant.
2. The cost associated with developing the marina infrastructure (pontoons, mooring blocks, services etc.) is estimated at €8,000 per berth.
3. The temporary marinas in Pietà/Sa Maison and Kalkara can eventually be replaced with Permanent Marinas.