

National Strategic Reference Framework

Malta
2007 - 2013

Draft Document for Consultation

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Note: Statistics which appear in this document are based on official figures available as on 16th March 2006.

Chapter 1. Introduction

The Maltese archipelago consists of three Islands, Malta -246 sq km, Gozo – 67 sq km and Comino – 2.7 sq km. The country is located in the Mediterranean Sea, about 100 kilometres south of Sicily and 300 kilometres east of Tunis. The Maltese archipelago is on the periphery of the European Union. Malta's population stands at 402,700 (2005) of which approximately 50,000 live on the island of Gozo.

Malta's socio-economic development rests on three main pillars: sustaining economic growth and competitiveness through the generation of a knowledge-based and service-based competitive economy; the safeguarding of the natural and urban environment; and ensuring continuous investment in human capital and education. Government's Vision for Malta is one which aims to sustain and develop a dynamic, high value added economy founded on competence, skills and excellence and one which is capable of sustaining a high standard of living for all citizens. Within this context, the main macroeconomic policy objectives of the Maltese Government remain the achievement of sustainable economic growth and a high and stable level of employment, restoring fiscal balances to sustainable levels and ensuring a reduction in the debt-to-GDP ratio and stability in the external sector. Achieving a sustainable fiscal position remains a priority to ensure a stable macroeconomic framework, capable of fostering economic growth, generating employment opportunities and sustaining social responsibilities. The Budget Speech for 2006, as well as a number of measures taken during 2005, clearly demonstrate Government's commitment to remain on track to reduce the fiscal deficit to below 3.0 per cent of GDP and to achieve a reduction in the debt-to-GDP ratio in 2006. Furthermore, Government is committed to ensure the long-term sustainability of public finances. A number of reforms, such as the pension reform, will be undertaken towards this end. A stable macroeconomic environment also entails stability in the external sector, as this is essential to maintain price stability. This continues to be a priority, especially in view of Malta's participation in ERM II, as from May 2005.

The small, open characteristics of the Maltese economy and the continuous resolve for international competitiveness in an increasingly globalized world, implies the need for greater strides towards capability development to sustain and improve the current standard of living. Improved competitiveness cannot be achieved only by focusing on the cost component of competitiveness, although this remains important. The Government believes that competitiveness is enhanced by increasing productivity, sustaining the development of a knowledge based economy and by facilitating the shift to higher value-added economic activities. Indeed, the most important means through which an adequate standard of living for the Maltese population can be secured in the longer term is by maximizing the country's productivity and competitiveness in the international sphere through innovation and knowledge. Within this context, structural reforms to instill

greater efficiency and to enhance the supply side of the economy are important. Government remains committed to increase efficiency in the public sector whilst focusing on its role as a regulator rather than participating as an operator in economic activities.

In May 2004, Malta became a European Union Member State. Through the strategic frameworks set out by successive National Budgets since the late nineties and other programmes¹, the country has been undertaking a specific direction towards convergence at the European Union level. In recent years, the main strategic focus was on strengthening the competitiveness of the Maltese economy, whilst maintaining a sustainable use of the environment. Much of Malta's domestic manufacturing industry, agriculture and fisheries had developed behind protective barriers which created an artificial scenario of market stability and encouraged these enterprises and farmers to move into areas of production in which it is difficult to compete in an open economy. At the same time, due to the pressures on the environment resulting mainly from the very high population density and environmental fragility of the Islands, Malta needed to take action to ensure the sustainability of its future socio-economic development.

Malta's strategy under Cohesion Policy 2004-2006 envisaged an urgent need to address the socio-economic infrastructure, in particular the environment and transport sectors², a need to support the productive sector in its efforts to restructure and diversify and compete within the internal market, and a need to address the issue of human resource development, particularly in the area of vocational educational training. The paramount importance of *economic competitiveness*, *environment* and *education* remain important cornerstones of Malta's development objectives for the next round of Cohesion Policy.

Cohesion policy for the period 2007-2013 can be characterised by a strengthened strategic approach with two new elements: the Community Strategic Guidelines' at European level and the National Strategic Reference Framework at the Member State level. Both elements as presented in the draft Council Regulation of 14 July 2004, are aimed at a better integration of the Community priorities into national and regional development programmes.

In Malta, the National Strategic Reference Framework (NSRF) has been drafted in an intensive dialogue process and an extensive assessment of the country's needs and challenges, strategic objectives for development for the medium and longer term.³ The NSRF provides the goals and the basic strategic framework for the operational programmes on the objective of sustaining economic competitiveness through innovation and entrepreneurship and facilitating a knowledge based economy through investment in the necessary physical and social infrastructural capabilities, education and social inclusion. The NSRF is based on and builds upon the National Reform Programme and

¹ Including Malta's Pre-Accession Programmes, the Structural Fund Programme and the Cohesion Fund 2004-2006, and the Vth Italo Maltese Financial Protocol.

² Malta was not eligible for ISPA, SAPARD and PHARE.

³ Information is contained in Chapter 3 of this document.

the Pre-Budget Document published by the Government in 2005.⁴ It also links to the National Strategy Plan (for Rural Development) and the National Fisheries Strategic Plan.⁵

This National Strategic Reference Framework consists of a number of Chapters.

Chapter 1 serves as an introduction to the strategic framework of Malta. Chapter 2 presents a diagnosis of Malta's territorial and socio-economic context. It consists of an overview of Malta's territorial characteristics, an analysis of most recent economic performance, and a review of the sectors considered critical for Malta's convergence. The scope of Chapter 2 is to provide the contextual scenario in which to ascertain Malta's position vis-à-vis the European Union 25 benchmarks. The latter position is presented in Chapter 4. Chapter 3 provides a detailed overview of the national strengths, weaknesses, opportunities and threats (SWOT) analysis. This analysis is the outcome of an intensive public dialogue process undertaken to assess the country's needs, challenges and strategic objectives.

Following the delineation of this socio-economic context and Malta's position in the EU wide context, Chapter 5 enlists the principal needs and challenges Malta is facing up to the 2013 period. In relation to these needs and challenges, Chapter 5 presents the NSRF strategic objectives and provides a description of each objective. Chapter 6 highlights how the NSRF strategic objectives relate to the governing visions of the country mainly those emerging from the Pre-Budget Document 'A Better Quality of Life' (2006) and Malta's National Reform Programme.

⁴ Strategic consistency and coherence is contained in Chapter 6.

⁵ These refer to the strategic documents for the agriculture/rural development and fisheries sectors respectively for the period 2007-2013.

Chapter 2. Malta's Territorial and Socio-economic Context

2.1 Territorial context

The Maltese Islands, consisting of Malta – 246 sq km, Gozo – 67 sq km and Comino – 2.7 sq km, are located in the Mediterranean Sea, about 100 kilometres south of Sicily and 300 kilometres east of Tunis. The Maltese archipelago is on the periphery of the European Union. The population of Malta is 402,700 (2005) of which approximately 50,000 live on the island of Gozo. This population intermingles with 1.12 million tourists who visit the Islands on an annual basis.



Malta exhibits a number of territorial, and therefore permanent, characteristics that impact on its socio-economic development. The distance from mainland Europe together with its fragmentation, constitute permanent characteristics of peripheral territories as recognized in the Treaty of Amsterdam. Malta's southern peripherality results in direct problems with respect to accessibility to the rest of the European Union and as a result the country is extensively dependent on air and sea transport. In turn, this dependence results in higher costs, creating problems with reliability of supply and limited physical

access to the European market. Taken together, the peripheral location and insularity reflect the permanent vulnerability of the Maltese archipelago. Within this archipelago, Gozo, faces the real constraint of ‘*double insularity*’ as a result of its dependence on Malta for the movement of people and imports and exports of goods and services. As a result, improving both Malta’s and Gozo’s accessibility, including the link between Malta and Gozo, is a key factor in improving the country’s overall economic performance and general standard of living.

The insularity of the Maltese islands is further aggravated by the population density factor. Although Malta is one of the smallest countries in Europe with a total population of 402,668 at the end of 2004 and with a current average annual growth rate in the region of 0.4 per cent, it is by far the most densely populated. Between 1931 and 2004, population density increased from 764 to 1,276 persons per square kilometer. Malta is *de facto* the smallest, mostly dense populated Member State in European Union with an average population density which is almost 11 times the EU25 average. Malta’s population density is further accentuated by the large annual influx of tourists. Out of the ten recently acceded member states, Malta ranks second in terms of international tourist inflows per 100 residents. This exerts several pressures on the island’s environment, infrastructure and socio-economic structures. The population density issue and its emerging problems are further accentuated by the large influx of illegal immigrants Malta has been experiencing in recent years.

Peripherality, insularity and population density restrict local market economies. In particular, contrary to the conventional notion that sees high population density constituting an advantage for socio-economic development, Malta’s case represents the particular exception where high population density acts as a severe constraint rather than a driver to economic growth. Malta’s small size, coupled with its high population density, result in very acute environmental pressures and a high degree of urbanization. Whilst impacting negatively on Malta’s physical environment, high population density does not secure adequate economies of scale able to drive economic growth, it negatively affects the environment and acts as a constraint in areas such as waste disposal, air and water pollution. For example, large infrastructural projects are not easily undertaken since minimum efficient scale of production are often too large in relation to the size of the domestic market.

Malta is distinctively different from the other Member States because of its limited resource endowments, economic constraints on its ability to reap the benefits of economies of scale due to indivisibilities and limited scope for specialization, the high dependence on international trade, production possibility limitations, and effects of insularity. In order to counter these problems, Malta aims to gradually upgrade its physical infrastructure systems, develop efficient and high quality transport methods and improve widespread accessibility in concomitance with the country’s medium and long term requirements, economies of scale and inherent structural characteristics. Malta also aims to deepen its resource base by investing in the attractive elements of its urban environment mostly composed of rich cultural assets.

The challenges Malta faces are magnified in the case of its sister island, Gozo. Gozo is a significantly smaller island in terms of land area and has an extremely restricted internal market. Malta's sister island sensitivity is underpinned by an environmental fragility compounded with high population density in a small land area supporting an economy primarily based on tourism and agriculture. A critical factor underpinning Gozo's logistical difficulties relates to its overtly dependence on the port at Mgarr. The island's economic dependence on fisheries, maritime freight and passenger transport imply that the requirements of competing users on the port facilities need to be constantly reconciled. The island's geographical and economic realities prevent the development of a second port. Transport through Malta creates a dependency on the inter-island ferry and helicopter services. Both services are limited and discontinuous, due to operational restrictions primarily for climatic reasons.

Overall, the small size of the Maltese territory, its separation into multiple islands and the distance between the islands generate increased time lags, higher costs for production and market access. Malta's small size coupled with its high population density result in very acute environmental pressures. Size heightens the vulnerability of the islands to environmental issues as well as leads to a high degree of urbanization. The islands' small size and their separation from mainland Europe also impact on high demand for an economic and social infrastructure particularly for external and internal accessibility, waste management and public utilities infrastructures.

2.2 Economic context

2.2.1 Overview

The Maltese economy has been performing below its potential in recent years though positive signs have been registered with a pick-up in growth in 2005. In terms of GDP at market prices in Purchasing Power Standards (PPS), the Maltese economy showed a decrease for most of the years from 2000 onwards compared to the EU average. In fact, on a per capita basis, Malta's GDP per head in PPS declined from 78 per cent of the EU-25 average in 2000 to 69.2 per cent in 2004. The unfavourable global economic environment prevailing since 2001 has impinged significantly on domestic economic conditions. Exogenous shocks stemming from rising energy prices have also affected the Maltese economy negatively in recent years. Furthermore, the international economic environment is becoming increasingly competitive due to stronger market positions by emerging low-cost countries. On the domestic front, demand is being dampened by the fiscal consolidation process currently underway, whilst a number of economic sectors are facing competitive challenges both in domestic and export markets.

In 2001 and 2002, the rate of growth of real GDP was 0.4 per cent and 1.5 per cent respectively. Negative growth rates of 2.5 per cent and 1.5 per cent were registered in 2003 and 2004 respectively. Nonetheless, positive signs have been registered in 2005, when real GDP increased by 2.5 per cent.

In recent years, the Maltese economy was characterized by subdued growth in private and general government final consumption expenditure whilst gross fixed capital formation exhibited significant fluctuations. The relatively low positive or negative growth rates in consumption reflect the fiscal consolidation under way. Meanwhile, gross fixed capital formation was influenced by one-off exceptional transactions, particularly in 2003, whilst strong investment activity was registered in 2005. The external sector has contributed negatively to real GDP growth between the years 2003 and 2005. In particular, exports of goods and services contracted in 2003, increased marginally in 2004 but declined again in 2005. Exports of goods and services are significantly influenced by the performance of the major company in the semi-conductor sector. Main economic indicators are presented in Table 2.1.

Table 2.1

| Main Economic Indicators | | | | | | |
|---|--------|--------|--------|--------|--------|--------|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| GDP market prices (Lm millions) | 1696.3 | 1737.7 | 1796.8 | 1829.1 | 1830.4 | 1927.1 |
| GDP at constant (2000) prices (Lm millions) | 1696.3 | 1702.5 | 1727.4 | 1684.3 | 1659.4 | 1700.8 |
| GDP growth at constant (2000) prices (%) | | 0.4 | 1.5 | -2.5 | -1.5 | 2.5 |
| Expenditure Components of GDP at constant 2000 prices (% change) | | | | | | |
| Private final consumption expenditure ⁽¹⁾ | | 0.8 | -0.3 | 2.4 | -1.2 | 1.4 |
| General government final consumption expenditure | | 0.7 | 4.0 | 3.0 | 1.8 | -1.9 |
| Gross fixed capital formation | | -14.0 | -18.7 | 28.6 | 3.8 | 6.1 |
| Exports of goods and services | | -2.2 | 3.6 | -2.1 | 0.4 | -3.9 |
| Imports of goods and services | | -8.6 | -2.3 | 7.0 | 2.0 | 0.2 |
| Inflation rate (%) ⁽²⁾ | | 2.9 | 2.2 | 1.3 | 2.8 | 3.0 |
| Employment growth (%) ⁽³⁾ | | 0.7 | -0.1 | -0.5 | 0.3 | 0.6 |
| Unemployment (%) ⁽⁴⁾ | | 5.1 | 5.2 | 5.6 | 5.6 | 4.9 |
| Labour productivity (% change) ⁽⁵⁾ | | -0.3 | 1.6 | -2.0 | -1.7 | 1.6 |

⁽¹⁾ Includes NPISH final consumption expenditure

⁽²⁾ As measured by the Retail Price Index (RPI)

⁽³⁾ Data for 2005 is as at October 2005

⁽⁴⁾ Based on Part I and Part II registered unemployed data of the Employment and Training Corporation (ETC) as at October 2005

⁽⁵⁾ Data for 2005 refers to the period January-September 2005

Source: National Statistics Office

Malta has registered relatively high fiscal deficits in recent years. However, since 2004 the fiscal deficit has been contracting, reflecting the ongoing implementation of Government's fiscal consolidation program (Table 2.2). The general Government deficit declined from 5.1 per cent in 2004 to an expected 3.8 per cent in 2005. As outlined in the Budget Speech for 2006 and in the Update of the Convergence Programme 2005-2008, the deficit will be below 3.0 per cent of GDP in 2006. The fiscal deficits incurred over the years have been reflected in rising debt-to-GDP ratios. General Government debt as a percentage to GDP increased from 56.0 per cent in 2000 to an expected 75.6 per cent in 2005. In order to restore public finances to a sustainable path, Government is not solely addressing the current imbalance in public finance, but importance is attached to the need to reduce the debt-to-GDP ratio at a satisfactory pace. Fiscal targets project a decline in the debt ratio in 2006 to 70.8 per cent of GDP.

The Maltese economy faced a relatively difficult external environment during the past recent years. The internationally exposed sectors continued to be adversely affected by the downturn in Malta's main European markets and geopolitical uncertainty world-wide. Real exports of goods and services increased by 0.4 per cent in 2004 but declined by 3.9 per cent in 2005, whilst imports increased by 2.0 per cent and by 0.2 per cent in 2004 and 2005 respectively. The decline registered in the export sector is partly a reflection of the relatively subdued international economic environment, especially in Malta's main trading partners, combined with an increasingly competitive international market. The decline in exports was mainly attributed to developments in a major manufacturing company in the semiconductor industry. Indeed, some other sectors managed to register positive results, despite the unfavourable conditions in the external market. Tourism also suffered a slowdown. This is partly a result of a trend towards land based means of transport as opposed to air transport.

Table 2.2

| General Government Deficit and Debt | | | | | | |
|---|------|------|------|------|------|------|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| General Government Deficit as a % of GDP | 6.2 | 6.4 | 5.6 | 10.2 | 5.1 | 3.8 |
| General Government Debt as a % of GDP | 56.0 | 61.7 | 61.2 | 71.3 | 76.6 | 75.6 |

Source: National Statistics Office, Ministry of Finance

Table 2.3

| Current Account | | | | | | |
|---|--------|-------|-------|--------|--------|--------|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| Current Account (Lm million) | -209.2 | -73.6 | 5.4 | -105.3 | -175.3 | -252.5 |
| Net Trade and Services | -167.3 | -88.5 | 19.0 | -74.8 | -128.0 | -206.5 |
| Net Income | -53.1 | 11.1 | 2.6 | -11.3 | -21.5 | -49.9 |
| Net Current Transfers | 11.2 | 3.8 | -16.1 | -19.1 | -25.7 | 3.8 |
| Current Account Balance (% of GDP) | -12.3 | -4.2 | 0.3 | -5.9 | -9.6 | -13.1 |

Source: National Statistics Office

A significant increase in the trade deficit and a decline in the positive services balance were main contributors of the deterioration in the current account since 2003. In 2004 and 2005, higher reinvested earnings contributed to a further deterioration in the current account. An increase in net outflows by way of current transfers was also recorded in 2004. However, net inflows of Lm3.8 million were recorded in 2005. The widening of the current account deficit experienced in the last years continued during 2005, as the

deficit stood at 13.1 per cent of GDP. Current account performance is shown in Table 2.3.

Percentage changes in the 12-month moving average in the Retail Price Index (RPI) show that the inflation rate in Malta over the last two years has followed a gradually increasing trend. The inflation rate increased from 2.8 per cent at the end of 2004, to 3.01 per cent in December 2005. These inflationary developments have been largely due to domestic and international factors, mainly reflecting the increase in international oil prices.

2.2.2 Labour Market

Table 2.4

| Labour Market | | | | | | | |
|----------------------------------|---------|---------|---------|---------|---------|-----------------|-----------------|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2004 October | 2005 October |
| Labour Supply | 143,947 | 145,095 | 144,981 | 144,930 | 145,220 | 145,869 | 145,638 |
| Gainfully Occupied | 136,759 | 137,662 | 137,465 | 136,755 | 137,117 | 137,697 | 138,517 |
| Private Direct Production | 34,332 | 34,677 | 34,600 | 33,337 | 32,995 | 33,404 | 33,416 |
| Private Market Services | 53,190 | 53,322 | 54,631 | 55,606 | 57,444 | 57,564 | 59,283 |
| Public Sector | 48,031 | 48,487 | 47,160 | 46,832 | 45,752 | 45,771 | 45,231 |
| Temporary Employment | 1,206 | 1,176 | 1,074 | 980 | 926 | 958 | 587 |
| Unemployed ⁽¹⁾ | 5.0 | 5.1 | 5.2 | 5.6 | 5.6 | 5.6 | 4.9 |

⁽¹⁾ based on Part I and Part II of ETC register

Source: National Statistics Office

The domestic labour market has been characterised by relatively weak conditions in recent years, particularly as regards developments in full-time employment and in unemployment levels (Table 2.4). The process of economic adjustment triggered by industrial restructuring in both public and private enterprises, fiscal consolidation, as well as sluggish growth in the economies of Malta's main trading partners and the steep rise in international oil prices posed an increased uncertainty that affected employment developments. Nonetheless, the performance of the labour market during the twelve months to October 2005 indicates the degree of resilience through the expansion in part-time employment, increases in the full-time gainfully occupied population, as well as the decline in the number of registered unemployed.⁶

Employment levels remained substantially unchanged in recent years. In fact, a slight decline of 0.5 per cent was registered in 2003 while a marginal increase of 0.3 per cent

⁶ It is notable that over the recent years, increasing importance is being attached by both economic operators and employees to part-time work as the main occupation. This indicates changing working patterns and the relative degree of flexibility of the labour market.

was registered in 2004. The full-time gainfully occupied population rose by 0.6 per cent reaching 138,517 as at the end of October 2005, when compared to the end of October last year. Meanwhile, the number of persons with a part-time job as their main occupation stood at 22,951 at the end of October 2005, representing an increase of 2,272 or 11.0 per cent over October 2004. The number of unemployed persons registering under Part I and Part II of the Register expressed as a percentage of labour supply was 5.6 per cent in 2003 and 2004. The unemployment rate declined to 4.9 per cent in October 2005. In the period 2000-2004, employment in the private sector, inclusive of temporary employees, was on an upward trend. Furthermore, in October 2005, private sector employment (inclusive of temporary employees) stood at 93,121, an increase of 1,541 or 1.7 per cent over October 2004.

In line with long-term trends, this higher employment in the private sector reflects a significant expansion in private market services over the period 2000 to 2004, most notably in the auxiliary transport activities and travel agencies, renting of machinery and equipment, activities auxiliary to financial intermediation, insurance and computer sectors. This trend was also present during the twelve months to October 2005, when employment in private market services increased by 1,719 or 3.0 per cent. These increases in private market services employment were partly countered by a decline in employment in private direct production, owing to an active restructuring process in the industrial sector.⁷ On the other hand, due to the restructuring of public enterprises, privatisation initiatives, as well as Government's policy to restrict recruitment in non-essential categories in Government Departments, public sector employment has been following a downward trend over the recent years. In fact, public sector employment (inclusive of temporary employees) declined from 48,367 in December 2000 to 45,396 in October 2005.

2.2.3 Main Economic Sectors

Economic activity in Malta is characterised by a prevalence of small enterprises with micro enterprises constituting approximately 94 per cent of the total number of firms (2004), operating prevalently in the manufacturing and tourism sectors. Overall, the fragmented composition of Malta's industrial landscape, the economic openness, insularity and high export concentration of goods and services, underpins the vulnerability of the Maltese economy. Malta's manufacturing enterprise base predominantly consists of locally-owned small and medium-sized enterprises (SMEs) operating alongside a small number of relatively large foreign-owned export-oriented subsidiaries of multinational companies.

In recent years, this industry has faced the need to restructure in order to better compete at international levels. This need was underpinned on the one hand by the prospect of the dismantling of protective measures as well as by the need to better face the challenges from developments in the international markets, in particular with intensified competition from the emerging countries. International competition will remain a key concern and

⁷ This has been particularly evident in the textiles sector.

further investments in support infrastructures are required to assist enterprises in dealing with such challenges.

Manufacturing industry in Malta has been changing with the emphasis shifting from the traditional low cost manufacturing towards higher value added activities. Cases in point are the contraction of the textile sub-sector and the emergence of generics manufacturing activities in the pharmaceutical sub-sector, in which operators' competitive advantage lies in value added.

Table 2.5

| Manufacturing Industry | | | | | | |
|------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| Output (Lm ' 000) | 1,314,596 | 1,086,776 | 1,078,156 | 1,105,179 | 1,085,847 | 1,037,373 |
| Output Growth (%) | | -17.3 | -0.8 | 2.5 | -1.7 | -4.5 |
| Gross Value Added (Lm ' 000) | 345,828 | 299,799 | 307,062 | 313,150 | 282,169 | 284,784 |
| Gross Value Added (%) | | -13.3 | 2.4 | 2.0 | -9.9 | 0.9 |

Source: National Statistics Office

As highlighted in Table 2.5, aggregate nominal output from manufacturing activity has decreased by approximately 21 per cent from Lm1,315 million in 2000 to Lm1,037 million in 2005. However, the decline registered in 2005 is mainly attributable to the difficult and subdued environment of the semi-conductor international business, which constitutes a large share in total manufacturing, and offset positive results registered in other sub-sectors. The sector's gross value added decreased from Lm345 million in 2000 to Lm300 million in 2001, increasing subsequently in 2002 and 2003, but contracted again to Lm282 million during 2004. During 2005, gross value added in the manufacturing industry increased marginally by 0.9 per cent to Lm285 million. In line with these developments, manufacturing employment followed a downward trend over the past years. Manufacturing employment declined from 25,126 at the end of October 2004 to 24,605 at the end of October 2005. Job losses were mainly concentrated in the manufacturing of textiles and textile product and manufacturing of transport equipment.

Tourism⁸ contributes significantly to Malta's economic growth, employment creation and foreign exchange earnings. During recent years, the local tourism industry has been significantly affected by the adverse geopolitical situation that characterised the international environment, as well as the economic situation in a number of major tourist markets. The Maltese tourism industry is also facing increased international competition, both from traditional as well as from new emerging tourist destinations. Largely as a result of international developments, the tourism sector in Malta has declined from a level

⁸ The analysis of tourism in this section is starting from 2001, as data for tourist departures is only available from this year due to a change in tourism statistics data collection system.

of 1.18 million passengers in 2001 to 1.12 million passengers in 2003. An improvement was recorded in 2004 from the decline registered in previous years. In 2005, tourist departures increased by 24,108 or 2.1 per cent, as compared to an increase of 3.5 per cent recorded in the previous year. Nevertheless, growth rates remain relatively modest. During January 2006, tourist departures declined to around 50 thousand tourists as compared to 52 thousand registered during January 2005. The domestic tourism industry continues to face competitive challenges. Malta is a mature destination which needs to deepen - through improved quality and presentation - rather than widen its tourism offer. The monthly distribution presented under Table 2.6 above highlights the prevailing seasonality in Malta's tourism trends, with the four months between June and September 2004 accounting for 48 per cent of tourist departures recorded during 2004. This seasonal concentration involves particular difficulties, including the effects on infrastructure, hotel occupancy, as well as on the labour market and highlights the need to further invest in marketing efforts in order to achieve a better seasonal distribution. Malta's tourism industry remains in operation throughout the year with the result that profits made in summer have to make up for winter losses or reduced profits. Malta does not have the flexibility of shifting workers from one industry to another over seasons.

Table 2.6

| | Tourist Departures | | | | | | | | | |
|------------------|--------------------|-----------|-----------|-----------|-----------|--------|--------|--------|--------|--------|
| | Air | | | | | Sea | | | | |
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2001 | 2002 | 2003 | 2004 | 2005 |
| January | 55,790 | 47,305 | 49,480 | 48,819 | 52,270 | 313 | 563 | 522 | 441 | 855 |
| February | 54,847 | 47,320 | 49,020 | 50,900 | 45,053 | 522 | 461 | 398 | 232 | 84 |
| March | 81,029 | 78,751 | 71,678 | 65,019 | 70,562 | 486 | 1,108 | 823 | 980 | 715 |
| April | 102,308 | 91,352 | 93,287 | 90,875 | 87,433 | 1,571 | 2,207 | 1,353 | 1,291 | 846 |
| May | 105,923 | 95,160 | 102,580 | 103,272 | 112,001 | 2,633 | 2,332 | 3,156 | 2,130 | 558 |
| June | 107,161 | 101,626 | 104,094 | 112,514 | 112,177 | 3,611 | 1,931 | 2,132 | 2,365 | 1,754 |
| July | 127,519 | 120,828 | 126,043 | 130,202 | 134,575 | 6,144 | 5,465 | 5,395 | 4,164 | 1,176 |
| August | 154,782 | 149,941 | 157,670 | 162,910 | 167,614 | 11,994 | 13,952 | 9,442 | 14,187 | 10,680 |
| September | 130,152 | 122,798 | 118,472 | 126,402 | 131,217 | 4,192 | 4,182 | 3,604 | 3,023 | 2,374 |
| October | 115,393 | 124,460 | 109,805 | 128,070 | 128,806 | 1,945 | 1,580 | 784 | 957 | 528 |
| November | 67,432 | 70,283 | 65,781 | 67,434 | 69,527 | 1,350 | 644 | 587 | 310 | 125 |
| December | 42,830 | 47,003 | 41,179 | 40,990 | 40,280 | 828 | 1,025 | 951 | 195 | 133 |
| Total | 1,145,166 | 1,096,827 | 1,089,089 | 1,127,407 | 1,151,515 | 35,589 | 35,450 | 29,147 | 30,275 | 19,828 |

Source: National Statistics Office

Growth in cruise passenger arrivals was registered between 2001 and 2003, increasing by 31.7 per cent and 14.0 per cent in 2002 and 2003 respectively. During the subsequent year, cruise passenger arrivals registered a significant drop from 389,456 passengers in 2003 to 291,821 passengers in 2004 due to international operators re-assessing their operations in the Mediterranean region. More recently in 2005, a turnaround was registered whereby the number of cruise passenger arrivals increased by 9.7 per cent over the previous year following more cruise liner operators started using Malta as a home port. Moreover, positive signs were also registered during January 2006, when the cruise passenger arrivals increased to 5,551 passengers as compared to 3,144 registered during January 2005. Since this concept involves tourists flying to Malta from where they start and end their cruise, this concept provides increased value added to the economy that

goes beyond the cruise liner industry. The new Cruise Liner Terminal, which should open in the very near future, will continue to bolster Malta as an important cruise liner destination in the Mediterranean.

Malta's main tourism source markets are the United Kingdom, Germany, France and Italy and hence it depends on a restricted market.⁹ This highlights the need to further invest in the development of niche tourism markets, such as cultural heritage, rural tourism, sports tourism and language tourism, whilst maintaining the holiday market. Investment is required to improve Malta's tourism product both in terms of human resource development and in the marketing of the islands. This would not only help to tap new market segments and achieve market diversification but also to achieve a better seasonal distribution. International developments also point to the need to invest in newer forms of capturing business. In this context, ICT applications provide Malta the opportunity to further its market penetration.

NSO data indicates that between 2001 and 2003, total tourist expenditure for visits to Malta increased from Lm415.5 million in 2001 to Lm433.3 million in 2003. Subsequently, declines were registered in tourist expenditure in 2004 and 2005 of 0.2 per cent and 1.1 per cent respectively. On a per capita basis, expenditure by tourists followed an upward trend up till 2004, however, in 2005, per capita expenditure by tourists decreased from Lm191.70 in 2004 to Lm185.80, a reduction of 3.1 per cent. The average number of nights spent by tourists followed an upward trend between 2001 and 2003, increasing from 9.2 nights in 2001 to 10.2 in 2003. Thereafter, the average number of nights spent declined to 9.7 in 2004 and 9.5 in 2005. This performance must be viewed in the context that generally, internationally the growth rates for short breaks continue to outpace the growth in outbound travel.¹⁰

Malta's tourism activity is highly dependent on the country's culture both in terms of cultural heritage and in terms of living culture. This provides Malta with an opportunity to create jobs in the creative industries which have the potential to support economic growth in tourism.¹¹

For decades, the financial services sector in Malta has played a supportive role as a provider of services to the economy with the market for banking and insurance services being predominantly a domestic one. Since 1994, the development of the sector was characterised by the implementation of a legislative programme, which involved upgrading the existing legislation taking into consideration EU standards and moving towards the establishment of a single regulator now known as the Malta Financial Services Authority (MFSA). The market for banking and insurance services adopted a broader focus, while the Investment Services Act alone created a whole new business in

⁹ Although over the past three years increased tourism traffic resulted from Denmark and Sweden, these represent a small proportion of tourism traffic.

¹⁰ In fact in the last years, growth rates in tourist departures on an international level have tended to outpace nights spent.

¹¹ This has the potential to further increase the multiplier effect of tourism in the economy.

financial intermediation, accounting for some 100 licensed investment services providers. Today, the amount of investment funds under management tops the Euro 1 billion mark. The financial services sector accounts for around 12.0 per cent of Malta's GDP and is considered to be one of Malta's key growth areas. Employment in the sector has grown to around 5,500 and financial services are now fast becoming an attractive career proposition for well-trained, highly motivated graduates and support personnel.

The construction industry has always been considered one of the significant drivers of Maltese economic activity, as it represents a high degree of local value added with a significant multiplier factor. National infrastructure programmes have provided a considerable impetus to the sector in recent years, namely the new hospital project as well as a number of infrastructural projects financed by the Fifth Italian Financial Protocol and EU Cohesion Policy 2004-2006.

Over the last five years, the share of gross value added of the construction industry expressed as a percentage of total value added was 4.5 per cent. Output by the construction industry followed an upward trend from Lm108.6 million in 2000 to Lm144.0 million in 2005. Output by this industry registered an average annual growth rate of 5.8 per cent over the 2000-2005 period. The upward trend in output by the construction industry was reflected in positive growth rates in gross value added during the 2000-2005 period registering an annual average growth rate of 5.7 per cent.

2.2.4 Competitiveness

Maintaining and improving competitiveness is a central goal in Government's economic and industrial policy. National competitiveness is a function of multiple factors, varying from factors such as macroeconomic stability to the skills and flexibility of employees, from the regulatory regime to the way that companies operate.¹² An indicator of a country's international price competitiveness is provided by the real effective exchange rate (REER) which captures movements in the domestic currency against movements in competitor countries corrected for inflation differentials. Over the recent years, the Maltese economy registered a decline in international competitiveness. Malta's real effective exchange rate (REER) increased at a lower rate than that for the EU25 between 2002 and 2004. Meanwhile, the REER for 2005 declined though at a lower rate than that for the EU25. This suggests that competitiveness is still of concern although improvements were recorded.

The divergence between the REER and its nominal counterpart reflects domestic inflation relative to that registered in Malta's competitor countries. Inflation in Malta, based on the Harmonised Index of Consumer Prices (HICP), ranged from a high of 3.0 per cent in 2000 to a low of 1.9 per cent in 2003. Malta's inflation rate was above the EU25 average during the 2000-2005 period, except in 2001 and 2003 when it was equal to the EU average. In 2005, Malta's inflation rate based on the HICP stood at 2.5 per cent in 2005, compared to 2.2 per cent for the EU25.

¹² Given this complexity, there is not a unique way of measuring competitiveness in its broadest sense.

Unit labour cost growth compares remuneration (compensation per employee) and productivity (Gross Domestic Product per employment) and serves to show how the remuneration of employees is related to the productivity of their labour.¹³ Unit labour costs increased substantially in 2001 and 2003 in the wake of higher growth in compensation per employee and contraction in productivity. During 2002, an easing in wage pressures together with an improvement in productivity contributed to a relatively deceleration in unit labour costs. Marginal increases were registered in unit labour costs in 2004 reflecting lower productivity levels. Forecasts for unit labour cost growth in 2005 show that Malta is expected to register a negative unit labour cost growth of –1.8 per cent - hence productivity is anticipated to outweigh the growth in remuneration of employees, thereby increasing Malta’s competitiveness.

Table 2.7

| Labour Productivity per Person Employed (EU25=100) | | | | | | | | |
|--|-------|-------|-------|-------|-------|-------|---------------------|---------------------|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | change 2004/2005 | change 2000/2005 |
| EU25 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 0.0 | 0.0 |
| Austria | 111.1 | 108.3 | 105.8 | 106.6 | 110.8 | 111.2 | 0.4 | 0.1 |
| Belgium | 125.9 | 126.4 | 127.6 | 128.6 | 128.8 | 128.7 | -0.1 | 2.2 |
| Cyprus | 73.2 | 73.2 | 72.0 | 70.5 | 73.7 | 74.7 | 1.4 | 2.0 |
| Czech Republic | 58.5 | 59.6 | 60.0 | 62.1 | 64.4 | 69.0 | 7.1 | 17.9 |
| Denmark | 105.0 | 104.6 | 102.2 | 103.1 | 104.1 | 106.0 | 1.8 | 1.0 |
| Estonia | 42.4 | 43.5 | 45.7 | 48.0 | 51.0 | 54.0 | 5.9 | 27.4 |
| Finland | 109.4 | 108.9 | 107.7 | 106.8 | 107.9 | 107.5 | -0.4 | -1.7 |
| France | 122.2 | 122.5 | 120.5 | 120.3 | 118.9 | 119.5 | 0.5 | -2.2 |
| Germany | 101.2 | 100.2 | 99.8 | 100.5 | 100.3 | 100.6 | 0.3 | -0.6 |
| Greece | 89.2 | 91.7 | 97.2 | 100.5 | 98.2 | 99.4 | 1.2 | 11.4 |
| Hungary | 60.6 | 64.2 | 66.7 | 66.9 | 68.2 | 70.4 | 3.2 | 16.2 |
| Ireland | 121.6 | 123.8 | 127.7 | 128.3 | 129.4 | 129.0 | -1.1 | -9.8 |
| Italy | 121.2 | 118.7 | 115.2 | 111.9 | 110.5 | 109.3 | 7.7 | 20.1 |
| Latvia | 38.3 | 39.4 | 40.2 | 41.4 | 42.7 | 46.0 | 7.7 | 20.1 |
| Lithuania | 41.0 | 44.8 | 44.8 | 47.1 | 49.6 | 51.8 | 4.4 | 26.3 |
| Luxembourg | 153.4 | 143.8 | 141.0 | 145.5 | 148.3 | 148.7 | 0.3 | -3.1 |
| Malta | 89.5 | 84.9 | 86.4 | 85.6 | 81.1 | 81.9 | 1.0 | -8.5 |
| Netherlands | 101.0 | 107.1 | 105.9 | 106.4 | 108.0 | 108.4 | 0.4 | 7.3 |
| Poland | 51.3 | 50.3 | 51.6 | 59.6 | 62.1 | 63.0 | 1.4 | 22.8 |
| Portugal | 72.0 | 71.4 | 71.1 | 65.8 | 65.7 | 65.3 | -0.6 | -9.3 |
| Slovakia | 54.1 | 55.3 | 58.3 | 58.4 | 59.1 | 61.0 | 3.2 | 12.8 |
| Slovenia | 69.8 | 71.3 | 71.0 | 72.5 | 75.2 | 77.2 | 2.7 | 10.6 |
| Spain | 97.6 | 97.4 | 98.7 | 100.0 | 99.3 | 97.2 | -2.1 | -0.4 |
| Sweden | 106.6 | 102.7 | 101.5 | 104.1 | 106.5 | 107.8 | 1.2 | 1.1 |
| United Kingdom | 103.4 | 105.0 | 107.4 | 106.8 | 106.3 | 106.6 | 0.3 | 3.1 |

Source: Eurostat

Apart from price competitiveness, Malta’s national competitiveness is dependent on labour productivity. Labour productivity as measured by real output per employee increased by 1.6 per cent in the first nine months of 2005 when compared to the

¹³ A negative growth rate of the unit labour cost index indicates that the output value created is higher than the cost of labour.

comparable period in the previous year.¹⁴ This improvement in productivity reverts the recent trend recorded in the data for 2003 and 2004 when labour productivity declined by 2.0 per cent and 1.7 per cent respectively. As highlighted in Table 2.7, the labour productivity index (relative index of GDP per person employed) represents the relativity of national measures of labour productivity to the European Union (EU25) average. Over the period 2000 to 2005, Malta's labour productivity has declined by 8.5 percentage points, highlighting an important area of concern for Malta to improve on its international competitiveness.

2.2.5 Future Economic Prospects¹⁵

Being a small and open economy and operating within an increasingly competitive international environment implies that the Maltese economy must continue to improve its competitiveness not only by focusing on cost but also by increasing productivity and shifting to higher value-added economic activities. Achieving a sustainable fiscal position is fundamental for a stable macroeconomic framework, capable of fostering economic growth, generate employment opportunities and sustaining social responsibilities, which are key goals of the Maltese Government.

A stable macroeconomic environment also entails stability in the external sector, as this is essential to maintain price stability. Price stability continues to be a priority, especially in view of Malta's participation in ERM II as from May 2005 and the intention of the Maltese authorities to adopt the Euro on 1st January 2008.

Table 2.8

| | Macro-economic Indicators ⁽¹⁾ | | | | |
|--|--|------|------|------|------|
| | 2004 | 2005 | 2006 | 2007 | 2008 |
| GDP real growth rates (%) | -1.5 | 2.5 | 1.1 | 1.2 | 2.0 |
| GDP nominal growth rates (%) | 0.1 | 5.3 | 3.9 | 3.9 | 4.0 |
| General Government Net Lending (%) ⁽²⁾ | -5.1 | -3.8 | -2.7 | -2.3 | -1.2 |
| General Government Gross Debt (%) ⁽²⁾ | 76.6 | 75.6 | 70.8 | 68.9 | 67.3 |
| Employment growth rates (%) | 0.3 | 0.3 | 0.9 | 1.0 | 1.2 |

⁽¹⁾ Data for 2006-2008 and employment growth rate for 2005 are forecasts as per Malta: Update of Convergence Programme 2005-2008.

⁽²⁾ Absolute levels for deficit and debt for 2005 are estimates as per Malta: Update of Convergence Programme 2005-2008.

Source: National Statistics Office, Ministry of Finance

¹⁴ Real GDP data is available quarterly up to 2005 while latest data for gainfully occupied is available monthly up to October 2005. Thus, labour productivity is calculated for Jan-Sep 2005.

¹⁵ Data for 2004 and 2005 reflect actual data available by the cut-off date being 10 March 2006. Similarly, projections are as on 10 March 2006.

Over the coming years, the economic recovery is expected to be moderate (Table 2.8). Malta's economic performance is expected to be influenced by the sluggish rate of economic growth in Malta's main trading partners, as well as the increase in the international price of oil. Additionally, domestic demand is expected to be somewhat dampened by the unfolding of Government's consolidation programme, slow growth in personal incomes and the globalisation challenges faced by a number of sectors. On the other hand, investment expenditure is expected to boost demand and overall output growth in the short-term. GDP is expected to grow by 1.1 per cent in 2006 and 1.2 per cent in 2007. Whilst the external sector will continue to be the main contributor to economic growth in 2008, domestic demand will also contribute positively to GDP growth during the same period. As a result, the economy is expected to grow by 2.0 per cent in 2008.

As outlined in the Update of the Convergence Programme 2005-2008¹⁶, Government's fiscal consolidation programme is proceeding on track. The general Government deficit as a per cent of GDP is projected to decline below the 3.0 per cent of GDP reference value in 2006 and to continue to fall thereafter. In fact, the general Government deficit ratio is expected to follow a downward path from 3.8 per cent in 2005 to 2.7 per cent and 2.3 per cent in 2006 and 2007 respectively. By 2008, the general Government deficit ratio is expected to decline further to 1.2 per cent of GDP. The gross debt as a percentage of GDP is also expected to decrease gradually from 75.6 per cent in 2005 to 67.3 per cent in 2008.

2.3 Accessibility

2.3.1 Transport

Within the context of the limited national physical territory and population density, Malta gives particular importance to its accessibility issues, notably aspects related to the road network, sea and air ports infrastructure. In the context of the Maltese archipelago, internal accessibility is primarily dependent on road transport with sea transport ranking second in terms of importance, while external accessibility is based on either sea or air transport. Malta's transport infrastructure consists of: one airport (including heliport) in Malta and a heliport in Gozo; four sea ports (Valletta, Marsaxlokk, Cirkewwa and Mgarr); and the road network. In 2002, a Transport Infrastructure Needs Assessment (TINA) was carried out where the network components for a future Trans-European Transport Network (TEN-T) in Malta were identified.

The length of Malta's road network has not changed significantly since the early 2000 and currently stands at around 2,227 km (2004). In this road network, the arterial and distributor roads account for a total length of 184 km. Malta's road network has been catering for an increasing motor vehicle population which has been contributing to a

¹⁶ Malta: Update of Convergence Programme 2005-2008, Ministry of Finance, December 2005

considerable increase in traffic congestion. Private car ownership and usage is on the increase, whereas public transport patronage has never assumed rising trends in consumption.

Four of Malta's seaports, namely Valletta, Marsaxlokk, Cirkewwa and Mgarr, have been identified as being motorways of the sea and are part of the planned TEN-T Maltese network. The sea ports of Cirkewwa and Mgarr handle inter-island transportation of passengers and cargo between Malta and Gozo and therefore constitutes a critical service and a socio-economic life-line for the island of Gozo. The volume of passengers, vehicles and cargo using the ferry service between Malta and Gozo has increased substantially in recent years. The trends show that the number of passengers and cars using the Gozo ferry service has increased over the years and it is expected that the demand for crossings is likely to increase. Inter-island transportation exerts considerable pressure on the existing port infrastructure, both in terms of port facilities and actual transportation modes.

Valletta and Marsaxlokk are the main ports serving international traffic both capable of providing a comprehensive package of maritime services and cargo storage. The port of Marsaxlokk hosts a major Mediterranean container terminal and an independent oil terminal. The Port of Valletta is a natural deep water harbour with a generally good commercial port infrastructure. The further development of the port infrastructure depends on required dredging works, quay extensions and expansion of the port hinterland areas. It does however have the potential for increased inter-harbour trips for residents' and tourists' use and pleasure.

Malta's international airport and a heliport in Gozo support the requirements of the country which is heavily dependent on air transport connectivity. There are a number of airlines operating to and from Malta. Air transport policy is crucial to the further development of tourism, trading and commercial activities in general. Air transport is also critical to support the development of the country's manufacturing capacity by providing air cargo solutions.

2.3.2 E-Society

Malta has shown that it can attain success given the right vision, leadership, commitment and investment. The progress attained in ICT and the proliferation of an E-Society is one area of success.

Government is committed to achieve a first class information society and has launched a national strategy with a number of objectives, including the attainment of extensive e-accessibility in a number of sectors. In 2004, practically all households were connected to the telephone network and mobile telephony penetration was rapidly converging with the EU average. A national ICT strategy for the period 2004 to 2006 was launched. The aim is to also extend the information society to tourists visiting the island and to potential

visitors. This strategy is based on the e-Europe action plan, identifying a number of strategic objectives with the aim of obtaining extensive e-accessibility.

Government intends to further exploit the country's abilities in ICT, both to improve Malta's competitiveness in an increasingly knowledge-dependent world, as well as establish ICT as a value added contributor to the Maltese economy. Moreover, ICT is one way to mitigate against insularity. The implementation of the ICT strategy began in earnest in 2005 and will continue with measures in the national budget and also in the relevant Operational Programme (2007-2013).

2.3.3 Challenges

The main challenges for the said period will be to upgrade the physical condition of the road network, improve port infrastructure, enhance inter-island transport facilities, bridge the digital divide by furthering the investment in ICT education and accessibility, continue to develop E-Government services, promote ICT in SMEs and internationalize the Maltese ICT industry.

2.4 Environment and Energy

Malta's environment is essential for our quality of life and health, as well as being part of the country's national identity. With strong linkages with economic resources management, this sector strategic to Malta's future development. Recent years have seen a dramatic increase in the extent of environmental initiatives, principally relating to upgraded regulation. Besides legislation, other instruments and measures such as permitting regimes, guidelines, economic instruments and administrative arrangements have been used. Further changes in behavioural patterns in the public and private sector, however, remain to be made.

2.4.1 Energy generation and supply

Malta's electricity generation is exclusively reliant on non-renewable energy sources (liquid fossil fuels) and this has been adversely affected by developments in international pricing of petroleum products. Electrical power is generated in two conventional thermal power stations owned by Enemalta Corporation and located at Marsa and Delimara. These power plants utilise heavy fuel oil for conventional steam plant (boiler/turbo generation) and gas-oil for gas turbines. The Marsa power station houses the older generation plant, whereas the Delimara power station is relatively more modern, albeit still in need of upgrading particularly in relation to energy efficiency and cleaner fuels. Investment is also required in certain critical sections of the distribution system to prevent distribution failures.

Consumption of electrical energy has been increasing steadily. This can be attributed to a number of factors including growth in economic activity, higher standards of living and improved distribution network and increased use of electrical energy. Electricity demand

has increased from 1,603 GWh in 1995 to 2,263 GWh in 2005 which is equivalent to an average increase of 3.3 per cent per annum over the last ten years.¹⁷ Currently, the active power maximum demand has surpassed the winter maximum demand in terms of magnitude.

Malta currently depends on imported fossil fuels for practically all its energy needs. The production of energy from fossil fuels is the most obvious source of environment pressure because of the combustion processes involved. The energy sector contributes to approximately 63 percent of Malta's GHG emissions. In recent years, Government has introduced a number of measures in order to reduce the harmful effects of electricity generation. Technical modifications were made in order to increase the efficiency of the power plants. Coal was phased out in 1995 and the introduction of low sulphur heavy fuel oil in 2004 reduced sulphur dioxide emissions. Efforts are underway to assess both the potential and applicability of renewable energy sources and recently, Government has set up a Waste to Energy committee entrusted with the objective to assess the feasibility of recovering energy from waste generated.

2.4.2 Water

The geology of the Maltese islands allows the occurrence of natural groundwater in two distinct rock formations: the upper-coralline limestone where groundwater accumulates over the impermeable blue clay and the lower corraline limestone where groundwater occurs as a freshwater lens floating over seawater. Malta has no surface waters that can be economically exploited, in that the islands depend on frail groundwater resources that are subject to fierce competition and are under increasing pressure from intense human activity over a relatively small territory.

Besides agriculture and industry, groundwater is also a valuable source for drinking purposes. Half of the drinking water comes from aquifers, whilst the remaining part is procured from three seawater desalination plants located at Pembroke, Cirkewwa and Lapsi. The desalination facilities are amongst the most significant users of electricity in Malta and water production utilizes an overall 8.0 per cent of the total electricity production.

Due to its topographical and climatic features, Malta is vulnerable to the effects of flash floods, more common during the Autumn and Winter months. Flooding results in damage to infrastructure, disruption to economic activity and occasionally, loss of human life. At the same time, storm water presents an alternative source of fresh water that can be stored and made good use of.

In 2004, approximately 6.5 percent of the sewage was treated. The Sewage Master Plan foresees the setting up of a number of waste-water treatment plants to treat all Malta's liquid waste. The use of treated sewage effluent (TSE) for non-potable purposes offers a cost-effective alternative to more costly sources of water supply. Being less responsive to

¹⁷ Enemalta Corporation sources.

seasonal fluctuations, TSE is a more reliable source that offers challenging possibilities to the agricultural sector. Modeled projections of TSE production show an annual output of 14hm³ once the new facilities are commissioned.

Malta's coast and sea are essential to the quality of life of the resident population and to economic activity. Malta uses sea water for the production of potable water. Moreover, coastal waters also have an intrinsic value in supporting some of Malta's richest ecosystems thus contributing to a better quality of life. Even though coastal waters are constantly monitored, more investment is required to improve national capacity to monitor coastal waters in line with the EU *Acquis*.¹⁸

Efforts are being directed so as to mitigate and possibly eliminate discharges that harm the coastal environment. In addition to marine discharges from public sewers, considerable volumes of wastewater are discharged from Malta's power stations; from the fishing sector, mainly through net washing, fish penetration and packing; and from the oil and fuel terminals, of which the most significant contaminant contributing to marine pollution is petroleum hydrocarbons. Other sources of marine contamination include landfills, marinas and other related activities, as well as the ship building and ship repairing yards. Monitoring programmes show that since 2002 the overall water quality has improved. In 2004, 83 percent of sites were classified as First Class under the Barcelona Convention, indicating a marked improvement from 55 percent of sites in 1996. Between 2001 and 2004, all bathing sites complied with Bathing Water Quality Directive criteria.

Malta's implementation of the Water Framework Directive is aimed towards achieving good status of these waters by 2015, to monitor the quality of inland surface and to include measures for their protection in a Water Catchment Management Plan for Malta, by ensuring long-term sustainable use of water resources

2.4.3 Emissions

Even though between 1990 and 2000, Malta's GHGs emissions increased by 44 percent (compared to the EU as a whole), it had one of the lowest emission rates per capita (approximately 7 tonnes in 2002). It is estimated that around 20.0 per cent of total emissions are caused by road transport. As a result of increased usage of unleaded petrol in recent years, benzene concentrations in the air have declined significantly.¹⁹ Similarly,

¹⁸ Monitoring is based on a number of parameters specified under, *inter alia*, the Dangerous Substances Directive, the Bathing Water Directive, the Protection of Fish Life Directive, the Urban Wastewater Treatment Directive and the Nitrates Directive.

¹⁹ In September 2000, leaded petrol was replaced with a lower lead content fuel and by January 2003 leaded petrol was completely phased out. Bio diesel, which is made up of less polluting sources of diesel, was also introduced. With the abolition of leaded petrol and the supply of bio diesel, there were corresponding improvements in air quality. Subsequent to the introduction of unleaded petrol, benzene concentrations in air have declined, with notable declines in benzene concentrations occurring in most aggravated areas.

an 8.0 per cent reduction was also achieved in nitrogen oxide concentrations. Given its territorial conditions and population density, Malta attaches great importance to the environment. It has numerous international obligations relating to environmental issues and is a member of several international institutions dealing with these issues.²⁰

2.4.4 Waste Management

Malta's solid waste originates from construction and municipal waste. Municipal solid waste as well as mixed trade and municipal waste have increased by 53.0 percent since 1996.²¹ Malta's solid waste management strategy aims to put in place an integrated approach to waste management, which also involves the reduction in the quantity of waste and an increase in recycling and composting. In 2004, the Maghtab and Qortin waste disposal sites were closed and a project on the rehabilitation of the Maghtab, Qortin and Wied Fulija landfills is currently being carried out.

In terms of waste collection, households have been encouraged to undertake waste separation at source. To-date, a number of projects - such as the setting up of bring-in-sites which encourage the collection of materials suitable for recycling - are being organised through local councils. A number of projects on waste collection, recycling and education campaigns related to the implementation of the solid waste management strategy are currently being co-financed by the European Regional Development Fund, the European Social Fund and the Cohesion Fund of the 2004-2006 European Union Cohesion Policy.

2.4.5 Bio-diversity

The main threats to Malta's biodiversity are the development in the rural and marine areas, the introduction of alien (non-native) species that may compete with native biodiversity and the exploitation of wildlife. An enhanced legal framework has been put in place to ensure the protection of ecologically important sites in the Maltese Islands such as marine protected areas. Maltese candidate sites submitted for the EU Nature 2000 network of protected areas cover approximately 12.5 per cent of Malta's land area. Effective management of protected areas has begun, with management plans approved, covering 1.3 per cent of Malta's Special Areas of Conservation. This process needs to be significantly accelerated in order for Malta to reach its target of halting loss of biodiversity by 2010.

²⁰ Malta is also signatory to a number of multilateral agreements, which affect environmental policies and practices at the national level. Malta has been transposing the EU Environmental *Acquis* through the upgrading of environmental legislation and the introduction of specific legislation. By 2004, approximately 130 pieces of legislation under the 2001 Environmental Protection Act had been published.

²¹ In 2001, municipal waste collected amounted to 549 kg per capita comparatively higher than EU average.

2.4.6 Urban Development

The urban fabric in the Maltese Islands plays an important role in the development of society and the economy. The Maltese archipelago has one of the highest densities of cultural heritage sites in the world. The country's rich repertoire of cultural heritage include the oldest free standing megalithic buildings in the world, one of the most extensive and complex systems of fortifications and a remarkable concentration of baroque art and architecture. Government's strategic objectives focus on the regeneration and rehabilitation both in terms of continuously upgrading the urban environment of localities in the country as well as conserving, restoring and safeguarding the unique heritage sites found in the Maltese Islands.

2.4.7 Challenges

Malta's primary environmental challenges are identified by the State of the Environment Report 2005. These include the need to enhance the environmental and economic sustainability of future electricity generation, the need to continue efforts at achieving compliance with EU legislation - particularly in areas of water and waste management – the protection of bio-diversity including the coastal zones, the need to mitigate the impact of economic activity on the environment (also including issues related to land use and the restoration and conservation of cultural heritage) and the strengthening of the country's monitoring capacity. Challenges for the energy sector relate to measures aimed at improving efficiency - including distribution - as well as the further assessment of the application of renewable energy sources.

2.5 Human Resources Development

Government is well aware that human resource development is a determinant factor to economic growth and development. Human capital is crucial to the country's ability to compete in the high-value-added, knowledge intensive markets that are the key to the country's future prosperity. Government believes that a highly skilled workforce is the product of life-long education which starts from early childhood - through effective primary and secondary schooling – continues with vocational or tertiary education and which is subsequently followed up by continuous life-long professional training process.

Public expenditure on education as a percentage of GDP amounts to approximately 6.5 per cent and there is an ongoing commitment and process to improve and upgrade the quality of education system in Malta. All three year old children have access to kindergarten services. A new national curriculum inspires a new vision and strategy in primary and secondary schooling. Government has embarked on a ten-year multi-million project to build new and upgrade State schools. In 2001, a vocational College, the Malta College of Arts, Science and Technology (MCAST), was established resulting in an increase of around 35.0 per cent (until 2004) in student participation take up of post-secondary courses. Investment in infrastructure and resources have been undertaken in

the tertiary sector to accommodate the increase of 48.4 per cent between 2000 and 2004 in the university student population.²²

To enhance the quality of educational experience, Government has embarked on a wide-ranging education reform process. During the past decade, emphasis has been placed on subjects as the national curriculum, school development plans, inclusion, literacy programmes, ICT diffusion, quality assurance and accountability as a driver for education improvement. Government has established a National Commission for Higher education as an advisory commission for the development and transformation of the post-secondary and tertiary sectors. The Malta Qualifications Council (MQC) has been established to ensure that formal, informal and non formal qualifications are accredited and certified. Investment in the education sector is being undertaken to overcome a number of challenges. For example, Malta has a high rate of persons without a higher level of education (51.0 per cent of 20-24 year in 2004), a high rate of early school leavers and low rates of participation in life-long learning.²³ Currently there are few pathways for the flexible development between VET and non-VET streams. The national employment and training service offers a wide range of training courses for skill development.

Public service administrative capacity is vital for national economic competitiveness. Over the years, Malta's Public Service has proven its ability to implement government programmes, to deliver services adequately, and to provide continuity during changes of government. The Public Service underwent extensive reforms during the 1990s and subsequently with a view to modernizing career structures and upgrading staff skills in order to render the service more productive and cost-effective. Major investments were also made in the utilization of information technology in public administration. In the years running up to EU Accession, Government has increased investment in its human resources through national budget which was complemented by a number of programmes under the EU pre-accession funds and later the Transition Facility (2004-2006). The investment focuses on strengthening the country's administrative capacity to implement EU legislation and foster exchange of best practice.

2.5.1 Challenges

It is Government's intention to maintain a steady pace of reform in education so as to further increase existing participation rates in further and higher education in an inclusive manner in line with the nations socio-economic development. The Government will take measures to increase inclusive education and training policies aimed at reducing illiteracy and the number of early school leavers; ensure that education and training pathways are attractive and flexible; continue and strengthen current ICT programmes and promote e-learning; expand science and technology education; respond (in a timely manner) to

²² Approximately 42.0 per cent of the University student population were pursuing social studies, business and law courses.

²³ School leaver rate was 42.6 per cent (Source: National Reform Programme October 2005). One should note the difference in measuring school leaving age, which is 16 in Malta and 18 for Eurostat calculation purposes.

new occupational needs, key competences and future skills requirements; promote new forms of work organizations that are sensitive to the needs of life-long learning through adult training and re-training programmes; and finally ensure investment in education and training infrastructure.

Chapter 3. An Analysis of Malta's Strengths, Weaknesses, Opportunities and Threats

The information emerging from the previous Chapters is supplemented with an analysis of the current socio-economic context through an examination of Malta's strengths, weaknesses, opportunities and threats (SWOT).

The SWOT analysis has been undertaken through a series of meetings held in September 2005 with relevant public and private sector stakeholders. The SWOT meetings were organised along the thematic areas of accessibility; economic development and competitiveness; employment, education and social inclusion; environment; and Gozo special needs. Meetings were open for all Line Ministries and public agencies, non-governmental organizations, social partners and other stakeholders. In addition to these SWOT meetings, a dedicated e-mail address was created to receive feedback. In the first quarter of 2006, a number of public dialogues were held on the same thematic areas in various locations, including Gozo.²⁴

Malta's strengths, weaknesses, opportunities and threats are set out in Tables 3.1, 3.2, 3.3, 3.4. This SWOT analysis highlights a number of crucial realities that affect the strategic direction of Malta's socio-economic development for the programming period 2007 – 2013. This feedback has been feeding the delineation of the strategic objectives of the NSRF process.

Table 3.1 – Strengths

| | |
|--|--|
| - Politically stable, strong social fabric and safe country | - Good airport infrastructure |
| - Strategic location in Mediterranean | - Natural strategic seaports |
| - Favourable climate conditions | - Flexible, reliable, and adaptable workforce |
| - Good governance | - Multi-lingual population |
| - Good industrial relations climate | - Good welfare framework |
| - Well-established tourism sector and financial services sector | - Active voluntary sector and non-profit organizations |
| - A wealth of cultural heritage | |
| - Established manufacturing base with a good reputation of retaining FDI | |

²⁴ Apart from the general public, relevant civil society partners and representatives of local government participated in these meetings.

Table 3.2 Weaknesses

- | | |
|---|---|
| <ul style="list-style-type: none"> - Vulnerability as a small island state - Insularity and discontinuity of the territory - Double insularity for Gozo - High population density - Small internal market - Poor integrated land use and transport planning - Poor roads infrastructure - Limited internal (road) access links - Inadequate investment in seaport infrastructure Environmental sustainability - High dependency on non-renewable energy sources | <ul style="list-style-type: none"> - Skills mismatches - Insufficient take-up of science-based studies - Inadequate continuous VET - Lack of flexible pathways between VET and non-VET streams - Low female participation rate - Lack of affordable child care and after school care services - Insufficient entrepreneurial culture - Poor branding of key economic sectors - Perceived narrow tourism offering - Lack of adequate support structures for micro-enterprises and SMEs - Level of spending in R&D |
|---|---|

Table 3.3 Opportunities

- | | |
|--|---|
| <ul style="list-style-type: none"> - Potential diversification in the main economic sectors (niche markets) - Increased trade integration opportunities - Growth through better branding of main economic sectors - Potential focus on higher value added economic activity - Potential for furthering intra and inter-industry linkages - More strategic focus on Gozo as a region with distinct characteristics - Expansion of back-office operations and ICT services - Expansion of E-Services - Capitalising on untapped financial services potential - Expansion of trans-shipment and logistics | <ul style="list-style-type: none"> - Potential increase in Research & Development activities - Potential for increased use of renewable energy sources - Improvement of infrastructure and services of general economic interest - Potential from the regeneration of urban areas, particularly those linked to historical areas/heritage sites - Potential from the valorization of cultural heritage assets - Active ageing - Life-long learning and further human resource development - Social inclusion and integration of different levels of society through ICT |
|--|---|

Table 3.4 Threats

- Declining birth rate
- Ageing population
- Widening welfare gap
- Over-utilization of finite resources
- Increased vulnerability of some economic sectors due to globalisation
- Inability to reap economies of scale
- The burden of over regulation
- Reduced competitiveness due to current work practices and reluctance to change these practices
- Risk of losing heritage sites (funds vis-à-vis volume)
- Volume of tourism to Gozo and high dependence on day trippers
- Further environmental degradation and bio-diversity decline
- Transport congestion
- Insufficient risk prevention measures
- Environmental fragility

Chapter 4. Benchmarking Malta with the EU25

4.1 Introduction

Malta's national strategic reference framework aims to assess Malta's needs and challenges for Malta's progress within the framework of convergence to European Union benchmarks. Table 4.1 below highlights some structural indicators for Malta and the European Union 25 Member States on economic performance, employment and human capital development, innovation and research and environment in a bid to elucidate on Malta's comparative position vis-à-vis EU benchmarks.

4.2 Economic Performance

In terms of economic performance, Malta's real economic growth rate has been lagging behind the EU-25 average during the period 2001-2004 (in 2004, a negative rate of 1.5 per cent compared to 2.4 per cent). Declining economic performance is reflected in GDP per capita decreasing from 74.0 in 2001 to 69.2 in 2004. Whereas, Malta's labour productivity has been registering a deterioration over recent years, total employment growth has recorded a turnaround in 2004. In 2004 Malta's employment growth was higher than the EU25 average. The indicators for trade integration of goods and services extensively reflect the high degree of openness of Malta's economy. In 2004, Malta's trade integration of goods stood at 57.8 per cent compared to the EU25 average of 9.4 per cent. In the same year, Malta's trade integration of services reached 21.7 per cent compared to the 3.3 per cent for the EU25. Malta exhibits a strong foreign direct investment intensity indicator compared to the EU25 average. On the basis of this comparative performance, Malta acknowledges the need to boost its economic growth fundamentals, improve productivity and foster international competitiveness in the goods and services market.

4.3 Employment

In terms of employment, the disparity between the male and female activity rates in comparison to the EU trends is quite evident. However, the consistently lower trend for female employment rates should be seen in terms of the wide socio-cultural factors rather than merely from a restricted economic analysis viewpoint. Malta's employment rate of older workers and adult participation in education and training are both lower than the average for EU25. Malta's unemployment rate has consistently been lower than the EU25 average, partly highlighting the resilience of the economy in maintaining employment levels despite sluggish economic growth trends. The low female labour market participation rate partly results from a mixture of socio-economic factors which seem to

Table 4.1 Various Structural Indicators - EU25 and Malta

| Indicator | EU 25 | | | | Malta | | | |
|---|----------|----------|----------|---------|--------|--------|--------|----------|
| | 2001 | 2002 | 2003 | 2004 | 2001 | 2002 | 2003 | 2004 |
| General Economic Background | | | | | | | | |
| GDP per capita in Purchasing Power Standards (PPS) (EU25=100) | 100.0 | 100.0 | 100.0 | 100.0 | 74.0 | 74.2 | 72.7 | 69.2 |
| Real GDP growth rate - Growth rate of GDP at constant prices (1995=100) - Percentage change on previous year | 1.9 | 1.2 | 1.2 | 2.4 | 0.3 | 1.5 | (2.5) | (1.5) |
| Labour productivity per person employed - GDP in PPS per person employed relative to EU25 (EU25=100) | 100.0 | 100.0 | 100(f) | 100(f) | 84.9 | 86.4 | 85.6 | 81.1 |
| Total employment growth - Annual percentage change in total employed population | 1.4 | 0.5 | 0.3 | 0.6 | 2.1 | (0.7) | (0.7) | 1.4 |
| Inflation rate - Annual average rate of change in Harmonised Indices of Consumer Prices (HICPs) | 2.5 | 2.1 | 1.9 | 2.1 | 2.5 | 2.6 | 1.9 | 2.7 |
| Unit labour cost growth - Growth rate of the ratio: compensation per employee in current prices divided by GDP (in current prices) per total employment | 0.3 | (0.4) | (0.2) | (1.1) | 4.1 | (0.6) | 2.5 | 0.7 |
| Market integration - Trade integration of goods - Average value of imports and exports of goods divided by GDP, (x100) | 9.6 | 9.1 | 8.9 | 9.4 | 60.7 | 61.8 | 60.0 | 57.8 |
| Market integration - Trade integration of services - Average value of imports and exports of services divided by GDP, (x100) | 3.4 | 3.3 | 3.2 | 3.3 | 24.5 | 23.4 | 23.1 | 21.7 |
| Market integration - Foreign Direct Investment intensity - Average value of inward and outward Foreign Direct Investment flows divided by GDP, (x100) | 2.4 | 1.3 | 1.3 | 0.8 | 4.0 | (5.3) | 14.5 | 5.5 |
| Business investment by the private sector as a percentage of GDP | 17.8 | 17.2 | 16.9 | 17.1 | 15.4 | 11.1 | 14.6 | 16.4 |
| Employment | | | | | | | | |
| Total employment rate - Employed persons aged 15-64 as a share of the total population of the same age group | 62.8 | 62.8 | 62.9 | 63.3 | 54.3 | 54.4 | 54.2 | 54.0 |
| Employment rate - females - Employed women aged 15-64 as a share of the total female population of the same age group | 54.3 | 54.7 | 55.0 | 55.7 | 32.1 | 33.9 | 33.6 | 32.7 |
| Employment rate - males - Employed men aged 15-64 as a share of the total male population of the same age group | 71.3 | 71.0 | 70.8 | 70.9 | 76.2 | 74.7 | 74.5 | 75.1 |
| Total employment rate of older workers - Employed persons aged 55-64 as a share of the total population of the same age group | 37.5 | 38.7 | 40.2 | 41.0 | 29.4 | 30.1 | 32.5 | 31.5 |
| Life-long learning (adult participation in education and training) - Percentage of the population aged 25-64 participating in education and training | 7.8(e) | 7.9 | 9.2(b) | 10.3 | 4.6 | 4.4 | 4.2 | 4.8 (b) |
| Total unemployment rate - Unemployed persons as a share of the total active population | 8.4 | 8.8 | 9.0 | 9.0 | 7.6 | 7.5 | 7.6 | 7.3 |
| Innovation and Research | | | | | | | | |
| Gross domestic expenditure on R&D (GERD) - As a percentage of GDP | 1.93 (s) | 1.93(s) | 1.92 (s) | 1.9(ps) | : | 0.28 | 0.27 | 0.29 (u) |
| Science and technology graduates - total - Tertiary graduates in science and technology per 1000 of population aged 20-29 | 11.0 | 11.4 | 12.3 | : | 2.7 | 3.1 | 3.1 | : |
| Youth education attainment level - total - Percentage of the population aged 20-24 having completed at least upper secondary education | 76.1 | 76.5 | 76.5 | 76.6 | 40.1 | 39.0 | 43.0 | 51.4 |
| Youth education attainment level - females - Percentage of the female population aged 20-24 having completed at least upper secondary education | 78.9 | 79.4 | 79.0 | 79.6 | 38.7 | 42.2 | 46.2 | 54.1 |
| Youth education attainment level - males - Percentage of the male population aged 20-24 having completed at least upper secondary education | 73.3 | 73.5 | 73.9 | 73.7 | 41.4 | 36.1 | 39.8 | 48.8 |
| High-tech exports - Exports of high technology products as a share of total exports | 21.1 | 18.8 | 18.4 | 18.2 | 58.1 | 56.5 | 55.5 | 55.9 |
| R & D expenditure financed by business sector, as a percentage of total | 55.3 (s) | 55.0 (s) | 54.3 (s) | : | 18.6 | : | : | : |
| | 91.4 | 90.7 | 92.0 | : | 124.4 | 129.7 | 129.1 | : |
| Environment | | | | | | | | |
| Total greenhouse gas emissions - Percentage change since base year and targets according to Kyoto Protocol/Eu Council Decision for 2008-2012 - (in CO2 equivalents) indexed on actual base year = 100 | 209.71 | 206.51 | 209.49 | : | 266.59 | 263.88 | 268.95 | : |
| Gross inland consumption of energy divided by GDP (at constant prices, 1995=100) - kgoe (kilogram of oil equivalent) per 1000 Euro | 529 | 537 | 531 | 537 | 494 | 516 | 543 | 572 |
| Municipal waste generated - measured in kg per person per year | 278 | 268 | 255 | 247 | 375 | 459 | 457 | 458 |
| Municipal waste landfilled - measured in kg per person per year | 87 | 91 | 91 | 94 | - | - | - | - |
| Municipal waste incinerated - measured in kg per person per year | 87.0 | 91.0 | 91.0 | 94.0 | : | : | : | : |

Legend:

b - Break in series i - See footnote s - Eurostat estimate f - Forecast p - Provisional value e - Estimated value

Source: Eurostat

strengthen the traditional gender arrangement.²⁵ Although wage levels are lower than in the EU15, they are higher than in most of the new Member States. Another area of concern is the fact that wages may be rising at a faster rate than productivity. Productivity per person employed (EU25=100), declined from 84.9 in 2001 to 81.1 in 2004. Unit labour cost (which compare compensation per employee and productivity) increased substantially in 2001 and 2003 reflecting growth in compensation per employee and declines in productivity. During 2002, unit labour costs decelerated as wage pressures eased whilst productivity improved. In 2004, marginal increases were registered in unit labour costs in 2004 reflecting lower productivity levels. Forecasts for unit labour cost growth in 2005 indicate negative unit labour cost growth as productivity is anticipated to offset growth in remuneration of employees.

4.4 Education

Malta has an extensive and inclusive education system. Public expenditure on education as a percentage of GDP compares favourably with the EU25 average (4.54 per cent compared to 5.22 per cent in 2002). The country has a number of incentives for students to remain in education especially in the vocational and tertiary levels of education. On the other hand, in 2004 Malta had an early school leaver rate of 42.6 per cent, compared to 15.6 per cent in the EU25. Total tertiary graduates in science and technology per 1,000 of the population aged 20 to 29 is around 3 per cent compared to approximately 11 per cent in the EU25. The life-long learning ratio, measured by the percentage of the population aged 25 to 64 participating in education and training, is only around half that recorded in the EU25.

4.5 Research and Development

In the field of innovation and research, Malta's performance is underpinned by a mixed array of structural indicators. Malta performs poorly on indicators reflecting patents and number of innovating small and medium-sized enterprises and the share of the labour force with scientific and technological skills. There are only very limited technological transfers and economic relationships between firms oriented towards export markets and those servicing the local market. On the one hand, Malta compares unfavourably with the EU average in terms of the low incidence of science and technology graduates and the significant disparity between the youth education attainment level in Malta and the EU benchmarks. Malta's Research and Development intensity as a percentage of GDP currently stands at 0.3 per cent and compares to 1.9 per cent for the EU25.

Despite its low R&D intensity, Malta has registered a real growth rate of 1.4 per cent in R&D expenditure over the 2001-2004 period. On the one hand, Malta compares positively against EU averages in terms of its share of high-tech exports. Among the

²⁵ The problem is compounded by the general lack of child care facilities that play a role in female participation in the labour market.

EU25 Member States, Malta had the highest share of high-tech exports accounting for 55.9 per cent of its total exports in 2004, compared to 18.2 per cent for the EU25. In 2002, it was also the country where investments and the production value per enterprise in the high-tech manufacturing sector were the highest. The country's labour productivity in the high tech sector stood at 72,000 Euro per person employed compared to 63,000 for the EU25. In the same year, more than 70 per cent of the Maltese total acquisitions of machinery and equipment (226 million Euros) were undertaken in the high-tech manufacturing.

Reconciling Malta's low R&D intensity score with the highest share of high-tech exports indicator might, at first, seem problematic. A number of caveats to Malta's efforts to support RTDi need to be highlighted. In 2003, Malta's R&D financed by the business sector stood at 18.6 per cent, when compared to the EU average of 54.3 per cent. Considering that industrial activity is the back bone for R&D in every economy and that the total number of manufacturing enterprises in Malta amounts to 3,792 - of which more than 70 per cent are engaged in low tech manufacturing primarily geared to the domestic market - there is a prevailing structural constraint for Malta to achieve significant developments in the R&D sector. Despite Government's efforts in bolstering RTDi, this private sector structural threshold will remain a distinct characteristic of the Maltese economy.

Structural data for high-tech exports pertains to a handful of enterprises in the manufacturing sector, notably foreign affiliates with R&D structures based in their home country and with very limited local economic linkages. Although, Malta is committed to increase RTD participation through training and investment, the fundamental dualistic nature of industrial activity in Malta is very likely to remain unchanged.

The state of innovation performance in Malta is mainly a result of structural factors, related to the small size of the economy, which renders it impossible to accumulate the critical mass. Maltese firms face the challenge of competing with very large firms, they cannot exploit the benefits of economies of scale, have no path dependencies in industrial technological development and depend highly on imported technologies, as small size inhibits the development of indigenous technology. Malta also lacks the critical mass of activity to successfully interface local business with local research institutions. Participation in international innovation programmes thus becomes crucial. Overall, Malta's relative minor expenditure on R&D and low youth education attainment level highlight the need for further investment in these areas, preferably through parallel development of local industrial linkages comprising the public sector, private enterprise, academic institutions and other relevant stakeholders.

4.6 Infrastructure

It is important to note that key characteristics of the country's territorial and physical infrastructure, such as those related to the environment and the physical infrastructure, are quite unique and not easily compared with EU benchmarks. Although, the territorial

and the infrastructural aspects of the EU smallest and most densely populated Member State cannot be compared to other Member State indicators, these factors heavily determine and impact on Malta's path towards socio-economic convergence with EU benchmarks. Therefore in the context of the Malta–EU25 comparative analysis, it is important to briefly highlight these issues.

Some 23.0 per cent of Malta's territory is urbanized. Urbanization is closely related to increases in population which is expected to continue increasing until 2030.²⁶ In this context, motor vehicle ownership has more than doubled since 1986 whereas gross energy consumption increased by 73.0 per cent between 1990 and 2001. Greenhouse gas (GHG) emissions and transport related GHG emissions (which account for around 20.0 per cent of the total) increased by 44.0 per cent and 45.0 per cent, respectively between 1990 and early 2000. In 2002, per capita greenhouse gas emissions exceeded the EU average by 41.0 per cent. This mainly reflects the high car density, which at 0.65 vehicles per resident also causes constant road erosion, parking, noise and congestion problems. A typical arterial road on mainland Malta is currently supporting a bi-direction movement of 80,000 vehicles daily.

Between 2002 and August 2005, 89 historical sites and areas were protected under the Development Planning Act. This area covered 167 hectares of fortifications in the Grand Harbour. Malta's small island character dictates that a large percentage of its land falls within the coastal zone. It is estimated that in the 14 years between 1990 and 2004, the developed portion of Malta's 1 kilometre coastal buffer area grew by approximately 5.0 per cent. Given the limited extent of Malta's coastal area, there is relatively high rate of development change indicating significant pressure for development, mainly for recreation and tourism purposes. Statistics indicate that 21.0 per cent of the coastline no longer retains its natural form, as a result of displacement of traditional coastal uses (such as fishing) and to user conflicts.

The Maltese landscape may be characterised as a cultural landscape with a combination of elements that give it a distinct character that is unique in the world and in the EU. Since 1990, there has been a limited but noticeable improvement in townscapes in terms of architectural quality and public amenities, with more attention to landscaping, treatment of facades and public open spaces. However, the domestic landscape is threatened by the increasing built up area, industrial and coastal development, increasing vehicular access. In this context, constant efforts aimed at upgrading the physical infrastructure for enterprise support, heritage conservation, for improving accessibility and services of general economic interest, for TEN-T developments must be seen as posing challenges for the Maltese landscape.

Waste generation is still increasing rapidly particularly in the construction and demolition and municipal waste fractions. Progress has been achieved in setting up waste management systems which are contributing to changing practices and attitudes with regard to waste in industry and households. Between 1996 and 2004, waste arriving at

²⁶ Total population is projected to grow to approximately 410,000 by 2030 and then decline to 387,000 by 2050 (Malta Convergence Programme).

Malta's principal waste management facilities doubled. Construction and demolition waste made up 88.0 per cent of total in 2004. Available indicators highlight that Malta is lagging behind with regard to reduction targets of greenhouse gas emissions. Municipal waste generation is - on a per capita basis - relatively higher than EU benchmarks. This waste is exclusively land-filled. In terms of solid waste, current estimates suggest that each household and the average tourist generates approximately 2.2 kilograms and 1.5 kilograms of daily waste. Land-filling of municipal waste per capita is twice the EU average, while recycling accounts for only 1.0 per cent of the annual total waste generation in the Maltese Islands.

Electricity and water provision is problematic, since all energy sources have to be imported and water is very scarce. The energy sector requires massive investment (generation and distribution) to sustain the growth in demand created by changing standard of living of citizens and increased economic activity. There is no generation of electricity from renewable sources, compared to a 13 per cent share of such electricity in the EU. Furthermore, the market suffers from structural weaknesses, namely the small size of the island, which places constraints on the location of renewal energy facilities, and the fact that the domestic electricity system is not connected to other systems. Currently, Malta's primary energy requirements are all imported and the inland and aviation market needs are met by a state-owned enterprise, which also stores and distributes (wholesale) oil products.

Chapter 5. The Strategic Direction for Malta 2007-2013

Following the delineation of this socio-economic situation and Malta's position vis-à-vis the EU 25 benchmark, the National Strategic Reference Framework enlists the principal needs and challenges Malta faces in its quest to converge with the rest of the European Union over the 2007-2013 period. In view of Malta's Vision to promote competitive, a high value adding economy and to achieve sustainable socio-economic development earmarked for a better quality of life, and in relation to the socio-economic context highlighted earlier, the country's needs and challenges can be summarized in five main categories. These refer to the following:

- I. the need to improve Malta's international competitiveness in its key economic sectors (the promotion of indigenous investment and facilitate the attraction and consolidation of foreign direct investment, to enable the diversification of tourism industry market segments, as well as to facilitate the development of the knowledge intensive economic activity in existing and new economic sectors);
- II. the urgent need to address existing deficiencies in Malta's physical infrastructure particularly those related to the environment, energy, transport and ICT;
- III. the need to ensure quality education and training for all and provide a knowledge and skill development environment which targets the responsive identification of future labour market requirements;
- IV. the need to raise the employment rate;
- V. the need to address Gozo's regional distinctiveness, bolster economic activity and address the negative impact of the island's double insularity on its socio-economic development.

The country's strategic objectives for the period 2007 – 2013 are underpinned and based on present and future policies of public investment undertaken by the Government of Malta and co-financed by the national budget and European funds. Malta's national development strategy is geared to meet the three strategic pillars of (1) economic competitiveness, (2) the need to safeguard and improve the environment and (3) the resolve to invest and facilitate the development of human capital.

Malta's NSRF is based on four Strategic Objectives: sustaining a growing and knowledge-based, service-oriented economy; improving the quality of life of citizens; investing in human capital and addressing Gozo's regional distinctiveness. These objectives are depicted in Table 5.1.

A detailed description of these strategic objectives and the potential measures which could achieve these objectives, follows.

5.1 Sustaining a growing and knowledge-based, competitive economy

The strategic priority aimed at sustaining a growing and a knowledge-based, competitive economy is underpinned by measures aimed to support the restructuring of industry to compete in the internal market and the world economy; attract more FDI; support entrepreneurship; mobilizes investment in research, technological development and innovation (RTDi); sustain the tourism industry and promote Malta's culture in the context of the tourism potential; moving towards the information society, and last but not least, investment in the country's infrastructure (transport and services of general economic interest) as one of the principal backbones for economic growth and competitiveness.

In order to generate economic growth and employment opportunities, specific attention will be given to the manufacturing industry, tourism as well as other services-related sectors. As regards manufacturing, efforts are being focused on attracting new investment in target and niche markets which are high value added and where Malta can remain competitive in the years to come. Tourism remains an important sector in the Maltese economy and Government remains committed to further develop this industry. The financial services sector has assumed growing importance over recent years and Government wants to strengthen this sector and to realize its potential for additional growth.

Malta has developed its economy, first and foremost, through its outward orientation, openness and international competitiveness. Today the level of openness of Malta's economy is such that it finds very few parallels with other countries. Few economies have managed to simultaneously develop tourism, attract a high level of foreign direct whilst attaining a high level of exports compared to gross domestic product. Malta's economy is not an insular economy. It has not shied away from being an integral part of the international economy, be it in the manufacturing sector, or in the services sector, particularly through tourism and the financial sector. It has managed to do so even though the country does not have natural resources. Furthermore, over the past four decades since its independence, Malta's socio-economic development has been based on the general consensus to boost the tourism industry, to facilitate indigenous and foreign direct investment and to achieve economic growth through exports.

Table 5.1 NSRF - Strategic Objectives 2007-2013

Strategic Objective 1: Sustaining a growing and knowledge-based, competitive economy

Supporting entrepreneurship and mobilizing investment in research, technological development and innovation (RTDi)

Access to finance, SMEs
Implementing an RTDi strategy
Enterprise infrastructure

Sustaining the tourism industry and promoting culture

Access to finance, SMEs
Conserving and promoting Malta's cultural heritage
Enhancement and promotion of Malta's tourism offer

Promoting an E-Society

Developing more E-Government services
Facilitating access to ICT
More efficient ancillary business services

Improving and expanding the transport infrastructure

Roads, Inter-island sea ports and air services

Strategic Objective 2: Improving the quality of life through environment protection and urban regeneration

Environment, energy and risk prevention

Environmental protection, compliance with the *Acquis*
Waste management
Water
Energy generation and efficiency
Urban regeneration

Strategic Objective 3: Investing in human capital

Education and employment

Expand and improve investment in human capital
Adapt education and training systems to new competence requirements
Promote a life-cycle approach to work
Ensure inclusive labour markets
Education infrastructure

Strategic Objective 4: Addressing Gozo's regional distinctiveness

Enterprise promotion, tourism and service sectors
Accessibility issues, road and sea transport
Human capital and skills

Supporting Enterprise and mobilizing investment in RTDi

From a competitiveness point of view, Malta's strategic direction focuses on increasing the value-added by Maltese enterprises. This resolve requires a shift to economic activity where knowledge intensity creates greater value added and assumes a central role in the production of goods and services. Besides supporting existing high-value added enterprises, Malta aims to continue focusing on the identification and development of new high-value niche sectors both through local and foreign investment. A knowledge intensive competitive economy necessitates an enabling business environment underpinned by an adequate enterprise support infrastructure.

The development of research and technical development (RTDi) is a goal that Malta will actively seek to address. Malta's objective in promoting RTDi is to develop a focused sector bearing in mind the country's realities that do not support the development of a broad-based research sector or the pursuit of pure research for its own sake. The specific targeting of focused, business-oriented RTDi is envisaged to be driven by operators of repute. In this respect, a study is currently underway to identify those RTDi areas in which Malta can be competitive and on which it should focus its resources. Through a macro and a micro perspective, Malta is taking a two pronged approach towards the development of a thriving RTDi sector. The macro approach envisages the delineation of a strategic framework in which actors in the system of innovation can interact and engage. A micro approach will look closely at the actions of specific economic sectors both in the firm and non-firm sector.

At the micro level, Malta already scores high in terms of growth rates in Europe for investment and performance levels related to the knowledge-based economy. Specifically Malta has enjoyed the EU highest average annual growth in RTDi intensity. Malta is plotting a positive course in improving research and innovation, taking into consideration and learning from the experience of older EU Member States who only intensified their RTDi policies after the country's accession to the European Union in the early 1980s. Compared with the other EU Member States, Malta is still below the average in key areas of RTDi activity, but aims to gradually converge in a sustainable and pragmatic manner.

Malta proposes to build an innovation system that feeds in the development of its RTDi strategy. The strategy is to embark and implement a number of initiatives to promote innovation in Malta as well as build upon current initiatives. It is envisaged that the core of Malta's innovation system will hinge on the process of strengthening the climate for innovation (stimulating private initiative, collaboration and supply of knowledge workers), instilling a culture for innovation vital for personal and economic success, creating the dynamism of enterprises to innovate by stimulating new innovative business activity, exploiting the growth potential of SMEs and attracting knowledge-intensive activity to Malta.

To reach these objectives, high quality business support is essential as well as access to finance such as through venture capital funds for innovative business start-ups. Measures will be put forward so as to facilitate the collaboration of enterprises to focus more on the

value chain and hence be in a position to compete better in the EU internal market. Particular emphasis will be given to sub-contracting and linkages between large and small enterprises and the need to bolster the support to enterprises to enhance their knowledge transfer base, particularly through their liaisons with academic and industrial-driven research. Emphasis will be given on the transfer and nurturing of new technologies, possibly from other EU countries to local SMEs.

In order to facilitate innovation, spearheading ways of doing business and improve the domestic economic product, Malta's priorities in this regard centre on the need to build a more enterprising culture through, for example, reducing the barriers to enterprise. Providing a coherent and integrated business support service including ensuring greater integration of current services, offer adequate support services for accelerated and sustained growth, productivity and competitiveness of the region's businesses. Appropriate schemes will be implemented so as to develop the capacity of business activity particularly the capacity building potential in terms of global marketplace development.

A key factor in attracting Foreign Direct Investment is the availability of a physical enterprise infrastructure. Over the years, Malta has already invested significantly in industrial parks. However, demand still exceeds supply and the current supply of "factory space" may not necessarily meet the requirements of high value-added industries currently being targeted. Investment in both general purpose and dedicated "factory space" will be required to enhance the country's attractiveness for investment. Existing parks also need to be upgraded with specific facilities such as child care centres in order to cater for more flexible forms of employment and to allow for a wider participation, and also facilities related to environment and energy efficiency.

In the past years the country has managed to attract a number of multinational companies in the ICT and service-providing industries. Despite the lack of specific infrastructure and at-times, non availability of workforce skills, the local ICT industry has experienced considerable growth, with a substantial number of Maltese enterprises offering their services in foreign markets. More efforts need to be directed at improving the physical infrastructure as well as continuously upgrade human resource skills in the industry.

The shift to economic activity where knowledge assumes a more important dimension is not restricted to Research and Technical Development. Various economic sectors, including the financial services and pharmaceuticals, the film industry have developed well over recent years and established themselves as competitive players in an international market. They already provide a high value-added to the Maltese economy and the aim is to support such enterprises in their efforts to strengthen and widen their business activity, and to attract further investment in activities that can add high value to the Maltese economy, both in terms of economic and social benefits.

The local crafts industry will benefit from the development of crafts centres to address the current fragmentation of this particular segment of economic activity and to improve accessibility for the public, in particular for tourists visiting the country. Some of these

enterprises are engaged in traditional crafts that have a direct relevance to the Maltese heritage. Efforts will be undertaken to promote the sector and its linkages with the rest of economic activity be it tourism or manufacturing.

Sustaining the tourism industry and the promotion of the cultural heritage

Tourism is one of the main pillars of economic activity in Malta. Every effort will be directed at consolidating and improving the contribution of this industry to the socio economic well being of the Maltese islands and their people. Tourist arrivals are, in part, compensating for the aggregate volume losses with the industry's traditional seasonal concentration in the summer period persisting and even increasing in relative terms. Clearly, distinct efforts are required from Malta to diversify the traditional seasonal dependence. Malta has managed to penetrate the market for a number of segments with the result that tourists visit Malta for different motivations, primarily for a holiday but also for language learning, for diving and to practice other sports, for conferences and incentives, for cruising, for experiencing and appreciating the country's wealth of cultural heritage. In the context of increasing competition in Mediterranean tourism driven by the more aggressive market presence of emerging destinations, Malta needs to address its current perceived narrow offering in this area ('sun, sea, and sand destination'). This can only be done through the marketing and branding of Malta in its source markets, through efforts at product development and investment in cultural heritage, through the valorization of Malta's culture and through the further investment in human resources working in the tourism and creative industries.

The investment in 'public sector' measures needs to be complemented by direct support to the sector. The rationale for supporting tourism enterprises is based on the need to increase the competitiveness of tourism service providers, to stimulate and direct investment by the private sector and spearhead investment in human resources.

Support to tourism enterprises to conduct their own marketing activities is complementary to the country's destination marketing. Efforts have to be made to create an image and raise awareness of Malta as a tourism destination among potential travelers. This is even more the case in Gozo. Tourism enterprises must conduct their own marketing activities in order to build this image of Malta and sell their services in the source markets they tap, particularly for visits to Malta in the off-peak period. A high proportion of enterprises conduct traditional marketing activities with only a few adopting more innovative marketing approaches. Investment in E-services being offered by the tourism enterprises needs to be supported alongside e-mentoring programmes for the tourism industry

In order to be competitive tourism enterprises must improve their cost structures and adopt a more entrepreneurial approach. To achieve this, tourism enterprises must be encouraged to be more innovative in the way they conduct business, in their planning and investment processes. Enterprises need to be encouraged to invest in environmental

systems and become more energy efficient so that they can meet their environmental obligations as well as minimise costs.

Apart from the support to the private sector, Government believes that non-profit organisations have an important role in the implementation of the strategy. Malta boasts of a strong and active presence of non-profit making organisations in the tourism and culture sectors. These organisations are the custodians of important sites of cultural, heritage and natural value, all key assets for the tourism industry. They are experts in their respective fields of interpretation, study, and site management and generally hold a positive track record in being innovative (for Malta), and sometimes entrepreneurial in their field. Here lies an opportunity for tourism and for culture to utilise these organisations to further develop these two economic activities.

Promoting an E-Society

The use of technology across all facets of our society and economy is one of the primary objectives of Government. The strategy and action plan of the eMalta Commission (2001-2003) were followed by the National ICT Strategy (2004-2006). This strategy has been lauded by various local and international quarters and significant strides have been achieved in the implementation of this strategy. This strategy lays Government's vision for making the country a good practice example of how technology could be used to improve the quality of life and increase economic competitiveness.²⁷

One of the objectives of the National ICT Strategy is to proliferate the delivery of first class, accessible and secure e-Government services. A central government portal serves as the main point of entry to all Government information and services. Content is available in Maltese and English and information is available in 15 different work themes. There are also links to all Government departments and services. Government is currently working on the implementation of local E-Government that is the delivery of E-services through the front offices of Local Councils. With the aim of increasing e-accessibility opportunities and ICT familiarisation, Government will continue to invest in ICT education and training. In addition, the objective of the Maltese Government is to consolidate and increase e-Government in areas and sectors such as E-Health, E-Identity and E-learning.

A competitive accessibility to electronic services is an essential enabler for the attraction to Malta of new investment in the high value-added, knowledge economy. Despite significant investment in developing and enhancing the underlying infrastructure, the international connectivity service lacks in competitiveness. In the light of the strategic importance of accessibility to electronic communications, Government is considering measures to address this issue.

²⁷ The national ICT strategy has 13 objectives aimed at making Malta become one of the most developed information societies in Europe.

Expansion and improvement of transport infrastructure

The social and economic development of the islands depends upon timely and regular connections for both goods and passengers to European ports and airports, and an efficient distribution on the national network on the initial or final leg of the journey. Notwithstanding its distinct territorial constraints, Malta's resolve is to make the most from the development of international gateways and national transport systems. This is primarily envisaged through the upgrading of the road network, ports and other physical support infrastructure.

Malta aims at modernising the national strategic road network to international standards with a view to improving road safety, accessibility and mobility within the broader context of socio-economic development. Investment for the medium and long-term is earmarked to include programmes for the road network and in the seaport infrastructure..

Improvements related to the TEN-T network will continue to form a key driver behind these investments. The upgrade of the TEN-T and the rest of the arterial and distributor road network is necessary to reduce congestion/less time in traffic, improve safety, and lead to a reduction in operation/transport costs. Due to Malta's dense urban morphology, the main arterial and distributor road network (including the TEN-T network) needs to be supported by the appropriate road network infrastructure to provide the traffic linkages of medium capacity designed to standards road safety to population centres, areas of employment, areas of tourism and industrial areas.

In view of the current use of private vehicles and the unsustainable growth projected in the feasibility studies, it is the Government's objective to encourage modal shift. In this respect the Government recognizes that the current constraints of land availability within the existing urban area, will not allow a much greater increase in mobility by private car. To achieve a reduction in private mobility without compromising accessibility, the Government is looking at improving the national network of public passenger transport services. A primary objective of the Government is to improve the public passenger transport system in Malta through a process of operational reform including the introduction of new technology to improve bus service reliability and passenger information and the provision of quality public transport infrastructure for passengers.

5.2 Improving the quality of life

The physical, natural and cultural environment is of primary importance both to economic performance and to the quality of life enjoyed by the Maltese population. There is no doubt that the quality of life of citizens is intertwined with the quality of the environment. The national consciousness for the need to protect the environment is increasingly becoming an intrinsic part of the behaviour of the Maltese people. This is also reflected in the prioritization that Government is establishing for securing and improving the environment.

As a small, densely populated and highly urbanized island economy, Malta faces a wide array of environmental challenges distinctly related to the management of its waste streams, the reduction of air pollution and the preservation of the country's biodiversity, the upgrading of the urban fabric and the conservation of its extensive cultural heritage. The improvement of the environment will not only ensure an improved quality of life through sustainable development for the citizens, but also support economic activities, such as the tourism industry. Malta's strategic environmental direction is oriented towards enhancing the state of the environment, protecting and actively managing terrestrial and marine habitats and bio-diversity, minimizing sources of pollution, rehabilitation and conservation of the country's cultural and natural assets as well as increasing the public's awareness of environmental issues.

Every economic activity, to various degrees, exerts pressure on the environment. The policy challenge remains that of balancing the requirements of economic development with the sustainable use of the environment. Improving the quality of life through the conservation of the country's environment and bio-diversity is a critical component of Malta's strategic direction. Reducing the environmental impact of activity in the country enables the benefits of increased environmental sensitivity to be disseminated through an improvement in the population's standard of living, also bestowing benefits on economic activity by enhancing the attractiveness of the Maltese islands as a tourism destination or as a residential location for economic operators.

In the energy sector, economic growth has been a major stimulus to Malta's electricity demand growth. The *status quo* in the sector necessitates an assessment of energy supply mechanisms as well as the undertaking of considerable investment to upgrade the energy distribution system to bring it in line with current and future economic and social requirements. The issue of energy efficiency, driven also by the need to reduce the use of fossil fuels to mitigate the impact of their rising prices on the national economy and of the resultant emissions on climate change, is in Malta now increasingly being pushed up in the list of national priorities. Energy efficiency measures aim to reduce energy consumption while maintaining or increasing the level of output and delivered outcomes. They are likely to be more rewarding than the introduction of renewable energy sources in reaching the national objective of reducing fossil fuel consumption.

The production of energy through the combustion of fossil fuels contributes to Malta's GHG emissions in 2003 and is a main source of Malta's air pollution. As a signatory to the Kyoto protocol, Malta is committed to reduce its emission of greenhouse gasses. Addressing the environmental impact of electricity generation will be a key strategic thrust in this respect, alongside other measures to reduce air pollution to come in line with EU directives. In the meantime, efforts will continue to be made to identify and examine the relevant opportunities for renewable energy sources. A strategy for renewable energy is currently underway where not only traditional sources such as wind and solar energy is being examined, but also the potentials of new technologies such as those related to waste to energy.

Within the context of climate change, risk prevention remains a priority for Government. Malta's topography tends to contribute to the phenomenon of flash flooding on the occurrence of heavy storms during the autumn and winter months. This phenomenon frequently leads to heavy damage to the physical environment, economic disruption and occasionally, to loss of human life. In this regard, the formulation of a proactive approach to this problem, particularly the development of infrastructural solutions to address the incidence of high storm water volumes within highly urbanized areas, constitutes a major priority. Studies are currently underway to ascertain and identify the priority projects and the relevant technology options. Better storm water management is also seen in the context that storm water provides an additional source of fresh water which currently is not utilized to its full potential.

In the water sector, Malta has been increasingly relying on sea water desalination as the major source of supply of potable water, though a variable extent of groundwater extraction is still prevalent. Malta's strategic direction in this area is to continue to upgrade relevant infrastructure including reservoirs, sea water desalination efficiency in order to reduce its electricity demands, and to continue to improve drinking water quality through improved distribution systems. In the waste water sector, Government's objective is the completion of the sewage Master Plan that aims to treat all waste water in compliance with EU regulations.

In the area of waste management, waste minimisation remains a critical strategic objective with the principal aim to reduce the amount of waste as much as possible and to divert the remaining residues for recycling, recovery of resources and the efficient utilisation for energy production. The strategic direction of Malta with regard to waste infrastructure is to expand the network of waste facilities as directed by the Solid Waste Management Strategy for the Maltese Islands. As part of this strategy, a number of key initiatives are currently being implemented. These include the setting up of the basic infrastructure for managing waste, the upgrading of the San' Antnin waste treatment plant and material recovery facility, the reduction of aerial emissions from the disused landfills, and the rehabilitation of disused quarries. Government is cognisant that more efforts need to be directed to meet both economic and social requirements and to fully comply with the *Acquis* in this sector.

Developing infrastructures for sound waste management practices, including systems for the collection and storage of hazardous waste, radioactive waste and the rehabilitation of the old landfills will remain key national objectives for the 2007 -2013 period. Malta's strategic vision also encompasses the exploration of the possibility of exploiting waste as a potential energy source for electricity generation. Infrastructure needs to be set up to treat and recover various other waste streams, including end-of-life vehicles and waste electrical and electronic equipment. Improvements in health institutions including the construction of a new hospital will bring increased quantities of specialist waste streams, which need to be managed.

The urban fabric in the Maltese Islands plays an important role in the development of society and the economy, more so given the country's predominantly urban and densely populated territory. Government's strategic objectives for urban regeneration focus on regeneration, restoration and rehabilitation of key assets around the Maltese Islands. A central role in this strategy is played by the regeneration of cultural assets in a sustainable manner, where possible through arrangements such as public private partnership (PPP). The principle of sustainable conservation will ensure that Malta's historic fabric is safeguarded and at the same time effectively utilized. It is envisaged that improvement to the quality of life through urban regeneration is also undertaken at the local community level.

5.3 Investing in human capital

The underlying basis for this strategic objective is to provide quality life-long education for all, leading towards the maximum possible fulfillment of the potential of every person and the fostering of a knowledge based culture to improve the country's competitive edge, for the satisfaction of the nation's needs with regard to sustainable growth and development.

The main strategic goal of Malta's employment and social inclusion direction is based on a number of important thrusts. These thrusts relate to the need to increase investment in human capital through better education and skills, through investment in education and training infrastructure, through improving the adaptability of workers and adopting a life-long learning approach, through increasing the participation rates in the labour market and developing the administrative capacity in the public and the NGO sector. In line with the policy to develop a knowledge-based economy, significant importance is being attached to improving the educational and skill levels of Malta's human resources. Government views employment as important, not only from the economic perspective, but also as an instrument to achieve social cohesion and avoid poverty. Government strongly believes that Malta should remain a caring society in which everybody is secured an adequate standard of living, and it is only through economic growth that the goal of social inclusiveness can be sustained in the years to come.

Education and Training in a knowledge based economy

The strategic stance underlying Malta's economic vision necessitates an *increased supply of knowledge workers* with tertiary, upper secondary, and secondary educational or vocational qualifications. To allow this knowledge development, *the educational infrastructure* needs to expand its capacity, improve its quality further and increase its flexibility to respond to the ongoing need for change. This includes the expansion of the physical educational infrastructure, the upgrading of existing schools, and the development or procurement of additional educational facilities and material required to achieve this transition. The quality and responsiveness of the educational system would benefit also from further investment in training and development programmes for

teaching and academic staff and administrators, together with investment in administration information systems to manage and develop these institutions into centres of excellence.

More investment in human capital through better education and skills is envisaged to be undertaken within the existing educational framework. Malta believes there is a need to support the wider career choices for young people as well as facilitate the development of skills that better meet the needs of business. It is imperative that the country facilitates the development of higher level skills that support the creation and consolidation of a knowledge based economy. A knowledge based economy will benefit not only those in the mainstream labour markets but also those in the disadvantaged communities and groups to access sustainable employment opportunities. First and foremost, more investment in human capital requires more education capacity and infrastructure at the secondary, vocational and tertiary levels, particularly - but not exclusively - with respect to the requirements of science based studies (such as equipment and laboratories).

Some of Malta's challenges to increase its activities in RTDi are also related to the education system. In Malta, only 3.1 per cent of annual graduates are in science and engineering studies. Government is already taking concrete actions in this respect by increasing measures aimed at the promotion of science and technology studies at the tertiary level. The education system needs to ensure that the appropriate investments are made to encourage more students into scientific, technical and engineering disciplines. As the increased investment in R&D should mainly take place in industry, an increased mobility of researchers between academia and industry is envisaged to ensure that a sufficient number of academically trained researchers can be employed by industry. This inter-sector mobility would also contribute to speed up the dissemination of knowledge in all sectors.

The training needs of the work force engaged in Malta's manufacturing sector are diverse and call for a high degree of flexibility. Given the small size of the economy, any reduction in activity in a specific sector or even the demise of one large firm can have serious repercussions unless the Maltese workforce is continually trained and re-trained to meet changing realities. Unlike larger economies, Malta cannot adapt quickly to mismatches in labour supply and demand through inter-regional worker mobility. The small size dictates that Malta must adopt policies which will enable people to develop their skills levels, attain flexibility and develop skills to meet the requirements of an ever changing market place. Particular emphasis will be directed at the training needs of enterprises and their employees which will then enable the end users to upgrade their skills towards the current needs that are brought about by innovation and automation.

Improving the adaptability of workers and implementing a life-long learning perspective

Malta will only achieve a knowledge-based economy if it can ensure a continuous and excellent quality life-long learning education amidst a commitment to enhance further investments in education and in specific fields of vocational training. Technical and

scientific progress as well as socio-economic needs and expectations are rapidly changing and increasing the demand to augmented knowledge and flexibility from people. Advances in the creation of a knowledge society are dependent on the ability to instill a culture of life-long learning. With regard to measures aimed to improve the adaptability of workers, there is recognition of the need for the educational and economic sectors to co-ordinate efforts so as to ensure a close match between labour supply and demand. The outcome of both mechanisms need to be reflected in educational strategy, in order to ensure the relevance of policy and informed student choices, including enhancing employability and adaptability on a widespread basis. Such dialogue mechanism needs to be complemented by forward planning due to the inherent time lag in the education process. This will be addressed by developing research capability to provide guidance to parents and students, institutions and policy makers on local and international trends in education, technology, and labour markets.

This strategy will also envisage a framework for education and training outside the formal education sector, within a national life-long learning framework. The setting up of quality assurance and qualification accreditation systems necessary across the entire education sector is also necessary to create more accessible pathways into education and training at different levels and stages in life. This strategic direction will also focus on extending further adult education, formulating, developing and adopting open, distance and e-learning strategies, tools and programmes, as well as introducing related training and re-training schemes. Work organisation also needs to address the concept of an innovative and adaptable workforce, through continual training and re-training and participation in education programmes within a life-long learning context.

Inclusive labour markets

Government believes in the need to increase employment rates in disadvantaged segments of the population facing barriers to employment. Concurrently there is recognition of the need to increase the participation rate of under represented segments of the labour market. The basic thrust of the employment strategy is to increase the overall employment rate in an equal and inclusive manner. This objective is based on a number of strategic components. Foremost among these is the adoption of an integrated economic strategy that attracts enterprise based on the skills capacity of untapped or underutilized human resources. At a strategic level, the possibility of generating economic growth systematically through employment policy will be pursued. This is primarily dependent upon improving forms of work organisation as a means of placing employees at the heart of economic transformation and growth. In this context, flexible and adaptable forms of work organisation must provide an acceptable balance between work and family life. In addition, Government is committed to promote child care facilities so as to ensure more inclusive labour markets. Social partners and non-profit organisations pay an important role in promoting equality and reducing social exclusion within the labour market. To increase the contribution of social partners to this process, the strengthening of their administrative capacity, skills and support systems is required.

Malta's labour market strategy highlights a number of strategic thrusts to secure inclusion through employment, skills and a safe working environment. These include offering equal opportunities to everyone in society, including the integration of disabled people and disadvantaged groups, by operating and extending employment schemes. Furthermore, in Malta's education strategy one major thrust aims to reduce the risk of social exclusion by seeking to reduce early school leavers with low levels of basic skills, by nurturing a readiness to participate in the labour market and instilling an entrepreneurial spirit. Local development initiatives started ten years ago when a community development team was set up within the Cottonera region and developed into promoting a more locality focused approach. It is the government's plan that the successful concept and practice will be expanded to other regions, namely central Malta, northern Malta and Gozo. Studies show that a large percentage of youths are experiencing the risk of poverty and social exclusion. As a result every effort needs to be directed at improving social inclusion measures in those areas where people are mostly experiencing poverty and social exclusion.

A healthy labour force

Health care in Malta is mainly provided through public hospitals and primary health care centres. Continuous investment to modernize the health system, in terms of infrastructure, service facilities and training requirements, will remain an important cornerstone in the generation of a healthy population and therefore also a healthy labour force. Government's goals will continue to be the enhancement of the quality of life of Maltese citizens by ensuring equity and access for all to excellent quality health services, while directing its efforts to increasing life expectancy and reducing premature deaths. In the last years Malta has invested heavily in the building of a new acute hospital, however pockets of investment are still required with respect to specialized hospitals and also the Gozo hospital.

Government's objective is to strive to safeguard the gains already attained in this sector, whilst undertaking new initiatives such as the implementation of an E-health system which will continue to improve the delivery of health services and the sustainability of the health sector. The issue of occupational health is also a matter which requires further investment – both at the public information level and also at the micro level of the enterprise.

Administrative capacity building

Government recognizes that, despite successful measures taken over the past years, the public sector continues to be over-manned in certain areas. With Government responsible for over 33% of productive employment, over-manning and under-productivity in some areas are two reasons why the economy is under performing. The Government realizes that decisions in this area are also required if Malta is to realize its objective to attain a vibrant economy. Government also recognizes that effective and

efficient performance in Government will not be attained if the re-structuring of these entities is based on the premise that they will continue to hold on to surplus staff. Government entities should be put on a lean-and-mean basis with surplus staff being designated as such and placed in a surplus pool. The focus on re-deployment (also to private sector) will require support for re-skilling and re-training of surplus or non-productive employees.

In order to consolidate, sustain and further improve the role of the public administrative capacity, further changes are required to ensure that the Public Service remains capable of meeting administrative needs and public expectations in the 21st century, especially now that Malta is well on course towards European convergence. Government's earmarked efforts in the field of administrative reform include the furthering of a number of initiatives such as the enactment of a Public Service Act, the safeguarding of better regulation, consolidated financial management, the rationalisation of public sector resources, facilitating / streamlining of government back-office operations, through the concept of an ICT consolidation environment and the continued implementation of value added E-Government initiatives.

Government recognizes the important role that stakeholders and partners - including the representatives of local government, the socio-economic partners and non-profit organisations – play in the achievement of the country's socio-economic objectives. In this context, Government believes that the achievement of the NSRF objectives also requires the full participation of this sector. Adequate capacity is crucial and Government is committed to support the efforts (e.g. via training and support for networking) of local government and the civil society towards this end.

5.4 Addressing Gozo's regional distinctiveness

Gozo's regional distinctiveness arises from a variety of factors including the island's double insularity as an island on the periphery of another small island, its distinctive socio-economic development, and its fragile environment. The need to address Gozo's regional distinctiveness are specifically linked to mitigating the double insularity issues, primarily accessibility factors and efforts to increase employment opportunities. These issues together with the island's geographic and structural handicaps are accelerating the under performance of the Gozitan economy. This is attested by recently published statistics which show that Gozo's GDP per capita has declined from 73.2 per cent of that of Malta in 1999 to 69.3 per cent in 2003. The decline in Gozo's GDP per capita highlights the need for a specific holistic approach to boost the island's economic growth. Government's objective to address Gozo's regional distinctiveness will be translated by a commitment to spend a minimum of 10.0 per cent of Cohesion Policy resources on measures contributing to Gozo's socio-economic development.

Addressing the double insularity issue

Gozo's peripherality to the mainland's main commercial infrastructure gives rise to its double insularity, which, in turn, leads to constraints on the movement of persons, goods and services. The constraints are the cause of additional financial burdens and time delays for Gozitans, visitors and economic operators active on the smaller island. The issue of double insularity impacts negatively on all sectors of the economy and also undermines the quality of life on the island, given the limitations on accessibility to and from the main island for important services, such as, education and training, specialised health care and employment opportunities.

Access to the island is primarily provided by a ferry service between the ports of Cirkewwa in Malta and Mgarr in Gozo, and to a limited extent by a helicopter service between Malta's international airport and Gozo's heliport. The availability of both services is dependent on weather conditions, adding further uncertainty to an already costly and time consuming form of transportation. Gozo's limited external accessibility is worsened by a limited internal accessibility as a result of a single access road to the port of Mgarr. Facilitating inter-island access remains a priority for the Government.

Creating employment

As an island on the periphery of another small island and with a relatively small population, Gozo is faced with an extremely restricted internal market and limited export opportunities. Over the years this has resulted in a sharp drop in activity in the traditional manufacturing sectors such as textiles, making the island highly dependent on tourism, crafts and agriculture for employment. Henceforth, enabling the development of new economic activities based on Gozo's perceived strengths, in particular in the services sector, is envisaged to provide the key impetus towards economic restructuring towards more knowledge based economic activities. There is a need for infrastructural investment in those sectors that can contribute to the creation of sustainable job opportunities, such as educational/vocational infrastructures, ICT infrastructure and tourism facilities. In particular, ICT can be effectively used to mitigate the negative impacts of double insularity on enterprise development and employment opportunities for the Gozitans in general.

The manufacturing industry in Gozo exhibits high market concentration and is heavily influenced by transport costs. Industry in Gozo is rapidly losing competitiveness due to increasing operational costs, mainly transport, and the opening up of markets to lower priced imports. This calls for a re-consideration of the types of activities that are sustainable for Gozo and which are less affected by the disincentives of the territory and can offer the added benefit of synergies with other sectors. Such restructuring should focus on the contribution of micro firms mainly engaged in crafts and cottage industries. This industry is well-established in Gozo and has the potential for further development in relation to the synergies that it provides with other important sectors such as agriculture and tourism. The services sector exhibits growth potential and can compensate somewhat

for the loss in production employment. However, this sector requires investment in infrastructural facilities to create the right environment to facilitate investment in ICT related activities, particularly in areas such as financial services and the creative industries. This sector needs to be exploited since such activities contribute high value added and are not excessively disadvantaged by the inevitable inter-island transport costs.

Compared to Malta, the island of Gozo has endured less urban development and has managed to safeguard much of its natural beauty and rural feel. This provides the island with a clear competitive advantage, in particular in the tourism sector. Maintaining the fragile balance between economic and urban development on the one hand and environmental protection, including Gozo's cultural assets, on the other hand, remains central to this strategic objective.

Tourism is the mainstay of the Gozo economy. From a supply-side point of view, tourism activity is relatively more important for employment in Gozo than in Malta. Gozo has distinct advantages for tourism, including, natural assets as well as cultural and heritage attractions, which provide potential for further exploitation. The island's tranquility makes it attractive to new tourist markets. Government believes that there is capacity to develop further tourism activity, while from the demand-side it emerges that there are significant areas of potential niche demand expansion achievable through the adoption of a holistic approach to the marketing of Gozo's distinctive features and the better exploitation of niche tourism markets, particularly, those, which attract tourism during the lean months, such as, sports, cultural, rural, walking and cycling tourism. This strategy requires the development of the relevant infrastructures to render Gozo as an all-year round attractive tourist destination. This will not only help maintain existing tourist levels, but aims to provide the potential to increase the number of tourists who visit Gozo, (particularly during the off-peak season) and help to extend the length of stay of visitors. More tourism activity in Gozo will make a significant contribution to job creation and economic growth.

Human capital and skills

Gozo's economic activity and growth is underpinned by a low labour market activity rate with extensive employment in lower-value added activities. This largely reflects the competitive disadvantages of Gozo, where available jobs are of a relatively low skilled nature. There are also a significant number of Gozitans working in Malta because of insufficient employment opportunities in the island. Gozo's labour market situation is different from Malta's labour market in particular with regards to the level of 'underemployment'. Instead of moving or commuting to Malta for employment, a significant segment of the Gozitan population prefers employment or self-employment in Gozo, even though the activity may not be sufficient to support full productive employment.

Gozo's high population density (i.e. 458 persons per square kilometre) puts a strain on the island's small land area and supports an economy primarily based on tourism and

agriculture. Economic seasonality has an important impact on the Gozitan labour market. Low participation rates, especially for women largely reflect the unavailability of full time productive jobs in Gozo, leading to seasonal, part-time and irregular employment. The Gozitan labour market is characterised by a lack of appropriate skills, including skill mismatches and negative attitudes towards labour market employment. In addition, the seasonal nature of tourism reinforces the trend in part-time employment as a primary occupation and lends itself to a higher rate of unemployment in the winter and shoulder months than in the summer months.

The economic and labour market *status quo* warrants interventions on various fronts to ensure a skilled labour force and to create the much needed job opportunities in Gozo. The fact that an increasing number of higher education students from Gozo have to commute to Malta on a regular basis to continue education / undergo training highlights the need to step up investment in human capital through an increase in the provision of vocational education, training and retraining schemes on the island. There is also a need to increase labour market participation rates, particularly female participation; improve the employability of the unemployed; reduce labour market frictions; and encourage the unemployed particularly those with entrepreneurial potential to engage in entrepreneurial activity.

Infrastructure

Access to and from the port of Mgarr, as well as, within the island itself is highly congested and, at times, is totally blocked in strategic parts of the island. This congestion exerts a significant negative impact on the environment and on economic activity, notably tourism. This situation calls for higher investment in road infrastructure and in particular the construction of a new access road at the lower junction of the port of Mgarr so as to ensure access to and from this only entry and exit point at all times. Mobility within and around Gozo needs to be improved through the reconstruction and upgrading of parts of the road network. Better infrastructure is expected to go a long way to mitigate transport inefficiencies and associated costs faced by Gozo's economic operators and consumers.

Equally important is the need to upgrade waste management systems in Gozo in order to ensure the protection of the environment as well improving environmental, social and economic conditions on the island. Equally important is the need to meet health infrastructure requirements on the island of Gozo.

Chapter 6. Strategic Consistency and Coherence

6.1 Consistency of the NSRF with other national strategies

The National Strategic Reference Framework is one of three key strategic documents through which the country's socio-economic development challenges will be addressed. The other two strategic documents are the pre-budget document 2006-2010 'A Better Quality of Life', which delineates Malta's vision of excellence for the period 2006-2010 and Malta's National Reform Programme, which is intended to address Malta's competitiveness in terms of the EU Lisbon Agenda. Seen together, these three complementary strategic documents espouse Government's holistic vision and strategy into the next decade.

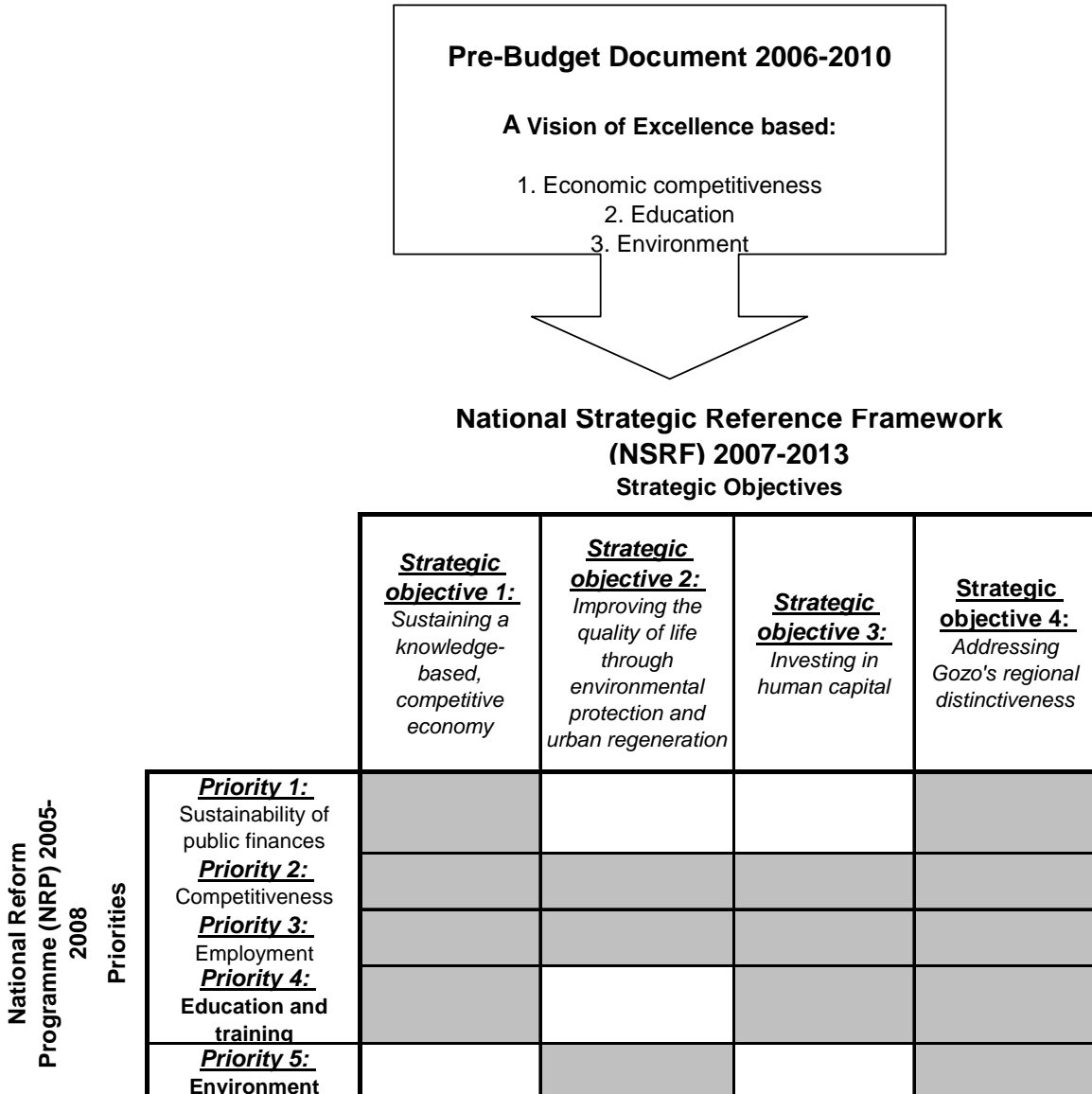
The strategic document 'A Better Quality of Life' highlights Malta's strategic resolve towards the achievement of a vision of excellence based on economic competitiveness, the investment in education and upgrading of human capital and skills and the safeguarding of the environment. The five-year time period spanned by this document represents a move towards inter-generational budgeting. The document stresses that a healthy, stable economy requires financial sustainability.

The Lisbon Agenda was launched in March 2000 with the aim for Europe to become, by 2010: "the most dynamic and competitive knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion, and respect for the environment". The National Reform Programme (NRP) with a governance structure based on a three-year cycle, commenced in 2005 (to be subsequently renewed in 2008), aims to set out a comprehensive strategy to deliver growth and jobs in line with the refocus of the Lisbon Agenda agreed to in the Spring European Council. Several political, economic, social, technological and environmental factors affect Malta's economic growth and international competitiveness and hence, the island's employment growth potential. Malta has chosen five strategic themes, which form the pillars of its NRP. These are: the sustainability of public finances; competitiveness; employment; education and training; and the environment.

As highlighted in Diagram 6.1, these three documents come together in a cohesive and complementary manner. The pillars of Malta's vision for excellence as emerging from the Pre-Budget Document are firmly based on achieving economic competitiveness, continuous investment in education and the safeguard of the environment. This three pronged Vision is envisaged to be met through the interplay between the four strategic objectives of the NSRF and the 5 priorities highlighted in the NRP. From the NSRF strategic objective point of view a competitive, knowledge-based economy is based on the realization of public finance sustainability, employment generation, further investment in education and training. An improved quality of life is inextricably linked with the NRP priorities of competitiveness, further employment opportunities and the

protection of the environment. For strategic objective 3 – investing in human capital – is extensively linked with economic growth and competitiveness, a healthy labour market and further education and training. Last but not least, the strategic objective of addressing Gozo’s regional distinctiveness is related to the attainment of all priorities under the NRP.

Diagram 6.1 Malta Strategic Documents - Agenda 2006 – 2013



6.2 Progress achieved in the implementation of the 2004-2006 Programme

Undoubtedly, Malta's programming for the 2007-2013 period is based on the experiences gained in implementing EU funded programmes and projects during the period 2004 – 2006 and the capacity of the Maltese administration to implement initiatives and to absorb the available funds.

During the 2004 – 2006 planning period, the main strategic focus was on strengthening the competitiveness of the Maltese economy, whilst maintaining a sustainable use of the environment. Much of Malta's domestic manufacturing industry, agriculture and fisheries had developed behind protective barriers which created an artificial scenario of market stability and encouraged these enterprises and farmers to move into areas of production in which it is difficult to compete in an open economy. At the same time, due to the pressures on the environment resulting mainly from the very high population density, environmental fragility and also the need to comply with EU Acquis in a number of sectors, Malta needed to take action to ensure the sustainability of its future socio-economic development.

The following three national objectives were identified for the period 2004 – 2006:

- to promote an open and competitive economy;
- to ensure that the growth in social and economic development is spread equitably across the Maltese Islands, both socially and geographically; and
- to promote a sustainable use of the environment and to assist in the implementation of EU environmental directives and regulations.

Following an appraisal of the then socio-economic situation and extensive discussions with stakeholders, the following three main needs emerged:

- an urgent need to address the socio-economic infrastructure, in particular the environment and transport;
- a need to support the productive sector in its efforts to restructure and diversify and compete within the internal market; and
- a need to address the issue of human resource development, particularly in the area of vocational educational training.

Given the lack of experience of the new member States in matters relating to Structural Funds²⁸, the Commission's suggestions to the then accession countries to adopt a realistic and pragmatic approach to implementing the Structural Funds and Cohesion Fund, these needs were translated into the two main priorities of strategic investments and strengthening competitiveness and developing people.

²⁸ This was more so in the case of Malta since the country was not eligible to PHARE, ISPA and SAPARD.

Based on the central threats emerging from the SWOT analysis compiled in 2002, these two main priorities were supplemented by priorities on rural development and fisheries, and the regional distinctiveness of Gozo. During the period 2004 – 2006 progress has been made in various areas, including:

- the partial achievement of objectives on training, life-long learning and improving the employability of the unemployed (ESF);
- aid schemes implemented by Malta Enterprise and the Malta Tourism Authority aimed at supporting enterprises (ERDF);
- the continuing implementation of Malta's waste management strategy in the areas of infrastructure, training, creation of public awareness, and reduction of emissions from disused landfills (ERDF, CF and ESF);
- ongoing developments with regards to infrastructural projects in the transport, tourism and environmental sectors, as well as in the creation and upgrading of the physical business infrastructure (ERDF and CF);
- addressing Gozo's special needs in the areas of transport, tourism, and vocational training (ERDF and ESF);
- from the side of the Managing Authority, the setting up of implementation systems and the gradual strengthening of institutional capacity of horizontal stakeholders.

Malta's NSRF aims to build on and consolidate the objectives and priorities of the strategy as outlined under the Single Programming Document whilst setting new and additional goals and targets, in order to achieve the vision that the Government has set out to secure a future of excellence for all citizens.

6.3 Community Strategic Guidelines

Malta's strategic framework aims to benchmark the country's socio-economic development in the light of the Community Strategic Guidelines for programming in the period 2007 – 2013.

The draft Community Strategic Guidelines urge Member States to concentrate the limited resources available to cohesion policy on promoting sustainable growth, competitiveness and employment as set out in the renewed Lisbon agenda. To promote a sustainable development path and strengthen competitiveness in the knowledge-based economy, it is essential to ensure availability of basic infrastructures, to increase investments in human capital, and to promote research and innovation, including access and strategic use of information and communication technologies. In addition, the success of Cohesion Policy depends on a range of conditions which favour investment such as macro-economic stability, effective implementation of the Single Market, structural and administrative reforms, good governance, a business-friendly climate, and the availability of a highly skilled workforce.

In the light of the renewed Lisbon strategy for growth and jobs, programmes co-financed through the cohesion policy should seek to target resources on the following three priorities for the period 2007 – 2013:

- improving the attractiveness of Member States, regions and cities by improving accessibility, ensuring adequate quality and level of services, and preserving their environmental potential;
- encouraging innovation, entrepreneurship and growth of the knowledge economy by research and innovation capacities, including new information and communication technologies; and
- creating more and better jobs by attracting more people into employment or entrepreneurial activity, improving adaptability of workers and enterprises and increasing investment in human capital.

6.4 List of Operational Programmes

The strategic objectives, as outlined in Chapter 5, provide the overall direction of Malta's economic development for the programming period 2007 – 2013. This strategic direction is supplemented by two Operational Programmes that outline the implementation of the overall strategic direction, as set out below. The four strategic priority areas outlining the strategic direction of NSRF will be implemented through a number of priority axes under two Operational Programmes which are currently being drafted.

Operational Programme 1 – Investing in Competitiveness for a Better Quality of Life

This Operational Programme will be co-financed by the European Regional Development Fund (ERDF) and the Cohesion Fund (CF). It will primarily support investments in enterprises and enterprise support infrastructure, development of R+D, upgrading education and training infrastructure, investments in tourism related infrastructure, transport infrastructure, the strengthening of ICT industry and the transition to an e-society, environment infrastructure (including energy) and urban regeneration. The whole territory of the country will be eligible for interventions under this Operational Programme.

Operational Programme 2 - Development of Human Capital

This Operational Programme will be co-funded by the European Social Fund (ESF). It will primarily support investments in education, training and employment, social inclusion and strengthening administrative capacity. The whole territory will be eligible to participate in this Operational Programme.

