Operational Programme I Cohesion Policy 2007-2013

Investing in Competitiveness for a Better Quality of Life

Draft Document for Consultation

June 2006



Introduction

The National Strategic Reference Framework (NSRF) is the strategic document that sets outs Malta's strategic objectives for Cohesion Policy 2007-2013. The NSRF is complemented by two Operational Programmes, each of which comprising a number of Priority Axes aimed at achieving the national strategic objectives for the period 2007-2013.

The strategic objectives of the NSRF provide the basis for the selection of priorities in both *Operational Programmes*. Priorities under the two Operational Programmes represent the policy mix that Malta has identified and chosen as the main focus areas for Cohesion Policy support during the period 2007-2013. The Operational Programmes and their components take account of the needs and priorities as emanating from the NSRF and the National Reform Programme exercises, the strong link between Cohesion Policy and the achievement of the Lisbon objectives, as well as the regulatory restrictions of the Funds. Together the priorities proposed constitute a plan of action for the period 2007-2013, whereby investment in the various sectors is not seen as an end in itself but as a means of contributing to the realisation of the vision and the attainment of the underlying strategic objectives. The two Operational Programmes do not include other measures that are best funded through national funds and/or other Community/International financial instruments, including the programmes under the European Agricultural Fund for Rural Development (EAFRD) and the European Fisheries Fund (EFF) and the Territorial Objective in which Malta will participate.²

This Operational Programme, thereafter referred to as Operational Programme I, is to be co-financed by the European Regional Development Fund (ERDF) and the Cohesion Fund (CF). Operational Programme I aims to primarily address the infrastructural needs of the country. This Operational Programme is complemented by another Operational Programme, Operational Programme II, to be co-funded by the European Social Fund (ESF) earmarked to focus on the development of human resources and employment. Both Operational Programmes foresee direct support to the private sector in the form of aid schemes.

This document begins with a situation analysis of the main focus areas of this Operational Programme; namely the economy and relevant economic sectors, accessibility issues, research and development, sustainable development, energy, education and social infrastructure, and territorial cohesion. Chapter II presents an analysis of the country's relevant strengths, weaknesses, opportunities and threats (SWOT). Chapter III and Chapter IV delineate Malta's strategic direction and Operational Programme Priority Axes, respectively. The Priority Axes are firmly based and linked to the attainment of the objectives under the Lisbon Agenda. The Priority Axes have been kept to a number which allows for maximum flexibility during the implementation period. The Chapter on the Priority Axes includes a description of the principal measures contemplated under each Axis. Chapters V, VI and VII, present the financial tables, the complementarity with the EAFRD and EFF funds and the provisions for implementation, respectively.

The financial tables constitute the total expenditure foreseen under each Priority Axis.³ In this regard, it is important to note that Strategic Objective 4 of the NSRF, namely addressing Gozo's regional distinctiveness, will be implemented through a commitment by Government to spend a minimum of 10 per cent of the funds under this Operational Programme on measures contributing to Gozo's socio-economic development. Chapters VI and VII are mainly technical in nature and arise from the requirements as outlined in the relevant Regulation.⁴ These chapters focus primarily on the implementation procedures.

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¹ The two Operational Programmes fall under the Convergence Objective.

² The Territorial Objective Programmes are the new Interreg Programmes for 2007-2013.

³ Whether financed by the EU, national and where applicable, private funds.

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Following the mid-term update carried out on the 2004-2006 programme which focused on efficiency issues, a number of changes (vis-à-vis the 2004-2006 procedures) in the implementation provisions are being proposed.

This Operational Programme is currently undergoing an ex-ante evaluation by independent evaluators which will be concluded in the coming weeks. This Operational Programme is also undergoing a Strategic Environment Assessment (SEA) in terms of the obligations under the Environment Protection Act. The document may therefore undergo changes following the conclusion of both the ex-ante evaluation and the SEA.

This Operational Programme was published in draft format for public consultation on the 22nd of June 2006. A formal session with the extended Malta Council for Socio-Economic Development is being planned for mid-July 2006.

⁵ Article...of EC Regulation.....

Chapter I – Situation Analysis

The following situation analysis constitutes the basis for the Operational Programme strategy. The situation analysis is composed of an analytical part which provides a diagnosis of the prevailing socio-economic situation and serves to identify the main challenges and obstacles as well as strengths and opportunities for Malta in view of ERDF and CF interventions. The emerging analysis is EU-objectives driven since it takes account of the objectives of the EU Cohesion and Employment Policy as emerging from the Community Strategic Guidelines (CSG), the National Reform Programme, the Lisbon objectives and the Gothenburg priorities. Indeed, this Operational Programme seeks to direct Malta's endeavours in meeting the CSG, specifically making the country a more attractive place to invest and work, improving knowledge and innovation for growth and undertake Cohesion Policy interventions in the territory.

Within the context of the CSG, making Malta a more attractive place to invest and work will be underpinned by investment in the TEN-T, ports, priority projects (CF, ERDF), investment in renewable energy [ERDF], investment in municipal waste management to enhance territorial attractiveness [CF], in waste water management (incl. storm water and flooding) [ERDF and CF]. Improving knowledge and innovation for growth will be underpinned by investment to improve the general business environment, improving access to finance for SMEs, investment interventions to strengthen research and innovation and through the promotion of sustainable tourism and heritage. Cohesion Policy interventions in the territory will also involve urban development initiatives and E-society interventions.

This Chapter follows with a situation analysis focusing on the economy and relevant economic sectors, accessibility issues, research and development, sustainable development, energy, education and social infrastructure, and territorial cohesion.

1.1 Economic context

Malta's economic performance has been characterised by positive performance in 2005 despite its performing below its potential in recent years. Current data for developments in GDP growth and its main aggregates suggests that, following a period of relatively low growth rates, the first signs of an economic recovery are getting increasingly evident. Indeed in 2005, an expansion of 2.5 per cent in real terms was registered. 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 when compared to the EU average. In fact, on a per capita basis, Malta's GDP per head in PPS stood at 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. Main economic indicators are presented in Table 1.1.

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.

In the last couple of years 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 slower rate of growth. This is partly a result of a trend towards land based means of transport as opposed to air transport and to the high growth rate in low fare air travel.

Table 1.1

Main Economic Indicators									
	2000	2001	2002	2003	2004	200			
GDP market prices (Lm millions)	1696.3	1737.7	1796.8	1829.1	1830.4	1927.			
GDP at constant (2000) prices (Lm millions)	1696.3	1702.5	1727.4	1684.3	1659.4	1700.			
GDP growth at constant (2000) prices (%)		0.4	1.5	-2.5	-1.5	2.			
Expenditure Components of GDP at constant 2000 prices (% change)									
Private final consumption expenditure (1)		0.8	-0.3	2.4	-1.2	1.			
General government final consumption expenditure		0.7	4.0	3.0	1.8	-1.			
Gross fixed capital formation		-14.0	-18.7	28.6	3.8	6.			
Exports of goods and services		-2.2	3.6	-2.1	0.4	-3.			
Imports of goods and services		-8.6	-2.3	7.0	2.0	0.			
nflation rate (%) (2)		2.9	2.2	1.3	2.8	3.			
Employment growth (%) ⁽³⁾		0.7	-0.1	-0.5	0.3	0.			
Jnemployment (%) (4)		5.1	5.2	5.6	5.6	4.			
Labour productivity (% change) ⁽⁵⁾		-0.3	1.6	-2.0	-1.7	1.			
1) Includes NPISH final consumption expenditure									
2) As measured by the Retail Price Index (RPI)									
3) Data for 2005 is as at October 2005									
(F) Based on Part I and Part II registered unemployed data of the Employment and Training Corporation	C) as at October 2005								

Source: National Statistics Office

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

Current account performance is shown in Table 1.2. 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, when the deficit stood at 13.1 per cent of GDP.

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 3.0 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.

Table 1.2

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

1.2 Main Economic Sectors

Manufacturing industry

Economic activity in Malta is characterised by a prevalence of small enterprises with micro enterprises constituting approximately 94.0 per cent of the total number of firms (2004), operating mainly in the manufacturing and tourism sectors. The vulnerability of the Maltese economy is underpinned by the fragmented composition of Malta's industrial landscape, its economic openness, insularity and high export concentration of goods and services. 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. It is important to note that a substantial portion of local SMEs are family-owned businesses.

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 and on the other hand 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 further investments in support infrastructure are required to assist enterprises in dealing with such challenges.

Manufacturing industry in Malta has been changing with the emphasis shifting from traditional low cost manufacturing towards higher value added activities. Cases in point are the contraction of the textile subsector and the emergence of generics manufacturing activities in the pharmaceutical sub-sector, in which operators' competitive advantage lies in value added.⁶

⁶ Over recent years, apart from the challenges of competitiveness in general, there has been increased recognition of the needs and challenges of enterprises, particularly the micro enterprises which constitute the backbone of the Maltese economy, to comply with the Acquis, notably with respect to environmental and health and safety regulations. The cost of compliance with environmental standards impacts the overall competitiveness of the individual enterprise and of the economy in general. As the agencies responsible for environmental management and enforcement of regulations step up their efforts, a strong need is felt for a targeted and defined parallel effort to support enterprises in achieving compliance with the regulatory regime and to promote measures that go beyond compliance in the adoption of new, environmentally sound technologies. Similarly, occupational health and safety are core elements in terms of quality of work and general work conditions. A high incidence of occupational accidents hinders both productivity and economic performance of enterprises, particularly micro-enterprises, where the cost of accidents in economic and social terms could be substantial

As highlighted in Table 1.3, aggregate nominal output from manufacturing activity has decreased by approximately 21.0 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 products and manufacturing of transport equipment.

Table 1.3

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

Value added data provides an indication of the contribution of sectoral performance to developments in the total manufacturing industry. Total manufacturing value added at factor cost fell by 3.7 per cent in 2004, following a decline of 0.7 per cent recorded in the previous year. This reflected a 4.0 per cent decline in personnel costs and a 3.3 per cent decline in gross operating surplus in 2004 when compared to the level recorded in 2003.

A sectoral analysis of the manufacturing industry, based on value added per capita, is provided in Table 4.1. Despite the decline in total value added, value added per capita registered a marginal increase in 2004 reflecting lower employment levels. The growth rate in value added per capita declined from 10.4 per cent in 2002 to 1.5 per cent in 2004. Per capita personnel costs rose by 2.8 per cent and 6.5 per cent in 2002 and 2003 respectively, while a 1.0 per cent increase was recorded in 2004. Gross operating surplus per capita recorded a 20.4 per cent rise in 2002, followed by a 3.0 per cent and a 2.2 per cent increase in the following two years. Estimated average value added at factor cost per capita at constant prices for 2005 stood at Lm11,206, rising by 5.9 per cent over that recorded in 2004.

The contribution of the food, beverages and tobacco sector to total value added remained the second largest in the industry. The sector's share in total value added fell marginally to 15.3 per cent in 2002 from 15.6 per cent a year earlier. However this decline was reversed in the following year when the share rose to 16.6 per cent in 2003. In 2004, the food, beverages and tobacco products sector's contribution in total value added rose by a further 0.2 percentage points, to 16.8 per cent. Personnel costs per capita fell marginally in 2002. However this decline was reversed in the following year with a further rise registered in 2004. The share of gross operating surplus in the sector's value added per capita rose from 54.0 per cent recorded in

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⁷ The data compiled for this analysis is based on the manufacturers' responses to an annual business statistics questionnaire, in line with the Structural Business Statistics Council Regulation 58/97. According to this methodology, value added at factor cost is made up of personnel costs and gross operating surplus. Personnel costs are made up of wages and salaries and employers' social security costs, whilst gross operating surplus is the surplus generated by operating activities net of labour cost.

2001 to 57.4 per cent in 2004. Developments in gross operating surplus were reflected in the performance of value added per capita, which followed a similar trend. It is noteworthy that the sector's value added per capita was 12.8 per cent higher than the average for the manufacturing industry in 2004.

The share in value added at factor cost of the wearing apparel and clothes sector rose from 6.5 per cent in 2001 to 7.0 per cent in the following year, subsequently falling to 3.8 per cent in 2004. The sector's value added at factor cost per capita, which registered an average annual growth rate of 10.7 per cent between 2001 and 2003, fell by 8.3 per cent in 2004. Since 2002, the share of personnel costs per capita in the sector's value added per capita has increased from 64.0 per cent to 83.5 per cent in 2004. The sector's gross operating surplus per capita nearly doubled in 2002 when compared to the level registered a year earlier, but declined by 23.1 per cent in 2003 and nearly fell by half in 2004. Value added per capita in the wearing apparel and clothes sector was 42.3 per cent less than the average for the manufacturing industry.

The publishing and printing sector's share in total value added reached 6.3 per cent in 2004. The sector's personnel costs per capita registered an annual average growth rate of 9.7 per cent between 2001 and 2004, exceeding the average for the total manufacturing industry by 14.2 per cent in 2004. Gross operating surplus rose by 25.9 per cent in 2002, and fell subsequently in the following two years to nearly half the level recorded in 2001. Following a 22.3 per cent rise in the sector's value added at factor cost per capita in 2002, a decline of 14.2 per cent was recorded in 2003, followed by a decline of nearly the same magnitude in the following year.

With a share of 7.3 per cent, the rubber and plastic products sector was the fourth largest contributor to total manufacturing value added in 2004, reversing the decline recorded in 2003 and exceeding the share recorded in 2001 and 2002. The sector's value added at factor cost per capita exceeded the average for the manufacturing industry by 6.9 per cent in 2004. The trend in value added per capita was underpinned by developments in gross operating surplus, which made up 49.0 per cent of the sector's value added per capita in 2004, up from 45.6 per cent recorded a year earlier. Personnel costs per capita made up 51.0 per cent of value added per capita in 2004, being 3.4 percentage points lower than that recorded in the previous year.

The radio, TV and communication equipment sector's share in total manufacturing value added remained the major contributor towards total manufacturing value added at factor cost. This share was the highest registered in recent years and reached 25.0 per cent in 2004. This performance is reflected in value added at factor cost per capita which rose steadily at an annual average growth rate of 7.5 per cent. The sector remained the most capital intensive sector in the industry, with gross operating surplus per capita as a share of the sector's value added per capita making up around 70 per cent between 2001 and 2004. Personnel costs per capita reached 29.0 per cent of value added per capita in 2004, declining by 2.2 percentage points from the share recorded in the previous year.

At 10.2 per cent, the third largest contributor to aggregate manufacturing value added was the furniture and other manufacturing sector. The sector's value added per capita registered an average annual growth rate of 11.4 per cent between the 2001-2004 period. This was underpinned by an increase in personnel costs and gross operating surplus per capita, which registered average annual growth rates of 4.5 per cent and 20.6 per cent respectively. In 2004, gross operating surplus made up 50.1 per cent of the sector's value added per capita while the remaining 49.9 per cent consisted of personnel costs. It is noteworthy that during recent years, the share of gross operating surplus per capita has increasingly outweighed the share of personnel costs per capita.

Table 1.4 Value Added at Factor Cost per capita

				Lm
	2001	2002	2003	2004
Food, Beverages and Tobacco Products	11,303	12,094	12,760	13,219
Textiles and Textile Products	12,370	11,241	11,669	11,232
Wearinig Apparel and Clothes	6,017	7,361	7,376	6,765
Leather and Leather Products	5,928	6,606	6,904	6,669
Wood and Wood Products	5,882	6,491	5,994	6,361
Paper and Paper Products	7,174	9,398	10,638	10,677
Publishing and Printing	11,211	13,716	11,768	10,114
Chemicals and Chemical Products	11,376	10,613	13,780	14,058
Rubber and Plastic Products	10,301	12,745	12,300	12,530
Other Non-Metallic Mineral Products	7,268	7,561	8,903	8,272
Basic Metal Products	7,304	7,301	6,212	7,206
Fabricated Metal Products	7,698	8,784	8,563	7,277
Machinery and Equipment n.e.c	11,250	9,020	11,927	10,840
Electrical Machinery and Apparatus	12,340	13,717	14,335	16,587
Radio, TV and Communication Equipment	21,725	23,388	24,653	27,035
Medical, Precision and Optical instruments	9,590	11,624	10,667	9,691
Motor Vehicles, Trailers and Semi-Trailers	6,627	7,707	7,175	6,844
Other Transport Equipment	4,401	4,615	3,353	2,832
Furniture and Other Manufacturing n.e.c	8,167	9,043	10,004	11,331
Recycling	9,251	14,909	16,990	15,526
Total Manufacturing	9,971	11,006	11,541	11,718
Provisional				

Source: National Statistics Office

Enterprise infrastructure

One of the key factors in attracting foreign direct investment is the availability of physical enterprise infrastructure. Over the years, Malta has 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. Further investment in both general purpose and dedicated factory space will be required to enhance the country's attractiveness for investment. Existing industrial parks and industrial areas dedicated to local micro enterprises need to be upgraded in terms of facilities on site. Moreover, industrial parks and areas (existing and new) need to be supplemented by child-care facilities in order to cater for more flexible forms of employment and to allow for a wider participation in the labour market.

Crafts

The crafts sector in Malta is characterised by a predominance of micro enterprises, clustered in two important crafts villages, one in Malta (the Ta' Qali Craft Village with 92 enterprises) and another one in Gozo (the Ta' Dbiegi Crafts Village with space for 26 enterprises). These two villages include several types of crafts ranging from handicrafts such as the production of lace, pottery, glass blowing and handmade gold and silver jewellery, as well as general crafts such as woodworking, ceramics and the production of souvenirs. The importance of these two clusters is directly related to the very important role that tourism plays in the economy, particularly in Gozo. Other craft enterprises are spread throughout the island. Some of these enterprises are engaged in traditional crafts that have a direct relevance to the Maltese heritage such as boat building of traditional Maltese gondolas (Dghajsa), the Maltese Clock⁸ and Gozo lace. The crafts sector has a growth potential as demand for genuine crafts is increasing both from locals to adorn their homes and also from tourists seeking to spend their money on unique products. The local crafts industry will benefit from the upgrade of existing crafts centres to address the current fragmentation of this segment of economic activity and to improve accessibility for the public, in particular for tourists visiting the country. This needs to be complemented by efforts which preserve the skills and workmanship required to retain the craft industry, such as wood working, design and art.

Tourism

Tourism contributes significantly to Malta's economic growth, employment creation and foreign exchange earnings. The sector's contribution to GDP is approx 25.0 per cent accounting for circa 28.0 per cent of the full-time equivalent employment. 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 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 of 1.18 million tourists in 2001 to 1.12 million tourists 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 cruise industry is evolving into a major pillar of the local tourism industry. 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 – an increase attributed to the fact that more cruise liner operators chose to start using Malta as a home port, a result of the investment taking place in the upgrading of the Cruise Liner Terminal and marketing of Valletta as a cruise port. More 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. The new Cruise Liner Terminal, earmarked to be operational in second half of 2006 aims to continue promoting Malta as an important cruise liner destination in the Mediterranean.

The monthly distribution presented under Table 1.4 highlights the prevailing seasonality in Malta's tourism trends, with the peak summer months between July and September 2005 accounting for 38 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

⁸ The Maltese Clock is a gold-guilded hand decorated wall clock.

⁹ Tourism departures refers to tourist departing from Malta after visiting the islands and thereby accounts for a more realistic indicator for tourist visits in Malta.

industry remains in operation throughout the year with the result that profits made in summer (high season) have to make up for winter (lean and shoulder months) losses or reduced profits.

Table 1.5

•	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
Septembe	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

Malta's main tourism source markets are the United Kingdom, Germany, France and Italy. Efforts are currently underway to diversify Malta's tourism source market. This highlights the need to further invest in the development of niche tourism markets, such as cultural heritage. The tourism authorities have identified seven key tourism segments which offer potential for Malta's tourism activity. These are the segment relative to leisure generated mainly through tour operator business, cultural tourism segment, language learning segment, meetings, incentives, conferences and exhibitions (MICE), sports and in particular diving tourism, Gozo-based tourism, and growth niche markets (health and wellness tourism, film production, cruise and stay, short breaks and vacation ownership). Investment is required to improve Malta's tourism product, upgrade related human resources skills and continue improving the marketing of the islands to increase Malta's visibility in its tourism source markets. 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.

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.

Another important indicator of the performance of the tourist industry is that related to the average length of stay by tourists. The average number of nights spent by tourists followed an upward trend between 2001 and 2003, increasing from 9.2 nights to 10.2. Thereafter, the average number of nights spent declined to 9.7 in 2004. In 2005, the average length of nights spent stood at 9.5 nights compared to 9.8 nights in 2004. 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

¹⁰ In recent years international growth rates in tourist visits have tended to outpace nights spent.

Table 1.6

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Cruise Passenger Arrivals										
	2001	2002	2003	2004	2005					
January	1,967	3,658	1,977	-	3,144					
February	3,535	529	854	353	4,534					
March	4,595	7,924	4,348	2,400	7,997					
April	16,942	20,203	16,128	19,118	22,658					
May	50,152	40,770	55,277	30,740	36,092					
June	25,413	42,932	45,809	24,342	31,956					
July	29,915	50,686	55,746	37,183	41,425					
August	32,072	46,054	55,265	42,236	35,348					
September	23,298	44,538	57,735	46,816	41,326					
October	44,869	51,602	62,708	45,790	52,912					
November	22,626	26,136	22,781	32,075	34,076					
December	4,006	6,600	10,828	10,768	8,636					
Total	259,390	341,632	389,456	291,821	320,104					

Source: National Statistics Office

Tourism Product and Culture

Malta's tourism industry continues to face competition challenges. Malta is a mature destination which needs to deepen - through improved quality and presentation - rather than widen its tourism offer.

Malta's tourism product is inextricably linked with its cultural heritage and the island characteristics and therefore development in the tourism sector is intrinsically linked with the promotion of Malta's cultural heritage. The Maltese archipelago has one of the highest densities of cultural heritage sites in the world. The local landscape has been intensively exploited and reshaped by different civilizations for over 7,000 years, resulting in a rich array of archaeological, architectural and historic remains from different epochs. The country's cultural heritage resources include the oldest free-standing megalithic buildings in the world, one of the most extensive and complex system of fortifications world wide and a remarkable concentration of baroque art and architecture. Malta's World Heritage Sites include a series of six megalithic buildings dating from the Neolithic period, the fortified capital city of Valletta, and the underground Hal Saflieni Hypogeum. Valletta and the Grand Harbour area provide immense potential both for tourism and for cultural activities and has also been identified as one of the tourism zones requiring improvements in access, conservation and restoration.¹¹ Malta also has a number of underutilised buildings which need restoration and an appropriate use providing cultural valorisation of such buildings. Malta needs to develop a digital inventory of its rich cultural heritage. 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. 12

Tourism product related surveys identify Malta's surrounding sea and beaches as having an important role in the overall product composition. However, the state of Malta's beaches has been identified as an area

¹¹ Between October 2003 and September 2004, a total of 1,210,046 visitors were registered in Heritage Malta managed sites with the Ggantija site in Gozo being the most popular site with 166,885 visitors.

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

which requires further improvement due to issues of (limited) quantity and quality of beaches, the facilities provided and the quality of service. These deficiencies reflect important limiting factors to a Mediterranean island destination which, due to its geographical location, is still expected to provide a proper beach offer. Concerted efforts need to be directed towards the development of new beaches and the improvement of existing beaches to match Blue Flag criteria. This will be done in line with environmental protection of the coast and the marine environment.

Malta's tourism product is also composed of assets such as gardens and natural areas. These sites have the potential to be utilised for culture and act as a tourism attraction through the creation of routes, artists' space and improved presentation and interpretation.

Tourism and Culture Operators

The tourism sector in Malta is characterised by small and medium, sized enterprises (SMEs), over 90.0 per cent which are micro enterprises and family-run businesses. At the beginning of 2005, a total of 7,030 tourism operators were licensed to operate as at the beginning of 2005, with 5,905 based in Malta and 1,126 in Gozo. Tourism operators comprise a variety of accommodation establishments ranging from hotels to hostels, restaurants and other catering establishments, travel operators, and destination management companies, diving operations, care hire firms, pleasure craft operators and cultural tourist related enterprises. Some 40 English language schools are operational and provide language teaching services to foreign students of various ages and professional backgrounds.

Maltese tourism service providers suffer from a number of deficiencies in their marketing strategies, such as lack of ICT utilization in e-marketing and e-booking systems, lack of effective participation in consumer and trade affairs, inadequate provision of services and quality assurance. In general, tourism enterprises require more innovative approaches in their operations. For example, low profitability arising from existing cost structures characterizes the tourism industry pointing to the need for investment in, for example, environmental systems which can reduce operational cost. In order to strengthen the competitive base, support is envisaged also for the private sector in order to upgrade its tourism offer. Whilst some tourism service providers have already achieved this, quality assurance is still lacking.

The tourism and culture sector are also characterised by the operations of a number of non-profit making organisations. These organisations are primarily custodians of important sites of cultural heritage and natural value, promoters of the art, aspects which undoubtedly represent key assets for tourism in Malta. These non-profit organisations have an important role in the provision of tourism related services especially in terms of cultural heritage, the artistic creation and environment protection.

Other economic sectors

The financial services sector is one of the success stories of the Maltese economy. It has assumed growing importance over the last decade and is now a significant contributor to Malta's economic output. Other sectors such as the IT, logistics and film and other creative industries¹³ are amongst the growing service sectors with potential for even further growth.

Effort is being undertaken to establish an adequate business support environment to enable to the promote of business start-ups. Efforts in this area are being undertaken through the setting up of business facilitation

¹³ Creative industries refer to those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property. This includes architecture, the art market, crafts, design, film and video, music, the performing arts, publishing, software and computer games, television and radio. These industries in Malta are characterised by micro enterprises and a few small enterprises.

centres, the establishment of a business care unit and the promotion of greater awareness and training programmes for micro enterprises, including craftsmen.

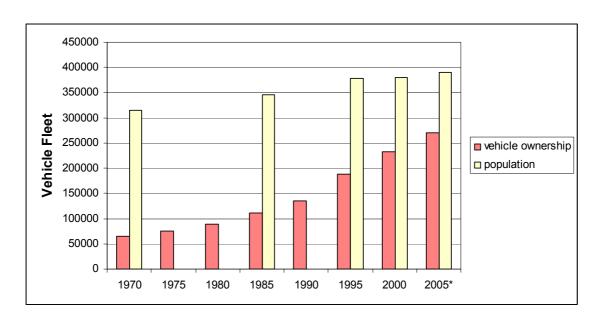
1.3 Territorial Accessibility

The Maltese archipelago is made up of three islands and hence internal accessibility is mainly dependent on sea or road transport, while external accessibility is based on either sea or air transport. Malta's transport infrastructure consists of the road network, four main sea ports (in Valletta, Marsaxlokk, Cirkewwa and Mgarr in Gozo) and one airport in Malta and a heliport in Gozo.¹⁴

Land Transportation

The road networks for the islands of Malta and Gozo were originally designed and constructed to accommodate light traffic volumes. Over the last two decades, the increased demand for both personal mobility and the movement of goods by road has led to a rapid growth in motorisation at a national level (as illustrated in the Figure 1.1 below). The increase in traffic loads and axle-weights of vehicles using the roads has resulted in significant structural damage being caused to critical sections of the network and to the development of traffic bottlenecks at critical locations on the network.¹⁵





¹⁴ There is a helipad in Comino and the helicopter operator has been cleared to operate charter flights there.

¹⁵ Between 1989 and 1998, peak hour vehicle journey times increased by over 10.0 per cent.

In the late 1990s, Government published a Master Plan for the Road Restoration in Malta and Gozo. The Master Plan aims to upgrade and modernise the national strategic road network to international standards whilst at the same time improve road safety, accessibility and mobility within the broader context of economic development and a better quality of life of Malta's inhabitants. This Master Plan was supplemented by the TINA study which was concluded in 2002¹⁶ and by a series of technical studies on parts of the road network identified as priorities. ¹⁷

During the accession process, the TINA study identified the Malta TEN-T network which provides critical linkages between the two international seaports of Valletta and Marsaxlokk, the international airport and between Malta and Gozo. Investment in the TEN-T road network is envisaged to meet the country's growing transport requirements. The upgrade of the TEN-T and the rest of the arterial and distributor road network is necessary for various reasons, most notably to reduce congestion/ time in traffic, to improve safety, to reduce operational/transport costs and to improve the environment. Feasibility and environmental impact assessment studies for the improvement of the TEN-T network have been undertaken in 2004 and 2005. Thirteen projects have been identified in Malta and Gozo.

Table 1.7

Road Network (in km)

Moad Network (III kill)								
	2000	2002	2004					
Length of road network	2,190	2,225	2,227					
Categorised as follows:								
Arterial and distributor roads		185	184					
Urban and local access roads (surfaced)		1,156	1,166					
Urban unsurfaced roads (estimated)		281	212					
Non-urban (surfaced)		647	665					
Total	2190*	2,269	2,227					

^{*}categorisation not available Source: Malta Transport Authority

The current network suffers from a number of bottlenecks which are currently causing a delay in the flow of goods and people. Congestion results in increasing delays for the delivery of goods and loss of productive working time. In line with the European Union objective for road safety, the Government aims to halve the number of injury accidents by 50.0 per cent by 2010. In order to reduce the incidence of road accidents resulting from poor road infrastructure design or condition (particularly at accident black-spots), an upgrade is required in the road geometry, surface and signage. In 2004, 37.0 per cent of all injury accidents in Malta occurred on the arterial and distributor road network. In addition, the number of accidents occurring during dark hours amounted to 42 per cent of the total injury accidents. With the proposed programme of road construction, better road signage and street lighting will be installed in order to improve night time visibility for motorists and therefore increase safety. The growth in commercial

¹⁶ The Transport Infrastructure Needs Assessment (TINA) was co-financed by EU funds under the Malta-EU Fourth Financial Protocol.

¹⁷ These studies are co-financed by the Pre-Accession Funds and are expected to be concluded by June 2006.

¹⁸ Studies surveyed the daily traffic distribution on the main road network, identifying the problem areas along the TEN-T network, close to the central business area of Valletta.

¹⁹ The finds allocated from the 2004 OCL. In the control of the central business area of Valletta.

¹⁹ The funds allocated from the 2004-06 budget amount to Euro21 million and cover only 15% (8kms) of the TEN-T network, that requires upgrading.

traffic is reflected in the growing increase in commercial vehicles. These have increased from 21,870 in 1990 to 43,971 in 2005. With the removal of bottlenecks along the network will mean a better flow of traffic, a more timely delivery of goods and a reduction in operating costs for transport operators.

Another objective for the transport sector is to improve the sector's contribution to environment protection. In Malta, transport is the second largest contributor to pollution, after power generation. Road network improvement is envisaged to reduce traffic emissions. The improvement in the road surface is expected to dramatically reduce the noise generated from vehicular traffic that is currently very high due to the current uneven surface. An upgrade of the road network would also entail improvements in the roadside environment, with better landscaping and the planting of trees and shrubs that absorb some of the impact of traffic on the adjacent urban and rural areas.

Another concern for Malta is the surface water run off which causes a number of problems in low lying areas and causes damage to the road network. In order to ensure a sustainable reuse of surface water run off, the new roads will also take into consideration the collection and treatment of water run off. This will reduce the flow of water into the low lying areas, but will also reduce the amount of water run off on the road surface, making the road a safer environment for traffic.

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. To this end, the Government intends to continue its efforts to reconstruct or rehabilitate the roads performing a linking function through national and EU funds.

Provisions of new roads should also be in line with strategic land-use policy which promotes the location of new jobs on the basis of a multi-centred approach that reinforces the existing hierarchy of employment hubs. The environmental, aesthetic, water run-off-management and land use concerns should also be integrated into project planning at all stages. Coordination between infrastructural entities will be an issue that receives further attention during the programming period.

Public Transport

In view of the current high use of private vehicles and the unsustainable growth projected in the feasibility studies, it is the Government's objective to encourage modal transport shift. To achieve a reduction in private mobility without compromising accessibility, the Government is looking at improving the national network of public passenger transport services.

The operation of the network of scheduled bus services has, over the years, experienced a decline in patronage (3.0 per cent decline per year over the decade 1991-2002). It is evident that if this trend continues, there will be greater pressures on the current bus network, both in terms of its financial feasibility as well as in terms of the competition for limited road space with the private car.²⁰

In the last few years, Government has sought to attract more passengers to the national public transport system by supporting the upgrading of part of the fleet of buses, modernising the ticketing system and improving waiting facilities and travelling information at public transport infrastructure. Moreover the Government has recently invested in the first park-and-ride scheme which forms part of a comprehensive transport strategy plan for Valletta and which aims to give public transport priority over the private car.

²⁰ The Household Travel Survey attributed an average four-minute delay in public transport trips between the period 1989 and 1998.

A primary objective is to improve the public passenger transport system in Malta through a process of operational reform, the upgrade of vehicle fleet, the introduction of new technology to improve bus service reliability and passenger information, and the provision of quality public transport infrastructure for waiting passengers (the Valletta bus terminus is one of the largest bus stations in Europe handling over 3,000 bus departures a day). Government is exploring the feasibility of alternative mass transit systems that will support the projected modal shift. The aim is to provide sustainable and efficient public transport alternatives which will reduce private car use.

Maritime Transportation and ports

In view of its geographical location as an island on the southernmost periphery of the European Union, Malta does not have direct connections to the European land corridors. Therefore the provision of frequent, reliable, safe and cost effective sea transport is of primary interest. The social and economic development of the Maltese Islands depends upon timely and regular maritime connections with a number of European ports for the transportation of goods and services. On a regional level Malta has become an important nodal point for the connection of intercontinental maritime transport to short-sea shipping. The transhipment facilities in Malta could be further developed to efficiently organise the maritime chains in the Mediterranean and provide for more interconnectivity with short-sea shipping links to European ports. In Malta this would require further investment in additional port infrastructure and superstructures which will derive more economic benefits.

Four of Malta's seaports, namely Valletta, Marsaxlokk, Cirkewwa and Mgarr (Gozo), have been identified as motorways of the sea (MOS) and are part of the TEN-T Maltese network. Valletta and Marsaxlokk are the main ports serving international traffic and are capable of providing a comprehensive array of maritime services including towage, salvage, pilotage and provisions for all kinds of stores and supplies. Economic progress and increased commerce in the Mediterranean fuelled in part by the EU transport policy calling for a modal shift towards the sea and promoting the MOS concept, will bring greater demands on the maritime industries and on related support services, especially those related to transportation, logistics and port activities to cope with an increased, faster and more efficient and cost-effective movement of cargo and people. Internally, port developments serving the inter-island traffic are of utmost importance, especially in the case of Gozo where double insularity problems are thus likely to be mitigated.

Table 1.8

Cargo handling at Port of Valletta							
	2000	2001	2002	2003	2004		
Containers (TEU)	12,116	7,853	8,512	11,144	15,186		
Trailers (TEU)	19,432	18,962	17,290	18,792	21,358		
Break bulk (000 tonnes)	135	130	179	152	255		
Dry bulk (000 tonnes)	609	666	719	738	517		
Wet bulk (000 tonnes)*	4,316	4,319	4,186	4,144	4,100		

^{*}Excluding bunkers

Source: Malta Maritime Authority

One of Malta's key attractions is the maritime environment. A number of private sector operators also contribute to maritime transportation by providing services relating to sailing, yachting, harbour and round the island cruises. These operators are restricted to Malta's territorial waters.

A number of technical studies co-financed under Pre-accession Programme 2003 are currently underway the aim of which is to prepare a project pipe-line, inclusive of feasibility studies for the maritime transport sector. These studies are being complemented by survey and geo-technical investigations, co-funded under the TEN-T programme to be completed in early 2007. In 2006, Malta will be implementing a port and coastal VTS co-funded under national pre-accession programme 2003, ERDF (2004-2006) and national funds. The VTS is expected to be put into operation during the first months of 2007 and will give Malta the means to monitor shipping traffic to enhance navigational efficiency and safety.

The cargo traffic in the Port of Valletta has been generally static over the past decade (Table 1.8). The factors that have contributed to this situation relate to the substitution of containerised shipping for conventional break-bulk service and the competing role of Malta Freeport Terminals in handling domestic containerised traffic since 1989.

The Valletta port also handles ferry and cruise traffic and during the last ten years it has developed as a major port of call for cruise liners in the Mediterranean. During recent years, record levels of over 350 cruise liners carrying more than 300,000 passengers, have visited the port. The majority of passengers come from the USA, Britain, Spain and France. Over the years there has been an increased interest in using Malta as a hub port.²² One of the main problems for the further development of the Port of Valletta is the lack of berthing capacity for specialized vessels such as container and ferry vessels. Surrounded as it is with historical sites, land based industries and residential areas there is little room for expansion in the port infrastructure, an aspect which has been highlighted as a major weakness for the port's future sustainability. Towards this end, a number of geotechnical, feasibility studies and environment impact assessments on related projects aimed at alleviating this problem are currently underway. Port development in Malta is crucial to safeguard competitiveness in the sector and increase capacity, thereby mitigating any possible extra costs of congestion and delays for the transport of goods and passengers. This will also enable Malta to establish its role in the implementation of the MOS concept.

Over the last decade, the port of Marsaxlokk has been hosting wet bulk operations, the volume of which has increased as a result of the construction of the Delimara power station. The port also handles the discharge of petroleum products which mainly takes place at the Enemalta discharge installation point at Birzebbugia. The port hosts an independent oil terminal which has discharge and loading points along the breakwater pier and offers storage, blending and bunkering facilities. Furthermore, since the introduction of the Malta Freeport, the port has developed into a major container terminal in the Mediterranean, equipped with the latest technology and serving many of the largest operators in the container carrier sector.

The ports of Cirkewwa and Mgarr handle inter-island transportation of passengers and cargo between Malta and Gozo. These two ports are currently being upgraded and expanded in order to accommodate the increasing number of crossings, improve berthing facilities, accommodate the new terminal buildings and segregate the flow of passengers and cargoes. The Malta Maritime Authority has recently invested over 22.0 million Euros in the construction of new berthing facilities in both ports, with a further 10.2 million Euros to be spent by 2007. Works are now in the process for the construction of a new passenger terminal in the port of Mgarr, Gozo. In order to complement this development and in a bid to ensure the safety of passengers in both ports, a new passenger terminal is also envisaged in the port of Cirkewwa. The number of trips made by the ferry and the number of passengers and vehicles, analysed in passenger and cargo vehicles, carried for the years 2000 to 2004 are set out in Table 1.9.

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²¹ The studies are expected to be concluded by October 2006.

²² Recently, analysts have placed Malta among the top ten base ports in the Mediterranean.

Table 1.9

Sea transport between Malta and Gozo

Number	2000	2001	2002	2003	2004
Trips	21,930	21,756	19,351	18,856	18,826
Passengers ('000s)	3,069	3,178	3,320	3,388	3,512
Cars and cargo ('000s)	738	796	845	899	914

Source: Gozo Channel

Trends show that the number of passengers and cars using the Gozo ferry service has been steadily increasing over the 2000-2004 period. It is noteworthy that the number of trips has decreased during the years under consideration as a result of the heavy investment undertaken by Government on three modern purposely built ferryboats for journeys between the two islands. These new vessels are relatively faster and can carry more passengers and vehicles than their predecessors.

Government also believes that Gozo needs to be included in the itinerary of cruise liners. For this development to take place it would not be necessary to build a cruise terminal in Gozo but the setting up of infrastructure that will allow for the regulated ferrying of cruise passengers from liner to land.

Air Transport

Malta's airport terminal is the international gateway to the Maltese Islands and thus is a prime contributor to the economy. Since tourism is strongly characterised by the seasonality factor, the current number of tourists comes close to the overall carrying capacity during the summer months. In this context, the prevailing airport infrastructure will soon become a bottleneck for the envisaged development of the tourism in the Maltese Islands. Indeed, the TINA study identified that the infrastructure of the airport needs improvement mainly with regard to the resurfacing of the main aircraft parking area, the runway pavement and the construction of a new taxiway to cater for increased aircraft movement capacity as established by recent forecast analysis.

1.4 E-Accessibility

Bridging the Digital Divide

During the period 2000-2005, Malta has made huge strides in its effort to bring about an inclusive information society and economy. Sustaining this momentum becomes harder as the effort becomes exponential. The social disparities and gaps overlooked by the onset of the information society now leave behind substantially less people than they did at the turn of the decade. But the obstacles faced by the minority that remains excluded have been the hardest to solve and by definition the toughest to overcome.

Malta is well placed compared to European averages in terms of subscription rates to fixed and mobile telephony. Similarly, Malta's compares favourably to the EU25 averages with regard to broadband internet take-up. Figure 1.2 illustrates EU 25 performance in terms of broadband penetration in terms of subscribers per 100 population for digital subscriber line (DSL) and other technologies. These indicators suggest that continued effort is required to further improve Malta's ranking in broadband penetration and to diffuse digital technology application. A portion of the Maltese population does not possess the required abilities and skills to use ICT efficiently nor can they afford its applications. The digitally excluded are primarily citizens with less formal education and lower income and persons with physical and social barriers.

ICT in Education

Over the last decade, the national investment programme in public schools has enabled the Maltese education system to be ranked as one of the most technologically connected in the world with ICT utilised not merely for its teaching but also as a pedagogical tool. However, this level of integration in the first eleven years of education contrasts with tertiary education where technologies continue to be less pronounced in the teaching methods. There is also a marked contrast between education in the first six years of schooling, where 76.6 per cent of teachers use the technology and the following five years, where only 27.8 per cent tend to do so. Overall, the potential of ICT to enable access to learning resources inside and outside the school environment is grossly under-exploited. The next, natural step concerns the promotion of e-learning initiatives that are aimed to enable teachers to unlock innovation in teaching methods and greatly improve the students' learning experience. Malta lags other EU Member States in terms of achievements in e-Learning as well as in Maltese ICT teaching content. Given that E-learning is fast becoming a fundamental infrastructure for the knowledge economy, investment in this area is pivotal.

The Knowledge Economy

Over the last six years, Government has striven, through the implementation of its National ICT Strategy, to establish ICT as a standing pillar in the national economic game plan. A major deliverable of this Strategy was the development and implementation of a Technology Centre of Excellence in the region. The very recent announcement by Government of SmartCity@Malta is the vehicle for the realisation of this deliverable. SmartCity@Malta²³ aims to transform the currently Ricasoli area in Kalkara into a state-of-the-art ICT and Media Park on the models of Dubai Internet City and Dubai Media City. This park foresees a series of ancillary activities aimed at creating a quality working environment to help attract and retain the best and brightest knowledge workers to SmartCity@Malta.

Notwithstanding current efforts, a number of fundamental infrastructural deficiencies can be identified, mainly due to the geographical nature. The cost of international connectivity is an issue both for indigenous and foreign direct investment. The take-up of the information economy has been vibrant in larger firms but remains depressed in micro-enterprises that together form the largest employing and value-adding component of the entire economic scenario. There is limited appreciation of how technology can be exploited to improve efficiency, cut costs, reach out to overseas markets and sharpen competitiveness.

Gender and age barriers to work are often associated with the flexibility of working hour arrangements and the location of work. These conditions can potentially be alleviated by a secure and reliable e-work environment that allows staff to deliver in their own time and from their own homes. In this regard, ICT application has an important role to play in issues such as raising the overall, female and older workers' employment rates as well as mitigating against insularity and double insularity issues.

²³ The project aims to create over 5,000 jobs over a number of years in private sector employment.

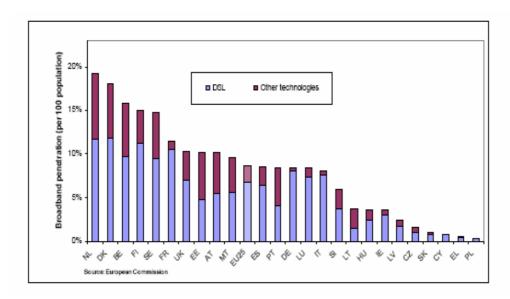


Figure 1.2 Broadband penetration – subscribers per 100 population (January 2005)

E-Government

The e-Government programme (2000-2005) has succeeded in introducing a 24x7 culture in the delivery of public services and in the meantime, serving as a catalyst to business process re-engineering in various Government branches. The supply of e-Government services in Malta has been measured annually in the last four years as part of the European Commission's e-Europe benchmarking exercise. In terms of on-line sophistication, Malta scores about average compared to the EU25.

The current heterogeneous setup within the public sector is more expensive than it needs to be and is conducive to waste in human resources, skills spread and business continuity. The current scenario is diverting moneys needed for re-investment and upgrading into maintenance necessitated only by the incoherence of the structure's architecture.

Following the reform in the ICT operations launched in 2005, Government has embarked on an intensive consolidation programme in order to strengthen the backbone infrastructure that will cater for all ICT requirements of both Public Service and Public Sector. The project proposes the implementation of an Active-Active data centres that can host a number of information systems in a common environment with failover/redundancy and data backup that will guarantee business continuity for all the systems hosted on the mentioned environment. In line with this consolidation, the Government is looking to draw up a national Geographic Information Systems Strategy which will define the consolidated approach to be taken for the provision of GIS services to Public Service and Public Sector.

The new scenario foresees a unique contact centre bridging all varying public demands for services, all media used to interact with the public sector and all segments of the public sector engaged in providing the services. Such a centre would be designed around a backbone infrastructure, a central payment gateway and an integrated support service for clients. The centre would also be equipped by a secure authentication mechanism electronically confirming the identity of users and suppliers. Integration will allow for the provision of various public services to an individual proving his or her identity using new Electronic Identity Cards that would 'smarten' existing national ID Cards. A homogenous infrastructure would also

allow private operators to provide services over the e-ID Card kick-starting the concept of e-wallets and e-ticketing for transport, loyalty schemes and other services requiring proof of identity.

In the national health services there remains a large potential to exploit technology. The provision of public health can continue to reach the expected standards of excellence and continue to be affordable to citizens so long as secure, high-speed infrastructure is in place for the application of e-Health systems, both in the new general hospital as well as in all public health clinics in the country. A national e-Health strategy is currently underway. The vision of this strategy is to enhance the communication processes at all levels taking place within health processes.

ICT provides huge opportunities for tourism and culture. Further improvements in the utilisation of ICT for increasing Malta's visibility in source markets and in the presentation and interpretation of culture (culture heritage and the arts) need to be made and further complemented with further ICT education for people engaged in these sectors.

In line with the target set out in the National Reform Programme of increasing the participation levels of employment, measures that facilitate the entry and retention of people in the workforce are being addressed by the introduction of eWork. eWork ties in with the Government policy of promoting equal opportunities and helps to achieve these targets.

1.5 Research and Development

The context for research, technological development and innovation (RTDi) in Malta was set in 1988 with the constitution of the Malta Council for Science and Technology (MCST). In its early years, the MCST focused its efforts on raising awareness and undertaking the establishment of scientific networks within the Maltese community. MCST also played an important role in the establishment of a number of research-oriented institutes and in the setting up of the Malta National Laboratory. Over the last year, the Government has been undergoing a process of deep reflection and re-thinking of national policies relating to science and technology, research and innovation and technological development. MCST is now located within the Office of the Prime Minister and has been assigned a new, more prominent role, to ensure a more coordinated and coherent policy approach in RTDi across Government Ministries and agencies so as to harness synergies and avoid duplication of effort.

Until as recently as 2002, statistics on national spending on RTDi were not available, resulting in a lack of awareness among policy makers on the extent to which the country was lagging behind in this critical area. The process of data and information gathering on RTDi activity in both Malta's public and private sector is still at an early stage. Nonetheless, there are strong indications that an important part of RTDi activity in the country is currently not being captured. Malta's RTDi intensity as a percentage of GDP currently stands at 0.3 per cent.²⁴ This is well below the EU average of 1.9 per cent.²⁵ The current situation is not optimal and Government recognises that RTDi is a critical driver for the success of a competitive knowledge-based economy.

An assessment of the current state of affairs with respect to RTDi in Malta include inadequate national research institute funding, the absence of a legal framework for business to university collaboration, the prevailing industrial and business structure, limited local market economies, and lack of RTDi recognition in society in general. There is a need to present a true and fair view of RTDi activity in Malta, so as to generate a positive understanding of its potential and strategic role in the country's development process. A realistic assessment of RTDi sector in Malta is expected to have a positive impact on the take-up of scientific careers by the younger generation, on related job opportunities and in promulgating a protechnology culture.

²⁴ This data refers to latest available statistics from NSO Press Release of October 2005.

 $^{^{25}}$ Malta's target for 2010 is 0.75% of GDP

Malta does have a number of research institutes falling mainly under the aegis of the University of Malta. A national RTDi programme was launched in 2004 which consists of a number of sub-programmes benefiting both industry and academia in the provision of financial support over the whole research and innovation chain from basic and applied research to near-to-market innovations. In addition, various University departments have embraced the opportunities provided by the Community Framework Programmes on Research and Development. The University has a good science base and exhibits potential to extend its industry linkages thereby transferring research knowledge to business in the form of Intellectual Property (IP). This potential is currently dented by the absence of an IP framework within which academic-industry linkages can be established and developed.

Delving into the underpinnings of the present status of RTDi in Malta, one has to acknowledge that Malta's industrial sector is characterised by a dual structure. On the one hand, industry predominantly consists of domestically-owned micro enterprises primarily local market oriented engaged at the lower end of the technological ladder and generally lacking the critical mass to engage in RTDi.²⁶ On the other hand, Malta's industry comprises a number of foreign-owned affiliates of multinational conglomerates which undertake RTDi activities in home economies and merely transfer technology to Malta in accordance with corporate strategies to serve the needs of the local manufacturing arms. This state of affairs has so far resulted in limited inter-linkages between the domestic and foreign sector, primarily as a result of lack of economies of scale and scope.

Presently, a national RTDi strategy is being drafted. The emerging strategic principles include achieving value-added RTDi (focus); exporting locally generated RTDi (e.g. in the Mediterranean region); expanding Malta's science, engineering and technology human capital base; addressing national issues through RTDi (such as water, energy and environment); enabling SMEs to innovate and synergising industry to academia linkages.

In addition, there is widespread recognition that in order to improve overall competitiveness, efforts with respect to RTDi in industry (within the context of the macro framework for RTDi strategy) need to be stepped up. To this end, a number of initiatives addressing industrial RTDi have already been initiated such as the development of the Regional Innovation Strategy for the Maltese Islands (MARIS) and the development and implementation of an R&D fund under the EUREKA brand and also through initiatives linked to the development of business technology networks.

1.6 Environment

General Overview

The Maltese economy, cultural identity, as well as citizens' health and quality of life bear a strong linkage with the state of the environment. A healthy environment is considered to be a crucial prerequisite to Malta's future development and competitiveness. The environment sector has been the largest single beneficiary of Malta's 2004-2006 Cohesion spending.²⁷

Malta has numerous EU and international obligations relating to environmental matters and is a member of several international institutions dealing with these issues. Malta is also party to a number of multilateral

²⁶ This failure has been compounded by the absence of supporting institutions such as technology transfer centres.

²⁷ Both under Malta's Single Programming Document, the Cohesion Fund and the Interreg Community Initiative.

legal agreements, which affect environmental policies and practices at the national level.²⁸ Malta has been transposing the EU Environmental *Acquis* through the upgrading of national environmental legislation and the introduction of specific regulatory instruments. By 2005, approximately 135 pieces of legislation under the 2001 Environmental Protection Act had been published. Correspondingly, recent years have seen a dramatic increase in the extent of environmental regulation. Besides actual legislation, other instruments, such as permitting regimes, guidelines, economic instruments and administrative arrangements have been used.

The transposition of the environment *Acquis* and the institution building of the relevant organisations have benefited from considerable investment from Malta's Pre-Accession instrument and the Transition Facility. However, there is still room for improvement with respect to changes in behavioural patterns in both the public and private sector. Furthermore, environment monitoring and reporting as well as the integration of environment concerns with other sectors, regulation and enforcement can also be improved.

Environmental topics within school syllabuses have increased over the last decade with subjects like science and social studies now including topics relating to the Maltese environment. The Eco-schools initiative and environmental studies subject have also been introduced in some schools and at the tertiary level. The University has introduced, within the various faculties, more courses related to the environment. However, there are as yet, no formal courses which serve to qualify operatives and officers in the environment disciplines that are required to service the requirements of the regulatory agencies or third parties such as industry. The 2004-2006 Structural Fund programme is also funding various awareness raising campaigns related mainly to waste management. Further investment is required to embark on ongoing campaigns on environment issues targeting cross sections of the population and disseminating information and know-how among operators and providing access to funding to the private sector to undertake environment initiatives in their enterprises and operations.

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 layer and the Lower Coralline Limestone where groundwater occurs as a lens of freshwater floating over seawater. Groundwater was, until the introduction of desalination in the 1960s, the sole source of water, as well as the only large natural source of water for the Maltese islands. Since Malta has no surface waters that can be economically exploited, the islands depend on frail groundwater resources that are subject to fierce competition and are under increasing pressures from intense human activity over a relatively small territory. The use of available groundwater to best effect is recognised as an essential asset for the continue sustained development in the agricultural and industrial sectors of the Maltese economy (refer to Figure 1.3).

²⁸ These agreements mainly relate to: Pollution Control, Biodiversity, Nuclear Safety, Climate Change, Desertification, Endangered Species, Hazardous Wastes, Law of the Sea, Marine Dumping, Ozone Layer Protection, Ship Pollution, Wetlands and Education for Sustainable Development

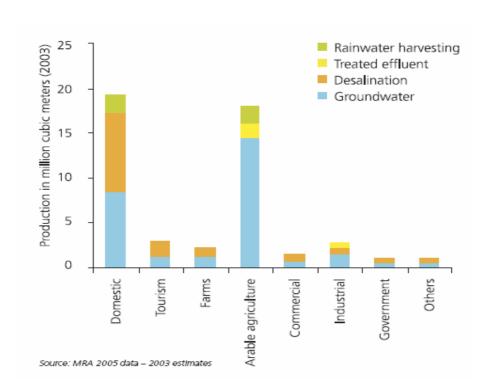


Figure 1.3 Sectoral Water Consumption by Source

Besides agriculture and industry, groundwater is also a valuable source for drinking and other municipal purposes. Half of the drinking water comes from aquifers, whilst the remaining part is procured from three seawater desalination plants located Pembroke, Cirkewwa and Lapsi. These desalination facilities are amongst the most significant users of electricity in Malta and water production utilizes an overall 8 per cent of all the total electricity production. Currently, the supply of drinking water for the Eastern part of Malta depends solely on the Pembroke Reverse Osmosis (RO) for its water supply. This implies that when the RO plant is offline, water has to be transferred from Ta' Qali Reservoir (located in the central region of the island) to this area, exerting extra pressure on the Island's potable water storage resources given that this storage capacity only caters for a few hours. In addition, the cost to transfer water from Ta' Qali to the Eastern part of Malta is extremely high.

Municipal water demand has decreased significantly over the past years largely as a result of demand management actions adopted by the Water Services Corporation. These actions included an intensive leakage detection ands control programme, the continued upgrading of the distribution network and the improved management practices through the installation of intelligent network control devices and improved pumping systems.²⁹ Notable results have been obtained in the leakage management programme: where production estimates indicate that leakage have been reduced by more than 50.0 per cent over this period. Water savings by consumers have also played a role in the decrease of water consumption. Despite recent achievements, further investments are required to improve the energy efficiency of desalination plants, to reduce water leakages in the distribution process and to maximise the collection of rain water from built-up or hard paved surfaces.

²⁹ Water demand decreased from 50 million m³ in 1995 to 33 million m³ in 2004.

Water demand estimates for 2003 indicate that the domestic and the agricultural sectors are by far the largest water consumers respectively utilizing 39.0 and 37.0 per cent of the total water produced on he islands. It is also estimated that alternative water supply sources such as the harvesting of surface runoff and the use of treated sewage effluent (TSE) still contribute to a mere 3.0 and 7.0 per cent respectively of the total water production. It is recognized that increasing these shares would contribute to a more efficient and sustainable use of Malta's water resources. Hence the need for the development of further infrastructure aimed at increasing the storage of rainwater runoff, for treating sewage effluent to the quality levels required for its re-use and for delivering these waters to the point of use.

Almost 46.0 per cent of Malta's potable water supply (12.7 million m³) is abstracted every year from groundwater. Of this supply, more than 65.0 per cent comes from almost 42 kilometres of a groundwater-skimming gallery system running at sea level. The first station using galleries in the Means Sea Level Aquifer was commissioned in 1887 (Wied il-Kbir) with the last in 1963 (Kandja). No cleaning and rehabilitation was ever carried out and from site inspections, it transpires that silt deposits over the years have hindered the proper management and at times caused shutdowns to these galleries as a result of contaminations. The Water Services Corporation has launched an exercise with the aim to locate and secure all 77 gallery ventilation shafts in the gallery systems. The ultimate objective of this exercise is to eventually clean and rehabilitate this system which extends to more than 9 kilometres.

Storm Water

Floods have been recognised as potentially undermining Europe's drive towards sustainable development with the adverse effects they have on the economy, the environment and public health³⁰. In Malta, urban development, together with the absence of an integrated approach to rainwater and valley management, have increased the risk of flooding from flash rainstorms in urbanised areas. The management of rainwater and valleys has been largely fragmented, at best, and non-existent at worst. Urbanisation along watercourses has led to increased runoff and loss of areas for percolation and replenishment of aquifers. Illegal dumping activities and decades of improper development in valleys have also restrained the water carrying capacity of Malta's natural watercourses, the largest three of which flow down through urbanised and intensely developed areas. The effects of long years of fragmented and oftentimes only reactive efforts in valley and water management become evident when flash floods hit particular areas, compounding problems into disrupting economic activity, high risk to life and property in some of the most densely populated areas of Malta. Less visible effects are the continuing loss of the quality and quantity of water that is naturally available in aquifers.

In September 2003, heavy rainfall led to flooding considered subsequently a "major disaster" within the meaning of Article 2 of Regulation (EC) No 2012/2002.³¹ Government has acted with urgency to this situation and has been drawing plans and performing works to mitigate future damage from flash storms. So far efforts have focused mainly on channelling and disposing of water runoffs from the two largest rainwater catchment areas in Malta. In effect these investments, although mitigating the problem of flooding, do little to address the problem of water conservation.³²

³⁰ Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions: Flood risk management – Flood prevention, protection and mitigation (COM (2004) 472 Final). Conclusions of the 2610th Council (Environment) of 14 October 2004 (12908/04).

³¹ Council Regulation (EC) No 2012/2002 of 11 November 2002 establishing the European Union Solidarity Fund (OJ L 311, 14/11/2002, p. 3).

³² Malta is currently preparing a storm water management plan that is being co-funded under a Cohesion Fund technical assistance project co-financed under the 2004-2006 period.

In the context of extremely limited extent of undeveloped open spaces in the urbanised flood-prone areas and high property prices, above-ground reservoirs are deemed highly impractical. As a result, an integrated storm water management system with underground water retention infrastructure is being envisaged for the most densely populated catchment areas in Malta. These efforts seek to address both flood relief and water conservation issues. In January 2006 the European Commission presented a proposal for a Directive on the assessment and management of flood risks. All river basins are included within the scope of this proposed Directive, indicating the significance, even at Community level, of the phenomenon and the possible consequences.

Coastal Waters

Coastal waters make up the majority of Malta's water resources and are a key resources for Malta's tourism. As part of the implementation of the Water Framework Directive (2000/60/EC) Malta is bound to achieve good environmental status of coastal waters by 2015 through the setting up of a monitoring network and a Water Catchment Management Plan. In turn, these would identify a series of measures required for the water status to be improved and, where necessary, maintained. Investments are required to support this monitoring and to allow for an integrated approach.

Coastal waters are currently being monitored for a number of parameters specified under a number of EU Directives³⁴. However the current monitoring capabilities are incomplete and significant investments are required to improve national capacity to monitor to the standard required to satisfy all relevant water monitoring obligations under existing Acquis and forthcoming obligations under the Marine Strategy. In the Seventh Report on the Monitoring Programme for Coastal Water (published in May 2004) it was noted that discharges from the Marsa and Delimara power stations are leading to significant reductions in water quality at these areas. With respect to areas exposed from sewage outfalls, the most significant reduction in water quality was recorded at Cumnija and Xghajra (Wied Ghanmmieq). Both areas should see significant improvements once relevant infrastructure is operational. Other areas were monitored for temperature, salinity, transparency, chlorophyll and nutrient levels as well as dissolved oxygen. The findings confirm poor water quality in some inshore coastal waters, especially harbour and marina areas and areas subjected to sewage outfalls. However, in general, monitoring programmes results show that since 2002 the overall water quality has improved and that most of Malta's coastal waters are of acceptable status.

Malta's inland surface and transitional waters include freshwater and brackish water habitats such as watercourses, springs and freshwater pools. Transitional waters in Malta are saline marshlands or areas at the ends of valleys leading to the sea. These habitats harbour various animals and plants within them having a considerably restricted geographical range and are in danger of extinction. Due to the scarcity of freshwater resources, these habitats are rare in Malta. There are also a number of activities which increase the threats on the status of these waters, such as the depletion of groundwater supply, pollution and encroachment from development. Malta's bathing waters are in line with the Bathing Water Directive quality standards and mostly meet those of the Barcelona Convention. In 2004, 83 percent of sites were classified as First Class under the Barcelona Convention. This indicates a marked improvement from 55per cent of the sites in 1996, however further investments are required to improve the national monitoring capacity and implement any remedial actions and measures, depending on the outcome of this monitoring.

³³ Proposal for a Directive of the European Parliament and of the Council on the assessment and management of floods (COM (2006) 16 final: 2006/0005/COD).

³⁴ These are the Dangerous Substances Directive, the Bathing Water Directive, the Protection of Fish Life Directive, the Urban Wastewater Treatment Directive and the Nitrates Directive,

Air Quality, Climate Change and Pollution

Significant improvements in air quality data availability have been achieved since 1998 particularly through investment support from EU funds. This development has allowed for the first quantitative assessment of air quality to take place over the Maltese Islands. In fact, in 1999, the then Environment Protection Department commenced a routine National Air Monitoring Programme. Parallel work has also been carried out on determining emissions and in the drawing up of a greenhouse gas (GHG) inventory. Even though Malta's GHGs emissions increased by 44 per cent between 1990 and 2003 when compared to the EU25, Malta had one of the lowest emission rates per capita, at 7 tonnes compared to 11 tonnes per capita for the EU25.

The production of energy from fossil fuels is the most obvious source of environment pressure because of the combustion processes. The energy sector contributed to approximately 63 per cent of Malta's GHG emissions in 2003. A number of measures to reduce the harmful effects of electricity generation have already been undertaken. Coal was phased out and this resulted in lower carbon dioxide (CO₂) emissions and a significant improvement to the environment around the power station at Marsa which is located adjacent to a densely populated area. The introduction of 1.0 per cent sulphur fuel oil contributed to a significant reduction in sulphur dioxide (SO₂) emissions. Additional investment is, however, required to:

- i. replace ageing plant with new more efficient plant which employs best available technologies to reduce emission of pollutants;
- ii. where cost-effective, render existing generation plant/s at both power stations compliant with current and proposed EU environmental legislation³⁵;
- iii. pursue the further study of an energy interconnection with mainland Europe that could be used for the supply of natural gas and/or electricity as an alternative to local generation

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. In terms of nitrogen oxides, Maltese localities experiencing heavy traffic are the most affected. Although between 2003 and 2004, there was an 8.0 per cent reduction in nitrogen oxides, concentrations increased in localities such as Floriana. Investment is also required to reduce the emission of VOCs during fuel loading and unloading to/from fuel supply road tankers. A project co-funded under the 2004-2006 Structural Fund programme aims at controlling the emissions from the three closed landfills of Maghtab, Qortin and Wied Fulija.

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³⁵ In particular this involves major modifications to the two larger combustion plants at each of the two power stations in Malta to render them compliant as far as nitrogen oxide, sulphur oxide and particulate matter emissions are concerned.

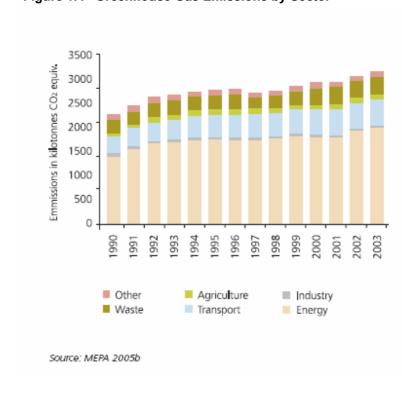


Figure 1.4 Greenhouse Gas Emissions by Sector

Waste Management

Construction and demolition activities are generally associated with environmental damage and undesirable practices and most of Malta's solid waste originates from these activities. There has been a marked growth of construction and demolition waste over the years. Municipal waste, which includes mixed trade and municipal waste, is another major contributor to Malta's total generated waste and has increased by 53.0 per cent since 1996.³⁶ In 1998 collected municipal waste in kg per person stood at 549. This was comparatively higher than that in most of the new EU acceding countries but compared well with the average for the EU15 average estimated at 556 kg per person for that year. Malta's average amount was usually higher than the majority of member states with regard to land-filled municipal waste.³⁷ In recent years, Malta has made significant investment in environmental infrastructure related to waste management, including the development of new engineered landfills and separate waste collection infrastructure and more investment is planned in 2006 and 2007 as a result of funding from the ERDF and CF (2004-2006).

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³⁶ This figure does not take into account several issues namely the fact that in 1996 there were no weighbridges (just estimates), current definitions and proper classification of waste streams, increased use of one-way packaging, changes in consumer attitudes, multiple facilities of waste entry points in 2000.

³⁷ In fact, in 2000, Malta's amount of waste land-filled was rated the second highest in Europe. (NSO, Benchmarking Malta in Europe, 2004).

Malta's solid waste management strategy aims to put in place an integrated approach to waste management, involving the reduction in the quantity of waste with a simultaneous increase in recycling and composting. Subsequent to the closure of the uncontrolled landfills at Maghtab and Qortin in 2004, an interim controlled engineered landfill was developed at a site known as Ta' Zwejra. Located in the vicinity of the closed Maghtab dump, this facility receives municipal solid waste and will be equipped with a combined gas recovery and leachate collection system. This facility is furnished and lined with 500 mm thick foundation layer, a 250 mm complementary gas drainage layer, a drainage geo-composite and a geo-synthetic clay liner (GCL). The landfill gas generated will be collected and treated in the common gas collection system planned for the Maghtab rehabilitation, the Ta'Zwjra landfill and the new proposed facility at Ghallis.

Waste to energy is one of the alternative energy sources that Government is currently exploring. A proposed facility of waste treatment and composting, co-financed by the 2004-2006 Cohesion Fund, will treat dry-recyclables and biodegradable waste with a view to recycle waste and reduce the amount of biodegradable waste deposited in landfills.³⁸ The upgrade/improvement of the Sant' Antnin Waste Treatment Plant will be sufficient to fulfil the first target of the Landfill Directive (99/31/EC) in 2010. The design of an additional treatment solution with increased capacity is therefore unavoidable. This will fulfil the first target of the Landfill Directive (99/31/EC) in 2010. Projects are being prepared with Cohesion Fund Technical Assistance 2004-2006.

Households have been encouraged to support the gradual introduction of waste separation at source. To-date a limited number of projects, which encourage the collection of materials suitable for recycling, are being organised through local councils. One such project is the national 'bring-in-sites' campaign, which was introduced as a pilot by Government in 2003 and is being implemented on a national scale under the current 2004-2006 programme. The private sector also has a role to play in this sector and could be assisted to take the required initiatives.

In July 2003, the Maghtab uncontrolled facility stopped accepting inert waste. This was followed by the introduction of a new project concerning the rehabilitation of quarries. Disused quarries, which are considered to impact negatively on the environment, are being rehabilitated with uncontaminated inert material originating from the construction industry. Between May 2003 and May 2005, 3.3 million tonnes of inert waste were deposited in 14 quarries. It is estimated that the remaining capacity will serve for less than five years. Rehabilitated quarries are used for agricultural purposes.

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³⁸ The proposed upgrade includes a Material Recovery Facility, a Mechanical Treatment Plant and an Anaerobic Digestion Facility for the production of biogas with following energy generation. The energy produced is estimated to be sufficient to supply 1400 households with their daily electricity needs.

³⁹ The overall aim is that some 400 bring-in sites and 4 Civic Amenity sites will be located around Malta and Gozo. Further initiatives are required to increase the level of waste separation, reuse and recycling of waste materials, and subsequently the reduction of the amount of waste landfilled.

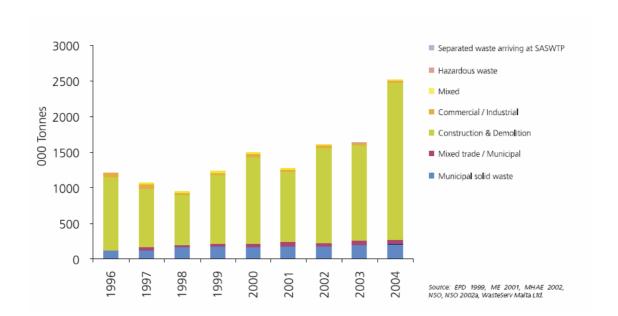


Figure 1.5 Waste arriving at principal waste management facilities by type

Sewage and Purification

Malta's industrial waste water and sewage has a high organic content in comparison with that of other European countries due to its lack of treatment prior to disposal. Approximately 6.5 per cent of the sewage produced in 2004 was treated at the Sant' Antnin Sewage Treatment plant in Marsascala. The sewage Master-Plan identifies the construction of three waste water treatment plants. Two of the envisaged waste water treatment plants will be operational by July and August 2007 (Gozo and Malta North) respectively. Investment in a wastewater treatment plant in the South of Malta will complete the plan. The system is expected to be complete by end December 2009. The Gozo plant is being co-funded under Malta's Preaccession Programme 2003 while the Malta North plant is being funded under the Vth Italian Protocol. Transmission infrastructure for the third plant is currently being undertaken with the support of the ERDF (2004-2006).

Nature Protection

Total woodland area of Malta comprises approximately 200 hectares. It is mainly artificial as it has been planted by man over the years, yet it still contributes to the Maltese landscape and in some cases to biodiversity and are important for rural tourism. Natural forest remnants are restricted to only four localities. However, the Maltese Islands also harbour specially protected areas and important natural habitats associated with specific geo-morphological features. Coastal habitats such as sand dunes, saline

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⁴⁰ Both projects are underway.

marshlands and wetlands are also considered to be highly threatened and rare. The rural landscape in areas dominated by natural habitats is predominantly characterised by vast stretches of karstland that support garigue communities. These garigue communities support the most biodiverse habitat in the Maltese Islands.

Malta's inland surface and transitional waters include freshwater and brackish water habitats such as watercourses, springs and freshwater pools. Transitional waters in Malta are saline marshlands or areas at the ends of valleys leading to the sea. These habitats harbour various animals and plants within them having a considerably restricted range. Due to the scarcity of freshwater resources, these habitats are rare and more monitoring is required to ensure their protection.

The Maltese Islands harbour a diverse array of flora and fauna, especially when considering the relatively small land area, the limited number of habitat types and the intense human pressure. There is a significant degree of endemism with substantial number of species restricted to the islands and not found anywhere else in the world. Over the past decade, there has been increasing widespread awareness that protected areas can contribute to the conservation of biodiversity and to the good of society at large if they are appropriately managed. In themselves these areas, even in their current state are a tourist attraction

In order to comply with the EU nature protection *Acquis*, Malta has designated an extensive network of 38 Special Areas of Conservation (under the Habitats Directive), which represent approximately 15.0 per cent of the national territory of land area. As a result of the legislative acts in place, Maltese species of international importance that are protected has risen considerably. To date only one special conservation area in the marine environment has been designated. This area is representative of the main marine habitat types that are found in the Maltese Islands. This site is currently benefiting from support under Malta's 2004-2006 Structural Fund programme. Adequate management of such a protected area is a key factor in the effectiveness of protection that is being afforded. In this regard, investment would be required to support the planned management for the site and to monitor those important species and habitats to ensure their favourable conservation status, as required by the Habitats Directive.

Several challenges remain under this sector mainly related to lack of adequate resources to manage NATURA 2000 sites, to enforce wildlife regulation, to raise awareness to encourage public participation, to undertake extensive studies to assess the conservation status of various species, to implement conservation measures and to implement more effectively the nature protection *Acquis* and a national biodiversity strategy is in preparation. This strategy will guide future investments required in actively managing the protected areas and monitoring impacts arising from human activity and development.

1.7 Energy⁴¹

Energy Demand

During the past decade, electricity demand in Malta has increased from 1,632 GWh in 1995 to 2,263 GWh in 2005 which is equivalent to an average increase of 3.3 per cent per annum. This demand growth has been caused by an increase in industrial development and tourism together with an increasing population that is enjoying a better standard of living. Electricity is also used to produce fresh water in Malta. Water

⁴¹ Section 1.6 (page 29) of this document refers.

production requires a significant amount of electrical energy, particularly for sea-water desalination processes in which approximately 6 kWh are needed to produce one cubic metre of desalinated water.

A significant amount of the electricity generation plant in Malta is well past its economic life expectancy and therefore needs to be urgently replaced. In order to guarantee an acceptable level of security of supply and ensure compliance with EU regulations on emissions of greenhouse and other gases, new generation plant is required both to replace the ageing plant and to increase generation capacity and maintain an adequate reserve capacity. In the meantime the possibility of an energy interconnection with the continent in the form of a gas pipeline or an electricity cable is being studied.

An increase in electricity demand also implies a need to continue developing the distribution network and reducing technical losses. The installation of additional high voltage circuits and construction of distribution centres at strategic points in the network is therefore rendered necessary. A programme of energy conservation and efficiency including a reduction in non technical distribution losses is also being actively considered. This will include the complete replacement of the traditional electromagnetic energy metering systems with a state of the art automatic meter reading system.

A new integrated utilities billing system (electricity and water) project which will include the replacement of all traditional electromagnetic energy meters with a state-of-the-art automatic meter reading system is in the tendering stage. The new system will provide more information about energy use characteristics to both consumers and suppliers, and hence facilitate the introduction of demand side management schemes, including time-of-day and other tariff schemes, aimed at increasing efficiency in the consumption of electricity. The new equipment and billing system will also play an important role in the reduction of non-technical losses.

Research and development are essential for the implementation of the measures contemplated in the forthcoming Directive on energy end-use efficiency and energy services. Efforts should be aimed at developing innovative cost-effective techniques and schemes specifically tailored for local conditions to minimise energy losses in existing and future buildings, and to educate consumers to conserve energy. Improvement in energy efficiency should result in minimising fuel importation to the Maltese islands.

Since Malta is geographically isolated, the importance of fuel storage in case of shortages in supply cannot be understated. The island has one of Europe's largest underground fuel storage facilities which is, however, in need of ivestment to prevent further deterioration of tanks to safeguard the environment and to retain its essential function in ensuring security of supply to local consumers in compliance with the EU Directive on minimum security stocks.

Alternative Energy Sources

The introduction of renewable sources of energy would reduce Malta's dependency on fossils fuels. Despite efforts, the utilisation of such renewable energy sources remains insignificant. A high level screening exercise on the resource availability of the sources specified in the EU Directive 2001/77/EC taking into account available renewable energy technologies was carried out by the Malta Resource Authority. It was concluded that the technologies which may be suitable for Malta and warrant further investigation are wind, solar photovoltaics, biomass wastes, landfill gases and sewage treatment gas.

Large onshore wind farm development, albeit the most cost-effective, is highly unlikely to materialise due to the constraints that have been identified in the October (2005) Report sent by Malta on the implementation of Directive 2001/77/EC. Offshore wind is the second best option in terms of costs and is being studied, although this investigation is further complicated by the fact that potential sites are important from the marine conservation point of view and/or fishing perspective as well as highly vulnerable to visual and landscape impacts and therefore to tourism. Micro-wind has not, for the time being, been considered a

feasible option for Malta because of planning constraints due to the visual impacts on the Maltese townscape.

The photovoltaic resource potential in Malta is substantial, particularly if one takes into account the roofs of private houses, certain public buildings such as schools but the cost implications of supporting photovoltaic is very high. In the 2006 Budget, Government has given incentives in support of photovoltaic, however these are not deemed sufficient to encourage a good take-up. The tourism sector is looking at the promotion of energy efficiency. This could lead to increased competitiveness and contribute towards saving energy consumption and increasing the overall share of renewable energy sources in Malta.

Nonetheless efforts continue to be made in this area. More recently, Government set up a Waste to Energy Committee with the objective to assess the feasibility of recovering energy from waste generated. Proposals in this regard will complement those currently being finalised for the upgrading of the St Antnin waste treatment plant. The digestion process planned for this facility will recover approximately 3.5 million m³ of biogas of which about 60.0 per cent will be methane to be used for the generation of 'green electricity'. Work is also underway on the development of a national energy plan.

1.8 Urban Regeneration

Built-up Environment

The urban fabric in the Maltese Islands plays an important role in the development of society and the economy. The importance of the urban fabric is even more pronounced since Malta is predominantly urban and by far the most densely populated country in the EU. Malta has a very high proportion of built up land to the tune of 23.0 per cent of total land area. The increase in urban development has mainly taken place in order to provide for additional housing units. In fact, residential areas constitute Malta's principal urban use of land. The relatively high cost of housing is underpinned by rising pressure on land resources for this land use. The rehabilitation of brown-field sites is considered a potential means to reduce this pressure.

From the late 1990s, urban development briefs have been undertaken with various projects in and around the Harbour area. The main projects currently include the Manoel Island and Tigne Redevelopment, the Cottonera Waterfront Redevelopment and the Valletta Cruise Liner Terminal. These projects have been largely based on a model conceived in the early 1990s with land concession agreements based on very long term contracts. The basic concept of these agreements is the long term concession with the benefits of private investment in the restoration, rehabilitation and redevelopment of earmarked assets. A number of other projects to rehabilitate old village cores have also been undertaken.

According to the latest Census, the population of Valletta and its environment reached the low figure of 7,184, which is less than 2.0 per cent of the total Maltese population. The trend is destined to continue, since around 30.0 per cent of the residential population consists of people aged 60 and over. This is a predominant trend in the urban cores around the Harbour Area. The increase in commercial activity and the presence of several offices, both public and private, in Valletta, has led to an increase in daytime population. The influx of daytime population in the harbour area including the heavy tourist impact has taken its toll on the environment and has created increasing pressures on accessibility, transport and more

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seriously to parking. The broad car presence in the Harbour hub and urban cores contributes to environmental decay. During the day, on street parking, obstructs pedestrian flow.

Specific interventions need to be undertaken in tourism zones. A tourism zone is defined as an area where there is a regular and significant presence of tourists due to a concentration of tourism accommodation, leisure facilities and/or visitor attractions. One can distinguish between a tourism zone which is a resort and a tourism zone which is more heritage oriented. These two types of zones have different characteristics which merit a different approach to tourism development. Investment in these zones is required as they form an integral part of our tourism offer.

In recent years, Government has focused to further re-launch urban regeneration as a potential economic initiative which acts as a catalyst in local development. The restructuring policy includes the development of the National Projects Committee which currently vets and launches new capital projects. The Committee is based on Inter-Ministerial cooperation and 'joined-up' government.

Forts and Fortifications

The historical fortifications are one of Malta's most valuable cultural resource assets. The Maltese islands contain one of the greatest concentrations in the world of bastioned works of fortification and military architecture from the gunpowder era, ranging from the late medieval to the twentieth century.

The harbour system of fortification consists of 25 km with a further 1.2 km of walls in Mdina. Of these 4.5 km require urgent and immediate restoration. The situation is such that the deterioration of the ramparts cannot be allowed any further. In various cases there is also the added reason of addressing issues of public safety. These fortifications not only have architectural and historical significance but they are also prime urban areas.

Apart from their significance within the urban regeneration concept, these structures offer a unique and extensive wealth of architectural and historical attractions that do much to set the Maltese tourism product above other destinations in the Mediterranean. These fortifications also house gardens, a unique characteristic. They offer a prime location for a soft tourist attraction in the field of culture particularly for high quality arts and cultural events.

Local Development

Local government in Malta constitutes the second tier of Government in a two-tiered Government system. The principle of local government is firmly ingrained in the Constitution, whereas the functions and operations are regulated by virtue of the Local Councils Act (Chapter 363, Laws of Malta). This legislation also enables Local Councils (68 in all) to be given further competences and responsibilities from time to time through central Government's policies on devolution and decentralization.⁴²

More than 90.0 per cent of funding to Local Councils is from Central Government's allocation based on current expenditure. This, effectively, result in limited funds for Local Councils to embark on projects and initiatives other than their statutory functions (mainly related to upkeep and maintenance of roads, pavements and public gardens and the collection and removal of domestic waste) that constitute the basic services that they are obliged to provide to their communities.

⁴² The statutory functions of Local Councils in Malta are laid down in Article 33 of the Local Councils Act.

Local councils have been very active in Cohesion Policy Programmes such as the Community Initiative Interreg. It is Government's objective to facilitate the participation of local councils in the next round of Cohesion Policy both under this OP (urban regeneration, social infrastructure and embellishment projects) and under the OP co-financed by the European Social Fund.

1.9 Education and Social Infrastructure

Education Infrastructure

The strategic stance underlying Malta's economic vision is underpinned by the need for continuous human capital development. The objective of increasing the relative share of high value added economic activity has widespread labour market implications in the sense of increasing demand for a labour force equipped with tertiary, upper secondary, secondary and vocational qualifications. Further human capital development entails investment in the capacity and quality of educational infrastructure such as at the University and Vocational Training Institutes, the upgrading of existing schools, and the development or procurement of additional educational facilities and resource materials. Furthermore, the shift to a high-value added and knowledge based economy should be accompanied with investment in social infrastructure aimed at workforce participation, employment and occupational health.

Social Infrastructure

Due to Malta's territorial size, the tendency in the past was to develop social and employment services on a national level. Such services provide assistance to service users without taking full cognisance of the particular needs of people coming from specific localities. Local development initiatives started around a decade ago when a community development team was set up within the Cottonera region with a view to promote a more locality-focused approach. This development led to the investment of a community resource centre known as ACCESS (complex). This centre aims to facilitate the social inclusion of people residing in this locality, particularly persons considered to be at risk of poverty and social exclusion, through personalized social welfare services, training initiatives, learning and enhancement of skills as well as other community initiatives. Both the voluntary sector as well as Local Councils contribute towards this community development. Such a centre targets a variety of potential service users including the unemployed, persons with disability, children and families, women, young and elderly people, persons with mental health difficulties, persons with housing problems, schools and community groups. Experience has shown that the introduction and development of such community based services is an effective method of intervention, as it not only facilitates working at grassroots levels, but helps to build upon the strengths of the community and to balance essential characteristics with cultural and national variations in attitudes, perceptions and concepts about children, families and local society.

Health Infrastructure

Health care in Malta is mainly provided through public hospitals and primary health care centres. The Maltese health care system has been commended for its high quality. This is the result of highly trained and committed health care workers and programmed investment that has allowed the local development of

highly specialised services. Malta is in the process of drawing up an action plan to promote quality and accessibility whilst safeguarding sustainability for health and long-term care services. The opening of the new Mater Dei hospital, projected for 2007, will provide a quality leap in the nature of health facilities in Malta, however further investments will be required in other public hospitals such as the smaller general hospital on the Island of Gozo and hospitals offering specific services such as mental health, geriatric care and oncology services. There is also a pressing need to further develop rehabilitation facilities and services so as to improve the quality of life, social integration and participation in the socio-economic environment particularly for the elderly. A lacuna in hospital service provisions for disabled persons exists at present with no facilities to cater for persons suffering from such disabling conditions as spinal cord injuries or stroke at young ages. There is also a need to develop community services targeted particularly for the elderly, disabled and mental health patients.

The links between primary and secondary care are weak as there is no patient registration system in primary care. This situation generates a lack of continuity of care making it difficult for specialists to discharge patients needing follow up from hospital to primary care. Better use of information technology in establishing appropriate links is required. In this regard the further development of e-health (within the new hospital and linking the new hospital to other health centres, locally and abroad) is seen as crucial and a means of overcoming constraints linked to accessibility.

Housing

Several old vacant dwellings are to be found not only in village cores but also in such urban centres as Valletta, the Three Cities and Floriana. The high architectural, cultural and historic value of these houses needs to be acknowledged. Besides the preservation of cultural heritage, the upkeep of such regions also contributes towards the promotion of Malta's natural assets for the development of sustainable tourism. Many of these older properties are in a poor state, requiring costly repairs. Many of these are in a dire state, where re-building would be preferable to refurbishing. Often the cost of repairing is too high to make a project feasible, and in any case most of these dwellings cannot be adapted to meet the modern standards of accessibility and render them habitable for elderly, disabled and frail residents as these buildings were not built according to modern standards of accessibility. In such cases, particularly where there may be many properties in a particular locality, urban renewal is often the most viable option.

Vacant properties account for some 23.0 per cent of all properties although around one third of this figure includes summer residences. Slightly more than half of vacant properties are in a state of disrepair. In the Cottonera region, in particular as well as in Valletta (both prime urban areas) only 36.0 per cent of vacant properties are in a good state of repair. Refurbishing these vacant properties and providing the supporting facilities such as playgrounds, open and green spaces would improve village cores and contribute to restoring the rejuvenation of the area which in itself reflects the ageing of Malta's population. Furthermore, it is the policy of the Housing Authority to promote more environmentally friendly building wherever possible. A new feature in the Housing Authority's building programme is that all new apartments be equipped with solar panels and other energy saving features including photovoltaic cells and passive measures such as louvers and double-glazing.

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2.0 Territorial Cohesion – The Island Region of Gozo

General Overview

The Island of Gozo (65 sq. kilometres) and its sister Isle of Comino (2.7 sq. kilometres) are located to the North West of the main island of Malta and are separated by about 4 km of sea. The only present link from Malta to Gozo is by ferry and through a helicopter service. In Gozo, one road provides the principal infrastructural link to and from the Mgarr harbour - Gozo's main and primary link to Malta and the world, - and the main town in Gozo of Victoria. Gozo's peripherality to Malta's main commercial infrastructure gives rise to its double insularity problems which in turn lead to constraints on the movement of persons, goods and services to and from Malta's sister island. Double insularity constraints result in additional transaction costs to Gozo's business sector and act as a burden to Gozitan citizens and visitors. The issue of double insularity impacts on all sectors of the economy and also undermines the quality of life on the island given the limitations on accessibility to important services such as education and training, specialised health care and employment opportunities. These issues together with the island's geographic and structural handicaps are accelerating the under performance of the Gozitan economy, notably, eroding the competitiveness of business in Gozo. This is attested by recent statistics showing Gozo's GDP per capita as a percentage of Malta's declining from 73.2 per cent to 69.3 per cent from 1999 to 2003. This indicator suggests the need for an integrated approach to address the island's accessibility problems (which impinge on all other sectors) with a view to reverse the decline in GDP and boost its socio-economic development through improved and continued connectivity with mainland Malta and mobility within the island itself.

Accessibility

Almost all passenger, vehicular and cargo access to Gozo is through the port of Mgarr. Access to and from the port of Mgarr, as well as within the island itself, is highly congested and at times totally blocked in strategic parts of the island, with a significant negative impact on the environment and on economic activity, notably tourism. The number of vehicles including cargo, crossing between Malta and Gozo has increased from 844,000 in 2002 to about 890,000 in 2005, while the number of passengers increased from 3.3 million to 3.5 million during the same period. Heavy traffic is putting pressure on the road infrastructure which was designed for lighter traffic flows. This situation calls for higher investment in road infrastructure, in particular the construction of a new access road at the lower junction of the port of Mgarr to ensure access to and from this only entry and exit point at all times, since this is the lifeline for Gozo. Moreover, the Mgarr harbour will require further investment in capacity to enable a broader use of the port to cater for cruise liners, ferries and also strengthen its yachting facilities.

With regards to air transport, at present there is only a helicopter air link between Malta and Gozo. The air transport link complements the sea transport link and makes a significant contribution to economic and social cohesion and to the island's balanced development, since this service is primarily sought after by upmarket tourists who choose Gozo as their holiday destination. In view of this, a study on the cost-effectiveness of this link - assuming different scenarios regarding frequency and types of carriers - is warranted in order to organise the air link in a manner that takes into account the broader economic, social and environmental concerns. The pressures of peripherality and double insularity on the availability of health services highlight the need to provide the minimum time-critical health services in Gozo. The lack of modern equipment and the under-exploitation of information technology necessitate the referral of a significant number of patients to Malta every year, mainly, for diagnostic purposes, with the consequent time delays in getting the required treatment, additional suffering and costs.

Competitiveness

The services sector comprises financial and ICT based services, as well as tourism and related services. The services sector in Gozo exhibits the strongest growth potential but necessitates significant investment in infrastructural facilities to create the right environment for increased economic activity. An enabling environment will go a long way to attract back-office work to the island, as well as encourage young people with an entrepreneurial ability and ICT skills to set up their own small business in ICT-based services, creating synergies with other sectors. The ICT sector needs to be further exploited given its high value added content and its capacity to withstand inherent disadvantages emerging from the inevitable interisland transport costs.

Tourism is the mainstay of the Gozo economy and is a provider for a wide array of employment activity in the island. Tourism in Gozo depends on both foreign as well as local, internal tourism. Accommodation facilities abound for all types of tourist markets, but occupancy levels are low denting profit margins. Gozo has unique potential in this sector. Besides its own history culture and archaeology, Gozo has to date avoided the scars of development that have occurred in the larger island. This strength gives it a competitive edge over Malta in terms of beauty, peace, tranquillity and ambience. It is Government's intention not only to safeguard but also to strengthen this competitive edge through improvements in the tourism product, investment in human capital and targeted marketing, protection of Gozo's character, environment and landscape. Gozo's tourism should focus on rural tourism and highlight the natural landscape and scenic views one can enjoy in a non-densely populated area.

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⁴³ Studies show that the average length of stay in Gozo is 5 nights as opposed to 9 in Malta. Tourist expenditure in Gozo in 2003 stood at Lm 5.9 million. This is very low when compared to Lm 342.1 million of tourism expenditure in Malta for the same year.

Chapter II – Strengths, weaknesses, opportunities and threats (SWOT) analysis

Five national SWOT meetings were held on 26th, 27th and 28th September 2005, for which the relevant public agencies, NGOs, social partners and relevant stakeholders were invited to participate. Further, an email address was created to receive input on SWOT separate from the meetings. The SWOT meetings were organised along the following thematic areas of accessibility, economic development and competitiveness, employment, education and social inclusion, the environment and Gozo. Moreover, a number of public dialogues were held (in various localities in Malta and Gozo) addressing the same sectors in the first quarter of 2006 in order to consolidate and build upon the first SWOT exercise carried out in September 2005.

SWOT factors pertaining to the Priority Axes of Operational Programme I, are set out in the following table:

Table 2.1 - SWOT Analysis

Strengths

- Politically stable, secure environment with good quality of life;
- Strategic location in the Mediterranean;
- Unique cultural heritage;
- Well-established tourism sector with excellent product potential (e.g. history and culture);
- Some strong industry sectors (e.g. electronics, ICT) resulting in experienced workforce and good basis for venturing into RTDi;
- A good ICT basis;
- Established manufacturing base with a good reputation of retaining FDI;
- Multi-lingual population;
- Commitment by the voluntary sector and NGOs;
- Established administrative structures;
- Close proximity to tourism source markets.

Weaknesses

- Vulnerability as a small island state;
- Small internal market;
- High urbanisation and space restrictions;
- Insularity and double insularity (Gozo);
- Poor public infrastructure in roads, transport planning, and the environment;
- Lack of integrated land use and transport
- Ports infrastructure conditions;
- Costly broadband connectivity;
- Power generation (polluting old plant not meeting demand):
- Fragmentation of territory;
- Dependency on non-renewable energy sources:
- Quality of overall tourism product;
- Seasonality in tourism sector;

- Gozo tourism dependent on tourism in Malta;
- No clusters of manufacturing excellence;
- Lack of well-defined niche markets and poor branding of key economic sectors;
- Low level of Research and Development, expenditure, funding, lack of integrators, traditional university:
- Lack of adequate support structures for micro enterprises and SMEs;
- Poor culture of entrepreneurship;
- Industry consists predominantly of SMEs and micro enterprises:
- Poor perception of S&T;
- Transport congestion and unsustainable mobility:
- Lack of direct accessibility to Gozo.

Opportunities

- Diversification in main economic sectors and focus on higher value added economic activity;
- Integration of different levels of society through ICT;
- Leverage local mastery of ICT to reduce costs and improve efficiency of industry and
- Renewable energy sources (territory permitting); Raising of environmental awareness;
- Back-office operations and IT services;
- Improved accessibility;
- Transhipment and logistics;
- Facilitating sustainable mobility;
- Improvement of Malta's niche tourism offering culture, history, agro-tourism, health tourism, education tourism;
- Continued organisational reform in the public sector:

- Increase in R & D activities including the setting up of strategic partners;
- Development of centres of excellence;
- Further development of education and training infrastructure at all levels;
- Small size and insularity makes Malta ideal test-bed for certain applications;
- Opportunity for the application of new technologies to Mediterranean climatic conditions especially those relating to alternative energy and water technologies;
- Short term break potential
- Communicating a coherent message and image of Malta.

Threats

- Increased international competition in particular from low cost countries resulting from significant loss of industrial base (making it more difficult to establish R&D industry);
- Increase in storm floods;
- Competition from other catch up countries and those already in a position of strength higher up in the technological ladder;
- Ageing society; Shrinking work-force
- Competition from lower cost Mediterranean destinations particularly from North Africa.

Chapter III - Strategic direction

Introduction

This Chapter seeks to describe the strategic direction and context of this Operational Programme. The Chapter starts with a brief overview of the Operational Programme. This is followed by a synthesis of the National Strategic Reference Framework, the Community Strategic Guidelines (CSGs) and the National Reform Programme (NRP), the latter providing the outline within which Malta's NSRF and OPs have been delineated. After this broad overview, this Chapter goes into specific detail of OP I, describing the number of Priority Axes composing the programme and examining the linkages with the CSG and NRP.

OP I, *Investing in Competitiveness for a Better Quality of Life*, will be co-financed by the European Regional Development Fund (ERDF) and the Cohesion Fund (CF). OP I will primarily support investments in infrastructure in a number of critical sectors such as transport, environment, tourism and enterprise support infrastructure. The OP also aims to invest directly in enterprises through a number of aid schemes financed by the ERDF. The whole territory of the country will be eligible for interventions under this Operational Programme. It is to be noted that this Operational Programme will be complemented by another Operational Programme co-financed by the European Social Fund which will focus on education, training, employment and administrative capacity building.

Malta's strategy for this Operational Programme is based on the socio-economic challenges that the country will face during the intervention period as identified in the NSRF, the strengths, weaknesses, opportunities and threats of the current socio-economic situation in Malta, priorities emanating from national strategies - including the Pre-Budget Document "A Better Quality of Life" 2006-2010 and the National Reform Programme 2005-2008, the Draft Sustainable Development Strategy 2004-2009⁴⁴ and the Structure Plan for the Maltese Islands 1990-2010. Additionally, it is based on the experiences gained in implementing EU funded programmes and projects during the period 2004 – 2006. From a Community perspective, the Lisbon Agenda, the draft Community Strategic Guidelines for the programming period 2007 – 2013, the relevant legislative package for Cohesion Policy 2007-2013 as well as the indicative financial resources available for the period 2007 – 2013 have also been at the forefront of considerations in the delineation of this Programme. Sectors/areas which are not catered for under this OP are not being excluded from investment. However, in these cases investment is being contemplated under other instruments (EU, bilateral and national), including the national budget.

National Strategic Reference Framework

The Operational Programme is one component⁴⁵ of the programming documents for Cohesion Policy 2007-2013. The overall strategy for Cohesion Policy is outlined in the National Strategic Reference Framework. The NSRF 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 a competitive and high value adding economy and to achieve sustainable socio-economic development earmarked for a better quality of life, the country's needs and challenges can be summarized in the following categories:

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);

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⁴⁴ This will be adopted shortly.

⁴⁵ The overall strategy is outlined in the National Strategic Reference Framework which is complemented by two Operational Programmes – Operational Programme I (ERDF and CF) and Operational Programme II (ESF).

- 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 integration between the ERDF, Cohesion Fund and ESF interventions reflects Malta's strategic objectives enlisted under the NSRF. The NSRF strategic objectives provide the overall direction of Malta's socio-economic development for the programming period 2007 – 2013. The strategic objectives reflect the need to sustain a growing and knowledge-based, competitive economy; the need to improve the quality of life through environment protection and urban regeneration; the need to invest in human capital; and to address Gozo's regional distinctiveness.

The strategic objective of sustaining a growing and knowledge-based, competitive economy consists of efforts to support entrepreneurship and mobilizing investment in RTDi, initiatives put forward to sustain the tourism industry and promote culture, promoting the E-Society and improving and expanding the transport infrastructure. The strategic objective of improving the quality of life through environment protection and urban regeneration encompasses primarily efforts in the environment, energy and urban regeneration. The strategic objective for investing in human capital focuses on investment in the wide aspects of education and the employment sector. Finally, the strategic objective of addressing Gozo's regional distinctiveness looks at promoting enterprise and key economic sectors on the sister island, addressing the key accessibility issues pertaining to road and sea transport as well as developing human capital and skills.

Overall, these strategic objectives for the period 2007-2013 are 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.

Community Strategic Guidelines

Malta's National Strategic Reference Framework aims to benchmark the country's socio-economic development in the light of the (draft) 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 infrastructure, 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.

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National Reform Programme

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.

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.

Operational Programme I in detail

This Operational Programme has the overall objective of investing in competitiveness for a better quality of life. This objective aims to develop and generate economic growth based on competitive economic activities underpinned by adequate physical infrastructure leading to a better quality of life for the citizens of the country. This general objective will be achieved through the attainment of a number of objectives, clustered in two main Specific Objectives of *Investing in the country's physical infrastructure* and *Supporting and promoting value added economic activities*.

Achieving competitiveness for a better quality of life necessitates first and foremost continuous investment in the country's physical infrastructure *inter alia*, in the areas of enterprise support, tourism (including heritage promotion), in education and training, RTDi, E-society, transport networks, services of general economic interest and environment sustainability and management). Economic competitiveness needs high quality physical and enterprise support infrastructure. A better quality of life for the Maltese citizens necessitates adequate investment in infrastructure in the specific fields of the environment, transportation and services of general economic interest. In addition, competitiveness is underpinned by the support and promotion of value added economic activities in both the traditional pillars of the Maltese economy and in the new emerging sectors.

The dual objectives of *Investing in the country's physical infrastructure* and *Supporting and promoting value added economic activities* represent the underpinnings of the NSRF strategic objectives for the 2007-2013 period. Figure 3.1 highlights the relationship between the Strategic objectives of the NSRF and OPI objectives. The (NSRF) strategic objectives of sustaining a growing and knowledge-based, competitive economy; the improvement of the quality of life; the investment in human capital; and addressing Gozo's regional distinctiveness are envisaged to be achieved through the promotion of value added economic activities and investment in infrastructure. Of direct relevance to OPI are the Strategic Objective 1 and 2;

i.e. the knowledge-based economy underpinnings and the investment in infrastructure for a better quality of life. Strategic Objective 4 of the NSRF will be addressed in both OPI and OPII by targeting specific measures for the development of the island of Gozo.

Figure 3.1 NATIONAL STRATEGIC REFERENCE FRAMEWORK AND OPERATIONAL PROGRAMME I

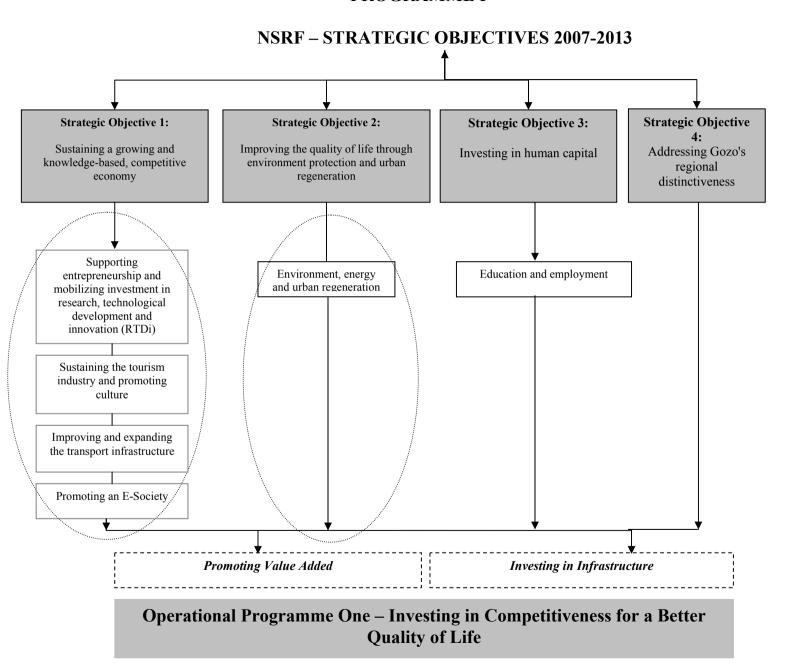
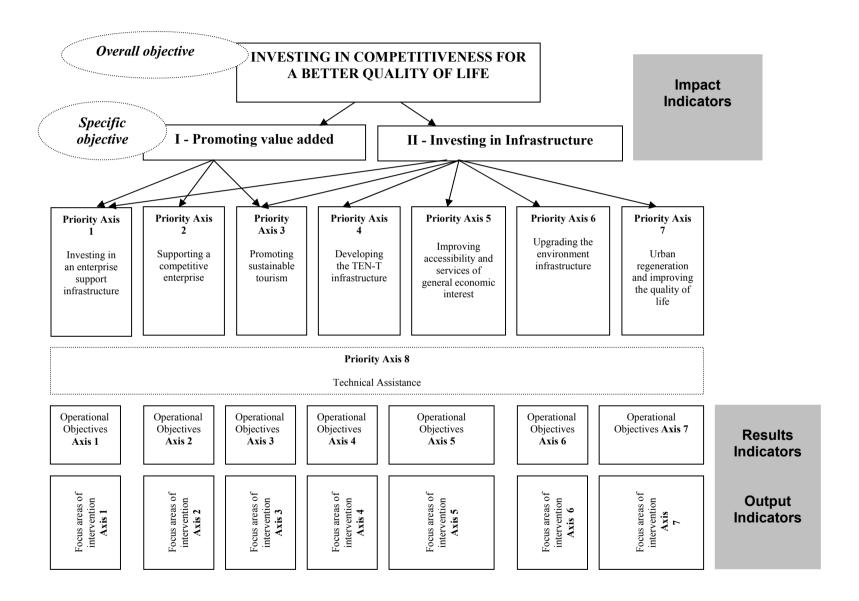


Figure 3.2 OPERATIONAL PROGRAMME 1



These two Specific objectives of Operational Programme 1 are underpinned by a number of Priority Axes. Eight Priority Axes are identified to this end which seek to address a number of important areas pertaining to the promotion of value added economic activities and investment in infrastructure. The Priority Axes are the following:

Priority Axis 1 - Investing in an enterprise-support infrastructure;

Priority Axis 2 - Supporting a competitive enterprise;

Priority Axis 3 - Promoting sustainable tourism;

Priority Axis 4 - Developing the TEN-T infrastructure;

Priority Axis 5 - Improving accessibility and services of general economic;

Priority Axis 6 - Upgrading environment infrastructure;

Priority Axis 7 - Urban regeneration and improving the quality of life;

Priority Axis 8 - Technical assistance

The eight Priority Axes are earmarked to provide an enabling socio-economic environment conducive to the promotion of competitiveness which in turn provides for the achievement of a better quality of life for citizens. Investment in physical infrastructure and the promotion of value added activities will be undertaken towards this end. The technical assistance Priority Axis aims at facilitating the implementation of this Operational Programme.

As illustrated in Figure 3.2, each Priority Axis has a number of Operational Objectives and is underpinned by a number of focus areas of intervention. The specific Objective of Promoting Value Added is directly supported by Priority Axis 1 - Supporting a competitive enterprise, Priority Axis 2 - Investing in an enterprise support infrastructure and Priority Axis 3 - Promoting sustainable tourism. Needless to say, Promoting Value Added is indirectly supported by the rest of the Priority Axes. On the other hand, the Specific Objective for Investing in Infrastructure is directly interlinked with Priority Axis 2 - Investing in an enterprise support infrastructure, with Priority Axis 3 - Promoting sustainable tourism, Priority Axis 4 - Developing the TEN-T infrastructure, with Priority Axis 5 - Improving accessibility and services of general economic; with Priority Axis 6 - Upgrading environment infrastructure and with Priority Axis 7 - Urban regeneration and improving the quality of life. 46

More specifically, the linkage between the OPI - Axes 1 to 7 and the NSRF Strategic Objectives is shown in Table 3.1. The table takes a disaggregated analysis of the components of the NSRF Strategic Objectives and of OP Priority Axes. In particular, the strategic objective of addressing deficiencies in the enabling environment related to the promotion of local and foreign investment (A) is linked to all OPI Priority Axes (1-7) and highlights the importance of the objective. Similar important links emerge from the objective to increase economic activity in Gozo by focusing on the sister island's strengths and supporting competitive edge (G) linked as it is with Priority Axes 1-7. Less extensive, but equally important level of interdependence between the NSRF strategic objectives and OPI Priority Axes results from the interaction of the Strategic Objectives (D) and (G), dealing with country's effort to improve the competitiveness of the tourism sector and with improving the quality of life, respectively with the majority of the OP Priority Axes. First and foremost, the linkages highlight the importance of the strategic complementarity between the NSRF and the OPI Priority Axis as well as the cohesive and integrative manner in which strategic objectives will be pursued over the 2007-2013 period.

⁴⁶ It is to be noted that in line with Article..... of the draft General Regulation⁴⁶, the sectors of environment and transport each feature in two Priority Axes due to the separation that has to be kept given that two of the Axes concerned (Priority Axes IV and VI) are being proposed for funding under the Cohesion Fund. All other Priority Axes will be co-funded by the European Regional Development Fund (ERDF).

Table 3.1: Operational Programme I and the National Strategic Reference Framework

Table 3.1	. •	perational Progra	e i ali						JOIN I
	Operational Programme – Priority Axes						y Axes		
			1	2	3	4	5	6	7
NSRF Strategic Objectives			Investing in an enterprise support infrastructure	Supporting a competitive enterprise	Promoting sustainable tourism	Developing the TEN-T infrastructure	Improving accessibility and services of general economic interest	Upgrading the environment infrastructure	Urban regeneration and improving the quality of life
	Α	Addressing deficiencies in the enabling environment related to the promotion of indigenous investment and attraction of foreign direct investment	~	✓	✓	✓	*	~	*
Strategic Objective 1: Sustaining a growing and knowledge-based,	В	Supporting the competitiveness of existing enterprises through the promotion of research technological development and innovation in order to facilitate the upgrading and development of Malta's economic segments	*	4			*		
competitive economy	С	Promoting E-society in the Maltese islands, so as to partly address the problems of insularity and double insularity	✓	✓			✓		✓
	D	Improving the country's international competitiveness in the tourism sector by developing and supporting niche markets and improving infrastructure, particularly that related to transport and environment	~	4	*	√	~	*	*
Strategic Objective 2: Improving the quality of life through environment protection and urban regeneration	Е	Upgrading the quality of life of residents in Malta and Gozo, by addressing existing deficiencies in Malta's physical infrastructure, particularly those related to transport networks, services of general economic interest and education and training	✓		√	4	~	✓	\
Strategic Objective 2: Improving the quality of life through environment protection and urban regeneration; Strategic Objective 3: Investing in Human Capital	F	Improving the quality of life of residents in Malta and Gozo by focusing on the environmental sustainability of economic development, safeguarding environmental assets, upgrading the environmental infrastructure and addressing risk prevention		*	*	*	~	1	~
Strategic Objective 4: Addressing Gozo's regional distinctiveness	G	Increasing economic activity in Gozo by focusing on Gozo's strengths and supporting Gozo's competitive edge	~	*	~	✓	✓	✓	√

Table 3.2: Operational Programme I and the Community Strategic Guidelines

Community Strategic Guidelines			OPI – Priority Axes							
			1	2	3	4	5	6	7	
1	Making Europe and its regions more attractive places to invest and work		Investing in enterprise support infrastructure	Supporting a competitive enterprise	Promoting sustainable tourism	Developing the TEN-T infrastructure	Improving accessibility and services of general economic interest	Upgrading environment infrastructure	Urban regeneration and improving the quality of life	
	1.1	Expand and improve transport infrastructure				~	✓			
	1.2	Improve the environmental contribution to growth and jobs	✓	1	1			1	√	
	1.3	Address Europe's intensive use of traditional energy sources	✓	1	~		*	*		
2	Improving knowledge and innovation for growth									
	2.1	Increase and improve investment in RTD	✓	✓			✓			
	2.2	Facilitate innovation and promote entrepreneurship	✓	✓						
	2.3	Promote the information society for all	✓				✓		*	
	2.4	Improve access to finance	✓							
3	More and better jobs									
	3.1	Attract and retain more people in employment and modernise social protection systems	✓	*	√	~	*	*	4	
	3.2	Improve adaptability of workers and enterprises and the flexibility of the labour market	✓	1	1				✓	
	3.3	Increase investment in human capital through better education and skills	✓	~					4	

Table 3.3: Operational Programme I and the National Reform Programme

OPI – Priority Axes				National Reform Programme						
		Promoting Value Added	Investing in Infrastructure	Sustainability of public finances	Competitiveness	Employment	Education and training	Environment		
1	Investing in an enterprise support infrastructure	✓	✓		√	✓	✓	✓		
2	Supporting a competitive enterprise	✓			√	√	√	✓		
3	Promoting sustainable tourism	✓	✓		✓	✓		✓		
4	Developing the TEN-T infrastructure		✓		√	✓				
5	Improving accessibility and services of general economic interest		✓	√	✓	√		✓		
6	Upgrading environment infrastructure		✓	√	√	√		✓		
7	Urban regeneration and improving the quality of life		✓	✓		✓	✓	✓		

After going through the main components shaping the programming period 2007-2013, and describing the interrelationship between OPI and the NSRF strategic objectives, the next step is to present the linkages between OPI and the Community Strategic Guidelines (CSGs) and the NRP.

The interrelationship between the Community Strategic Guidelines and the Operational Programme Priority Axes is highlighted in Table 3.2. From the OP point of view, the interventions falling within Priority Axes 1 to 7 at the Operational Programme level, will shape Malta's answer and position within the wider context of the Community Strategic Guidelines. More specifically, Priority Axes 1, 2 and 5, dealing with investing in an enterprise support infrastructure, supporting a competitive enterprise and improving the accessibility and service of general economic interest are the Priority Axis with the most extensive links with the CSGs. This highlights the important role attached to the attainment of these Priorities under OPI in the achievement of Malta's Vision in line with the CSGs.

The interrelationship between the National Reform Programme objectives and the Operational Programme Priority Axes is highlighted in Table 3.3. From the OP point of view, the interventions falling within Priority Axes 1 to 7 at the Operational Programme level, will shape Malta's strategy for more growth and job creation as envisaged under the Lisbon strategy. In this regard, employment, environment and competitiveness represent the most important objectives of Malta's NRP which will be addressed through OPI. The NRP objectives highlight Malta's Lisbon Agenda for growth and jobs will in part be met by the attainment of the objectives at the Operational Programme level. This is so because interventions earmarked to promote and support value added economic activities as well as the investment in physical infrastructure and other support infrastructure are seen as constituting an integral role in the attainment of the NRP objectives, primarily those related to competitiveness, environment, education and employment.

Chapter IV - Priority Axes

Each Priority Axis consists of a background overview, the overall and specific objectives pertaining to the Axis and a number of focus areas. The focus areas are not comprehensive of all the interventions that will be supported in the OP. They merely present an indicative list of the main areas of intervention.

Priority axis 1 – Investing in an enterprise support infrastructure

Background

This Priority Axis complements Priority Axis II in that it aims to provide the necessary *public infrastructure* support required for Malta's competitiveness challenges over the coming years. This Axis is concerned with contributing to the strengthening of the enabling business environment in which enterprise flourishes and becomes more competitive. It provides the infrastructural and supporting framework for RTDi; supports the strengthening of high-value enterprises and invests in physical enterprise related infrastructure—including industrial parks and upgrading and expansion of educational and training infrastructure to cater for the increasing and diversified needs in this sector.

Objectives

The overall development objective of Priority Axis 1 is to undertake investment in enterprise support infrastructure that would complement the promotion of RTDi initiatives and strengthen high-value added economic activity through dedicated industrial facilities and educational infrastructure.

The specific objectives of this Priority Axis are:

- to increase public RTDi investment in targeted sectors of national priority;
- to provide the basic infrastructure needed to retain and attract high-value added investment, such as those related to industrial facilities and the development of human capital.

Focus Areas of Intervention

Investment in RTDi

Malta's future as a knowledge- based and innovation driven economy depends on a number of *smart knowledge investments*. From a competitiveness viewpoint, Malta's strategic direction focuses on increasing the value-added component by Maltese enterprises. This requires a shift to economic activity

where knowledge assumes a more important dimension. Malta has historically supported a manufacturing sector where the principal focus was on production rather than on development. Within the context of the higher value added strategic objective, the development of RTDi is a goal that Malta will actively seek to address. Malta's objective in promoting RTDi is to develop a focused sector. The country's realities do not support the development of a broad-based research sector. In this respect, studies are currently underway to identify business-oriented RTDi areas in which Malta can be competitive and where the limited resources can be directed to have an impact.

Government believes that public sector investment in RTDi must add value to the economy and society in terms of tangible innovative products, processes and services. Capacity must, thus, be directed towards establishing an enabling framework that will allow value-added RTDI to flourish. In this context, applied and basic research investments and activity must come together. Government, through MCST, will seek to ensure that the required mechanisms are in place so as to ensure convergence and, above all, coherence between diverse initiatives. Government believes in exploring the emerging potential for public-private partnerships in applied research which give Malta an edge in the Euro-Mediterranean region.

The initiatives foreseen under 'potentially viable' include, *inter alia*, investment in public research infrastructure which would focus on specific sectors to be identified in the national RTDi strategy⁴⁷; the establishment of links between business and University which would provide for an intellectual property framework and to manage technology transfer facilities as well as develop showcases for the exportation of applied research to the Euro-Mediterranean region. In this regard the use of Gozo as a test-bed for applied research (particularly in sectors such as renewable energy) and subsequently as an international show-case for the micro social and economic society is being considered.

Strengthening high-value enterprises

Malta's investment promotion strategy aims at creating new investment development opportunities, the consolidation of local investment opportunities as well as the promotion of FDI. The local development strategic thrust is concerned with sustaining and developing further existing enterprise. The sectors to be targeted all present high potential and include ICT, health care (including pharmaceuticals), logistics (maritime and aviation operations), and tourism operations. The shift to economic activity where knowledge assumes a more important dimension is not restricted to RTDi. Various economic sectors, such as the services sector, have developed well over recent years and have established themselves as competitive players in the international market. These sectors already contribute extensively to the Maltese economy and the intention is to support such enterprises in their efforts to strengthen and widen their business activity, and to attract further investment to create growth and jobs. The strong position of such sectors will allow them to grow further and widen their service offering by venturing into new markets and/or introducing new products and services. In this context, attention will be given to the international branding of Malta's key economic sectors.

Enterprise infrastructure

A key factor in attracting foreign direct investment (FDI) is the availability of a physical enterprise infrastructure. The current supply of factory space may not necessarily meet the requirements of high value-added industries. Investment in both general purpose and dedicated factory space will be required to enhance the country's attractiveness for investment. Given Malta's limited space, its high degree of urbanisation and also its extreme population density, there is the need to look at more flexible modular

⁴⁷ A national RTDi strategy is currently being prepared by MCST.

solutions. Modern industrial infrastructure is progressively becoming more active, evolving from the maintenance of the industrial park common areas, to child care facilities to further shared business support. For example, the sharing of facilities is predominant with the ICT companies that have experienced cluster type of activities and wish to develop these further.

The interventions foreseen under this priority will include upgrading of general industrial space with modern amenities such as childcare, environmental and energy efficiency facilities; industrial space suitable for pharmaceutical, medical type of FDI; business parks for targeted service industries such as ICT, Software, Back Office, Shared Services &Call Centres; technology and commercial centres; and the expansion of the business incubation centre (BIC). The interventions will also include the upgrading of public amenities for the crafts centres.

Education and Social Infrastructure

The strategic stance underlying Malta's economic vision of increased competitiveness necessitates a supply of knowledge workers. The objective of increasing the relative share of high value added activity in economic output will transform the proportions of labour demand and increase the relative importance of more workers with a broader range of tertiary, upper secondary, and secondary educational or vocational qualifications.

For this to occur, the educational infrastructure needs to expand its capacity and improve its quality. In order to achieve this, investments will be directed towards the expansion and upgrading of the educational infrastructure, improvement of administrative systems, upgrades and expansion in vocational training institutes (including those housed within the national and regional employment services) and the University. Increase in capacity and quality do not only imply additional educational facilities but also investment in equipment, information systems and other resources. Efforts will be made to implement measures aimed at facilitating the shift to a high-value added economy with investments in social infrastructure which would contribute to a more inclusive workforce.

Fund

This Priority Axis will be co-financed by the European Regional Development Fund (ERDF).

Priority axis 2 – Supporting a competitive enterprise

Background

Malta's economy is facing a number of important challenges emerging from the economic reform and liberalisation process, increasing competitive pressures primarily in manufacturing and tourism and the entry into the Single European market. These challenges highlight the need to align Malta's overall competitive focus and direct investment to those economic activities which add most value, both in terms of economic and social value. This Priority Axis will be delivered through a number of grant schemes to the private sector to strengthen competitiveness of enterprises in a number of areas, such as RTDi, ICT utilization, the environment, occupational health and safety, marketing strategies and market development, product improvement and creations, quality assurance and knowledge transfer initiatives.

All the new measures being proposed under this Axis will be notified to the EC via the appropriate channels. The proposed measures will be designed to be compatible with the de minimis rule and/or the relevant State Aid block exemptions. The schemes will also be guided by the regional aid guidelines and the communication on risk capital. The support measures and initiatives will be for a pre-determined and fixed duration, tied to a specific budget line, biased in favour of innovation and the goals of the Lisbon Agenda, address the regional development of Malta, create an incentive effect without distorting competition and provide stimuli to SMEs with a growth potential. In addition, Malta is currently assessing the possibility of using the JEREMIE initiative under this Priority Axis.

The aid schemes under this Axis will be complemented with employment and training schemes for the private sector under OP II (ESF).

Objectives

The overall development objective of Priority Axis 2 is to support enterprise competitiveness and to promote the further development of those economic activities that can add most value both economically and socially.

The specific objectives of this Priority Axis are:

- to contribute to the enhancement of innovative capacities of enterprises;
- to spearhead collaboration between enterprises and support the creation of a knowledge- based economy;
- to contribute towards greater competitiveness of tourism enterprises through improvements in the tourism product and better marketing techniques and improved cost structures;
- to encourage the sustainable use of resources and strengthen the synergies between environment protection and growth and increase the level of compliance with environmental and occupational health and safety regulations in enterprises.

⁴⁸ All state aid schemes will be notified to the EC in line with relevant obligations.

Focus Areas of Intervention

Manufacturing and Service Industries

In essence, the initiatives for the manufacturing sector to be co-funded under this Priority Axis will be driven by the need to promote innovation in Malta. Grant schemes are earmarked to propel dynamic enterprises to undertake innovative activities, exploit SME growth potential as an end in itself as well as a means to attract knowledge-intensive manufacturing activity such as in the emerging sectors of pharmaceuticals and precision engineering. In this context, a main focus area will include initiatives to promote synergies between industry and RTDi actors departing from the traditional 'interventionist' policies but yet retaining a 'tailor-made' design to address the needs of Maltese industry and comply with the specific context of the economy. The principal overriding goal of grant schemes will be that to ensure that targeted enterprises undertake new initiatives leading to innovation in line with Lisbon Agenda goals for the creation of jobs and growth.

Considering the growth in the services sector and the developments expected in the future economic scenario, the delineation between manufacturing and service operations is becoming increasingly blurred. For example, evidence suggests that a number of manufacturing enterprises are looking to shift operations to services (becoming more knowledge based). SMEs operating in the ICT industry represent primary examples of this development transiting between manufacturing and services.

The grant schemes earmarked for manufacturing and services are not designed in isolation but will form part of a framework of activities that tie in directly with the measures that will be undertaken under Priority Axes I of this Operational Programme and also with a number of Priority Axes under Malta's Operational Programme II co-financed by the European Social Fund. ⁴⁹ The grant schemes for the manufacturing sector to be supported under the ERDF are currently being formulated by Malta Enterprise. They will include support on the enhancement of innovative capacity of enterprises and support for RTDi initiatives, incentives to encourage the further collaboration between enterprises, access to finance and support to improve regulatory compliance in a number of areas.

Tourism Enterprises

Increasing the competitiveness of tourism service providers, stimulating and directing investment by the private sector, improving their profitability and investing in human resources are the four main reasons for supporting tourism enterprises.

Maltese tourism enterprises operate in a highly competitive environment. Malta competes with destinations which, not only are better known and which invest heavily, but which enjoy economies of scale and/or lower cost structures particularly emanating from lower labour costs. Maltese tourism enterprises need support in order to be able to sell a more competitive tourism offer. Assistance to the private sector needs to be directed towards stimulating and directing investment aimed at improving the quality of the service being offered and leading to greater profitability through affordable reductions of operational costs.

A number of schemes will be developed to support the competitiveness of the tourism enterprises. These schemes, which will mainly support SMEs, though not exclusively, will aim at strengthening the sectors'

⁴⁹ Operational Programme II 'Investing in Human Capital'.

competitive advantage, promote entrepreneurship and innovation, facilitate the effective use of ICT and encourage environmental practices by strengthening the synergies between environmental protection and growth.

The schemes will have a two-fold approach towards the development of the tourism operators in Malta. They will provide assistance aimed at generating new and better employment potential and therefore directly affect the quality of life of the resident population. They will also aim at achieving a quality leap in terms of tourism product offer by means of securing the absorption of new technology, stimulating research development and technological applications in the industry, encouraging sustainable use of resources and strengthen the synergies between environmental protection and growth, and supporting operational and management processes and procedures leading to quality assured business practices, and overall competitiveness.

In order to be competitive tourism enterprises must improve their cost structures (e.g. via investments in environmental systems) 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 thinking and planning processes and in their investments. Currently, for example, 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.

Complementary to such assistance being provided to tourism service providers, enterprises operating in the culture and media fields need support to further develop the creative industry in Malta. Support to culture enterprises would be connected to development needs within the cultural sector in the different art forms to sustain their small enterprises and will be linked to the aim of increasing the skills of cultural operators to enhance their professional development. Often these enterprises are micro enterprises requiring some assistance to improve their culture product offer and to invest in human resources. Through the creative industry, Malta has the potential to create opportunities for young artists not only in terms of broadening and increasing access to high quality arts and cultural events but also in terms of job creation.

The schemes will be implemented under the relevant block exemption and the *de minimis* rule. The grant schemes earmarked for tourism are not designed in isolation but will form part of a framework of activities that tie in directly with the measures that will be undertaken under Priority Axes I and 3 of this Operational Programme and also with a number of Priority Axes under Malta's Operational Programme II co-financed by the European Social Fund. ⁵⁰

Other enterprises

Other enterprises in other economic sectors may benefit from horizontal aid schemes such as those related to ICT, environment and OHS. The cost of compliance with new standards impacts on the overall competitiveness of the individual enterprise and the economy in general, however, investment in sound infrastructure, practices and technologies will result in the creation of opportunities for economic growth and job creation and hence contribute also directly to the country's competitiveness. The need to assist enterprise in rising to the challenge of increased environmental regulation is recognised. It is foreseen that this Axis will support a shift towards environmentally compliant infrastructure and practices, and the certification of technically competent persons in relation to various environmental activities. Measures to promote environmental excellence and eco-innovation are also being considered.

Fund

This Priority Axis will be co-financed by the European Regional Development Fund (ERDF).

⁵⁰ Operational Programme II 'Empowering People for a Better Quality of Life'.

Priority Axis 3 – Promoting Sustainable Tourism

Background

Tourism contributes over 25.0 per cent to Malta's GDP.⁵¹ It also remains one of the major sources of employment in Malta (28.0 per cent) and a key foreign exchange earner. Tourism is considered to be one of the key sectors with strong potential growth and hence of utmost importance for Malta's development and competitiveness. Significant efforts need to be directed to the tourism sector in order to retain its competitiveness and to maximise the opportunities that lie in this sector. This Priority Axis will aim to provide the required integrated support so that this key industry may withstand the fierce competition and flourish. Apart from the direct investments in tourism specific initiatives, this priority foresees also investments in other areas such as culture and heritage and environmental protection are deemed to be crucial to improved competitiveness of Malta's tourism industry.⁵² In this context, public investment will be complemented with initiatives from non-profit organisations. This Axis is complementary to the investment in the private sector co-funded under Priority Axis 2 of this OP and the human capital interventions under OP II (ESF).

Objectives

The overall development objective of Priority Axis 3 is to promote a sustainable and competitive tourism industry able to achieve its potential for growth and re-affirm its central role in Malta's economic activity.

The specific objectives of this Priority Axis are:

- to further the promotion of key tourism niche segments, primarily those related to culture and heritage;
- to invest in the related physical infrastructure central to the tourism product development;
- to contribute to the ongoing branding exercise of Malta as a prime and diverse tourist destination;
- to promote further environment protection and awareness.

⁵¹ Date refers to 2003.

^{52 &}quot;A Better Quality of Life" - 2006-2010 Pre-Budget Document, Malta, July 2005.

Areas of Intervention

Niche market developments

Malta has identified seven key tourism segments which offer potential for Malta's tourism activity. Investment during the 2007-2013 period will meet the objectives to target diverse segments such as leisure and tour operator business; cultural tourism; meetings, incentives, conferences and exhibitions (MICE); language learning segment; sports and in particular diving tourism; Gozo-based tourism; and other growth niche markets (including health tourism, film production, cruise and stay, short breaks and vacation ownership). Research indicates that history and culture are primary motivators for tourists choosing Malta as their tourism destination, over and above weather and recreational considerations. Investment in the development of niche markets will also stimulate the promotion of Malta as a venue within regional and sub-regional based travel programmes. This is particularly relevant in attracting visitors from long-haul destinations. This segment has a very rich product base which, however, requires improved interpretation and investment in facilities.

Product development

Ultimately, Malta's tourism sector can only be competitive if the country dispels destination fatigue and remains vibrant. Competitive product development depends on investment in tourism zones and embellishment work aimed at upgrading the physical environment in concomitance with the high standard hotel and tourist facilities. Further investment is required in the development of new or improved tourism amenities such as beaches, the upgrading of gardens, improvements of the identified tourism zones and the upgrading of a number of heritage sites. Other measures will include initiatives to safeguard a cleaner environment, presentation of Malta's contemporary artistic activity and the organisation of regular events that promote Malta as a worthwhile experience rather than just another destination. The participation of NGOs and relevant partners and local councils will be further promoted to improve Malta's tourism product offer.

Branding

During recent years, there has been a rapid shift from the approach which was traditionally based on promoting a product or service differently within diverse geographical boundaries to one which is more globalised in nature. In addition, the market has also witnessed the emergence of strong destination brands traditionally reserved for tangible products rather than destinations. The recognition of these factors has led to the logical step of branding Malta which should also increase Malta's visibility overseas. The internationalization of media, the globalization of tourism operators, the liberalization of airlines and airline routes and the stiff competition from a number of successfully branded destinations, all point towards the importance of branding. Malta is currently faced with a structural problem that requires it to invest in branding the country's tourism product and direct efforts to successfully project itself in the international market place.

The importance of branding stems from the fact that it makes it possible for the destination to own a place in the perception of the target segments and thereby securing purchases and re-purchases over time. This exercise potentially secures long-term income streams which translate in measurable sustainable financial benefits over time and lead to economic growth and job creation. The country needs to move away from the traditional image of Malta as solely an island providing a "sun, sand and sea" destination. Elements of Malta's attractiveness should be regarded as additional bonus factors since it needs to be appreciated that

Malta is also a bustling, sophisticated metropolis with numerous possibilities for recreation and an unparalleled historical heritage. Malta will be branded on the basis of the three core values of heritage, diversity and hospitality. The branding exercise will be complemented by further investments in these areas.

Environment Protection and Awareness

Malta is a country where land resources are very limited and pressures for development are very high due to the increasing population density. The extent of vegetation cover and natural habitats in the Maltese Islands has been drastically reduced over the years. There is an increasing recognition of the need to conserve and protect the environment not only as an end in itself but also due to the strong linkages between environment and competitiveness, particularly sustainable tourism. The propagation of native woodland, other habitats and related fauna offer the possibility of sustaining particular niches of the tourism industry as well as offer recreational and educational facilities to the public. This Axis will be complementary to interventions undertaken under Priority Axes V, VI and VII of this OP, the relevant Axes in OPII (ESF) and also with initiatives implemented under the EAFRD (particularly with respect to actions related to the management of NATURA 2000 sites)

The participation of NGOs in the environment protection projects is desirable.

Fund

This Priority Axis will be co-financed by the European Regional Development Fund (ERDF).

Priority Axis 4 – Developing the TEN-T infrastructure

Background

As an island on the southernmost periphery of the European Union, Malta is highly dependent upon timely and regular connections for both goods and passengers to European ports and airports and an efficient distribution on the national network. Irrespective of its territorial constraints, Malta's resolve is to make the best from the development of international gateways and national transport systems.

Objectives

The overall development objective of Priority Axis 4 is to invest in the upgrading of transport links within the context of the TEN-T network.

The specific objectives of this Priority Axis are:

- to upgrade the road infrastructure that is part of the TEN-T network
- to invest in sea and air ports in a bid to meet European transport network requirements and Malta's economic development requirements;

Focus Areas of Intervention

Road Transport Links

Thirteen projects have been identified for the TEN-T network in Malta and Gozo with a total project cost of Euro 315 million. There are 51 kilometres of TEN-T road network in Malta and Gozo. The funds allocated under Cohesion Policy 2004-2006 budget amount to Euro 21 million and cover only 15.0 per cent (8 kilometres) of the TEN-T network that requires upgrading.

While considerable improvements of the network have already been undertaken using 2004-2006 ERDF, the Cohesion Fund and also national funds, this priority will see the continuing improvement of the backbone road with particular priority being given to alleviating bottlenecks in key areas, improving safety, reduce operation and transport costs. The investments under this priority axis will be complemented with further investments in the road network using the ERDF and also national funds in order to ensure that the upgrading of the road network will address the whole network, that is arterial, distributor and residential roads so that within a period of sustained investment, the whole network will be brought to the required standards.

Maritime Transport Links

The geographic discontinuity and the difficulties arising from Malta's insularity cannot be highlighted enough. The fact that socio-economic activity depends primarily upon maritime freight and increasingly the importance of passenger transport by sea highlights the critical importance of investments in Malta's seaport infrastructure and in adequate connectivity to the European Motorways of the Sea. During the period 2007-2013, investment is to be channelled into the upgrading and further development of sea port infrastructure in a bid to enhance merchandise trade capacity and stimulate additional economic competitiveness.

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. In the context of the TINA study (2002), fifteen improvement projects have been identified, of which nine refer to the Valletta Port, four refer to Marsaxlokk while one project refers to Cirkewwa and Mgarr Ferry Link. The initiatives under this Priority Axis will include the upgrading of port infrastructure such as breakwaters and quays in the Valletta and Marsaxlokk harbours and the further development of the Mgarr harbour to cater for improved accessibility to reduce the island's insularity and further economic activity.⁵³

Inter-island transport will be catered for under Priority Axis 5 and co-funded by the ERDF.

Air Transport Links

Besides the tourism objective, air connectivity is vital for many other high-value business activities. The TINA (2002) study has identified that the airport infrastructure requires upgrading in terms of the resurfacing of the main aircraft parking area, the runway pavement and the construction of a new taxiway. It is expected that with a new taxiway the airport capacity at peak times will be doubled. Since 2004, significant investment has been carried out in the airport infrastructure to cater for Malta's future access to Schengen⁵⁴. However, there are still considerable challenges to be addressed, to enable an expansion of operational capacity, the upgrading of the current aerodrome infrastructure and investment in air traffic control facilities in line with the airport's operational developments.

Fund

This Priority Axis will be co-financed by the Cohesion Fund.

⁵³ A number of technical studies co-financed under the Pre-accession programme 2003 are currently underway. The aim is to prepare a project pipe-line, inclusive of feasibility studies for the maritime transport sector. These studies are expected to be concluded by October 2006.

⁵⁴ The Schengen project has been proposed for considerable support under the Norwegian Financial Mechanism.

Priority Axis 5 – Improving accessibility and services of general economic interest

Background and Targets

Malta is an archipelago cut off from mainland Europe. Malta's external accessibility measures, most of which will be addressed through Priority Axis 4, need to be complemented with an efficient internal transport infrastructure and also with further intensification of efforts in the area of accessibility and electronic communications. In this context, both the external and the internal accessibility need to be further developed in line with changing demands. This Priority Axis aims to improve and strengthen Malta's competitiveness by supporting infrastructural provisions in the areas of transport (including interisland facilities), investment in e-accessibility and in services of general economic interest such as energy and water.

Objectives

The overall development objective of Priority Axis 5 is to improve accessibility and those services of general economic interest.

The specific objectives of this Priority Axis are:

- to invest in internal mobility and inter-island transport modes and supporting infrastructure;
- sustain the e-Inclusion initiatives across society and economy in a bid to narrow the digital divide, ensuring that all Maltese citizens are active participants in the knowledge society and leverage on the best use of ICTs across the public and private sector.;
- to upgrade Malta's services of general economic interest notably in those related to traditional and non-traditional energy sources, water and liquid waste.

Focus Areas of Intervention

Internal Mobility

Malta's small land mass, coupled with its high population density, means that the islands are heavily urbanised. One of the primary immediate priorities is to upgrade the physical condition of the road network. Although the upgrading of the TEN-T backbone, the airport and the main seaports is crucial to Malta's physical international connectivity, these transport nodal points have to be complemented by a comprehensive and effective road infrastructure network in the form of arterial, distributor and residential roads that connects these nodal points with the hinterland. A case in point is the Mgarr port which is exclusively linked to the Gozo hinterland through a single road. This case induces a significant strategic infrastructural dependency.

The TINA study in 2002 established that out of 96 kilometres of road representing TINA roads, 51 kilometres represented TEN-T roads and 45 kilometres consisted of access roads. In addition, there are 2,227 kilometre of arterial and local access roads. Government has already embarked on an extensive road upgrading programme which needs to continue with substantial investments in order to upgrade the entire network to a level which complies with the European transport network requirements. One of Government's primary immediate priority is to upgrade the physical condition of the overall road network, including the roads outside the TEN-T network (the latter will be targeted under Priority Axis 4). The interim objectives are to rebuild the majority of arterial, distributor and link roads to improve the quality of these roads as well as extending their life span, to upgrade existing tunnels, inspect and perform upgrades on existing bridges, and to introduce a maintenance scheme for projects being undertaken.

Internal transport networks are characterised by high levels of private motorised travel, lack of modal choice and low utilisation of the available public transport. In the coming years the upgrading of the road network will be complemented with reforms and investments in public transport so that the latter can become truly modern, attractive and sustainable. Measures include the further implementation of "park and ride" systems to reduce traffic congestion in city centres and the introduction of traffic management systems to encourage increase use of public transport. Other actions aimed at the improvement of safety on existing internal mobility infrastructure. In addition, Government is in the process of conducting studies into the feasibility of alternative mass transit systems that will support the projected modal shift. The aim is to provide sustainable and efficient public transport alternatives, which will reduce private car use and safeguard the environment.

Inter-island Transport

A critical strategic focal issue with regard to internal accessibility relates to the specific accessibility needs of the island of Gozo. Gozo suffers from double insularity, and is adversely affected in a number of areas due to its peripherality within the Maltese islands. Gozo's accessibility is completely dependent on Maltabased channels, currently comprising a ferry service to the port of Mgarr and a helicopter service between Malta International Airport and Gozo heliport.

The primary modal form of accessibility remains the ferry service between Mgarr and Cirkewwa. This accounts for all vehicular access to the island, for all freight transportation to address Gozo's requirements, and for the significantly greater part of all residents' and tourist traffic between the islands. During recent years, investment has been directed at upgrading the heliport facilities in Xewkija and the port infrastructure and facilities particularly in Mgarr, Gozo. However, more investment is required to improve the quality and efficiency of the inter-island connections and ensure adequate port capacity.

E-Accessibility

Improved access to electronic services and the proliferation of ICT among the different segments of the population are the main goals and enablers for a more efficient business development, increased economic activity and a more efficient public service administrative capacity. Firmly in this context, the aim is to increase the access to technology across a broader base of Maltese society. There is a resolve to use ICT as an effective management tool within the public sector aimed at the delivery of first class, accessible and secure government services. In this regard Government plans to embark on a number of initiatives. These will include an ICT Consolidation Programme, an e-health strategy, a National GIS strategy, an eGovernment Contact Centre, an eID and eWork management framework, and the promotion of further utilisation of ICT.

The ICT Consolidation programme includes the setting up of an Active-Active data centre for the central provision of ICT services to Public Sector and Public Service. The eHealth strategy aims at providing a setup giving citizens access to health services from their home on a 24x7 basis. The GIS strategy aims at consolidating the provision of services to increase efficiency of services delivered, to migrate to a common platform and to increase a wider dissemination of GIS related services within the Public Sector and Public Service. The eGovernment Contact Centre aims at providing citizens and businesses with a unified way of accessing eGovernment services via multiple communication channels, bridging all varying public demands for services, all media used to interact with the public sector and all segments of the public sector engaged in providing the services. Integration will allow for the provision of various public services to an individual proving his or her identity using new Electronic Identity Cards that would 'smarten' existing national ID Cards. A homogenous infrastructure would also allow private operators to provide services over the eID Card kick-starting the concept of eWallets and eTicketing for transport, loyalty schemes and other services requiring proof of identity. The eWork framework aims to provide guidelines and required setup to Government for the provision to teleworking facilities to public employees. Within this context, introducing eWork would tie with Malta's policy of promoting equal opportunities by making it possible for those segments of the population to enter the workforce or remain in employment.

With respect to e-learning, Government has made considerable investment in accessibility to ICT in state schools as well as in the familiarisation with science and technology based studies. Government intends to use Structural Funds to maintain the pace in E-accessibility with the focus put on providing the technology (e.g. with respect to distance learning as a means to reduce hardships for Gozo pupils, students and trainees) as well as the integration of ICT within the pedagogical content. Steps will also be taken to deploy a national e-learning platform.

The ERDF investment that will take place under this Priority Axis will be complemented with parallel investments to promote ICT use in enterprises under Priority Axis 1 of this Operational Programme and also with investment in ICT training under the different Priority Axes under the ESF Operational Programme.

Services of general economic interest

The provision of a secure, reliable and competitively priced supply of electricity of high quality is a service of general economic interest to all stakeholders in Malta. Increasing and improving the island's electricity generating capacity, distribution system and fuel storage facilities play a major contribution in supporting economic growth. However, this growth has resulted in a situation where the consequent demand places great strain on the current electrical system. Furthermore, electricity generation is currently mainly dependent on non-renewable (fossil) energy sources, and has been adversely affected by international oil prices. Therefore, security and quality of supply, competitiveness in energy pricing, compliance with EU regulations, demand management and efficiency improvement measures in generation, distribution and end-use will be key objectives for the period between 2007 and 2013 period. The achievement of such objectives requires the replacement of ageing plant with new, more efficient plant employing best available techniques to reduce emission of pollutants; rendering, where cost-effective, existing generation plant/s at both power stations compliant with current and proposed EU environmental legislation; pursuing interconnectivity with the European energy networks for gas supply and/or as a cost-effective alternative to the local generation of electricity; and the upgrading and further development of the distribution network⁵⁵.

⁵⁵ It is clear that not all these interventions will be funded under this Operational Porogramme. Prioritisation will follow upon the finalisation of the energy strategy.

Furthermore, the importance of alternative energy sources and energy efficiency is evident, both from a security of supply and an environmental point of view. The potential utilization of wind energy and photovoltaics is currently being studied. In the meantime, policies and legislation need to be developed to remove existing barriers (cost) to the eventual take up of renewable energy source generation and energy efficiency measures by households, architects and building developers, and energy services providers. Although incentives for industry will be granted under Priority Axis 1, Priority 5 will propose to seek to improve upon the schemes introduced in the national budget for private households and also consider the installation of renewable energy sources and energy efficiency measures in public buildings and in the planning process. Furthermore, electricity generation from waste is currently being studied and piloted and the possibility of a waste-to-energy treatment plant is being contemplated.

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 focus on desalination, to improve sea-water desalination efficiency, to further reduce water leakages from the distribution network and improve drinking water quality to come in line with the relevant EU Directives, whilst seeking and making use of other alternative sources of water such as storm water and/or treated sewage effluent.. Further attention will be given to improving the quality of groundwater extraction and its regulatory framework. Investments have taken place under the 2004-2006 Structural Fund Programme, however there is still room for further improvements.

Liquid Waste

Currently most of Malta's sewage is discharged untreated into the sea. This matter is expected to be addressed in part by the end of 2007, through the construction of two waste water treatment plants, one for Gozo and one for the North of Malta. The waste water infrastructure will require additional investment during the 2007 – 2013 planning period so as to complete the interventions foreseen in the Sewage Master Plan in the south of Malta and address critical importance to the quality of coastal waters, the tourism industry and the quality of life of residents. The management of waste effluent within the parameters mandated by environmental principles remains a national commitment. In this regard, initiatives to commence addressing the waste water issue are currently underway whereas the possibility of utilising waste effluent for rural, woodland or agricultural purposes is currently being assessed as a basis for the establishment of a strategic vision in this area.

Fund

This Priority Axis will be co-financed by the European Regional Development Fund (ERDF).

Priority axis 6 – Upgrading environment infrastructure

Background

As a small, densely populated and highly urbanised island economy, Malta faces wide-ranging environmental challenges including the management of its waste streams, air pollution and storm water. Apart from the deadlines concerning compliance with EU directives, the issue of environment infrastructure has a heavy bearing on Malta's competitiveness, particularly in the tourism sector, as well as on the quality of life of its citizens. Government has, in recent years, used a variety of instruments including the national budget, EU Pre-Accession Assistance, Transition Facility, Structural Funds and Cohesion Fund 2004-2006 in order to upgrade the country's overall environment. However, although various initiatives have already been undertaken more work needs to be done to achieve sustainability in the environment sector and compliance with EU Directives.

Objectives

The overall development objective of Priority Axis 6 is to continue with the upgrading process of the country's environment infrastructure, ore particularly to manage solid and liquid waste and storm water.

The specific objectives of this Priority Axis are:

- to minimise landfilling of waste and to rehabilitate disused landfills, as well as increase the capacity for waste treatment for energy recovery and recycling purposes and;
- to develop infrastructure to minimise the effects of storm water and reduce the incidence of flash flooding as well as develop storm water catchment and re-use facilities.

Focus Areas of Intervention

Solid Waste

As part of Malta's solid waste management 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 Sant' Antnin waste treatment plant and material recycling and recovery facility, the reduction of aerial emissions from the disused Maghtab, Qortin and Wied Fulija landfills, and the rehabilitation of disused quarries. Government has revised its waste management strategy which will provide the basis for the project pipeline under this Focus Area.

In the waste management sector, waste minimisation remains a critical strategic objective. The overall aim of a sustainable waste management strategy is to reduce the amount of waste and divert the remaining residues for recycling, the recovery of resources and the efficient utilisation of waste for energy production.

Malta's waste management resources are limited, highlighting the critical importance of reducing the overall waste volumes and the recovery and re-use of raw materials. This Priority Axis foresees the continuation of investment in infrastructure for sound waste management practices, including systems for hazardous waste and the rehabilitation of the old landfills. There is a need to minimise the effects of waste on the environment and society and to fully comply with EU Regulations. Malta's strategic vision also encompasses the possibility of exploiting waste as a potential energy source for electricity generation.

Storm Water Management

Investment in storm water management systems is a key priority for the country. 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, negative impact on economic activity 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, constitutes a major priority. At times, storm water presents an additional source of fresh water that currently is not utilised to its full potential. The installation of effective and efficient storm water catchment facilities will allow this source of fresh water to be utilised for a wide variety of purposes, reducing the strain on the current water infrastructure.

Fund

This Priority Axis will be co-financed by the Cohesion Fund.

Priority Axis 7 – Urban regeneration and improving the quality of life

Background

The urban fabric of the Maltese Islands plays an important role in the development of society and the economy. The importance of the urban fabric is increased since Malta is predominantly urban and densely populated and is characterised by a high degree of urban sprawl. Malta is also characterised by a high share of historical buildings, heritage sites and fortifications in its core urban centres. Regeneration projects are vital mechanisms which spur the main industries in the nerve centre of the Maltese Islands, the City and the Harbour region. Within the context of urban regeneration, local development will also be supported.

The quality of life of citizens is intertwined with the quality of the environment. Recent years have seen a dramatic increase in the extent of environmental regulation. The transposition of the environment *Acquis* and the institution building of the relevant organisations have been a priority in the run up years to accession. However, further efforts are required in this area. Health will continue to be an important focus of Government's attention. In this context, the goal will continue to be the enhancement of the quality of life of Maltese citizens by ensuring equity and access to excellent quality health services.

Objectives

The overall development objective of Priority Axis 7 is to safeguard and valorise the country's urban heritage, undertake urban regeneration initiatives for local development and promote a 'better quality of life'.

The specific objectives of this Priority Axis are:

- to upgrade the physical environment and visual appeal of urban cores (including restoration of fortifications);
- to encourage local development and village enhancement measures;
- to enhance environmental monitoring capability and awareness for environmental issues;
- to undertake initiatives to continue to improve the delivery of health services.

Focus Areas of Intervention

Urban Regeneration

The Government's strategy in the realm of regeneration has been directed at an integrated approach to address urban development, land transportation, conservation and social regeneration. A concerted effort to develop and integrate these factors to make the harbour and capital a successful economic and political hub is being implemented through transit-orientated projects. The harbour area and the capital Valletta are both

economic drivers and cultural catalysts which should find its culmination of Valletta as the European City of Culture. Age, traffic density, industrial development and misuse have, in a number of cases, resulted in urban deterioration. This Priority Axis will seek to upgrade the environment and visual appeal of urban cores; revitalise existing town centres; promote a positive centre/node image; protect, rehabilitate, regenerate and enhance local character; create a pedestrian-friendly environment and promote closer integration of development and land-use planning.

The adaptation of the Transit Orientated Development concept is sought to create a synergy between all the major capital projects and land transport issues, whilst revitalising urban and suburban neighbourhoods, communities and the economy of Maltese Islands. These include eco-friendly traffic, encouragement to change travel behaviour, cycling facilities, and the promotion of higher density, mixed use development around public transport and urban life-style amenities, amongst others.

Restoration and Rehabilitation of the Historic Fabric

Government's strategic objectives focus on the regeneration, restoration and rehabilitation of the urban centres. The historical fortifications are one of Malta's most valuable cultural resource assets. The Maltese islands contain one of the most extensive concentrations of bastioned works of fortifications and military architecture world-wide. These structures offer a unique and extensive wealth of architectural and historical attractions that do much to set the Maltese tourism product above other popular destinations in the Mediterranean. Many of these architectural assets are now in dire need of restoration. The situation is such that the deterioration of the ramparts cannot be neglected any further. In various cases there is also the added reason of addressing issues of public safety. Government intends to adopt a two-pronged approach to the fortification regeneration. The first concerns restoration and preservation. Second is the development of alternative uses of the fortifications which respect their character and which contribute to employment and growth, particularly in the tourism industry.

Local Development

Urban regeneration and improving the quality of life will be addressed through the strengthening the development of local communities, which are considered to be the backbone of the country's social infrastructure. Local Councils, having locally elected representatives, are best suited to identify the needs of the locality. In pursuance of the principle of subsidiarity, local authorities take decisions closer to the entities that will be affected by such decisions. The urgent and more pressing needs within the locality, can be readily identified by Local Councils. In addition, knowledge of the area as well as the labour market within the respective region, render local authorities in a better position to obtain best value for money. Given their role in local development, the non profit sector will be encouraged to participate in development initiatives. Local Councils planned initiatives at a local level include the development of playing fields, the setting up of community (including child-care) and cultural centres, and upgrading of promenades and squares.

Environmental Monitoring

Urban regeneration is also clearly linked to environmental issues, particularly the enforcement of legal compliance obligations. Crucial to the enforcement dimension is also the monitoring obligations. The main strategic thrusts in this regard over the programming period comprise the development of strategic plans, the setting up of monitoring and information and data compilation mechanisms, the carrying out of feasibility studies, coordinated environmental education through an established body as well as the

implementation of awareness and education campaigns, and the stimulation of research and development to stimulate more environment friendly processes and procedures by economic operators. These initiatives will focus particularly on environmental areas including industrial pollution control, environmentally friendly construction, air quality and climate change, water quality, biodiversity, and noise.

Health

Health will continue to be an important focus of Government's objectives. In this context, the goal will continue to be the enhancement of the quality of life of Maltese citizens by ensuring equity and access to excellent quality health services. A major investment has been made in the building of a new acute hospital. While Government will strive to safeguard the gains already attained in the health sector, it must, nevertheless, undertake initiatives to continue to improve the delivery of health services and ensure the sustainability of the sector.

Apart from investments emanating from Malta's e-health strategy (as outlined under Priority 5), investments will be required to reform primary health care, better integration of the local health centres and also upgrade smaller specialised hospitals. In this regard, for example, the Gozo General Hospital should be better integrated into the national health service by acting as a spill-over hospital where Maltese patients on a waiting list are provided with the option to receive care in a shorter time-frame.

Fund

This Priority Axis will be co-financed by the European Regional Development Fund (ERDF).

Priority axis 8 – Technical assistance

Background

The actions under this Priority Axis will support and accompany the programme implementation, in accordance with Articleof the Council Regulation laying down the general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund, and will fund preparatory, management, monitoring (including costs related to database), evaluation, information and publicity, control activities, and activities to reinforce the administrative capacity for implementing the Funds.

This priority axis will support the management and implementation of the programme through an effective application of the regulations, optimising the programme quality and efficiency of the interventions, and increasing the visibility and awareness on Structural Funds interventions through dissemination of relevant information and targeted publicity actions.

Objectives

The overall development objective of Priority Axis 8 is to reinforce the administrative capacity for implementing the 2007-2013 programme.

The specific objectives of this Priority Axis are:

- to ensure the administration and implementation of the programme through an effective application of regulations;
- to optimise the programme quality and efficiency of the interventions;
- to support the Operational Programme's communication plan.

Horizontal Priorities

As a general provision, interventions supported through this programme shall seek to respect the horizontal priorities of environment and sustainable development and gender equality.

Environment and sustainable development

The Government of Malta emphasizes the importance of taking an integrated approach to policy-making, recognizing both the potential impact of economic policies on the environment and the potential economic benefits that environmental policies can bring. The authorities are committed to seek that the implementation of all priorities of this Operational Programme is not detrimental to Malta's environment, but that it positively contributes to the attainment of the national environmental objectives, obligations and aspirations.

Recognising that a the environment is a crucial component of sustainable development, and that certain environmental targets can only be achieved if environmental objectives are taken into consideration, programme implementation shall seek to do this at all levels over and above achieving legal conformity with environmental and development planning regimes. At a strategic level the Government has commissioned a Strategic Environment Assessment (SEA) of the Programme in line with the Environment Protection Act. At project level the authorities will seek to minimise potential environmental impacts to a minimum while they will encourage that environmental benefits are maximized and synergies between economy and environment be explored in every project. Projects will be encouraged to seek to integrate environmental concerns and respect the principles of sustainable development.

The Managing Authority will liaise closely with the Malta Environment and Planning Authority (MEPA) in order to determine the likely environmental impacts on projects and ensure that project promoters are advised on applicable regulatory requirements, such as EIA, environmental or development permission or other form of authorisation. MEPA shall subsequently monitor the implementation of all projects for their environmental impacts and regularly advise the Managing Authority on their environmental performance.

Equal opportunities

All interventions financed under this programme must demonstrate commitment to respect the principles of non-discrimination and equal opportunities. Projects will be encouraged to take account of the needs of the local communities they serve, and where appropriate take account of good practice developed within the Equal Community Initiative.

It is clear that some Priority Axes and Focus Areas are more directly related to the gender dimension and hence also more conducive to contributing to gender mainstreaming than others. This is the case, for example, of Priority Axes 1, 2 and 5 where education and social infrastructure, entrepreneurship and esociety are specifically identified as a Focus Areas. However, as is the case for the environment, the Managing Authority will liaise closely with the National Commission for the Promotion of Equality in different stages of the programme. The Managing Authority will actively encourage (e.g. through the award of scoring marks in the project selection process) project promoters to integrate gender issues in projects and to seek to maximize the benefits and synergies between the economy and gender equality.

In this regard the Authorities will seek to ensure that the interventions pursuant to the Priority Axes of this Operational Programme are mainstreamed from the design stage, into the implementation, monitoring and evaluation processes. In this regard therefore, capacity building for key staff who participate in the

decision-making and implementation process is vital. In this context, other tools which allow the effective adoption of mainstreaming strategy will be considered, particularly, training, the provision of expertise, and awareness raising.

Chapter V – Financing Plans

Financing plans for the ERDF/CF operational programme

1. Financing plan of the OP giving the annual commitment of each Fund in the operational programme

Commitments shall be made on an annual basis according to the following plan:

Operational programme reference (

(CCI number):

Year by source for the programme, in \in *million:*

	Structural Funding	Cohesion	Total
	(ERDF)	Fund	(3) =
	(LKD1) (1)	(2)	(1)+(2)
2007	(1)	(2)	(1)+(2)
In Regions without transitional support	75	25	100
In Regions with transitional support	0	0	0
Total 2007	75	25	100
2008			100
	68	32	100
In Regions without transitional support In Regions with transitional support	0	0	100
Total 2008	68	32	100
	08	32	100
2009	61	20	00
In Regions without transitional support	61 0	38	99
In Regions with transitional support		Ŭ	Ŭ
Total 2009	61	38	99
2010	51	1.0	0.7
In Regions without transitional support	51	46	97
In Regions with transitional support	0	0	0
Total 2010	51	46	97
2011			
In Regions without transitional support	49	46	95
In Regions with transitional support	0	0	0
Total 2011	49	46	95
2012			
In Regions without transitional support	54	38	92
In Regions with transitional support	0	0	0
Total 2012	54	38	92
2013			
In Regions without transitional support	62	27	89
In Regions with transitional support	0	0	0
Total 2013	62	27	89
Grand Total 2007-2013	420	252	672
Total in Regions without transitional	420	252	672
support (2007-2013)			
Total in Regions with transitional support (2007-2013)	0	0	0

2. Financial plan of the operational programme giving, for the whole programming period, the amount of the allocation of each Fund in the operational programme, the national public contribution and the rate of reimbursement by priority axis.

Payments are made as reimbursements of expenditure actually paid out according to the following plan.

Financial plan concerning Operational Programmes expressed in total expenditure

Operational programme reference (CCI number): Priority axes by source of funding (in million euros)

_			For information			
	Community Funding (a)	National funding (b) ⁵⁶	Total funding (c) = (a)+(b)	Co- financing rate (d) = (a)/(c)	EIB contributions	Other funding
Priority Axis 1 – Implementing an Enterprise Support Infrastructure ERDF	108	19	127	85%		
Priority Axis 2 – Supporting Enterprise ERDF	27	41 ⁵⁷	68	40% ⁵⁸		
Priority Axis 3 – Sustainable Tourism ERDF	60	10	70	85%		
Priority Axis 4 – TEN-T Infrastructure CF	136	24	160	85%		
Priority Axis 5 – Improving Accessibility and Services of General Economic Interest ERDF	123	22	145	85%		
Priority Axis 6 – Upgrading Environment Infrastructure CF	116	20	136	85%		
Priority Axis 7 – Urban Regeneration and Quality of Life ERDF	87	15	102	85%		
Priority Axis 8 – Technical Assistance ERDF	15	0	15	100% ⁵⁹		
Total ERDF CF	672 420 252	151 107 44	823 527 296	82% 80% 85%		

It should be noted that allocations between priorities is indicative at this stage and is subject to change if focus areas are shifted to different priorities. The ex-ante evaluation evaluates also the allocation of budgetary resources and makes recommendations.

58 In view that Priority 1 will finance state aid to enterprises in the meaning of Article 87 of the Treaty, the Community co-financing rate is set at 40%, to respect the ceilings on state aid (30% to large enterprises, 40% to small and medium enterprises and 50% to micro enterprises.

59 In view that Priority 8 will finance technical assistance measures in relation to preparation, management, monitoring, evaluation,

⁵⁶ Represents potential public and private contributions unless otherwise specified

⁵⁷ Private sector contribution

information and control activities the Community co-financing rate is set at 100%.

Chapter VI – Complementarity with measures under the EAFRD and EFF

Under the 2007-2013 Programmes, the agriculture (rural development) and fisheries sectors have been separated from mainstream Cohesion Policy. The sectors will be supported by the European Agricultural Fund for Rural Development and the European Fisheries Fund respectively. Malta is preparing separate national strategies and programmes for each of the sectors. Malta's objective is to maximise the use of all the instruments made available in order to speed up development in the various sectors of the economy.

The objectives of the draft rural development strategy are:

(1) To improve the competitiveness of the agricultural sector by focusing on the priorities of knowledge transfer, modernisation of holdings, adding value to agricultural products with respect to quality and competitiveness in order to offer more differentiated, higher quality products and services to domestic consumers and foreign tourists and thus making farming a viable and more attractive career choice for younger people.

This objective will be achieved through the following measures:

- Promotion of knowledge and improving human potential through vocational training, information actions and the setting up of management, relief and advisory services;
- Restructuring and development the physical potential and promoting innovation through modernisation of agricultural holdings and adding value to agricultural products;
- Improvement of the quality of agricultural production and products through participation of farmers in food quality schemes;
- Transitional support for the setting up of producer groups.
- (2) To improve the environment and the countryside through encouraging the retention of agricultural activity and promotion of environmentally friendly production methods in line with rural heritage.

This objective will be achieved through the following measures:

- Natural handicap payments in areas affected by specific handicaps;
- Natura 2000 payments and payments linked to Directive 2000/60/EC;
- Agri-environment payments.
- (3) To improve the quality of life in rural areas through the conservation and valorisation of rural, natural and cultural heritage enhancing the multifunctional role of rural areas.

This objective will be achieved through the following measures:

- Conservation and upgrading of the rural heritage;
- Skills acquisition, animation and implementation.
- (4) To build local capacity for improving governance and mobilising the endogenous development potential of rural areas.

This objective will be achieved through bringing together the different public and private local actors, thus building local partnership capacity, promoting public-private partnership, promoting cooperation and innovation and improving local governance.

The aim of the European Fisheries Fund is to support the common fisheries policy so as to ensure the exploitation of living aquatic resources in a way that creates the necessary conditions for sustainability in economic, environmental and social terms. The Fund will promote a sustainable balance between the resources and the capacity of the fleet and it will also encourage sustainable development and the improvement of the quality of life in the marine environment.

At a strategic level the objectives are:

- (1) Measures for the fishing fleet including adjustment of fishing effort, modernisation of fishing vessels, small scale coastal fishing and socio-economic compensation for the management of the fleet;
- (2) Investment in acquaculture and processing and marketing of fisheries products;
- (3) Measures of collective interest for fishing ports, promotion and development of new markets and patrol and enforcement.

From a strategic point of view, it is clear that the objectives for rural development and fisheries clearly demonstrate the specific aims and targets which are sector related. However, at the implementation level it is clear that there could be potential overlaps and perhaps the risk of duplication of resources and efforts as well as lack of clarity to the beneficiaries themselves. In the case of this Operational Programme, these risks are more pronounced for Priority Axis 2 (particularly where the agro-food industry is concerned), Priority Axis 3 (e.g. is the case of management of NATURA 2000 sites) and Priority Axis 7 (where there could be potential overlaps on regeneration of the historic environment). In this regard Government is currently working on measures which would add clarity to the relevant documents and also to the beneficiaries. Moreover, effective co-ordination mechanisms are necessary in order to ensure that all priorities are addressed with minimal risks with regard to overlaps and duplication of effort and resources.

At the strategic level consistency and co-ordination between Cohesion Policy Programmes and the Programmes co-financed by the EAFRD and the EFF will be ensured through the setting up of a steering committee between the Planning and Priorities Co-ordination Division as the Managing Authority for Cohesion Policy programmes and the public authorities responsible for the implementation of the programmes financed by the EAFRD and the EFF. The Committee will meet at least twice a year and will also include the participation of other relevant bodies. The relevant organisations will seek to maximise the resources on the one hand and impact on the ground on the other. Clear demarcation lines with respect to the areas of intervention are being drafted to assist in the achievement of this aim.

Chapter VII – Implementing Procedures

The Managing Authority

Introduction

The Planning and Priorities Co-ordination Division within the Office of the Prime Minister (OPM) is entrusted with the management and overall coordination of this operational programme. The Planning and Priorities Co-ordination Division is set up in line with the established national procedures of the Government of Malta. The Planning and Priorities Co-ordination Division will carry out the tasks and functions of a Managing Authority as described hereunder in full accordance with the institutional, legal and financial systems of Malta.

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Tasks and Functions of the Managing Authority⁶⁰

The Managing Authority shall be responsible for managing and implementing the operational programme in accordance with the principle of sound financial management. In particular the Managing Authority will:

- (a) ensure that operations are selected for funding in accordance with the criteria applicable to the operational programme and that they comply, for their whole implementation period, with applicable Community and national rules;
- (b) verify⁶¹ the delivery of the co-financed products and services and that the expenditure declared by the beneficiaries for operations has actually been incurred and complies with Community and national rules;
- (c) ensure that there is a system for recording and storing in computerised form accounting records of each operation under the operational programme and that the data on implementation necessary for financial management, monitoring, verifications, audits and evaluation are collected;
- (d) ensure that beneficiaries and other bodies involved in the implementation of operations maintain either a separate accounting system or an adequate accounting code for all transactions relating to the operation without prejudice to national accounting rules;

 ⁶⁰ Article 59 of the Presidency Compromise on a Proposal for a Council Regulation laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund (Doc. 7175/06 dated 9 March 2006).
 ⁶¹ Verifications on-the-spot of individual operations may be carried out on a sample basis in accordance with the Commission

⁶¹ Verifications on-the-spot of individual operations may be carried out on a sample basis in accordance with the Commission Regulation setting out detailed rules for the application of Council Regulation XXXX/2006.

- (e) ensure that the evaluations of Operational Programmes are carried out in accordance with Article 45 of Council Regulation XXXX/06;
- (f) set up procedures to ensure that all documents regarding expenditure and audits required to ensure an adequate audit are held in accordance with the requirements of Article 88 of Council Regulation XXXX/06;
- (g) ensure that the Certifying Authority shall receive all necessary information on the procedures and verifications carried out in relation to expenditure for the purpose of certification;
- (h) guide the work of the Monitoring Committee and provide it with the documents required to permit the quality of the implementation of the operational programme to be monitored in the light of its specific goals;
- (i) draw up and, after approval by the Monitoring Committee, submit to the European Commission the annual and final reports on implementation;
- (j) ensure compliance with the information and publicity requirements laid down in Article 68 of Council Regulation XXXX/06;
- (k) provide the European Commission with information to allow it to appraise major projects in line with Article 39 of Council Regulation XXXX/06.

Additional Responsibilities

In addition to the above, the Managing Authority will be tasked with the following functions (to be carried out in coordination with the European Commission and other competent authorities):

Programming

- (1) ensure with the Commission that assistance from the Funds is consistent with the activities, policies and priorities of the Community, in particular with the priorities listed in the Community Strategic Guidelines on cohesion and in the national strategic reference framework;⁶²
- (2) participation in national coordination structures aimed at ensuring co-ordination of assistance from the operational programme co-financed by the ESF, the programmes financed by the European Agricultural Fund for Rural Development (EAFRD) and the European Fisheries Fund (EFF), the interventions of the EIB, where applicable, and of other existing financial instruments;⁶³

Implementation

- (5) co-ordinate with the competent authority to prevent any discrimination on the basis of gender, race or ethnic origin, religion or belief, disability, age or sexual orientation during the various stages of implementing the Funds and, in particular, access to them;⁶⁴
- (6) re-examine and revise the operational programme in agreement with the European Commission, in case of significant socio-economic changes, or in order to take greater or different account of major changes in

⁶² Article 8(2) of Doc. 7175/06 dated 9 March 2006

⁶³ Article 8(3) of Doc. 7175/06 dated 9 March 2006

⁶⁴ Article 14 of Doc. 7175/06 dated 9 March 2006

Community, national or regional priorities, or in the light of evaluation referred to in Article 46 of Council Regulation XXXX/06 or following implementation difficulties; 65

- (7) entrust, if deemed desirable, the management and implementation of a part of this operational programme to one or more Intermediate Body/ies. This delegation of authority will be laid down in an agreement between the Managing Authority and the designated Intermediate Body/ies.66
- (8) finance, through technical assistance, the preparatory, management, monitoring, evaluation, information and control activities of the operational programme together with activities to reinforce the administrative capacity for implementing the Funds.⁶⁷
- (9) lay down rules at national level on the eligibility of expenditure taking into account exceptions provided in the specific Regulations for each Fund, to revenue-generating estimates as set out in Article 54 of Council Regulation XXXX/06 and ceilings on state aid;68
- (10) ensure the application of Article 56 of Council Regulation XXXX/06. In case of modifications, the Managing Authority is to inform the European Commission in the annual implementation report required under Article 66 of Council Regulation XXXX/06;⁶⁹

Evaluation

- (11) co-ordinate the carrying out of evaluations ⁷⁰ and send the results to the Monitoring Committee and the European Commission⁷
- (12) draw up, an evaluation plan which presents the indicative evaluation activities which are intended to be carried out in the different phases of the implementation;⁷²

Reporting

- (14) provide the competent authority responsible for the drawing up of the annual implementation report on the National Reform Programme with information on the contribution of the Funds;
- (15) send by 30 June of each year (starting for the first time in 2008), an annual implementation report and by 31 March 2017 a final implementation report containing the information laid out in Article 66 of Council Regulation XXXX/06;⁷
- (16) examine with the European Commission every year, following the submission of an annual report, the progress made in implementing the operational programme, the principal results achieved over the previous year, the financial implementation and other factors with a view to improving implementation;⁷⁵

⁶⁵ Article 32 of Doc. 7175/06 dated 9 March 2006

⁶⁶ Article 41 of Doc. 7175/06 dated 9 March 2006

⁶⁷ Article 44 of Doc. 7175/06 dated 9 March 2006

⁶⁸ Article 55 of Doc. 7175/06 dated 9 March 2006

⁶⁹ Article 56 of Doc. 7175/06 dated 9 March 2006

⁷⁰ Article 46 of Doc. 7175/06 dated 9 March 2006 ⁷¹ Article 46 (3) of Doc 7175/06 dated 9 March 2006

⁷² Article 46 of Doc. 7175/06 dated 9 March 2006

⁷³ Article 27 (2) of Doc. 7175/06 dated 9 March 2006

⁷⁴ Article 66 of Doc. 7175/06 dated 9 March 2006

 $^{^{75}}$ Article 67 of Doc. 7175/06 dated 9 March 2006

Monitoring

- (17) co-ordinate the setting up of a Monitoring Committee for the operational programme within three (3) months starting from the date of the notification of the decision approving the operational programme;⁷⁶
- (18) provide the secretariat to the Monitoring Committee;⁷⁷
- (19) carry out in conjunction with the Monitoring Committee monitoring by reference to financial indicators and the indicators referred to in Article 36 of Council Regulation XXXX/06 and specified in the operational programme;⁷⁸
- (20) inform the Monitoring Committee of comments made by European Commission on reports concerning the operational programme, in particular the annual implementation report;⁷⁹

Control

- (21) co-ordinate with the competent public authority that management and control systems for the operational programme are set up in accordance with Articles 57 to 61 of Council Regulation XXXX/06 and function effectively and correctly; 80
- (22) co-ordinate with the competent public authority/ies the prevention, detection and correction of irregularities; 81
- (23) co-ordinate with the competent authorities the recovery of amounts unduly paid.
- (23) submit to the European Commission before the first interim payment or, at the latest, within twelve months from approval of the operational programme a description of systems containing details laid down in Article 70 of Council Regulation XXXX/06;⁸²
- (24) ensure that all supporting documents regarding expenditure and audits on the operational programme are kept available for the European Commission and the Court of Auditors as specified in Article 88 of Council Regulation XXXX/06;⁸³

⁷⁶ Article 62 of Doc. 7175/06 dated 9 March 2006

⁷⁷ Article 63 of Doc. 7175/06 dated 9 March 2006

⁷⁸ Article 65 of Doc. 7175/06 dated 9 March 2006

⁷⁹ Article 67 of Doc. 7175/06 dated 9 March 2006

⁸⁰ Article 69 of Doc. 7175/06 dated 9 March 2006

⁸¹ Article 69 of Doc. 7175/06 dated 9 March 2006

⁸² Article 70 of Doc. 7175/06 dated 9 March 2006. Note: The description of the systems will be accompanied by a report setting out the results of the assessment of the setting up of the systems and giving an opinion on their compliance with Articles 57 to 61 of Council Regulation XXXX/06. The Audit Authority of this operational programme will be overall responsible for the establishment of this report.

⁸³ Article 88 of Doc. 7175/06 dated 9 March 2006

The Certifying Authority

Introduction

The European Union (Paying Authority) Directorate within the Ministry of Finance (MFIN) is entrusted with the certification of the declarations of expenditure and applications for payment in relation to the priorities of this operational programme before they are sent to the European Commission. The European Union Paying Authority Directorate is set up in line with the established national procedures of the Government of Malta.

The European Union (Paying Authority) Directorate will carry out the tasks and functions of a Certifying Authority as described hereunder in full accordance with the institutional, legal and financial systems of Malta.

Contact Details: Head of the Certifying Authority, European Union (Paying Authority) Directorate, Ministry of Finance, Maison Demandols, 30, South Street, Valletta CMR 02

Tel: +356 259998297 Fax: +356 21251356 E-mail: info.mfin@gov.mt Website: www.mfin.gov.mt

Tasks and Functions of the Certifying Authority⁸⁴

The Certifying Authority shall be responsible for certifying declarations of expenditure and applications for payment before they are sent to the European Commission. In particular the Certifying Authority will:

- (a) draw up and submit to the European Commission certified statements of expenditure and applications for payment in line with the provisions laid down in Council Regulation XXXX/06;
- (b) certify that the statement of expenditure is accurate, results from reliable accounting systems and is based on verifiable supporting documents and that the expenditure declared complies with applicable Community and national rules and has been incurred in respect of operations selected for funding in accordance with the criteria applicable to the programme and complying with Community and national rules;
- (c) ensure for the purposes of certification that it has received adequate information from the Managing Authority and other relevant public bodies on the procedures and verifications carried out in relation to expenditure included in statements of expenditure;
- (d) take account for the purposes of certification of the results of all audits carried out by or under the responsibility of the Audit Authority;

⁸⁴ Article 60 of the Presidency Compromise on a Proposal for a Council Regulation laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund (Doc. 7175/06 dated 9 March 2006)

- (e) maintain accounting records in computerised form of expenditure declared to the European Commission;
- (f) keep an account of amounts recoverable and of amounts withdrawn following cancellation of all or part of the contribution for an operation. Amounts recovered shall be repaid to the general budget of the European Union, prior to the closure of the operational programme by deducting them from the next statements of expenditure in line with the provisions laid down in Council Regulation XXXX/06⁸⁵;
- (g) send at the latest by the end of April of each year to the European Commission a provisional forecast of likely payment applications for the current financial year and the subsequent financial year; *86*
- (h) ensure that the beneficiaries receive the total amount of the public contribution as quickly as possible and in full from the body responsible for making payments, 87
- (i) declare to the European Commission any interest generated by the pre-financing at the time of the final closure of the operational programme; ⁸⁸

⁸⁵ The Certifying Authority shall be responsible for the notification to the European Commission of the recovery of amounts unduly paid together with interest on late payments in view of Article 69 (1b) of Doc. 7175/06 dated 9 March 2006.

⁸⁶ Article 75 of Doc. 7175/06 dated 9 March 2006

⁸⁷ Article 79 of Doc. 7175/06 dated 9 March 2006

⁸⁸ Article 82 of Doc. 7175/06 dated 9 March 2006

The Audit Authority

Introduction

The Internal Audit and Investigations Directorate within the Ministry of Finance under the supervision of the Internal and Audit Investigations Board within the Cabinet Office is entrusted with verifying the effective functioning of the management and control system of the operational programme. The Internal Audit and Investigations Directorate is set up in line with the established national procedures of the Government of Malta and is functionally independent of the managing authority and the certifying authority of the operational programme.

The Internal Audit and Investigations Directorate will carry out the tasks and functions of an Audit Authority as described hereunder in full accordance with the institutional, legal and financial systems of the Republic of Malta.

Contact Details: Head of the Audit Authority,

Internal Audit and Investigations Directorate,

Ministry of Finance Lower Ground Floor, Valletta Building, South Street, Valletta CMR 02

Tel: +356 21237737 Fax: +356 21237681 E-mail: info.iaid@gov.mt Website: www.iaid.gov.mt

Tasks and Functions of the Audit Authority⁸⁹

The Audit Authority shall be responsible for verifying the effective functioning of the management and control system of the operational programme through the carrying out of audits. In particular the Audit Authority will:

- (a) ensure that audits are carried out to verify the effective functioning of the management and control systems of the operational programme; 90
- (b) ensure that audits are carried out on operations on the basis of an appropriate sample to verify expenditure declared;⁹¹
- (c) present to the European Commission within nine months of the approval of the operational programme an audit strategy covering the bodies which will perform the audits referred to in (a) and (b) above, the method to be used, the sampling method for audits on operations and the indicative planning of audits to

⁸⁹ Article 61 of the Presidency Compromise on a Proposal for a Council Regulation laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund (Doc. 7175/06 dated 9 March 2006)

Regional Development Fund, the European Social Fund and the Cohesion Fund (Doc. 7175/06 dated 9 March 2006)

Where the audits are carried out by a body other than the Audit Authority, the Audit Authority shall ensure that such bodies have the necessary functional independence. (Article 61(1a))

necessary functional independence. (Article 61(1a))

91 Where the audits are carried out by a body other than the Audit Authority, the Audit Authority shall ensure that such bodies have the necessary functional independence. (Article 61(3))

ensure that the main bodies are audited and that audits are spread evenly throughout the programming period;

- (d) establish a report setting out the results of an assessment of the setting up of systems and giving an opinion on their compliance with Articles 57 to 61 of Council Regulation XXXX/2006. The report will accompany the description of the systems, covering in particular the organisation and procedures of the Managing Authority, the Certifying Authority, the Audit Authority, other bodies carrying out audits under the responsibility of the Audit Authority and intermediate bodies, where applicable.
- (e) submit to the European Commission by 31 December of each year from 2008 to 2015, an annual control report setting out the findings of the audits carried out during the previous 12 months ending on 30 June of the year concerned in accordance with the audit strategy of the operational programme and report any shortcomings found in the systems for the management and control of the programme. The information concerning the audits carried out after 1 July 2015 will be included in the final control report supporting the closure declaration described in (h) hereunder.
- (f) issue an opinion by 31 December of each year from 2008 to 2015, on the basis of the controls and audits that have been carried under its responsibility, as to whether the functioning of the management and control system provides reasonable assurance that statements of expenditure presented to the European Commission are correct and that the underlying transactions are legal and regular;
- (g) where applicable, submit by 31 December of a given year, a declaration for partial closure assessing the legality and regularity of the expenditure concerned;
- (h) submit to the European Commission at the latest by 31 December 2017, a closure declaration assessing the validity of the application for payment of the final balance and the legality and regularity of the underlying transactions covered by the final statement of expenditure, which shall be supported by a final control report.
- (i) ensure that the audit work including that carried out by contracted bodies take account of internationally accepted audit standards.
- (j) meet with the European Commission on a regular basis, at least once a year, to examine together the annual control report and opinion described in (e) and (f) above, and to exchange views on other issues relating to the improvement of the management and control of the operational programme;⁹³
- (k) co-ordinate with the competent authorities the prevention, detection and correction of irregularities. The AA will also be responsible for communicating irregularities to the Commission. ⁹⁴

94 Article 69 (1b) of Doc. 7175/06 dated 9 March 2006

⁹² The first report to be submitted by 31 December 2008 shall cover the period from 1 January 2007 to 30 June 2008.

⁹³ Article 72 of Doc. 7175/06 dated 9 March 2006