

## Development of a National Transport Model Supporting Strategy Development in Malta







As a subcontractor:



Operational Programme I – Cohesion Policy 2007-2013 Investing in Competitiveness for a Better Quality of Life Event part-financed by the European Union European Regional Development Fund (ERDF) Co-financing rate: 85% EU Funds; 15% National Funds

Investing in your future



# tm

tm Transport Malta		Transport Malta Transport Planning Unit Integrated Transport Strategy Directorate
	Tel: E-mail:	Stephen Camilleri Senior Manager (EU Affairs) Transport Malta Sa Maison Road Floriana FRN 1612 +356 2560 8114 stephen.j.camilleri@transport.gov.mt www.transport.gov.mt
	Strategy Develo	of a National Transport Model Supporting opment in Malta: onmental Assessment Report. Scoping Report
Systematica	Contractor: Subcontractor:	Ineco-Systematica Consortium Adi Associates
	Contact: Tel: E-mail: Website:	José María Llorente Avda. Partenón 4-6 Madrid 28042 Spain +34 91 452 12 00 Ilorente@ineco.com www.ineco.com

lineco Z Systematica

	Revision Details			
Version	Date	Remarks		
0.1	13/01/2015	Draft Scoping Report, for review		
1.0	30/01/2015	Scoping Report, for consultation		
2.0	04/09/2015	Scoping Report, updated following consultation (consultation and feedback included as Appendix 2)		

### Please cite this publication as:

Transport Malta (2015), National Transport Strategy – Strategic Environmental Assessment Report (Scoping Report)



### Contents

1	INTRODUCTION
	1.1 Strategic Environmental Assessment
	1.2 Malta's Transport Strategy and Master Plan9
	1.3 Malta's Transport Strategy
	1.4 Malta's Transport Master Plan10
2	THE SEA PROCESS
3 DOC	RELATION OF MALTA'S TRANSPORT STRATEGY & MASTER PLAN TO OTHER NATIONAL CUMENTS & LEGISLATION
4	BASELINE DATA
5 MA	EVALUATION OF THE BASELINE IN THE ABSENCE OF THE IMPLEMENTATION OF THE STRATEGY & STER PLAN
6	EVALUATION OF THE NTS AND TMP OBJECTIVES
7	SEA OBJECTIVES
8	LIKELY SIGNIFICANT EFFECTS AND CONSTRAINTS
	8.1 Cumulative & Synergistic Impacts
9	ALTERNATIVES
10	MONITORING
11	THE ENVIRONMENTAL REPORT
	11.1 Guidance
12	STRUCTURE OF ENVIRONMENTAL REPORT
APP	ENDIX 1: ANALYSIS OF RELATED PLANS, PROGRAMMES, AND LEGISLATION
APP	ENDIX 2: RESPONSE TO PUBLIC CONSULTATION ON SCOPING REPORT
	Response to comments made by the Sustainable Energy and Water Conservation Unit within the Ministry for Energy and Health
	Response to Comments made by the Department of Environmental Health within the Ministry for Energy and Health
	winistry for Energy and realth and realth and real for the second s
	Response to comments made by the Malta Resources Authority





### **Tables**

Table 1.	Environmental baseline
Table 2.	Environmental Objectives & Indicators for Assessing Impacts
Table 3.	Assessment legend 26
Table 4.	Example Strategy and Master Plan Assessment framework and format for Environmental Report
Table 5.	Structure of the Environmental Report
Table 6.	Response to Comments made by the Sustainable Energy and Water Conservation Unit within the Ministry for Energy and Health
Table 7.	Response to Comments made by the Department of Environmental Health within the Ministry for Energy and Health
Table 8.	Response to Comments made by the Malta Resources Authority72
Table 9.	Response to Comments made by the Malta Environment and Planning Authority76
Table 10.	Response to Comments made by the Directorate for the Environment and Climate Change within the Ministry for Sustainable Development, the Environment and Climate Change



## **1** Introduction

- Transport Malta (TM) is responsible for the preparation of the National Transport Strategy and Master Plan. The Transport Strategy outlines the direction for transport policy in Malta for the next 30-40 years and the Transport Master Plan describes in more detail Malta's transport needs and projects for the next 10 years. Although both documents are being formulated by Transport Malta, a consortium of international consultants (Ineco - Systematica Consortium) is assisting TM with the preparation of these documents. Adi Associates Environmental Consultants Ltd has been sub-contracted by the Ineco - Systematica Consortium to carry out the Strategic Environmental Statement (SEA).
- 2. This report is the Scoping Report for the Strategic Environmental Assessment (SEA) of Malta's Transport Strategy and Master Plan. The aim of the Report is to set out the framework for the SEA, including setting the context of the SEA, establishing the baseline, setting the SEA objectives and indicators for the assessment, and identifying any potential significant impacts of the Transport Strategy and Master Plan. The Report will also discuss the proposed contents of the Environmental Report and the next stages in the SEA process.

### 1.1 Strategic Environmental Assessment

- 3. European Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment requires that a SEA of a wide range of plans and programmes is carried out prior to the implementation of the plan or programme. The objective of the "SEA Directive" is to provide a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans with a view to promoting sustainable development. SEA comprises:
  - Preparing an Environmental Report on the likely significant effects of the draft Strategy and Master Plan;
  - Consulting on the Strategy and Master Plan and the accompanying Environmental Report;
  - Taking into account the Environmental Report and the results of consultation in decision making; and
  - A discussion of how the results of the environmental assessment would be taken into account in the Strategy and Plan.
- 4. The information to be included in the Environmental Report includes:
  - A description of the baseline environment;
  - Links between the Strategy and Master Plan and other relevant policies, plans, programmes, and environmental objectives;

- An identification of existing environmental problems affecting the Strategy and Master Plan;
- The Strategy and Master Plan's likely significant effects on the environment, including issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climate change, material assets, cultural heritage, landscape, and the interrelationship between such factors;
- The mitigation measures envisaged;
- A description of the alternatives considered and those discarded in favour of the selected action(s);
- Monitoring measures envisaged; and
- A non-technical summary.
- 5. The SEA Directive (2001/42/EC) has been transposed into national legislation by the SEA Regulations, 2010 (Legal Notice 497 of 2010).
- 6. Guidance on SEA for Malta has not yet been published. The Scoping Report therefore draws on other European Guidance namely, the GRDP's (2006) "Handbook on SEA for Cohesion Policy 2007- 2013", the Commission's "Implementation of Directive 2001/42 on the Assessment of the Effects of Certain Plans and Programmes on the Environment" and the UK's (2005) "A Practical Guide to the Implementation of the SEA Directive".

### **1.2** Malta's Transport Strategy and Master Plan

- 7. As explained above Transport Malta is preparing two documents:
  - (i) A National Transport Strategy that outlines the direction for transport policy in Malta for the next 30-40 years; and
  - (ii) A National Transport Master Plan that describes in more detail Malta's transport needs and projects for the next 10 years.
- 8. The Transport Master Plan builds on the needs and objectives identified in the Transport Strategy. The two documents are considered highly interlinked and the timeframe for their preparation is simultaneous. On this basis and noting the advice given by the Joint Assistance to Support Projects in European Regions (JASPERS)<sup>1</sup>, Transport Malta will carry out a single SEA process for both the National Transport Strategy and National Transport Master Plan that will nonetheless ensure separate environmental assessments of each document. To this end, a Screening Template has been prepared that refers to both the National Transport Strategy and Master Plan.

<sup>&</sup>lt;sup>1</sup> During a meeting held on 8<sup>th</sup> October 2014 for which Transport Malta, Adi Associates, and the SEA Focal Point were present as well as JASPERS via conference call, JASPERS advised that it would consider a single SEA process to cover both the Strategy and the Master Plan to be a practical and acceptable way forward.

### 1.3 Malta's Transport Strategy

9. Following its establishment in 2010 under the Authority for Transport in Malta Act (Act XV of 2009), Transport Malta embarked on preparations to establish a strategic approach to transportation which would integrate the planning of the different transportation sectors. These preparations laid the ground for the development of an integrated National Transport Strategy (NTS) with a time horizon of 2050 together with a Transport Master Plan (TMP) with a time horizon of 2025. The NTS consists of a vision outlining where Malta wants to be in the long term, the high-level objectives each with specific outcomes, the strategic direction on how to get there and the indicators necessary to measure the progress of this strategy.

### 1.4 Malta's Transport Master Plan

- 10. The TMP is still being formulated and an initial draft is not yet available. It is likely that the Master Plan will clearly identify potential projects and actions for implementation until 2025. It will focus on transport sectors including land transport, public transport, ports, ferries and air transport and will include detailed sector action plans. The TMP will outline transport investment, regulatory change, safety improvement measures and institutional strengthening required to achieve the aims of the NTS for the period up to 2025. It will also identify the need for further studies or development of action plans in specific areas.
- 11. More detail of projects will be given when the first draft of the TMP becomes available.

## 2 The SEA Process

- 12. The SEA on the NTS and TMP started in April 2014 once the contract was awarded to the Ineco-Systematica Consortium. The aim is for the SEA Consultants to be included during formulation of both the Strategy and the Master Plan. Several discussions were held with Transport Malta, the SEA Focal Point and the JASPERS wherein it was agreed that one SEA would be carried out on two documents: the NTS and the TMP since the latter builds on the NTS and both documents are being formulated concurrently.
- 13. The SEA involves several key stages:
  - The *scoping stage* aims to agree the scope and level of detail of information which must be included in the Environmental Report. Several meetings are held regularly with the programme managers to ensure that the SEA Consultants are on board throughout the formulation of both the Strategy and the Master Plan. Scoping is one of the most important stages in the process as it identifies the issues for consideration in the Environmental Report. Although no longer a legal requirement, it is considered good practice to clearly document the scoping process. Consultation on the draft Scoping Report will be undertaken with a number of identified stakeholders including the SEA Focal Point, the Malta Environment and Planning Authority and the Malta Resources Authority.
  - The collection of baseline data and analysis of relevant plans, programmes, and environmental objectives has already commenced. The Consultants are collecting baseline data from a wide range of sources and analysing a wide range of plans/programmes/objectives using matrices to structure the data collection. Maps of key environmental issues are being prepared.
  - Preparation of the *Environmental Report* this commences once all relevant information is collected and following consultation with the stakeholders, MEPA, and Transport Malta.
- 14. The Scoping Report (version 1.0) was made available for public consultation on 27<sup>th</sup> March 2015 on Transport Malta's website. The Scoping Report was also sent directly to a number of stakeholders, as listed below:
  - Environmental Health Directorate;
  - Malta Environment & Planning Authority;
  - Malta Resources Authority;
  - Ministry for Energy and Health;
  - Department of Agriculture; and
  - Ministry for Sustainable Development, the Environment and Climate Change.
- 15. The stakeholders were asked to submit their comments on the Scoping Report by end of April 2015.



- 16. During this consultation period, comments were received in writing from:
  - Environmental Health Directorate;
  - Malta Environment & Planning Authority;
  - Malta Resources Authority;
  - Ministry for Energy and Health; and
  - Ministry for Sustainable Development, the Environment and Climate Change.
- 17. In addition, on its request, a meeting was held with the Department for Environmental Health on 20<sup>th</sup> April, in order to discuss their comments with the Consultants and Transport Malta.
- 18. The Appendix 2: Response to Public Consultation on Scoping Report lists all comments received and an accompanying response from the Consultants responsible for production of the Scoping Report. As a result of some comments, changes have also been made to the Scoping Report.

## 3 Relation of Malta's Transport Strategy & Master Plan to other National Documents & Legislation

- 19. Schedule 2 of the SEA Regulations requires a discussion of the "the degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources" and "the relevance of the plan or programme for the implementation of Community legislation on the environment, such as plans and programmes linked to waste-management or water protection". **Appendix 1** provides a list of the policies, plans, and programmes relevant to the NTS and TMP, which have been analysed.
- 20. The analysis has been subdivided into five main categories:
  - (i) International Commitments: this category covers the international environment and sustainability policy framework within which Malta must work. It includes a selection of global commitments, such as those arising from the Millennium Development Goals (MDGs), UN Framework Convention on Climate Change (UNFCCC) and Kyoto Protocol.
  - (ii) EU requirements: Relevant EU communications have been included. In the case of European Union Directives already transposed into national legislation, the Directives *per se* will not be discussed; the section on national legislation is described below;
  - (iii) National Environmental & Planning Documents including the Structure Plan for the Maltese Islands, the National Sustainable Development Strategy, the National Environment Policy and the National Reform Programme. The review provided herein summarises the key issues raised; further information can be obtained from the original documents;
  - (iv) National Sectorial Policies and Strategies: this section covers highest-level policy and strategy documents published by the Government, such as the National Strategic Plan. Rather than summarise entire documents this review seeks to emphasise the key sustainability objectives and priorities;
  - (v) National legislation: no attempt will be made to assess the individual regulations, as is done at the project level EIA (Environmental Impact Assessment). However, the main areas of concern for the NTS and the TMP will be highlighted. Given the scale (and evolutionary nature of this field) this review is not exhaustive and represents a current (September 2014) snapshot.



### **4** Baseline Data

- 21. A good understanding of the environment of the areas covered by the SEA is essential for the performance of a sound assessment. It is therefore necessary to establish the environmental baseline relevant to the plan or programme being proposed. This provides a snapshot of the existing state of the environment and a description of the likely future trends (based on past trends) without the programme being in place.
- Existing environmental and sustainability data will be collected from a wide range of sources.
   **Table 1** summarises this broad-brush description. The list is not exhaustive, and may be modified in the Environmental Report. It will also depend on the availability of data.
- 23. The Sustainable Development Strategy 2006 2016 identifies Malta's environmental challenges; it arises from a systematic review of official published reports including the State of the Environment Report (2008 and subsequent updates) and Malta's National Report to the World Summit on Sustainable Development (2002), and an extensive consultation process. The later National Environment Policy (2012) identifies Malta's Environmental Objectives.
- 24. The following environmental parameters were identified:
  - Air quality;
  - Climatic factors and climate change;
  - Energy-efficiency and renewable energy resources;
  - Biodiversity including the marine environment;
  - Freshwater (including rainwater runoff);
  - Waste;
  - Land use;
  - Soils;
  - Landscape;
  - Cultural heritage;
  - Population and human health; and
  - Material assets.
- 25. The SEA baseline will focus on the parameters listed under Schedule 1(f) of the SEA Regulations,2010 Information to be included in the Environmental Report.
- 26. Table 1 shows how the Environmental Report will draw together the issues and baseline data. Sources of information included the statistics produced by the National Statistics Office, the State of the Environment Report, 2008 (and subsequent updates) and the documents prepared

in connection with the Structure Plan Review process. As the Environmental Report is developed the baseline may be modified to reflect available and other relevant data.

Issue	Relevant baseline data	Illustrative material
Emissions to air and climate change	<ul> <li>GHG inventory</li> <li>Air quality - CO<sub>2</sub> emissions, PM<sub>10</sub> emissions, NO<sub>2</sub> concentrations</li> <li>Coastal erosion, sea level rise, changing weather patterns resulting from climate change</li> <li>Energy from renewables</li> <li>Energy consumption</li> </ul>	Graphs and figures.
Biodiversity / fauna and flora	<ul> <li>Areas protected and managed under international and local legislation</li> <li>Areas known to support priority Annex I habitats under the Habitats Directive</li> <li>Protected species and species of conservation interest</li> <li>Conservation status of species of conservation interest</li> <li>Areas for which surveys have been carried out</li> <li>Natura 2000 Network and Marine Protected Areas</li> </ul>	Designated, managed and surveyed areas; where relevant, any data related to areas, habitats and/or species that are not formally protected although they are considered to be of conservation value, will be included.
Water	<ul> <li>Information on the quality of the marine environment</li> <li>Information on the quality of groundwater</li> <li>Rainwater runoff management</li> <li>Water consumption by sector</li> <li>Water Framework Directive targets, objectives, protected areas</li> </ul>	Maps, graphs and tables
Soil	<ul> <li>Soil erosion</li> <li>Soil sealing</li> <li>Soil contamination</li> <li>Loss of soil</li> </ul>	Published data and figures

#### Table 1. Environmental baseline

Issue	Relevant baseline data	Illustrative material
Landscape	Areas protected for landscape value	Landscape sensitivity areas and protective designations
Cultural heritage	<ul> <li>Sites protected for cultural heritage</li> <li>Townscape (where information is available)</li> </ul>	Maps Published data
Human health	<ul> <li>Environmental health data (where available)</li> <li>Bathing water quality data</li> <li>National noise mapping information</li> <li>Accidents data</li> <li>Physical fitness</li> <li>Obesity</li> </ul>	Graphs and tables Published data
Material assets and population	<ul> <li>Transport infrastructure (air, land and sea)</li> <li>Vehicle ownership</li> <li>Modal split</li> <li>Green infrastructure</li> </ul>	Maps / figures

27. Quantitative data will be presented in the form of maps, tables, and figures, where possible. A brief description of the baseline and any trends will be given, where these are available. Where difficulties in obtaining data are encountered they will be described in the Environmental Report.

## 5 Evaluation of the baseline in the absence of the implementation of the Strategy & Master Plan

- 28. The SEA Regulations require a description of the relevant aspects of the current state of the environment and the likely evolution thereof without the implementation of the policy document with a particular emphasis on the future developments arising from other relevant plans and programmes.
- 29. This analysis will focus on the main environmental issues that have been identified in **Table 1**. It will include a description of the past and current trends from data available from existing monitoring systems or through expert judgements (in cases where data are lacking). It will also outline the likely evolution of these trends, if the Strategy and Master Plan were not implemented.
- 30. The description of the likely future trends should the NTS and TMP not be implemented is constrained by uncertainties, including availability of data on future economic development, technological progress, or advancements in regulatory frameworks that collectively influence future trends. The assessment will include a list of major uncertainties.



# 6 Evaluation of the NTS and TMP objectives

31. Prior to undertaking the assessment of the NTS and TMP objectives against the SEA objectives, the objectives contained in the NTS and TMP will be assessed against each other to verify their compatibility or otherwise.

## **7 SEA Objectives**

- 32. The SEA Directive does not specifically require the use of objectives or indicators in SEA, although they are a recognised way through which environmental effects can be described, analysed, and compared.
- 33. It is therefore preferable to use indicators to monitor the performance of the plans against the SEA objectives. The SEA objectives are meant to be separate from the policy objectives, and provide a way to assess the potential environmental performance of the policy objectives. Thus, the environmental objectives should influence plan objectives, and the two may even overlap. To fulfil the requirements of the SEA Directive and the SEA Regulations, 2010, the SEA objectives must cover biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage, landscape, and interrelationships between them.
- 34. In developing appropriate objectives, the following documents have been consulted:
  - GRDP's Handbook on SEA for Cohesion Policy 2007- 2011;
  - The Commission's "Implementation of Directive 2001/42 on the Assessment of the Effects of Certain Plans and Programmes on the Environment";
  - A Practical Guide to the Implementation of the SEA Directive, ODPM;
  - The SEA Directive 2001/42/EC;
  - SEA Regulations, 2010; and
  - The Commission's Guidance on integrating Climate Change and Biodiversity into SEA
- 35. In developing appropriate indicators the following documents have been consulted:
  - National Environment Policy, 2012;
  - The Sustainable Development Strategy for the Maltese Islands, 2006-2016; and
  - Malta's State of the Environment Report, 2008 and subsequent updates.
- 36. **Table 2** defines the set of objectives relating to the environmental issues identified in **Table 1**. Alongside these, relevant criteria for assessment and possible data sources have been identified.
- 37. The SEA indicators are measurements of trends over time. They will be used as a means of ascertaining the success of implementation of the Strategy and Master Plan against the various SEA Objectives. Where possible the SEA process endeavours to identify how the Strategy and Master Plan would affect these indicators (i.e. the trends); such a process is constrained by the fact that the SEA indicators themselves depend on other factors outside the influence of the NTS and TMP.



### Table 2. Environmental Objectives & Indicators for Assessing Impacts

lssue	SEA Objective	Criteria How this action will	SEA Indicator	Data source
Biodiversity, Flora & Fauna	<ul> <li>To maintain or improve biodiversity (including terrestrial and marine)</li> <li>To maintain or improve Natura 2000 sites</li> </ul>	<ul> <li>Affect the integrity of designated areas, including Natura 2000 sites?</li> <li>Affect protected species and habitats?</li> <li>Affect ecological connectivity?</li> <li>Contribute to generate ecosystem services?</li> <li>Affect the achievement of Good Ecological Status of coastal waters and Good Environmental Status of marine waters beyond protected areas (as per Water Framework Directive and Marine Strategy Framework Directive requirements respectively)?</li> </ul>	<ul> <li>Number of developments / interventions in protected areas</li> <li>Number of developments / interventions in Natura 2000 sites</li> <li>Conservation status of habitats and species</li> <li>Conservation status of habitats and species in Natura 2000 sites</li> <li>Number of developments / interventions on greenfield sites / undeveloped land</li> <li>Number of developments/interventions resulting in habitat fragmentation</li> <li>New or enhanced green infrastructure elements in urban areas</li> <li>Quality of the marine environment in terms of biological and physico-chemical elements</li> </ul>	Environmental Impact Assessment (EIA), Appropriate Assessment (AA), or other regulatory requirements as relevant. Malta Environment and Planning Authority (MEPA)

ineco	Z System
-------	----------

As a subcontractor:



Issue	SEA Objective	Criteria How this action will	SEA Indicator	Data source
Issue Population and Human health	<ul> <li>SEA Objective</li> <li>To reduce noise / vibration and light pollution</li> <li>To reduce air pollution</li> <li>To improve road safety</li> <li>To improve overall levels of health</li> <li>To enhance well-being<sup>2</sup></li> <li>To reduce road traffic and congestion through modal shift to more sustainable options</li> <li>To improve accessibility and transport links to services, facilities and opportunities</li> </ul>		<ul> <li>Compliance with air quality emission level standards</li> <li>Noise levels</li> <li>Number of noise complaints related to transport related activities</li> <li>Number of road accidents/injuries</li> <li>Access to services and facilities by public transport, walking and/ or cycling</li> <li>Number of improvement schemes for pedestrian and cycle routes</li> </ul>	Data source Transport Malta, MEPA, Ministry for Energy and Health
		• Promote an active lifestyle?	<ul> <li>% of bus fleet with facilities for accessibility for the disabled and people with impaired mobility</li> <li>Model split</li> </ul>	
			<ul><li>Modal split</li><li>Bus services running on time</li></ul>	
			Journey times	
			Public transport patronage	

<sup>&</sup>lt;sup>2</sup> In a consultation meeting held with the Department of Environmental Health (at its request), it was recommended that the environmental assessment should consider also wellbeing.



Issue	SEA Objective	Criteria How this action will	SEA Indicator	Data source
			Satisfaction with local bus     service	
			<ul> <li>Number of schemes for improving transport coordination and integration including interchange between cycling / walking and other forms of travel</li> <li>Life expectancy</li> <li>Proportion of street lamps with downward beam</li> </ul>	
Water	<ul> <li>To maintain or improve the quantity and quality of ground and sea water</li> <li>To maintain of improve rainwater harvesting capacity</li> </ul>	<ul> <li>Affect Malta's groundwater, inland surface waters and coastal waters?</li> </ul>	<ul> <li>Quality of the marine environment</li> <li>Bathing water quality</li> <li>Number of pollution incidents attributable to transport related activities</li> <li>Quality of the marine environment in terms of biological and physico-chemical elements</li> <li>Quality of groundwater in the</li> </ul>	MEPA, potential permit requirements Sustainable Energy and Water Conservation Unit, Ministry for Energy and Heath (MEH)
			vicinity of any projects related to the transport sector	

			ineco	As a subcontractor:
Issue	SEA Objective	Criteria How this action will	SEA Indicator	Data source
			• % of rainwater harvested	
Emissions to air	• To maintain or improve air quality	Affect air quality?	• Emission trends of key pollutants (such as NO <sub>2</sub> , PM <sub>10</sub> ) over time	MEPA
Climatic factors and climate	• To ensure resilience to climate change by minimising the risk of flooding and adapting to the	Affect climate change (considering in particular mitigation,	<ul> <li>CO<sub>2</sub> emission trends over time</li> <li>Area of land at risk of flooding</li> </ul>	MEPA, Transport Malta, MRA, Ministry for Health and Energy

Climatic factors and climate change	<ul> <li>To ensure resilience to climate change by minimising the risk of flooding and adapting to the predicted changes in weather conditions</li> <li>To decarbonise transport to reduce transport related CO<sub>2</sub> emissions</li> </ul>	<ul> <li>Affect climate change (considering in particular mitigation, adaptation renewable energy and GHGs)?</li> <li>Affect reduce transport related CO<sub>2</sub> emissions?</li> </ul>	<ul> <li>CO<sub>2</sub> emission trends over time</li> <li>Area of land at risk of flooding</li> <li>Number of projects in flood risk areas</li> <li>Number of projects that feature energy efficient design and/or use of renewable energy</li> <li>Proportion of felt using alternative fuel technology</li> <li>Modes of transport</li> </ul>	MEPA, Transport Malta, MRA, Ministry for Health and Energy
Soil	To maintain the resource of productive soil	• Affect soil quantity and quality?	<ul> <li>Soil conservation in the vicinity of any projects related to the transport sector</li> <li>Number of pollution incidents attributable to transport related activities</li> <li>Area affected by new developments</li> <li>Number of soil permits issued by</li> </ul>	Environmental Impact Assessment, Environmental monitoring as part of permit, Department of Agriculture



Issue	SEA Objective	Criteria How this action will	SEA Indicator	Data source
			the Department of Agriculture	
Material assets	<ul> <li>To maintain and include green infrastructure as relevant</li> <li>To promote better use of road space</li> <li>To improve efficiency of transport networks and physical infrastructure standards</li> </ul>	<ul> <li>Use green infrastructure?</li> <li>Affect sustainable transport modes?</li> </ul>	<ul> <li>Number of measures/actions that include green infrastructure</li> <li>Number of vehicles on the road over time</li> <li>Number of schemes aiming to modernise and upgrade the transport systems</li> </ul>	MEPA, Transport Malta
Cultural heritage	<ul> <li>To maintain or improve the conservation status of cultural heritage sites / areas with known cultural / archaeological remains</li> <li>To maintain or improve the cultural landscape, townscape or quality/amenity of Urban Conservation Areas as relevant</li> </ul>	Affect cultural heritage including archaeological heritage?	<ul> <li>Number of developments / operations located away from cultural heritage sites / areas or areas with known cultural / archaeological remains as a percentage of the total number of operations</li> <li>Number of projects targeting the improvement of the cultural landscape, townscape or quality/amenity of Urban Conservation Areas</li> </ul>	MEPA, Resources Management Unit Heritage Malta Superintendent of Cultural Heritage
Landscape	• To conserve or enhance landscape character and scenic value	• Affect landscape character and scenic value?	<ul> <li>Environmental Impact Assessment results on landscape assessment</li> <li>Number of transport measures aimed at improving local</li> </ul>	MEPA, Transport Malta



Issue	SEA Objective	Criteria How this action will	SEA Indicator	Data source
			landscape character	



## 8 Likely Significant Effects and Constraints

- 38. Significance will also be assessed in accordance with the criteria listed in Schedule 4 of the SEA Regulations, 2010. Consultation will ensure that all factors are considered. Reference documents are listed in Appendix 1 and include the National Environment Policy, Sustainable Development Strategy and the State of the Environment Report, 2008 (and subsequent updates). Subsequent sections further describe how impacts will be assessed.
- 39. The assessment of significance is already well established in Environmental Impact Assessment (EIA) literature. Significance is a function of impact magnitude and the sensitivity of receptors. Various methods can be used to determine significance including expert judgements, the use of thresholds, reference to legislation, and consultation with stakeholders. It is expected that, in the course of the SEA process, all these techniques will be used.
- 40. The assessment of significance is based on the probability of the impact occurring, on the scale of the impact, its duration, reversibility, whether it has transboundary impacts, and whether the impact is uncertain. **Table 3** describes the assessment framework and the symbols used to denote the various types of impact.
- 41. The relevant SEA objectives identified in **Table 2** will then be used to assess the NTS and TMP in accordance with the significance criteria described in **Table 3**. It is proposed to present the results of the assessment in the format indicated in **Table 4**.

Impact character	Symbol	Description of Impact
	IP	Impact unlikely to occur
Probability	Р	Impact likely to occur
	?	Impact uncertain
	+++	Large positive impact
	++	Moderate positive impact
	+	Slight Positive impact
Scale	0	No impact
	-	Slight negative impact
		Moderate negative impact
		Large negative impact

### Table 3. Assessment legend

# Systematica

As a subcontractor:

Adi

Impact character	Symbol	Description of Impact
Direct / Indirect	I	Indirect impact
	D	Direct impact
Frequency	LT	Long term
Trequency	ST	Short term
Transboundary dimension	TR	Possible transboundary effect

Relevant SEA Aspect	SEA Objectives	Indicator	Comment	Significance		
				Symbols	Summary description	Mitigation
Strategy / Mas	ter Plan Objectiv	/e				
Biodiversity, Fauna & Flora	<ul> <li>To maintai n or improv e biodive rsity (includi ng terrestr ial and marine)</li> </ul>	<ul> <li>Numbe r of develo pments in protect ed areas</li> <li>Conser vation status of habitat s and species</li> <li>New or enhanc ed green spaces in urban areas</li> </ul>	What is the potential impact of the proposed action / measure on protected areas?	Impact assessment in accordance with the criteria listed in Table 2	Justification of the impact assessment	Description of mitigation measures, if these are necessary

### Table 4. Example Strategy and Master Plan Assessment framework and format for Environmental Report



### 8.1 Cumulative & Synergistic Impacts

- 42. This stage of the process involves an assessment of the cumulative and synergistic effects of all proposed priorities in the NTS and TMP on the relevant environmental issues, objectives, and indicators. Cumulative effects are effects that result from incremental changes caused by other past, present, or reasonably foreseeable actions together with the proposal. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.
- 43. Synergistic effects interact to produce a total effect that is greater than the sum of the individual effects. Synergistic effects often happen as habitats or human communities begin to reach carrying capacity and/or non-renewable resources are depleted unsustainably.
- 44. The cumulative and synergistic impact assessment will be based on the information generated by the preceding assessments (described above) of the individual priorities. Any identified cumulative and synergistic effects will be summarised and used as recommendations for final adjustments to the planning documents.



## **9** Alternatives

- 45. The SEA Directive requires that an assessment must identify the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme.
- 46. During the development of the NTS and TMP, feasible alternatives considered by Transport Malta will also be assessed from an environmental viewpoint against the SEA objectives identified in **Table 2.** The alternatives assessment will focus on alternative scenarios. The assessment will be summarised and presented in one table.



## 10 Monitoring

- 47. The Environmental Report will include a section that describes how the success of the NTS and TMP's implementation will be measured with respect to the SEA objectives, by measuring (monitoring) the significant effects of the NTS and the TMP on the environment.
- 48. The SEA will assess the monitoring arrangements proposed for the NTS and TMP and may recommend incorporation of new indicators based on the relevant environmental issues, objectives, and indicators for the planning documents.
- 49. Again, it is noted that the correlation between indicators for monitoring and the NTS and TMP objectives may be constrained because indicators may be affected by other initiatives, including private sector initiatives, other plans and programmes, and legislative measures that are outside the scope of the Master Plan.



## **11** The Environmental Report

50. The proposed structure of the Environmental Report is as set out in **Table 5**. It is noted that as the Report develops the structure may change slightly; however, the following table gives the general framework. It is in accordance with the provisions of Schedule 1 of the SEA Regulations, 2010.

Section	Content
Summary and outcomes	Non-technical summary Statement on the difference the process has made Directions on how to comment on the assessment
Introduction	Strategic environmental assessment (compliance with the SEA Regulations, 2010) Aim and structure of the report NTS and TMP background
Methodology	Approach adopted Stages of SEA process (timings and responsibilities) Limitations Consultation
Baseline	The environmental baseline Summary of environmental issues Links to other relevant policies, plans, programmes
SEA framework	Objectives and indicators Assessment of significance
Assessment of alternatives	Alternatives considered Comparison of alternatives Consideration of environmental issues in development of alternatives Preferred alternative (including reasons for rejection of others)

Table 5.	Structure	of the	Environmental	Report



Section	Content
Detailed Assessment of the NTS and TMP	Assessment of each NTS and TMP Aspect Recommendations Recommended changes to the NTS and TMP Proposed mitigation Uncertainties and risks
Monitoring proposals	A description of the monitoring requirements
Appendices	As necessary

### 11.1 Guidance

51. Draft guidance on SEA for Malta has not yet been published. The Environmental Report therefore draws on other European Guidance, namely, the Greening Regional Development Programme (GRDP) (2006) "Handbook on SEA for Cohesion Policy 2007 - 2013", the Commission's "Implementation of Directive 2001/42 on the Assessment of the Effects of Certain Plans and Programmes on the Environment" and the UK's (2005) "A Practical Guide to the Implementation of the SEA Directive".



34

## **12** Structure of Environmental Report

- 52. The structure of the Environmental Report has been developed following consideration of European Guidance and as described in the Scoping Report. The Environmental Report structure is detailed below:
  - Non-technical summary;
  - Glossary of abbreviations;
  - **Chapter 1** Introduction (overview of the Strategy and its purpose; layout of report);
  - Chapter 2 Summary of the Strategy and Master Plan and their context (brief description of the Strategy and the Master Plan and related documents; links to other plans / programmes);
  - **Chapter 3** Methodology (identification of main options: approach taken, who has been consulted, and when);
  - Chapter 4 Baseline environmental information and trends (and limitations of data) including evolution of baseline without the implementation of the Strategy and Master Plan;
  - Chapter 5 SEA objectives and context (key environmental aspects, relevant environmental objectives and criteria, and likely environmental implications without the SEA);
  - **Chapter 6** Assessment of Alternatives including reasons for selecting alternatives dealt with;
  - **Chapter 7** Assessment of environmental effects and proposed mitigation;
  - Chapter 8 Recommendations; and
  - **Chapter 9** Monitoring requirements.





## Appendix 1: Analysis of Related Plans, Programmes, and Legislation



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
1. International comr	nitments	
The UN Millennium Declaration and Millennium Development Goals (MDGs)	The United Nations Millennium Declaration arose from the meeting of UN Heads of State in New York, September 2000. The Declaration was aimed at revitalising international efforts to tackle critical development issues, and led to agreement on, and adoption of, the eighth Millennium Development Goals (MDG). Of relevance to the SEA is the seventh MDG: ensure environmental sustainability.	This is a national commitment and Malta's Transport Strategy and Transport Master Plan must play a role in its realisation.
UN Framework Convention on Climate Change	The ultimate objective of this Convention, and any related legal instruments that the Conference of the Parties may adopt, is to achieve stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a timeframe sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner. Following the Doha Amendment, Malta has taken on emission commitments for the second commitment period and it will be bound to meet targets jointly with the EU and other Member States when the Amendment comes into force. In the meantime, Malta supports efforts to reduce greenhouse gas emissions and is bound by EU legislation.	The Transport Strategy and Master Plan should be aware of Malta's efforts to combat and adapt to climate change and encourage efforts to reduce emissions. The SEA proposes indicators related to climate change.
Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979)	Malta is a party to the Bern Convention. The Convention aims to ensure conservation of wild flora and fauna species and their habitats. Special attention is given to endangered and vulnerable species, including endangered and vulnerable migratory species specified in appendices. The Parties to the Convention must undertake to take all appropriate measures to ensure the conservation of the habitats of the wild flora and fauna species. Such measures should be included in the Parties' planning and development policies and pollution control, with particular attention	The Transport Strategy and Master Plan should be aware of the endangered and vulnerable species of flora and fauna in Malta and ensure that its Transport Master Plan is not in conflict with measures for their protection and conservation and those of their habitats. This will be done through the assessment of the Transport Master Plan using the SEA objectives on biodiversity.





Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	to the conservation of wild flora and fauna. They should also undertake to promote education and disseminate general information concerning the need to conserve species of wild flora and fauna and their habitats.	
Bonn Convention on the Conservation of Migratory Species of Wild Animals (1979)	This treaty provides a global platform for the conservation and sustainable use of migratory animals and their habitats. This Convention consolidates States through which migratory fauna pass, the Range States (any State that has jurisdiction over any part of the range of a migratory species) and sets the legal framework for internationally coordinated conservation of these species, which are listed in Appendix I of the treaty.	The Transport Strategy and Master Plan must ensure that their implementation will not jeopardise Malta's obligations under this treaty.
Ramsar Convention on Wetlands (1971)	<ul> <li>The Conventions mission is:</li> <li>the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world</li> <li>The scope of the convention includes all lakes and rivers, underground aquifers, swamps and marshes, wet grasslands, peatlands, oases, estuaries, deltas and tidal flats, mangroves and other coastal areas, coral reefs and all human-made sites such as fish ponds, rice paddies, reservoirs and salt pans.</li> <li>The Convention is based on three pillars: <ul> <li>Work towards the wise use of all wetlands;</li> <li>Designation of suitable wetlands as Wetlands of International Importance (the Ramsar List) and ensure their effective management</li> <li>International cooperation on transboundary wetlands, shared wetland systems and shared species.</li> </ul> </li> </ul>	There are two designated Ramsar sites in the Maltese Islands. These are L-Ghadira and Is-Simar wetlands. The Transport Strategy and Master Plan must ensure that their implementation will not jeopardise Malta's obligations under this treaty.



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
The United Nations Convention on the Law of the Sea, 1982	The ability to deploy and utilise installations or structures in the marine environment is essentially one of property rights. The basis of ownership and property rights within the marine environment emanates from the provisions of the United Nations Convention on the Law of the Sea, 1982 (UNCLOS). UNCLOS came into force on 16 <sup>th</sup> November 1994 and among its provisions, it conveys rights to coastal states <sup>3</sup> , while imposing certain duties, among which is environmental protection <sup>4</sup> and safety to navigation. UNCLOS establishes the legal status of the territorial sea, of the air space over the territorial sea and of its bed and subsoil. It also sets down rules for the passage of ships through the seas and distinguishes between passenger ships, commercial ships and warships. Article 56, Part V establishes the rights, jurisdiction and duties of the coastal State in the exclusive economic zone, stating that: In the exclusive economic zone, the coastal State has:	The Transport Strategy and Master Plan must ensure to integrate and/or consider the relevant requirements contained in this Convention including those related to waste management, marine pollution and conservation of living resources. This Convention is specifically important because the Transport Strategy and Master Plan also address the maritime sector. This Convention and its integration in the Transport Strategy and Master Plan will be assessed in the Environmental Report.

<sup>&</sup>lt;sup>3</sup> Article 56

In the exclusive economic zone, the Coastal State has:

<sup>(</sup>a) sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds;

<sup>(</sup>b) jurisdiction as provided for in the relevant provisions of this Convention with regard to:

<sup>(</sup>i) the establishment and use of artificial islands, installations and structures;

<sup>(</sup>ii) marine scientific research;

<sup>(</sup>iii) the protection and preservation of the marine environment;

<sup>(</sup>c) other rights and duties provided for in this Convention.

<sup>&</sup>lt;sup>4</sup> Article 194(1)

States are required to take "...all measures consistent with [the] Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source".





Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	Sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds; Jurisdiction as provided for in the relevant provisions of this Convention with regard to: The establishment and use of artificial islands, installations and structures; Marine scientific research; The protection and preservation of the marine environment; Other rights and duties provided for in this Convention.	
	Within harbour areas, the placing of any sort of installation, even moorings, falls under the jurisdiction of harbour authorities (in Malta's case, Transport Malta), whose permission is required prior to the placing of any such structures (see National Legislation below).	
	The protection of the marine environment is addressed in Part XII of the Convention. States have the obligation to protect and preserve the marine environment. With regards to marine pollution States are to take "all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavour to harmonize their policies in this connection". The Convention applies to all sources, pollution from vessels, and pollution from installations and devices operating in the marine environment. The measures taken to prevent pollution should include those necessary to protect and preserve rare or fragile ecosystems as well	



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	forms of marine life.	
	Pollution from vessels in further addressed in Article 211.	
	Like other Conventions, UNCLOS calls for an assessment of environmental impacts for planned activities that may cause substantial pollution of or significant and harmful changes to the marine environment.	
The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, 1976 (the Barcelona Convention)	This Convention, known as the Barcelona Convention, requires the Contracting Parties to "individually or jointly take all appropriate measures in accordance with the provisions of this Convention and those Protocols in force to which they are party to prevent, abate, combat and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area and to protect and enhance the marine environment in that Area so as to contribute towards its sustainable development" (UNEP, 2004 <sup>5</sup> ).	The application of the precautionary and "polluter pays" principles, the obligation on the Parties to carry out and promote impact assessments, protect and preserve the marine environment and biological diversity, and access to information and public participation are of relevance to the Transport Strategy and Master Plan which address the maritime sector too.
	The Convention, as revised in 1995, strives to "take all appropriate measures to prevent, abate and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area caused by dumping from ships and aircraft or incineration at sea." This is in line with similar moves in other international and regional conventions (e.g. the London Dumping Convention, the Oslo Convention <sup>6</sup> , and the Helsinki Convention <sup>7</sup> ), and is based on the precautionary principle, which has set a new level of priority in emerging international legislation, including EU Directives. These various amendments include the extension of the Convention's geographical field of application to the coast, the application of the	

 <sup>&</sup>lt;sup>5</sup> <u>http://www.unep.ch/seas/main/med/medconvii.html</u>. As accessed in March 2005.
 <sup>6</sup> The Convention for the Prevention of Marine Pollution from Ships and Aircraft (1972).
 <sup>7</sup> The Convention of the Protection of the Marine Environment of the Baltic Sea Area (1974 revised in 1992).





Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	precautionary and "polluter pays" principles, the obligation on the Parties to carry out and promote impact assessments, protect and preserve biological diversity as well as combat pollution from cross-border movements of dangerous waste, and access to information and public participation (EU, 2005 <sup>8</sup> ).	
The Protocol of the Barcelona Convention concerning Specially Protected Areas and Biological Diversity in the Mediterranean, 1999	This Protocol, promulgated by the Contracting Parties to the Barcelona Convention in 1999, aims to protect, preserve, and manage in a sustainable and environmentally sound way the areas of particular natural or cultural value of the Mediterranean through the establishment of Specially Protected Areas (SPAs), and to protect, preserve and manage threatened or endangered species of flora and fauna. To date, 4 SPAs have been designated in Malta under this Protocol, namely I-Għadira, II- Gżejjer ta' San Pawl, Filfla & surrounding islets and I-Ġebla tal-Ġeneral.	Its relevance to the Transport Strategy and Master Plan lies in its requirement for EIA for any industrial or other projects that could significantly affect protected areas and species and their habitats (Article 17 of the Protocol). The requirement for EIA will also be highlighted in the Environmental Report.
The Convention on Biological Diversity, 1992	The Convention on Biological Diversity, also known as the Rio Convention, was enacted in 1992. Its objective is to "conserve the maximum possible biological diversity for the benefit of present and future generations and for its intrinsic value". This pact among the vast majority of the world's governments sets out commitments for maintaining the world's ecological underpinnings while maintaining economic development. The Convention establishes three main goals: the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits from the use of genetic resources. Relevant aspects of the Convention are the emphasis on the sustainable use of components of biological diversity, the requirement for EIA, and the inclusion of biodiversity issues.	The sustainable conservation of biological diversity is particularly relevant to the Transport Strategy and Master Plan and will be assessed in the Environment Report.

<sup>&</sup>lt;sup>8</sup> Europa website. http://europa.eu/legislation\_summaries/environment/water\_protection\_management/l28084\_en.htm; Accessed January 2015.



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	A direct result of the Rio Convention was the concept of Agenda 21 – a global partnership for sustainable development. Agenda 21 addresses today's pressing problems aiming to prepare the world to meet its challenges. It reflects a global consensus and political commitment at the highest level on development and environment cooperation. Its successful implementation is first and foremost the responsibility of Governments but the broadest public participation and the active involvement of the non-governmental organizations and other groups should also be encouraged. National strategies, plans, policies, and processes are crucial in achieving this (UNEP, 2005 <sup>9</sup> ). Agenda 21 has four sections: Social and economic dimensions; Conservation and management of resources for development; Strengthening the role of major groups; and Means of implementation.	
Strategic Plan for Biodiversity 2011-2020	At the tenth meeting at the Conference of the Parties of the Convention on Biological Diversity held in 2010 in Japan, a Strategic Plan for Biodiversity 2011-2020 was adopted. This new plan provides the new overarching international framework for biodiversity including the Aichi Biodiversity targets for the period 2011-2020. There are twenty targets in all, divided into five strategic goal areas as follows: Strategic Goal A: Address the underlying causes of biodiversity loss by	The SEA will consider the Aichi Biodiversity Targets in the assessment of the Transport Strategy and Master Plan.

<sup>&</sup>lt;sup>9</sup> UNEP Earthwatch website, 2005. Accessed at <u>http://earthwatch.grid.unep.ch/agenda21/</u> in March 2005.





Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	mainstreaming biodiversity across government and society;	
	Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use;	
	Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity;	
	Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services; and	
	Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building.	
	It was agreed that all signatories to the Convention would translate this Plan into national biodiversity strategies and action plans	
Nagoya Protocol on Access to Genetic Resources and their Fair and Equitable Sharing of Benefits arising from their Utilisation in the Union	This is a supplementary agreement to the Convention on Biological Diversity (adopted in 2010) and provides a legal framework for the implementation of one of the three objectives of the CBD in relation to the fair and equitable sharing of benefits arising out of the utilisation of genetic resources. The Protocol applies to genetic resources covered by the CBD and to the benefits accrued by their utilisation, it also covers traditional knowledge from the use and benefits from utilisation.	The SEA will consider the Nagaya Protocol in the assessment as relevant.
2. EU requirements		
The White Paper – Roadmap towards a Single European Transport Area – Towards a Competitive and resource efficient transport system (2011)	This White Paper aims at building a competitive transport system which will result in increased mobility, the removal of major barriers in key areas and will fuel growth and employment. It also aims at reducing dependency on fossil fuels. 40 initiatives have been identified in order to create a Single European Transport Area for the next decade.	The Transport Strategy and Master Plan should incorporate the vision and concrete initiatives put forward in this White Paper that aims to create a Single European Transport Area.



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
EU energy and climate change policy, 2008: 20- 20-20 targets	The EU adopted an integrated energy and climate change policy in December 2008, aimed at achieving a low carbon, energy efficient economy as part of the action towards a sustainable future. The goals of this EU policy are better expressed in the so called 20-20-20 targets as follows:	The Transport Strategy and Master Plan need to be aligned with these commitments and contribute towards facilitating their achievement.
	• Decrease the EU overall greenhouse gases by 20% over 1990 levels (30% if international agreement is reached) by 2020;	
	• Reduce the EU overall energy consumption by 20% by 2020 through increased energy efficiency; and	
	• Achieve a share of 20% renewable energy in the EU overall gross energy consumption by 2020	
	The energy and climate change policy has resulted into a number of EU Directives, decisions which translate these goals into commitments for the EU Member states.	
2030 Climate and Energy Framework	In October 2014, EU leaders agreed on the domestic 2030 greenhouse gas reduction target of at least 40% below the 1990 level. This framework continues to drive progress towards a low-carbon economy. In reaching this target, the EU will ensure that it is on track to reach the target of a reduction in 80% emissions by 2050. In order to reach the 2030 target (40% emissions reduction), the sectors that fall within the EU emissions trading scheme (EU ETS) would need to reduce their emissions by 43% compared to 2005 whereas emissions from sectors outside the EU ETS Scheme (including transport) would need to be cut by 30% below the 2005 level. This needs to be reflected in Member States' targets.	The Transport Strategy and Master Plan must be integrate consideration of these 2030 targets and how the sector will contribute to their achievement.
Directive 2009/29/EC of the European Parliament and of the Council of 23	This Directive intends to extend and improve the EU emissions trading scheme (EU ETS) applicable from 2013.	The effect of this Directive is that large installations, which in Malta include the generation plant of Enemalta will have to buy the $CO_2$ allowances through auctioning. An amount of allowances which will





Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
April 2009 amending Directive 2003/87/EC (as amended inter alia by Directive 2008/101/EC that extends the scope to aviation activities) so as to improve and extend the greenhouse gas emission allowance trading scheme in the Community		decrease every year up to 2020 will be allocated to Malta for auctioning.
Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020.	This decision sets targets for Member States for greenhouse gas emissions that do not fall within the scope of the EU ETS.	The GHG emissions from the non EU ETS sector in Malta cannot increase by more than 5% (over the 2005 level) by 2020
Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing	This directive sets out new renewable energy targets for EU Member States aimed at reaching the overall EU share of 20% of energy from renewable energy sources by 2020. Member States may comply with their obligations under this Directive either by investing in renewable energy sources and/or using the flexible mechanisms provided by the same Directive such as statistical transfers and participation in joint projects in other Member States or in non-member states subject to a number of conditions.	Malta has an obligation to reach a 10% share of renewable energy in the energy consumption by 2020 (including a separate 10% target of renewable fuel in transport) with interim targets.



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
Directives 2001/77/EC and 2003/30/EC		
European Commission Communication Energy Roadmap 2050	The EU is committed to reducing greenhouse gas emissions to 80-95% below 1990 levels by 2050 in the context of necessary reductions by developed countries as a group. In the Energy Roadmap 2050 the Commission explores the challenges posed by delivering the EU's decarbonisation objective while at the same time ensuring security of energy supply and competitiveness. The Energy Roadmap 2050 is the basis for developing a long-term European framework together with all stakeholders <sup>10</sup> .	The strategic direction of the Transport Strategy and Master Plan should reflect the spirit of the Energy Roadmap 2050.
Directive on the development of alternative fuels infrastructure (2014/94/EU)	In line with the White Paper 'Roadmap to a Single European Transport Area – Towards a Competitive and Resource Efficient Transport System' that called for reducing the oil dependence of transport and set a target of 60% greenhouse gas emissions reduction from transport by 2050, this Directive sets out requirements on establishing national policy frameworks for the market development of alternative fuels and on a minimum infrastructure inclusion for alternative fuels, including the implementation of common technical specifications.	The Transport Strategy and Master Plan should be mindful of the requirements laid out in this Directive and the overall aim that it is seeking to contribute towards.
Directive 2009/30/EC amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and	The scope of this Directive includes road vehicles as well as inland waterway vessels when not at sea and sets technical specification on health and environmental grounds for fuels to be used with positive ignition and compression-ignition engines, taking account of the technical requirements of those engines; and a target for the reduction	The Transport Strategy and Master Plan should be mindful of the requirements laid out in this Directive as relevant.

<sup>&</sup>lt;sup>10</sup> COM(2011)112 final: Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and The Committee of the Regions: A Roadmap for moving to a competitive low carbon economy in 2050; http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52011DC0112; Accessed January 2015



As a subcontractor:

Adi	
ASSOCIATES	

Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC	of life cycle greenhouse gas emissions.	
Directive 2012/33/EU amending Council Directive 1999/32/EC as regards the sulphur content of marine fuels	Due to the potentially significant impacts resulting from emissions from shipping, this Directive sets new limits for sulphur content in marine fuels used in the EU and although use of fuel with higher sulphur content is still possible, appropriate exhaust cleaning systems must be in place. It also encourages the use of shore-side electricity.	The Transport Strategy and Master Plan should be mindful of the requirements laid out in this Directive as relevant.
Directive 2012/27/EU on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC	The Energy Efficiency Directive makes reference to the fact that the conclusions of the European Council of 4 February 2011 acknowledged that the Union is not on track with regards to the energy efficiency target and that action is required to ensure higher energy savings in a number of sectors including transport. The Directive establishes a set of binding measures that aim to help the EU reach its 20% energy efficiency target by 2020. Member States are required to use energy more efficiently throughout the energy chain.	The Transport Strategy and Master Plan should be mindful of the requirements laid out in this Directive as relevant.
EU Sustainable Development Strategy	The first EU SDS was launched at the Gothenburg Summit in June 2001. The strategy proposed objectives and policy measures to address key unsustainable trends and also the requirement for every new major policy to be submitted to an Impact Assessment. The SDS was revised and a renewed strategy was adopted in June 2006. Seven key priority	The priority challenge on sustainable transport is particularly relevant for the Transport Strategy and Master Plan.



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	challenges were established for a period until 2010:	
	Climate change and clean energy;	
	Sustainable transport;	
	Sustainable consumption & production;	
	Conservation and management of natural resources;	
	Public Health;	
	Social inclusion, demography and migration; and	
	Global poverty and sustainable development challenges	
	The policy was reviewed again in July 2009.	
EU Biodiversity Strategy to 2020	This document aims to halt the loss of biodiversity and ecosystem services in the EU by 2020. There are six main targets and 20 actions to facilitate Europe to reach this goal. The six targets cover:	The Transport Strategy and Master Plan should directly consider potential impacts on biodiversity and the increased use of green infrastructure. These will be assessed through the SEA.
	• Full implementation of EU nature legislation to protect biodiversity;	
	• Better protection for ecosystems, and more use of green infrastructure;	
	• More sustainable agriculture and forestry;	
	Better management of fish stocks;	
	• Tighter controls on invasive alien species; and	
	• A bigger EU contribution to averting global biodiversity loss.	
Commission proposal for EU legislation to address invasive alien species and	The Commission has proposed a Regulation on the prevention and management of the introduction and spread of invasive alien species. The proposal is for three types of interventions. These are: prevention, early	The spirit of this proposal will be considered in the SEA during assessment of the Transport Strategy and Master Plan as relevant.





Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
protect biodiversity	warning and rapid response, and management.	
The Habitats Directive (92/43/EEC)	The Habitats Directive is one of two main nature conservation Directives (the other being the Birds Directive). It centres around two pillars, one being the Natura 2000 network (designating Special Conservation Areas), the largest network of protected areas in the world, and the other the protection of species of conservation interest. In the event that a proposed plan/programme or project could negatively affect the integrity of a Natura 2000 site or listed species therein, the Habitats Directive requires an Appropriate Assessment. Rather than being a decision-informing instrument, such as EIA and SEA, Appropriate Assessment is a decision-maker in that should significant negative impacts be identified, the associated plan/programme or project will not be allowed to move forward in accordance with the requirements of this Directive.	The Transport Strategy and Master Plan should seek to ensure that it does not affect the integrity of a Natura 2000 site or relevant species. Any risk of this will be identified through the SEA.
The Birds Directive (2009/147/EC)	The oldest piece of nature protection legislation in the EU, this Directive seeks to provide protection to all of Europe's natural species. The Directive was set up in response to a growing decline in many of Europe's bird species resulting from pollution, loss and degradation of habitat and unsustainable use. Recognising these threats, the Directive provides emphasis on conservation of habitats for both resident and migratory birds and allows for the designation of Special Protection Areas (SPAs), that together with the Special Conservation Areas assigned under the Habitats Directive forms the Natura 2000 network. This Directive also bans activities that have a negative impact on birds, including those resulting in taking of birds.	The Transport Strategy and Master Plan should seek to ensure that it does not affect the integrity of SPAs.
The Water Framework Directive (2000/60/EC)	The Water Framework Directive seeks to establish a structured framework for action in the field of water policy. It aims to establish a framework for the protection of inland surface waters, transitional waters, coastal waters	In accordance with this Directive, Malta is required to ensure that designated surface waters achieve good ecological and chemical status by 2015 and that this status is to be maintained. Article 17 also specifies the need to achieve good status for groundwater bodies. The



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	<ul> <li>and groundwater that:</li> <li>Prevents further deterioration and protects and enhances the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems;</li> <li>Promotes sustainable water use based on a long-term protection of available water resources;</li> <li>Aims at enhanced protection and improvement of the aquatic environment, inter alia, through specific measures for the progressive reduction of discharges, emissions and losses of priority substances and the cessation or phasing-out of discharges, emissions and losses of the priority hazardous substances;</li> <li>Ensures the progressive reduction of pollution of groundwater and prevents its further pollution, and</li> <li>Contributes to mitigating the effects of floods and droughts and will have a significant role to play in protecting and managing water resources.</li> </ul>	Transport Strategy and Master Plan must have regard to this requirement. This will be assessed through the SEA.
Directive on the protection of groundwater against pollution and deterioration (2006/60/EC)	Groundwater is defined under the WFD as <i>all water which is below the</i> <i>surface of the ground in the saturated zone and in direct contact with the</i> <i>ground or subsoil.</i> The Groundwater Directive (GWD) establishes specific measures in light of Article 17 of the Water Framework Directive (WFD) with a view to prevent and control groundwater pollution. Thus, it establishes criteria as well as a procedure for assessing groundwater chemical status. Member States must characterise, monitor, classify, have objectives established for, protect and, where necessary improve groundwater. Like the WFD, the GWD takes a receptor-oriented and risk- based approach, in particular considering groundwater in terms of ecologically-oriented objectives including groundwater dependent terrestrial ecosystems and surface water ecosystems	As required under the WFD and the GWD in support of this requirement, Malta is required to ensure that groundwater bodies achieve good ecological and chemical status by 2015 and that this status is to be maintained. The Transport Strategy and Master Plan must have regard to this requirement. This will be assessed through the SEA.





Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
Directive on the assessment and management of flood risks (2007/60/EC)	The EU Floods Directive requires Member States to assess whether water courses and coast lines are at risk from flooding. Where these have been identified, the flood extent must be mapped as well as assets and people at risk in these areas. Measures to reduce this risk must be drawn up. This Directive should also be implemented in coordination with the WFD.	The Transport Strategy and Master Plan should be aware of areas that carry a flood risk, in particular, where interventions in such areas might be proposed.
Bathing Water Quality Directive (76/160/EEC)	This Directive provides a framework for the monitoring, assessment, and management of the quality of bathing water and defines minimum quality criteria that Member States must adhere to.	The Transport Strategy and Master Plan should be mindful of the need to abide by these standards. This will be assessed through the SEA as relevant.
Marine Strategy Framework Directive (2008/56/EC)	This Directive is the first all-encompassing piece of European legislation aimed at protection of the marine environment. The main aim is to achieve Good Environmental Status (GES) in European waters by 2020 through the adoption of an ecosystem-based approach to the management of all human activities that impact the marine environment. The regulation includes implementation of a number of key steps to achieve the overriding aim including an initial assessment of the current environmental status of marine waters as well as the environmental pressures and impacts on the marine environment. The initial assessment must include an economic and social analysis of the use and degradation of the marine environment. The determination of GES must then be carried out based on a number of qualitative descriptors. Environmental targets and associated indicators must then be set in order to guide progress towards the achievement of GES.	The Transport Strategy and Master Plan must operate within the spirit of this Directive.
European Communication Green Infrastructure (GI) – Enhancing Europe's Natural Capital	This Communication highlights the many benefits of GI solutions and the importance of integrating green infrastructure solutions in spatial planning. It notes that Cohesion Policy has identified GI as an investment priority for the next programming period.	The SEA will assess the significance of potential benefits proposed as well as identify any potential for improvement in proposals made in relation to GI.



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
SEA Directive (2001/42/EC)	The SEA Directive requires that certain plans and programmes are subject to an environmental assessment prior to their implementation.	The Transport Strategy and Master Plan is undergoing an SEA in accordance with the Directive.
Environmental Noise Directive (2002/49/EC)	The Environmental Noise Directive (the END) aims to <i>define a common approach intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to the exposure of environmental noise</i> . In addition, it aims to provide a framework for the development of EU measures to reduce noise from major noise emitters including road and rail vehicles and infrastructure, aircraft, outdoor and industrial equipment and mobile machinery.	The Transport Strategy and Master Plan and SEA will consider this Directive during their development.
3. Most Relevant Nat	ional Environmental, Planning & Sectorial Documents	
A Civil Aviation Policy for Malta 2014-2020	This proposed policy aims at updating the policy for the aviation sector to 2020. The policy includes the enactment of a Civil Aviation Act and the setting up of a Civil Aviation Authority (CAA). Other initiatives put forward include: the re-establishment of an air-link between Malta and Gozo, the establishment of a General and Business Aviation Terminal and an Airport Zone Master Plan.	
Budget 2015	The Budget 2015 document includes measures to address traffic congestion and incentives leading to the updating of the vehicle fleet.	The Transport Strategy and Master Plan will incorporate the relevant measures presented in the budget.
	This document provides the vision for the reform of the public transport system. It includes the concepts of intermodal travel and integrated transport systems.	
	This strategy, drawn up by the Climate Change Committee, presents 87 recommendations with the main principle to mitigate and embark upon	The Transport Strategy and Master Plan should aim to complement the



As a subcontractor:

ACI	
	1

Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	adaptation measures to minimise impacts from climate change, particularly those arising from greenhouse gas emissions.	recommendations developed in this strategy as relevant.
National Renewable Energy Policy (2006)	This policy aims at moving towards a sustainable energy supply by finding a balance between security of supply, environmental protection and the social dimension (i.e. affordability and competitiveness). The policy includes the promotion of the use of bio-fuels for road transport.	
	The revised National Environmental Health Action Plan (NEHAP), 2006-2010, includes the transport sector. In particular it deals with the correlation between high traffic and the incidence of related diseases.	
	This policy document shows that measures to combat obesity need to be interlinked with other sectors including transport. The policy shows that decreasing private car usage and increasing public transport usage would result in people walking more. Furthermore non-motorised forms of transport should be promoted.	
Facilities in Malta: Identification of Potential	This document identifies sites that can be considered for new permanent yacht marinas and sites for seasonal or temporary marinas. It also analyses the current demands for this infrastructure and considers the criteria for the selection for these facilities and also discusses relevant issues.	
	The Action Plan presents a synthesis of how Transport Malta will deploy Intelligent Transport Systems (ITS) in two phases i.e. 2013-2017 and 2018- 2020. The ITS sub-systems will include a CCTV network, a dynamic sign network updated with real time information, electronic parking guidance system, Urban Traffic Management and Control System (UTMC) and a road	



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	flooding alert management system.	
Renewable Energy Action Plan as required by Article	This action plan identifies Malta's expected final energy consumption between 2010 and 2020 and sets out national targets for the share of energy from renewable sources consumed in transport, electricity and heating and cooling in 2020 within the context of the national energy policy as required by the RES Directive.	
National Energy Efficiency Action Plan (2008-2016)	The aim of this Action Plan is to promote energy efficiency under Malta's EU obligations. The Action Plan is divided into three phases, comprising three years each:	
	Phase I: 2008-2010;	
	Phase II: 2011-2013; and	
	Phase III: 2014-2016.	
	In each of these phases, the Action Plan aims to achieve savings of 3% of the average energy consumption of the base period (September 2001-September 2006) as a result of improved energy efficiency resulting in a gradual reduction of total consumption by 9% until 2016. Measures include reduction of water demand, improved efficiency in buildings and in water production.	
The National Energy Policy for the Maltese Islands, 2012	Malta's National Energy Policy focuses on the following overall objectives: Energy efficiency; Reducing reliance on imported fuels; Security of supply; Reducing Emissions from the energy sector;	Any measures related to the energy sector described in the Transport Strategy and Master Plan should be in line with the direction set out in the National Energy Policy. This will be evaluated through the SEA.



As a subcontractor:

Adi
ASSOCIATES

Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	Delivering energy economically, efficiently and effectively; and Ensuring the energy sector can deliver.	
	The National Reform Programme (NRP) 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. The NRP includes measures that focus on the following thematic areas: employment, education, energy, research and innovation and social inclusion in particular through the reduction of poverty.	strategic direction.
Water Catchment Management Plan, 2011	Malta's Water Catchment Management Plan (WCMP) addresses all waters and its objectives focus on water resource management and conservation. The Plan is part of the implementation of the Water Framework Directive and takes an integrated approach and provides a single framework for the management of different water categories (surface and groundwater), integration of water policy across sectors, and promotes stakeholder and public participation dialogue.	approach with regards, in particular to the programme of measures and monitoring programme of the WCMP as relevant. The SEA considers impacts of the Strategy and Master Plan in relation to the requirements under the Water Framework Directive and the WCMP including impacts
Storm Water Master Plan, 2008	This plan addresses the economic losses, social damage and environmental consequences caused by floods. It proposes alternative engineering options for storm water management and reuse, maintenance programmes and implementation measures. The key principles considered in the plan are sustainable development, the proximity principle and self-sufficiency, the precautionary principle and pollution prevention.	implications of the plan including the findings of its associated SEA.
A Strategy for the Prevention and Control of	The overall goal of this strategy is: To develop a multifactorial approach to non-communicable disease (NCD)	The Transport Strategy and Master Plan can contribute to ensuring an integrated approach, where relevant (as identified here), in considering



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
Noncommunicable Diseaseprevention through tackling common risk factors targeting both at a population level, and also high-risk groups.how tr being common	how transport-related measures can also contribute to improved well- being of the population and reduced risk from NCD as a result of land-	
	regard, the Strategy identifies the increase in motorisation and vehicle use as contributing to air and noise pollution with ensuing effects on cardiopulmonary and mental health. Land transport-related air pollution has been linked to an increased risk of death, in particular from cardiopulmonary causes as well as an increased risk of respiratory symptoms and diseases that are not a result of allergies. In addition, land- transport related air pollution could increase the risk of developing allergies and can result in exacerbation of symptoms particularly in susceptible groups. Other identified risks include risk of myocardial infarction and lung cancer in people with long-term exposure. Long-term decreases in air pollution levels are associated with decreases in average annual deaths from all causes and declines in respiratory and	based air pollution. This issue will be considered in the SEA.
	The Strategy also identifies benefits associated with regular walking or cycling as an alternative to vehicular use in all age groups but especially in children and the elderly, enhancing well-being.	
	In an attempt to address physical inactivity, strategy targets for 2020 are:	
	To increase the proportion of the Maltese population who carry out a moderate or high level of physical activity daily or on most days, from the current 43.5% to 70%.	
	To reduce the proportion of children and adolescents who never perform any exercise by 5%.	
	With these in mind some of the strategies recommended to reduce the level of morbidity by increasing physical activity in the general population include:	





Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	<ul> <li>Infrastructural changes through intersectoral collaboration to:         <ul> <li>Enhance public leisure areas</li> <li>Increase availability of areas for physical activity</li> <li>Make physical activity accessible to all.</li> </ul> </li> <li>To promote walking as a means of active transport.</li> <li>To promote physical activity in all setting.</li> </ul>	
The National Cancer Plan, 2011-2015	This Plan recognises the need for an integrated approach with other sectorial areas including transport. The Plan identifies environmental risk factors for cancer including combustion products and particulate matter. The Plan identifies the decrease in air pollution following the abolition of the use of leaded petrol in Malta. However, it notes that the number of vehicles per capita has risen well over the European average and levels of particulate matter are in excess of EU limit values.	of the importance of land transport in contributing to environmental risk
National Tourism Policy 2012-2016	Malta's Tourism Policy aims to take an integrated approach by including economic, environmental and social goals. It identifies niche markets and discusses the tourism product.	
National Environmental Health Action Plan, 2006 - 2010	The action plan is a policy framework document that sets targets and priority actions for the period 2006-2010. Actions are primarily concerned with the protection of public health through protection of the environment.	health considerations as relevant. Impacts on human health are
A Draft Sustainable Strategy for the Maltese Islands 2006-2016	The Sustainable Strategy is centred on four main themes: Managing the environment and resources; Promoting sustainable economic development; Fostering sustainable communities;	Sustainable development principles must be integrated as part of the Transport Strategy and Master Plan. These will be assessed through the SEA.



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	Cross-cutting strategic issues.	
	Within these sectors the following priorities are identified:	
	The Environment	
	1. <u>Climate Change</u> : take steps to reduce greenhouse gas emissions through transport and energy policies that seek to promote environmental protection, competitiveness, and security of supplies and, as a result, decouple the rate of growth of Green House Gases (GHG) emissions from economic growth.	
	2. <u>Air Quality</u> : take remedial action to control emissions of air pollutants and achieve compliance with European standards;	
	3. <u>Nature and Biodiversity</u> : halt loss of biodiversity by 2010, and achieve management of protected areas by 2008;	
	4. <u>Groundwater</u> : adopt a policy that safeguards the quality of groundwater resources to protect human health, and satisfy the requirements for human use and achieve good quantitative status by 2015;	
	5. <u>Seawater</u> : sustain compliance with the Bathing Water Directive and achieve compliance with the Barcelona Convention standards;	
	6. <u>Waste</u> : prevent and minimise waste by achieving EU waste-related objectives and targets, reviewing Malta's Waste Management Strategy by 2007;	
	7. <u>Land use</u> : protect, maintain, and improve the urban and rural environment and through the planning system protect the open countryside from uses, particularly residences, which can be more appropriately located in urban areas;	
	8. <u>Transport</u> : reduce car ownership rates to the EU average by 2014. Attain 1995 bus patronage levels by 2014 (40 million passengers);	





Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	The Economy	
	9. <u>Economic Growth</u> : adopt policy measures so that the GDP (Gross Domestic Product) per capita in real terms grows at a rate that will enable the Maltese economy to converge towards the EU average.	
	10. <u>Employment</u> : create employment opportunities to generate income and improve the quality of life of the population, taking into consideration environmental and social impacts, and adopt policy measures so that the ratio of total employment to the working age population in Malta converges with the EU average and reaches at least 57% by 2010;	
	11. <u>Labour productivity</u> : adopt policy measures to increase average labour productivity at a rate of 1% per annum over the EU average by 2010, while attempting to balance wages, taxation, and productivity, in collaboration with the social partners.	
	Society	
	12. <u>Poverty reduction</u> : reduce or at least sustain the current level of 15% of the population at risk of poverty and decrease the ratio of population aged over 65 at risk of poverty from 20% to 15%, by 2010;	
	13. <u>Labour force participation of women</u> : adopt policy measures so that the labour force participation rate of women increases from 33% to 40.7% by 2010;	
	14. <u>Health</u> : decrease ratio of overweight/obese population in line with the EU average by 2010 by, amongst other actions enhancing the focus on healthy living and prevention, to reduce the need for curative care;	
	15. <u>Education</u> : continue to adopt measures to decrease the early school- leavers rate to 35% by 2010.	
	Cross Cutting Issues	



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	16. <u>Spatial development plan</u> : by 2010 draw up an integrated spatial development plan to take forward the National Strategy for Sustainable Development, with the participation of major stakeholders;	
	17. <u>Economic Instruments</u> : gradually adjust the present income tax regime so that the ratio of green taxation to total taxation reaches the EU average by 2010;	
	18. <u>Enforcement</u> : by 2008, put in place an audit of enforcement arrangements to assess the adequacy of the current enforcement mechanisms and to promote integration of responsibilities and reduction of overlaps.	
	Implementation	
	19. <u>Institutional setup</u> : by 2008 put in place a permanent structure, appropriately staffed and funded, to revise and implement the National Strategy for Sustainable Development, on an ongoing basis, under the auspices of the National Commission for Sustainable Development, and hold an annual Conference with participation of major stakeholders to critically evaluate progress relating to the strategy;	
	20. <u>Sustainability indicators</u> : by 2008, establish and fund an entity responsible for compiling and evaluating sustainability indicators. This entity should work closely with the National Commission for Sustainable Development and the National Statistics Office.	
Structure Plan for the Maltese Islands, 1990	This is the national planning document that sets out the development framework for the Maltese Islands for the twenty-year period to 2010. Its' three goals are:	
	1. To encourage the further social and economic development of the Maltese islands, and to ensure as far as possible, that sufficient land and support infrastructure are available to accommodate it;	





Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	<ol> <li>To use land and buildings efficiently, and consequently to channel urban development activity into existing and planned development areas, particularly through rehabilitation and upgrading of the existing fabric and infrastructure thus constraining further inroads into undeveloped land, and generally resulting in higher density development than at present;</li> <li>To radically improve the quality of all aspects of the environment of both urban and rural areas.</li> </ol>	
	The new Environment and Development Planning Act (2010) requires the preparation of a Strategic Plan for the Environment and Development (SPED). This document is currently under preparation and the initial consultation document to establish the strategic objectives can be downloaded from the MEPA website. The SPED will replace the current Structure Plan, providing a strategic spatial planning framework up to 2020. The SPED will be based on an integrated planning system that aims to (i) ensure the sustainable management of land and sea resources together with the protection of the environment; and (ii) guides the development and use of land and sea space.	spatial planning objectives. These will be considered in the Environment
National Climate Change Adaptation Strategy (NCCAS), 2012	The National Climate Change Adaptation Strategy presents a series of actions aimed at various sectors that requires integration of such measures as part of the strategic planning in areas such as fisheries, agriculture, water management, etc.	
National Strategy for Policy and Abatement Measures Relating to the Reduction of Greenhouse Gas Emissions, 2009	This strategy is based on a number of pillars including securing civil society and citizen participation, establishing an institutional framework for climate change and building the appropriate human capital, integrating the economics of climate change in policy design and the identification of abatement measures. Abatement measures in the following sectors: energy, waste and agriculture, water, and transport.	objectives within the National Strategy for Policy and Abatement



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
National Air Quality Plan, 2010	This document provides policy guidance to reduce daily average $PM_{10}$ concentrations in ambient air in the Maltese Islands. Proposed measures target the major sources of $PM_{10}$ , including the construction industry, power generation and traffic (the major contributor to the exceedance of $PM_{10}$ concentrations in ambient air).	
National Noise Action Plan, 2013	The National Noise Action Plan was drafted to satisfy minimum requirements in accordance with the END Directive. It outlines a long-term strategy aimed at preventing and reducing environmental noise where necessary and in particular where exposure levels can result in harmful effects on human health and preserving environmental noise quality where it is good. It also sets out objectives for monitoring and management of environmental noise in the Maltese Islands.	
National Environment Policy, 2012	The final NEP was launched in February 2012 and covers all end sectors and natural resources, including air, waste, water, land, soil, climate, biodiversity, coastal and marine area, noise chemicals and mineral resources. The policy covers the period from 2012 to 2020.	an environmentally-sustainable and integrated manner. The
	The NBSAP provides a vision that reflects the priorities for efficient use of resources and halting biodiversity loss in line with EU requirements and the Global Biodiversity Strategic Plan under the Convention on Biological Diversity.	consider the potential impacts clearly outlined in the NBSAP and ensure
Strategic Action Plan for the Conservation of Maltese	This Report identifies priority actions in the field of marine and coastal biodiversity. These actions include the preparation of species and habitat action plans, declaration of marine and coastal protected areas, data compilation, monitoring proposals, upgrading research equipment, and effective enforcement.	requirements in the field of biodiversity and ensure integrated measures





Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	The MNEAP aims at increasing the Battery Electric Vehicles (BEV) on the Maltese roads. The target is that of 5,000 vehicles by 2020. The Action Plan presents a SWOT analysis and a three level phased approach of how to build an electromobility sector in Malta. The three levels will be implemented in parallel.	
Speed Management on Maltese Roads Policy and Technical Guidance Manual (Consultation Document)	This document focuses on the issue of speed limits on the Maltese Roads. It presents an overview of the current situation and presents a number of proposals for improving public awareness, law enforcement and road safety.	
National Road Safety Strategy 2014-2024	<ul> <li>The National Road Safety Strategy aims to improve road safety, and in doing so has identified a number of objectives that are of particular relevance from an environmental and well-being point of view and that can be supported through the Transport Strategy and Master Plan. There is a focus on encouraging cycling, recognising it as an environmentally-friendly mode of transport and ensuring that this is a safe activity as well as promoting public transport to reduce air pollution. In conclusion the strategy considers that the proposed actions will support the following: <ul> <li>A way of life which is more sustainable and active</li> <li>Reduced energy consumption and reduced greenhouse gas emissions</li> <li>Reduced trauma and substance abuse will reduce the work load on the health systems</li> <li>Safety at the workplace for professional drivers will be improved</li> <li>Land use planning will be improved and community severance will be reduced</li> </ul></li></ul>	need to be considered and in synchrony with the development of the



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	economy due to less queues and delays resulting from collisions.	
Draft National Strategy for the Cultural Heritage (2012- 2016)	The draft National Strategy for Cultural Heritage 2012 addresses 22 inter- related objectives, that are grouped into four main areas:	The Transport Strategy and Master Plan must consider this draft strategy and integrate measures where relevant.
	<ul> <li>Broadening citizen participation: cultural heritage and the local community;</li> </ul>	
	• Improving governance in the cultural heritage sector: Investment in the administration setup of the local cultural heritage;	
	• Care and use of the cultural heritage resource: preservation and conservation;	
	• Sustainable use of heritage resources: sustainable use of cultural heritage.	
Malta's Partnership Agreement, 2013	This document provides the overall framework that will determine the areas for investment under the European Structural and Investment Funds. The Partnership Agreement sets the framework for Operational Programme I, Operational Programme II, the Rural Development Programme, and the Fisheries Operational Programme.	the 2014-2020 funding period and should therefore ensure coherence
4. National Legislatio	n	
Constitution of Malta	The Constitution of Malta (Section 9) declares that the State shall safeguard the landscape and the historical and artistic patrimony of the Nation. These are the only aspects of the environment referred to in the Constitution, underlining the importance of the landscape and historical heritage.	





Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
Environment and Development Planning Act, 2010	This Act seeks to protect the environment and make provision for the planning and management of development and establishes the Malta and Environment Planning Authority in relation to these requirements.	
	The Act requires everyone together with the government to protect the environment and to assist in the taking of preventative and remedial measures to protect the environment and manage natural resources in a sustainable manner. Various duties that fall to the government are established including:	
	4(a) to manage the environment in a sustainable manner by integrating and giving due consideration to environmental concerns in decisions on socioeconomic and other policies;	
	4(b) to take such preventive and remedial measures as may be necessary to address and abate the problem of pollution and any other form of environmental degradation in Malta and beyond, in accordance with the polluter pays principle and the precautionary principle;	
	4(e) to apply scientific and technical knowledge and resources in determining matters that affect the environment;	
	4(g) to safeguard biological diversity;	
	4(h) to combat all forms of pollution;	
	$4(\ensuremath{\mathbf{i}})$ to consider the environment as the common heritage and common concern of humankind; and	
	4(j) to provide incentives leading to a higher level of environmental protection.	
	The Territorial Waters and Contiguous Zone Act (Chapter 226) was enacted in 1971 (and subsequently amended in 1975, 1978, 1981, and 2002) "to extend the territorial waters of Malta and to make provision for a	



Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	contiguous zone". The Act declares the territorial waters of Malta as being "all parts of the open sea within twelve nautical miles of the coast of Malta measured from low-water mark on the method of straight baselines joining appropriate points".	
	The Act empowers the Prime Minister to make regulations to control and regulate the passage of ships through the territorial waters and to regulate [Art. 7(1)]:	
	Safety of navigation and marine traffic,	
	The protection of navigational aids, facilities and other installations;	
	The protection of cables and pipelines;	
	The conservation of marine living resources;	
	The prevention of infringement of fishery laws;	
	The preservation of the environment;	
	The prevention, reduction and control of marine pollution;	
	Marine scientific research and hydrographic surveys;	
	The prevention of infringement of customs, fiscal, immigration, or sanitary laws; and	
	The arrest, detention, and seizure of ships to ensure compliance with laws and regulations.	
	Although this Act provides for wide-ranging powers through enactment of regulations, none have been issued under this Act to date.	
Malta Resources Authority Act, 2000	The Malta Resources Authority Act establishes the powers of the Malta Resources Authority whose regulatory functions centre around water, energy, and mineral resources. In relation to water specifically the	





Plan, Programme, Legislation	Description	Implications for Malta's Transport Strategy and Master Plan
	<ul> <li>Authority shall under provision 4(2)(b):</li> <li>(i) secure and regulate the acquisition, production, storage, distribution or other disposal of water for domestic, commercial, industrial or other purposes;</li> <li>(ii) secure and regulate the conservation, augmentation and operation of water resources and the sources of water supply;</li> <li>(iii) secure and regulate the treatment, storage, disposal, use or reuse, as appropriate, of sewage, waste water, sludge and storm water run-off;</li> <li>(iv) secure and regulate the provision of adequate systems of public sewers and to ascertain their cleanliness, safety and efficiency;</li> <li>(v) ensure the safe discharge, reception, treatment and disposal of trade effluent;</li> <li>(vi) encourage and regulate the re-use of treated effluent;</li> <li>(vii) ensure the proper and fit disposal of waste water sewage;</li> <li>(viii) maximise the use of storm water run-off;</li> </ul>	
Authority for Transport in Malta Act, 2009	This Act provides for the establishment of the Authority for Transport in Malta, which assumes the functions previously exercised by the Malta Maritime Authority, the Malta Transport Authority and the Director and Directorate of Civil Aviation and for the exercise by or on behalf of that Authority of functions relating to roads, to transport by air, rail, road or sea, within ports and inland waters, and relating to merchant shipping.	



# Appendix2:ResponsetoPublicConsultation on Scoping Report



## Response to comments made by the Sustainable Energy and Water Conservation Unit within the Ministry for Energy and Health

Scoping Report Section	Comment	Consultants' Response
General	The lack of focus of surface water (rainwater runoff) in the scoping report is noted. One of the main issues in relation to the development of transport infrastructure is definitely its impact on the management of rainwater runoff. Therefore, it is suggested that this issued be included under the report's baseline issues.	Paragraph 19, bullet on freshwater has been updated to include direct reference to rainwater runoff. Baseline data on rainwater runoff management has been referred to specifically in Table 1 under the issue of Water.
General	Similarly the objectives of the SEA should not be solely focused on groundwater quality, but be more objective in considering rainwater runoff as a further national water resource. The potential for inclusion of rainwater harvesting facilities in transport infrastructure projects should thus be considered. Furthermore, the SEA should also consider the potential impact of the disposal of rainwater runoff generated through transport infrastructure development on groundwater quality and water management in valleys, since all too often these issues have been overlooked at planning stage.	Table 2 has been updated to include a SEA objective 'To maintain or improve rainwater harvesting capacity' and an appropriate indicator has also been identified. The assessment included within the Environmental Report will consider the issues identified by the Ministry in relation to rainwater runoff harvesting as well as impacts on groundwater quality and implications on water management in valleys in relation to runoff generated through transport infrastructure development.
General	With respect to legislative texts to be analysed under the scoping report, the inclusion of the EU Groundwater Directive and the EU Floods Directive is recommended.	These Directives have been added to the Appendix 1: Analysis of Related Plans, Programmes, and Legislation.

### Table 6. Response to Comments made by the Sustainable Energy and Water Conservation Unit within the Ministry for Energy and Health



# Response to Comments made by the Department of Environmental Health within the Ministry for Energy and Health

Scoping Report Section	Comment	Consultants' Response
Paragraph 19	Noise, bathing water quality (including chemical and physical parameters) should be included in the identified environmental parameters.	These aspects are considered within the parameter 'population and human health'.
Table 2	With regards to Population and Human health – all criteria (and indicators) listed seem to relate to road transport. Air pollution generation, noise and vibration, light pollution and safety must also be assessed in relation to maritime activities (e.g. air quality from/around shipping and other port activities; noise from shipping, port and recreational activities; safety at sea; etc) and air transport (noise and vibration from airfields/helipads; safety; light pollution; air quality; etc).	The Transport Strategy and Master Plan is largely concerned with internal transport as opposed to external transport. However, impacts from maritime activities (including port activities) and aviation activities will be considered as relevant, reflecting the level of consideration of these forms of transport within the Strategy and Master Plan.
General	Due to conflicting activities in port areas (including presence of resident populations), we recommend the development of master plans specific for port areas (detailed sector action plans). Therefore the environment report should include a baseline assessment of the activities around port areas including shipping and other transport related activities and industries which may affect nearby residences, institutional activities such as schools, hospitals etc.	Consideration of conflicting activities and uses in and around port areas lies within the scope of land use plans. However, the Environmental Report will consider potential impacts from the sector as relevant to the Strategy and Master Plan.
Paragraph 30	Why is reference given to 2005 SoER not later editions of these reports?	Bullet 3 has been updated to make reference to the 2008 edition and subsequent updates.

Table 7. Response to Comments made by the Department of Environmental Health within the Ministry for Energy and Health



Scoping Report Section	Comment	Consultants' Response
General	Any reference to quality of sea/bathing water should include chemical and physical parameters	Agreed. MEPA has gathered data on both types of parameters, and these shall be referred to as relevant.
Appendix 1	<ul> <li>In list of Related Plans, Programmes, and Legislation please include:</li> <li>1. "A Strategy for the Prevention and Control of Noncommunicable Disease in Malta (April 2010)". "The ever-increasing motorisation and vehicle use" is identified in this document as "contributing largely to air and noise pollution with ensuing effects on cardiopulmonary and mental health". Strategies recommended in this document include: <ul> <li>Infrastructural changes through intersectoral collaboration to;</li> <li>Enhance public leisure areas</li> <li>Increase availability of areas for physical activity</li> <li>Make physical activity accessible to all</li> <li>To promote physical activity in all settings.</li> </ul> </li> <li>To promote valking as a means of active transport.</li> <li>3. National Concer Plan 2011-2015" which recognises air pollution especially from traffic as a risk factor for cancer. Included in the recommendations is "Taking steps to reduce National Emission Ceilings".</li> </ul>	The Table has been updated with these inclusions.



# Response to comments made by the Malta Resources Authority

	Table 8.Response to Comments made by the Malta Resources Authority	
Scoping Report Section	Comment	Consultants' Response
Energy	The strategy should take into account the requirements of Directive 2014/94/EC. This directive mandates alternative energy requirements for a transport policy.	Appendix 1 has been updated to include reference to this Directive.
	The strategy should take into consideration the requirements of Directive 98/70/EC relating to the quality of petrol and diesel fuels and Directive 2009/30/EC which amends Directive 98/70/EC as regards the specification of petrol, diesel and gasoil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending 1999/32/EC as regards the specification of fuel used by inland waterway vessels.	Appendix 1 has been updated to include reference to these Directives as relevant.
	The strategy should take into account the requirements of Council Directive 1999/32/EC as amended by Directive 2012/33/EU as regards the sulphur content of marine fuels. Apart from the sulphur level in marine fuels this directive indicates a number of measures such as the availability of shore- side electricity for ships.	Appendix 1 has been updated to include reference to these Directives as relevant.
	The strategy should take into consideration the Energy Efficiency Directive 2012/27/EU. Moreover, it should be noted that the National Energy Efficiency Action Plan (pg 47) has been updated in 2014. So as to fulfil the obligation under Article 7 of the same Directive, Malta has submitted a report which consisted of a collection of policy measures to achieve energy savings among final customers.	Appendix 1 has been updated to include reference to this Directive as relevant.

Scoping Report Section	Comment	Consultants' Response
Groundwater – pg 43	There is also an obligation for Malta to achieve good status for groundwater bodies, apart from surface water.	Noted. Appendix 1 has been updated to reflect this.
Climate Change	The scoping report is not clear as to which transport modes will be covered by the Transport Strategy and Master Plan. However, the Transport Malta website states the following: "Transport Malta's Integrated Transport Strategy Directorate is driving the process of developing a National Transport Strategy (NTS) and Transport Master Plan (TMP) covering all relevant transport modes (land, public transport, maritime and aviation) for the short, medium and long term" (http://www.transport.gov.mt/transport-strategies/strategies- policies-actions/transport-strategies-in-development/national- transport modes are also to be covered, then due consideration should also be given to the following: • Ongoing discussions under the auspices of ICAO	Although the Transport Strategy and Master Plan will consider all modes as described on the website, the scope of measures will focus on internal transport and therefore, necessarily, road transport will be considered with a particular focus. However, the Strategy and Master Plan must be mindful of developments in the transport sector as these become available and the impacts from the different modes of transport will be assessed if these are addressed in the Strategy and/or Master Plan.
	<ul> <li>regarding a global market-based mechanism for international aviation;</li> <li>Ongoing discussions under the auspices of IMO on global action (including global MRV; global market-based measures) for maritime activities;</li> <li>The proposed EU regulation on maritime MRV for greenhouse gas emissions, on which political agreement has been reached.</li> </ul>	



Scoping Report Section	Comment	Consultants' Response
Page 39	With regards to references to the EU ETS Directive, it would be more appropriate to make reference to Directive 2003/87/EC as amended (by, inter alia: Directive 2008/101/EC that extends the scope to aviation activities; Directive 2009/29/EC) rather than specifically to Directive 2009/29/EC.	Directive 2009/29/EC remains relevant. The title has been amended to include reference to 2008/101/EC in Appendix 1.
	With regards to EU climate policy, due consideration should also be given to the 2030 Climate and Energy Framework, as adopted by the European Council last October, in particular the overall target of 40% reductions compared to 1990 by 2030, and the consequential revisions that will be made to relevant legislation (especially with respect to new targets for Member States for non-ETS emissions, that would include transport sectors). [NOTE: it may also be pertinent to note the longer term policy perspective of the ERU, namely a reduction of 80-95% in GHG emissions, compared to 1990 levels, by 2050.]	Noted. Appendix 1 has been updated accordingly.
	It is important to note that Malta is required to set out a Low Carbon Development Strategy, which would also cover transport (from a climate action, environmental, economic and social development perspective). It is crucial to ensure that the linkages between the TM/TSR process(es) and the LCDS process are given due consideration.	Noted. However the LCDC has not been formulated to date; if it is formulated during the timelines of this SEA then it will definitely be taken into account.



Scoping Report Section	Comment	Consultants' Response
	It might also be useful to bring to the consultants' attention the fact that a Climate Action Bill has been drafted and is expected to be submitted for Parliament's discussion in the near future. Though a Climate Action Act would not necessarily have direct explicit regulatory effect on transport, it will provide the overarching legal framework for climate policy in Malta, including insofar as it relates to transport. Furthermore, discussions are also ongoing at an international level on a new protocol to replace the Kyoto Protocol to the UNFCCC – quantified emission limitation/reduction obligations under the new protocol would also cover transport. This gives additional context to climate policy making, and, subject to the extent to which aviation and maritime will be specifically addressed by the new protocol (this remains an element of controversy in the discussions), could be of direct interest to these two transport modes.	Noted. However, this Appendix only considers legislation that is currently in force.



## Response to comments made by the Malta Environment and Planning Authority

Scoping Report Section	Comment	Consultants' Response
Plan level Appropriate Assessment	During the SEA Screening process, MEPA could not determine whether the National Transport Strategy and National Transport Master Plan require a plan-level Appropriate Assessment, mainly due to the lack of information available at the time. The Appropriate Assessment screening process for the National Transport Strategy and National Transport Master Plan, which is a requirement under Regulation 19 of the Flora, Fauna and Natural Habitats Protection Regulations of 2006 (L.N. 311 of 2006) as amended, is still pending.	Noted. Once the Strategy and Master Plan have been developed further, the details will be provided to MEPA to facilitate the Appropriate Assessment screening process.
	MEPA notes that more detailed information, including potential projects related to transport, will be available as part of these Plans. In order to conclude its Appropriate Assessment screening process, and therefore determine whether a plan-level Appropriate Assessment is required, MEPA requires submission of further information as part of the SEA process. <b>The SEA process</b> <b>should provide suitable and sufficient information on the likely</b> <b>significant impacts of these Plans on Special Areas of</b> <b>Conservation and Special Protection Areas / Natura 2000 sites.</b>	See above.

*Table 9.* Response to Comments made by the Malta Environment and Planning Authority



actor:	Adi

Scoping Report Section	Comment	Consultants' Response
Project-level Environmental Assessment	Future proposals emerging from, or are connected to, the implementation of these Plans may also require separate project-level environmental assessment once more detailed information about the specific projects and alternatives are available. This may include an Environmental Impact Assessment (EIA) and/or an Appropriate Assessment in line with the requirements of the EIA Regulations of 2007 and the Flora, Fauna and Natural Habitats Protection Regulations of 2006, as amended, respectively.	Noted. This will be considered at the assessment stage of the Environmental Report.
Chapter 4, Table 1	With respect to the section <b>on biodiversity / fauna and flora</b> , it is recommended that the Environmental Report should report on the current conservation status of the areas, protected species, etc. listed in Table 1. This is important since the strategic assessment needs to evaluate the likely significant impacts on the conservation status of these protected areas, species, etc. as highlighted in Table 2 of the Scoping Report.	Noted. Reference to this has been included in Table 1.
	With respect to the section on <b>soil</b> , it is recommended that the Environmental Report could also report on the current situation vis-à-vis: soil organic matter biomass; soil compaction; soil ecology/underground biodiversity; soil landsliding (mass displacement issues); and soil salinisation. It is suggested that the authorities responsible for agriculture are contacted to determine whether any useful information and data is available on such matters.	Data gathered should reflect what could be affected as a result of implementation of the Strategy and/or Master Plan, and does not necessarily affect all existing data. The baseline data listed in Table 1 is considered to provide the type of information that is relevant to the potential impacts arising from Strategy and Master Plan implementation and that should be considered in the assessment. Nonetheless, the Department of Agriculture will be contacted during the development of the Environmental Report in order to determine whether additional data is collected on a regular basis that may be relevant for the purposes of the assessment.



Scoping Report Section	Comment	Consultants' Response
Chapter 7, Table 2	<ul> <li>With respect to the section on biodiversity / fauna and flora, it is recommended that the assessment of impacts should also address, through the establishment of specific criteria and indicators:</li> <li>the need for Malta to achieve Good Ecological Status of coastal waters and Good Environmental Status of marine waters beyond protected areas, as per Water Framework Directive and Marine Strategy Framework Directive requirements respectively;</li> <li>any possible changes to visitor travel patterns, including car trips, which could put more pressure on sensitive environmental areas; and</li> <li>any possible effects on greenfield sites / undeveloped land.</li> </ul>	Noted. Table 2 has been updated as considered relevant.
	Moreover, better linkages are required between the criterion on ecosystems services and the associated indicators. At present, most of the indicators focus on the conservation status of protected area, species, etc.	Not all of the indicators focus on protected areas and conservation status, however. The last indicator in relation to this aspect in Table 2 has, however, been updated to refer to green infrastructure as opposed to solely green spaces, the inclusion of which can enhance ecosystem services provided in the existing environment.
	With respect to the section on <b>water</b> , it is acknowledged that the indicator 'quality of the marine environment' would cover all aspects covered by the WFD/MSFD. However, nutrient status seems to be singled out. It is recommended that reference should be made to 'quality of the marine environment in terms of biological and physico-chemical elements'.	Noted. Table 2 has been updated accordingly.



Scoping Report Section	Comment	Consultants' Response
	With respect to soil, it is recommended that the number of soil permits issued by the Agriculture authorities could also be included as another SEA indicator. MSDEC-AGR is the data holder/provider.	Noted. Table 2 has been updated accordingly.
	With respect to the section on <b>landscape</b> , it is recommended that the assessment could also consider, from a strategic perspective, any possible significant impacts on landscape features.	Landscape features are related to a given area, and therefore, are less strategic in their scope. However, Table 2 has been updated in terms of the SEA objective for landscape to specify consideration of landscape character and scenic value in line with the Landscape Institute and Institute of Environmental Management and Assessment (IEMA) Guidelines for Landscape and Visual Impact Assessment (2013) <sup>11.</sup>
Appendix 1	It is recommended that the Soil Thematic Strategy should be included in the list of relevant plans, programmes, etc and should be taken into consideration during the strategic assessment. This refers to the document Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Thematic Strategy for Soil Protection [SEC(2006)620] [SEC(2006)1165]: /* COM/2006/0231 final */.	Noted. Appendix 1 has been updated accordingly.

<sup>&</sup>lt;sup>11</sup> Landscape Institute & Institute of Environmental Management & Assessment. 2013. Guidelines for Landscape and Visual Impact Assessment. Third Edition. Routledge.



## Response to comments made by the Directorate for the Environment and Climate Change within the Ministry for Sustainable Development, the Environment and Climate Change

Table 10.	Response to Comments made by the Directorate for the Environment and Climate Change within the Ministry for Sustainable Development, the
	Environment and Climate Change

Scoping Report Section	Comment	Consultants' Response
General	Our general comments on the SEA centre on the fact that the whilst the various elements of what is expected to be included in an SEA Scoping Report from an environmental and climate change perspective are presented in the SEA the level of detail provided on such is rather limited. We feel that the level of information provided in the Scoping Report is not currently sufficient to allow stakeholders to provide meaningful and adequate feedback during the scoping consultations and hence this would be to the detriment of the final environmental report. Given the national importance of the NTS and MP for the transport sector we would strongly suggest the provision of more information on various environmental aspects as outlined below both in our general comments and specific comments section.	The aim of the Scoping Report is to provide the framework for the environmental assessment that is included in the Environmental Report. The Scoping Report lists all the tools that will be used for the assessment (including identifying baseline data to be obtained, and the setting out of the SEA Objectives together with appropriate indicators that will be used to carry out the assessment). As such, therefore, the Scoping Report does not (and is not meant to) provide any information on the various environmental aspects. This detail features in the Environmental Report. The consultation carried out on the Scoping Report is considered good practice and is carried out in order to facilitate the relevant stakeholders to identify whether all relevant considerations have been included in the Scoping Report that sets the appropriate framework for the Environmental Report.





Scoping Report Section	Comment	Consultants' Response
	We would expect the NTS and MP and thus the SEA Scoping Report should take into consideration the fact that any future NTS and MP would need to consider that Malta is developing a forwarding looking low carbon strategy. The transport sector in Malta plays a prominent role in various environmental aspects foremost of which are air quality and associated emission level and the impacts on health, society and the environment as a whole. The SEA Scoping Report to our mind does not place a sufficient level of importance and emphasis on this and as such we would wish to see mention of the shift towards a low carbon strategy as one of the elements to be considered as part of the SEA. This would also address our specific concerns regarding the exclusion on 2030 Climate and Energy Framework targets and the short comings in the SEA in this regard and the apparent lack of a longer term vision being taken into account as part of the SEA process.	Reference to the 2030 Climate and Energy Framework targets has been included in the updated Scoping Report (refer to Appendix I). The Scoping Report ensures that all environmental aspects listed in this comment (including others not mentioned here, as required by the Directive) will be assessed based on the SEA Objectives developed and presented in Table 2. All potential impacts on these aspects will thus be assessed in the Environmental Report and all have therefore been given their due importance, as required by the SEA Directive. With reference to a national Low Carbon Strategy that is still in the pipeline, in the absence of this Strategy, the Scoping Report cannot base the development of the SEA Objectives on this specific Strategy. If the DECC can identify specific SEA Objectives that should be included or that any of those presented should be modified to better reflect the strategic direction in this regard, this consultation period provides the opportunity for specific recommendations to be proposed.



Scoping Report Section	Comment	Consultants' Response
	A final general comment is that with regards to biodiversity and nature conservation the SEA Scoping Report does not to our mind place sufficient emphasis on the importance of biodiversity in the SEA process. Biodiversity conservation and the obligations that the national and international legislature place on Malta can and does have a significant impact on the 'environmental' assessment of any plans and programmes subject to SEA. However the current format and wording of the SEA Scoping Report is such that biodiversity has been combined into environment and sustainable development policy areas. This to our mind will place an inadequate level of importance on biodiversity and as such we would suggest that biodiversity and nature conservation should have a specific section within the upfront sections of the SEA Scoping Report.	We disagree that insufficient emphasis has been place on biodiversity and cannot understand why the comment suggests biodiversity has been subsumed into general aspects when it is specifically identified as one of a number of environmental aspects to be considered when carrying out impact assessment. Baseline data related specifically to biodiversity will be gathered as specified in Table 1 and specific SEA Objectives have been included (see Table 2) to ensure that impacts on biodiversity will be assessed in the Environmental Report in accordance with the SEA Directive requirements. It is further noted that the SEA is required to consider all environmental parameters as listed in the Directive, there is no requirement to give one parameter more importance than the others.
Air quality	Table 1, Page 13, Human Health Issue: Clarification is sought on whether data on air quality will be considered for the baseline in this section given the prominent role transport plays in influencing human health.	Refer to Table 2 where the SEA objectives clearly define what will be considered when carrying out the impact assessment. One SEA objective under 'human health' aims specifically 'to reduce air pollution'. An additional objective is found under air emissions underscoring the importance of emissions.
Sustainable development	On Page 10 the first bullet point also refers to Millennium Development Goals (MDGs) given the timeframe for implementation of these goal finishes in 2015 we would suggest that the SEA should instead reference the post 2015 Sustainable Development Goals.	The United Nations post-2015 development agenda will be launched in September 2015. Reference to the MDGs remains relevant.



		7			
or:	1	ASS	SOCIA	TES	

Scoping Report Section	Comment	Consultants' Response		
	Page 48 references the Draft Sustainable Strategy for Maltese Islands. In relation to biodiversity the Table references out of date targets or rather target timelines that have now passed and therefore we would suggest that this reference might now be inappropriate given the publication of the SEA in 2015. We would kindly suggest that the targets set out in the National Biodiversity Strategy and Action Plan would be more relevant.	Comment noted, however, given that this is the latest version of the Sustainable Strategy for the Maltese Islands, reference to it continues to be relevant (as for instance reference to the outdated Structure Plan continued to be relevant in the absence of an approved alternative). The National Biodiversity Strategy and Action Plan is also referenced in Appendix 1.		
Climate Change	Section 4, Page 11 Baseline Data. With regards to climate change we would consider the following elements need to be considered as part of the SEA process; waste, f-gases and agriculture emissions.	This is a sectoral strategy that focuses on transport. Table 1 lists the baseline data that is relevant in this regard in relation to emissions to air and climate change. It is not clear why the DECC considers emissions from other sources to be relevant to the assessment of this strategy and master plan.		
	As regards climate adaptation and mitigation these are well taken into consideration in the report together with the 2020 targets. On the other hand, given that the proposed strategy will outlines the direction for transport policy in Malta for the next 30-40 years, this lacks to take into consideration the 2030 Climate and Energy Framework targets, together with the EU climate vision towards 2050. The transport sector in Malta is one of the highest contributing sectors to our national Green House Gas emissions, thus a more holistic approach needs to be taken which in turn will also contribute in reaching a low carbon development by decarbonised transport.	Appendix 1 has been updated to include reference to 2030 Climate and Energy Framework target.		



Scoping Report Section	Comment	Consultants' Response
Biodiversity	We would expect at this stage that the Scoping Report would be able to identify which protected sites and species are likely to be affected by the development of NTS. Therefore we would suggest adding an additional section to the Scoping Report on Likely Environmental Impacts within which such information could be presented.	This assumption is incorrect as at this stage there are no details on protected sites for development under the Master Plan. Furthermore the Scoping Report is not the tool for consideration of potential impacts. Potential impacts on protected sites and species will be assessed in the Environmental Report (which will also be available for public consultation). It should also be noted that whilst sometimes possible, strategic assessment may not always be site specific precisely due to the strategic nature of plans/programmes (and therefore differs to EIA in this respect).
	Page 11 paragraph 18 references Malta's State of the Environment Report from 2005. It is our understanding that an updated version of this report was produced in 2008 title the Environment Report and as such it would be preferential to reference the 2008 report rather than the 2005. Additionally the 2015 EU State of the Environment Report might also be of relevance.	The Scoping Report has been updated accordingly.



-	-	_	_		_	-	-
					1		
				H		11	
•							
				ASS	OCIA	TES	

Scoping Report Section	Comment	Consultants' Response	
	Table 1 page 12. The section on biodiversity does on the whole include everything we would expect however there are some points not included that should be considered. Given the national scale of the Transport strategy we would expect the SEA to consider the impacts on biodiversity not only within protected sites but also out with such areas. Whilst the table makes some reference to this in point 3 (protected species) we would suggest that ecological connectivity needs to be considered too	It should be noted that Table 1 refers to baseline data that will be collected to provide a baseline against which to carry out the assessment. When collecting baseline data, one of the sources, as specified in Table 1, will be any relevant survey data that may exist in terms of ecology, even for sites that are not necessarily legally protected. Table 2 presents the SEA Objectives, against which the Strategy and Master Plan measures will be assessed. One of the SEA objectives in relation to biodiversity is 'To maintain or improve biodiversity (including terrestrial and marine.' This objective thus also encompasses biodiversity outside any legal protection considerations. Nonetheless, Table 2 has been updated to include an assessment criterion that will ensure that the assessment considers ecological connectivity.	
	Page 16 paragraph 30 again references Malta's SOER of 2005 and subsequent updates. We would kindly suggest that this should just read as the 2008 version.	Scoping Report has been updated accordingly.	
	Page 17. The Table highlights that the SEA objectives for biodiversity, flora and fauna are to (1) maintain or improve biodiversity (including terrestrial and marine) and (2) to maintain or improve Natura 2000 sites. On point (1) is this referring to a study across the whole of islands or just in areas close to transports links as to be delineated in the plan when it is developed? Clarification on this point is kindly suggested to provide a clearer definition of the geographical scope of the SEA.	The SEA Objectives represent that which, from a strategic environmental point of view, the Strategy and Master Plan either help to achieve (resulting in a positive impact), not affect (resulting in a neutral impact), or go against (resulting in a negative impact). Each proposed measure in the Strategy and Master Plan will be assessed against each SEA objective (refer to Chapter 8). The Transport Strategy and Master Plan have a national scope. The assessment (against the SEA Objectives) will reflect the scope of the Strategy and Master Plan measures and will therefore be at national or area-based level depending on the scope of the Strategy or Master Plan measure/s being assessed.	



Scoping Report Section	Comment	Consultants' Response
	Page 17. It is suggested that an additional criteria is added to the second column with respect to biodiversity. It is suggested that the SEA should consider ecological connectivity and how the objectives of the SEA in determining the effects of the NTS on such should be included as part of the assessment.	As identified also above, Table 2 has been updated to ensure that one of the criteria for assessment considers ecological connectivity.
Page 17 table column on SEA indicator. We we clarification on the SEA indicators chosen. There we general presumption against developing within terrestr 2000 sites and other protected areas given their small s such we would seek clarification on the rationale for both these SEA indicators.		Actually, although there are more conditions, it is still possible to have some types of development and/or interventions within protected areas. The selected indicators will highlight where such activity is occurring (and whether it is occurring as a result of Strategy/Master Plan implementation) and that therefore potentially significant negative impacts may be affecting protected areas. This data, gathered during SEA monitoring, when analysed, could prompt the potential need to revisit the Strategy and/or Master Plan.
	Page 32. We would suggest the inclusion of the both the Bonn Convention and Ramsar Convention with respect to international commitments.	Appendix 1 has been updated accordingly.
Water	Page 48 with reference to the water catchment management plan for Malta. We would kindly seek clarification as to whether this reference is solely to the first plan or whether the SEA will also consider the upcoming second water catchment plan.	Until the second water catchment plan is made available, the SEA can only consider the first plan. It is understood that the second plan will be available at the end of the year.

Sum

Scoping Report Section	Comment	Consultants' Response
nmary	Whilst the SEA Scoping Report does set out the proposed assessment of the NTS and MP we feel that in order for a thorough and complete scoping consultation process to be undertaken the above general and specific comments with regards to the various environmental impact should be taken into consideration. This is particularly important given the prominent role that the transport sector plays in Malta and the inherent implications of any future transport strategy will have on the environment. Further to this the critical role that consultation with stakeholders plays in the SEA process can be severely undermined by limited data presentation. As such we feel that increasing the level of information provide will not only improve the consultation process as well as the efficiency of such but will also result in an improved final environmental report that takes into account all the various environmental aspects to a level that is adequate for Malta to meet its national and international obligations.	See comments above. To clarify, the Scoping Report provides the framework for the Environmental Report and does not, at this stage include any environmental baseline data or impact assessment. Once a legal requirement, updates to the legislation (Legal Notice 497 of 2010) have resulted in it no longer including reference to a Scoping Report. However, the Consultants believe that producing a Scoping Report and consulting on it constitutes good practice and this is why it was produced nonetheless. Following updates to the Scoping Report that are based on relevant stakeholder comments, the next step in the SEA process is to carry out the impact assessment proper, which features in the Environmental Report. This report is also subjected to public consultation. Any comments received are addressed accordingly before the report is finalised. Findings of the Environmental Report are to be addressed during the Strategy and Master Plan development. It is further noted that there is limited information on the Strategy and Master Plan as these are still being developed. As is good practice, the aim of the SEA is to be carried out as the Strategy and Master Plan are being formulated.



## As a subcontractor:







As a subcontractor:





Operational Programme I – Cohesion Policy 2007-2013 Investing in Competitiveness for a Better Quality of Life Event part-financed by the European Union European Regional Development Fund (ERDF) Co-financing rate: 85% EU Funds; 15% National Funds



Investing in your future