

Analysis of maritime transport systems in the Mediterranean and associated ICZM issues - Med

1. Policy Objective & Theme

- SUSTAINABLE ECONOMIC GROWTH: Balancing economic, social, cultural development whilst enhancing environment
- SUSTAINABLE ECONOMIC GROWTH: Improving competitiveness

2. Key Approaches

- Knowledge-based
- Technical

3. Experiences that can be exchanged

The experience of some maritime companies and to contribute to ICZM objectives via environmental policies and strategies.

4. Overview of the case

Maritime transport in general is increasingly seen as an environmentally acceptable form of transport for people and goods. Ironically it is also responsible for environmentally damage through accidents and operational issues. Coastal and short sea shipping is becoming increasingly important in EU transport policy and this poses particular challenges in being able to balance the economic need for shipping and the environment. Increasingly maritime companies and organisations are taking responsibility for their operations in coastal environments.

5. Context and Objectives

a) Context

Short-sea shipping plays a vital role in the international movement of goods and passengers within the Mediterranean taking place within, or between, EU Member States, or between the Black Sea or the Middle East and Northern Africa countries bordering the Mediterranean Sea. There are three main factors pointing to the increasing development of Mediterranean short-sea shipping: Political developments, Economic growth and the increasing demand for transport services. Maritime Transport is seen as being the most cost effective with regard to investments/capacity, environmental acceptability and energy efficiency.

The major, direct ICZM issues associated with maritime transport systems are habitat loss due to infrastructure development whilst indirect ICZM issues include: ship and boat wash, seabed disturbances, vessel and cargo handling noise, marine accidents and groundings, accidental and operational discharges from ships and ports, dredging and disposal of spoils, oil spills and garbage disposal and ballast water discharge. Many of these issues are covered by international conventions through the International Maritime Organisation (IMO) (marine accidents, oil spills garbage and ballast water discharge). Additionally there are EU regulations and directives on shipping and the environment, regional conventions and national and local legislation. However, many responsible shipping companies and associations are increasingly looking to themselves to develop environmental and ICZM friendly policies and strategies e.g. Wallenius Lines which has had an environmental policy since 1996.

b) Objectives

An analysis of the problems and solutions associated with shipping and ICZM in the Mediterranean

6. Implementation of the ICZM Approach (i.e. management, tools, resources)

a) Management

Management of International, regional and national legislation and recommendations are the responsibility of national competent bodies. Compliance to the legislation is the responsibility of the companies and organisations. Environmental policy and strategy are also the responsibilities of the companies and organisations through their shareholders and governing boards.

b) ICZM tools

Ratification and enforcement of IMO conventions. The Contracting Parties to the Barcelona Convention adopted, at their 14th Ordinary Meeting (8-11 November 2005), the Regional Strategy for Prevention of and Response to Marine Pollution from Ships. The Strategy includes twenty-one objectives to be reached by 2015, one of these being the improvement of the level of enforcement of the MARPOL Convention Annex I requirements and the prosecution of discharge offenders in the region.

Many shipping companies have been investigating how they can reduce their impact on the marine and coastal environments. Although operational and retrofit technology can aid in this reduction the best results are achieved via newly built ships. The Grimaldi Group are one of the largest shipping operators in the Mediterranean and have a long history of interest in environmental issues participating in many EU projects regarding mitigating against the impact of shipping and ports on the marine environment. Their recently designed cruise ferries are designed to high environmental and energy standards. The Grimaldi group has recently launched a new Mediterranean cruise/ferry The Cruise Olympia. This is one of a fleet of four new ships for the Grimaldi Group. The ships have designed bearing in mind environmental and energy reduction requirement. It will be the largest ferry operating in the Mediterranean and will be awarded the "Green Star" certificate by the Italian Ship Classification society (RINA), proving how these units have been designed, built and run to have a zero impact on the environment thanks to the "Clean Air" and "Clean Sea" notations.

7. Cost and resources

Grimaldi is a privately owned company with no disclosure on expenditure on environmental issues per se.

8. Effectiveness (i.e. were the foreseen goals/objectives of the work reached?)

The Grimaldi group have been effective in the following areas of prevention of pollution from ships in the coastal zone. They keep the vessels in the highest operating conditions, including a preventive maintenance policy on main engines, diesel generators and boilers with the goal of maintaining the highest possible value of efficiency. Waste treatment and Garbage Management Plan: All ships carry the collection of waste in accordance with the garbage management plan prepared by the Company in compliance with Marpol 73/78 Annex V. Ballast water Management: The Company is currently compliant with compulsory regulation in term of ballast management, but is also evaluating various means for the treatment of ballast water to avoid to transfers organisms. Anti-fouling coatings: All vessels are provided with TBT-free antifouling paint in accordance with latest EU/IMO relevant rules. Furthermore, the company is benchmarking the various silicon paints to be applied in the future on ferry vessels trading in Mediterranean Sea. Nitrogen Oxides and Sulphur: They have installed on one Cargo Vessel MV "Grande Ellade" in 2008 an innovative and complex Emission Monitoring System to measure the real values of emissions and create a discussion base-line for future analysis. Greenhouse Gas: They are strongly involved in the global discussion on ship CO2 emissions and the relationship also to energy efficiency. Operational: All ships have dedicated Voyage Planning and patterns of reduced speed and are equipped with a weather routing service that provides on-board and around-the-clock weather forecasting and in some cases weather-routing with the scope to avoid marine accidents.

9. Success and Fail factors

Success and failure factors largely seem dependant on economics and to some extent public opinion and that of the

shareholders. However many innovations can be cost effective, e.g. in reducing fuel costs and are therefore more widely accepted.

10. Unforeseen outcomes

Grimaldi Naples was the first Italian shipping company to obtain the ISO 9002 Quality Certificate, and holds also ISO 14001 certificate (environment and ecology). The major problem, when considering policies or strategies to become more environmentally acceptable, is unforeseen changes in environmental legislation. Traditionally the maritime industry has been reactive to environmental legislation. However proactive policies which may involve heavy investment into new technologies can be jeopardised by unexpected changes in legislation.

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13. Sources

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