



**Table 2.1.2.1 Ports – Problems and their Root Causes**

PROBLEMS	IMPACT*	STAKEHOLDERS	ROOT CAUSES AND POSSIBLE SOLUTIONS				POSSIBLE TRANSBOUNDARY EFFECTS
			PROXIMATE	ULTIMATE	POSSIBLE SOLUTIONS		
1. Absence of escort tug at Mediterranean oil terminals	L - H N - M	<ul style="list-style-type: none"> <li>• Port authorities</li> <li>• Tanker owners</li> </ul>	<ul style="list-style-type: none"> <li>• No clear requirement</li> <li>• Human errors, equipment failure, faulty package labeling</li> <li>• Cost of equipment and manning</li> <li>• Need to prevent fouling of ship's hull for propulsive efficiency</li> <li>• Accidental discharge or voluntary wastes release in port basins during ship's repair operation in dry of wet docks</li> <li>• Possibly polluted mud has to be removed from port basins and access channels</li> <li>• Consequence of the fuel combustion in diesel engines, steam and gas turbines</li> <li>• Restricted budget for maritime affairs</li> <li>• No suitable training for controllers</li> </ul>	<ul style="list-style-type: none"> <li>• Cost of the service</li> <li>• Lack of information and training, absence of a "Port Emergency Plan"</li> <li>• Low priority of marine safety in the Nation Budget</li> <li>• Lack of proven alternative product or process</li> <li>• Insufficient care of Shiprepairers' management and personnel</li> <li>• Past and present industrial activities in or near, the concerned port</li> <li>• Long term trend to increase the power of marine propulsive and generating sets</li> <li>• Lack of interest for ship safety and marine pollution prevention</li> </ul>	<ul style="list-style-type: none"> <li>• Full implementation of the Dumping Protocol of the Barcelona Convention</li> <li>• Full implementation of the Hazardous Waste Protocol of the Barcelona Convention</li> <li>• Full implementation of the MARPOL Convention</li> <li>• Preparation and full implementation of Contingency Plans for all Mediterranean Countries</li> </ul>	<ul style="list-style-type: none"> <li>• When the causes of an accident in a port of a given country are traced to another</li> <li>• When a foreign flag vessel is involved in a port or coastal water navigation casualty</li> <li>• Pollution from dredged materials dumped in or near international waters</li> <li>• When a port is located near an international frontier</li> <li>• Poorly maintained and manned vessels remaining in operation in this area endangering the Environment</li> </ul>	
2. Safety of transport of dangerous cargoes in ports areas	T - I	<ul style="list-style-type: none"> <li>• Shipowners</li> <li>• Stevedores, docks workers</li> </ul>					
3. Absence of performing VIS in many Mediterranean ports and straits		<ul style="list-style-type: none"> <li>• Concerned Port States</li> </ul>					
4. Release in port areas of organotin biocidal pollutants from ship's anti-fouling paints		<ul style="list-style-type: none"> <li>• Concerned coastal states</li> <li>• IMO and other international organizations</li> </ul>					
5. Water pollution by ship repair wastes discharged in ports		<ul style="list-style-type: none"> <li>• Marine paints manufacturers</li> <li>• Environment administration</li> </ul>					
6. Environmental risks of disposal of polluted dredged material by dumping on the sea bottom		<ul style="list-style-type: none"> <li>• Dredging companies</li> </ul>					
7. Airborne pollution in ports and coastal areas by ship's exhaust gaseous emissions							
8. Absence or insufficient Port State control in many parts of the South-East region of the Mediterranean Basin							

\* L - Local; N - National; T - Transboundary; I - Insignificant; M - Medium; H - High

**Table 2.1.2.2 Maritime Transport – Problems and their Root Causes**

PROBLEMS	IMPACT*	STAKEHOLDERS	ROOT CAUSES AND POSSIBLE SOLUTIONS				POSSIBLE TRANSBOUNDARY EFFECTS
			PROXIMATE	ULTIMATE	POSSIBLE SOLUTIONS		
<p>1. Insufficient implementation of IMO SOLAS and MARPOL Conventions and related Codes concerning ship's safety and marine environment protection</p> <p>2. Late preparedness for too many ships and shipping to obtain ISM certification before July 1<sup>st</sup> 1998</p> <p>3. Possibility of major oil and chemical accidental spills in the whole Mediterranean</p> <p>4. Absence of ratification by some Mediterranean and other countries of IMO Conventions and Civil liability for oil pollution damage and of the compens. fund</p> <p>5. Insufficient control of discharge at sea of ship's wastes, specially of tank and bunker washings</p>	<p>L-H N-H T-H</p>	<ul style="list-style-type: none"> <li>Shipowners</li> <li>Classification societies</li> <li>All Flag States</li> <li>Mediterranean Port States</li> <li>Mediterranean coastal states</li> <li>IMO, REMPEC and other international organizations</li> <li>Shipowners and shippers</li> <li>General public</li> </ul>	<ul style="list-style-type: none"> <li>Ship's technical deficiencies</li> <li>Under qualified crew</li> <li>Weak Flag and Port State control</li> <li>Benign neglect attitude of many Shipowners</li> <li>Cost of certification</li> <li>Causalities: collision grounding, fire/explosion, sinking</li> <li>Low political priority for the concerned Governments</li> <li>Insufficient air and sea patrol means</li> <li>Mediterranean Sea is not rated as special area in MARPOL ANNEX II</li> <li>Unavailability or inconsistency of port data on loaded and unloaded cargoes</li> <li>Unconsciousness and human error among</li> </ul>	<ul style="list-style-type: none"> <li>Lack of training of many seafarers</li> <li>Maintenance cost avoidance policy of too many Shipowners</li> <li>Insufficient care for safety and pollution fighting measures</li> <li>Poor watchkeeping and/or facility maintenance of engines, gear and equipment</li> <li>Insufficient salvage means</li> <li>Lack of public interest in maritime affairs</li> <li>Low rank of priority of related expenses in state budgets</li> <li>Insufficient risk appraisal when MARPOL was discussed and adopted</li> <li>Low priority level</li> </ul>	<ul style="list-style-type: none"> <li>Full implementation of the Dumping Protocol of the Barcelona Convention</li> <li>Full implementation of the Hazardous Waste Protocol of the Barcelona Convention</li> <li>Full implementation of the MARPOL Convention</li> <li>Preparation and full implementation of Contingency Plans for all Mediterranean Countries</li> <li>Improvement of the Salvage availability</li> </ul>	<ul style="list-style-type: none"> <li>Risks of operational and accidental ship generated marine pollution in all parts of the Mediterranean Sea</li> <li>Possible conflicts between Port State control and non complying owners preventing a smooth implementation of the shipping Safety Management concept</li> <li>Pollution of coastal water</li> <li>Damages to marine ecosystems</li> <li>Economic impact on Fisheries and Tourism</li> <li>Impossibility to obtain a full financial compensation for oil and chemical pollution damages caused by ships flying the flags of these countries</li> </ul>	

<p>6. Possible high sea operational discharge of noxious chemicals following tank washing of chemical tankers</p>			<p>shippers' packaging staff</p> <ul style="list-style-type: none"> <li>Lack of resources and managerial skill in these ports</li> <li>Ship's ballasting and deballasting operations in different parts of the world</li> </ul>	<p>of maritime economics in international institutions</p> <ul style="list-style-type: none"> <li>Insufficient implementation of IMDG Code rules</li> <li>No clear commercial interest for concerned Port Authorities</li> <li>Great number of ships coming from African and Asian tropical waters to enter Mediterranean</li> </ul>	<ul style="list-style-type: none"> <li>High sea oil and wastes pollution still possible in some areas</li> </ul>
<p>7. Absence of comprehensive statistics on origin/destination of sea-borne traffic flows and ship movements in the Mediterranean</p>					
<p>8. Faulty or incomplete labeling, documenting and marking of packaged potentially polluting or noxious goods</p>					
<p>9. Absence of or insufficient port reception facilities in a few Mediterranean ports</p>					
<p>10. Introduction of unwanted aquatic organisms and pathogens from ship's ballast water and sediment</p>					

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**Table 2.1.5.1 Exploitation of Seabed and Subsoils – Problems and their Root Causes**

PROBLEM	IMPACTS*	STAKEHOLDERS	ROOT CAUSES		POTENTIAL TRANSBOUNDARY EFFECTS
			PROXIMATE	ULTIMATE	
<p>1. Available data and comparisons with other regions indicate that impacts from normal operational activities of individual fields are transient (exploration) and localized (exploration and production)</p> <p>2. Accidental oil spills can occur from offshore oil and gas operations, although spills of significance are rare events. Available data suggests that the major spills recorded in the region have arisen from shipping operations</p>	<p>L - M N - H T - H</p>	<ul style="list-style-type: none"> <li>• Relevant ministries</li> <li>• Industry</li> <li>• Private sector</li> <li>• NGOs</li> <li>• International organizations</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of readily available quantified and consistent data on pollutant loadings from the industry against which to fully evaluate cumulative transboundary impacts</li> <li>• Lack of coordinated reporting structure and database for spills to establish significance of the problem</li> <li>• Need for guidelines on best practice to minimize oil spills</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of guidelines on consistent reporting requirements</li> <li>• Need for criteria for the assessment of Annex 2 substances</li> <li>• Lack of readiness of relevant ministries and industry to define the problem</li> </ul>	<ul style="list-style-type: none"> <li>• Cumulative impacts on the environment</li> <li>• Pollution of international waters</li> </ul>

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