Harmonization from global to local legalisations against oil spill pollution: the case of the Mediterranean maritime transport and port activities

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Introduction

-1.200

Annual growth averages

between 1995 and 2004 (%).

absence of data

Maritime transport is characterized by multiple components and different interests that balance the protection of the marine environment and transportation activities. The majority of pollution originates from land with 62% industrial run-off compared to 3% accidental and 7% operational. Contrary to accidental pollution, it is possible to efficiently combat operational pollution through improving both the human (crew training, environmental education, etc.) and technical (monitoring and port reception facilities, etc.) elements necessary in the protection of the marine environment. Commercial activity is not gradual and in consequence the ports cannot neglect their responsibilities regarding pollution from ships that endangers Mediterranean zones. 20% of the total oil traffic in the world (2,2 billion tons in 2004) takes place on 0,7% of the worldwide seas and oceans' surface. There are three major sea routes. Straits and canals are specific hotspots and traffic has increased since 2004 (fig. 1).

Figure 1: Liquid bulk throughput in Mediterranean Seaports in 2004 250 500 km RIT France Geno: Trieste Croatia 0 Black Sea B .- H **Marseilles** 1150 M S.-M. Turkey 0) Algeciras Lebanou Skikda Israel Malta l'unisia Morocco Algeria Suez Canal MI Alb. : Albania Egypt B.-II.: Bosnia and Herzegovina S.-M.: Serbia-Montenegro North Africa 100 MI Vacher, A. Fremont, V. Lavand-Letillenl, M. Lo Prete, SPLOT-INRETS / CNRS UMR FRE 3027 MTE (2007/2009). Projection Lambert equidistante confique Traffic of liquid bulk (1) Foreign trade (oil and Oil traffic in million tons (2005) in million tons (2004) mining products) of States -69 200 173 Mt entering stream - 20 000 Exports Imports

77 343

25,000

285

25 000

123 Mt outgoing stream

Maritime main oil routes (3)

Operational pollution related to illicit ship discharge (oil, garbage and waste, ballast water) is less mediatised than accidental pollution but still represents an important part of marine pollution. Rules and regulation regarding illicit discharge date back to the 1970s and there have been many difficulties with their implementation in the Mediterranean Sea. Our analysis focuses on the difficult transposition of general principles of laws to their local application. International environmental law poses problems regarding multilevel decisions and their application throughout national iurisdictions. Its effectiveness depends on the quality of port equipment for water treatment and waste disposal, as well as political action regarding prevention, emergency management and sanctions. If different interpretations of rules and regulations lead to unequal practices between countries/ports, legal loopholes can allow innovative action on a local level. In following the continuing work of the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea on "Port Reception Facilities - A summary of REMPEC's activities in the Mediterranean Region" (REMPEC 2006), this research study focuses on the problem of the effectiveness of international, regional and national law regarding ship pollution linked at the port reception facilities in France and Italy by underlining the links between multi-factor impacts (legal, geographical, environmental, etc.) on seaport development. In this perspective, the analysis of French and Italian jurisprudence on seaport development highlights many problems in the enforcement of the laws.

I. The multi-factor impacts on maritime transport and port activities

Effective protection of the marine environment's relationship to maritime transport multiple elementary components: environmental, legal, management, land planning, political, technical, economic, sociological and media. The identification of environmental issues linked to maritime transport and port activity constitutes the premise of legal analysis. Faced with the diversity of these environmental problems, this analysis is centred around the pollution caused by ships (oil, garbage and waste, ballast water, etc). This collection of waste constitutes a problem for all ports receiving ships on stopovers. It is necessary to identify the legislation specific to each environmental issue within the hierarchy of standards, regulation (international, distinguishing three levels of European national/regional). The Mediterranean Sea is a good example of meetings, at an international level, due to its geographical location among three different continents and 22 countries, causing it to be a particularly sensitive area in terms of chronic pollution. Convergence of rights, duties and liabilities characterise maritime transport. The vulnerability of the Mediterranean Sea lies with this "common heritage" without frontiers; it is not easy to obtain a balance in the inevitable contrasts between the Flag State, Port and Coastal interests. Together these three key players must be conscious that they are one entity of the 'same ship'. Only one synergetic action between all States can elaborate and apply the international laws that may be effective at a global level. There remain a number of grey areas in Mediterranean States' ratification of relevant international conventions regarding the prevention of marine pollution, such as the OPRC 1990, OPRC-HNS Protocol of 2000 and the Intervention Convention of 1969 and its Protocol of 1973. Implementation of international frameworks is dependent on ensuring that ships comply with the required standards at all times. This requires States to ensure that they have effective maritime administrations capable of effectively fulfilling their Flag State. Port State and Coastal State obligations in line with the relative IMO recommendations

and guidelines. Similar to how the Barcelona System and REMPEC's role and actions operate in the Mediterranean, the effectiveness of the rules and regulations intended to preserve the marine environment should serve as an example at an international level.

Technological advancements have improved maritime transport by reducing some pollution but have really only changed the nature of risks incurred by ships at sea (ships turn around more quickly causing traffic congestion or collisions with whales). Regarding oil spill pollution, employment of spatial technology for maritime surveillance, 2350 oil spills of unknown origin were detected in 2000 by the EC Joint-Research Centre (JRC) using satellite platforms. The majority of those spills are considered to be illicit discharges. This study was conducted using archived imagery for the period 1999–2004, and therefore the spills detected could not be validated by aerial or vessel surveillance (fig. 2).

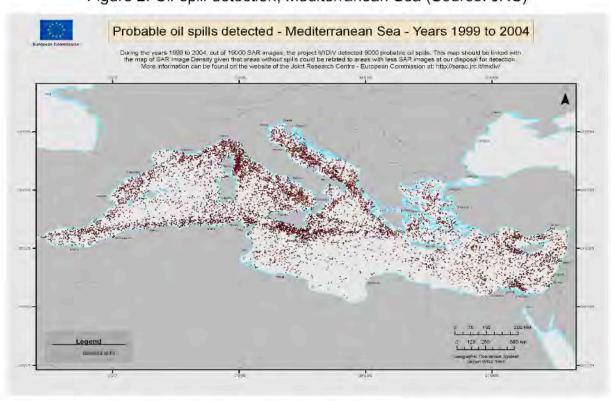


Figure 2: Oil-spill detection, Mediterranean Sea (Source: JRC)

This satellite image highlights the reality of operational oil spill pollution. The most evident feature from the density map is that the high-spill areas are located away from the coasts, beyond territorial waters. There is evidence that the distribution of the spills is correlated with the major shipping routes, particularly in the Ionian Sea, the Adriatic Sea, the Messina Straits, the Sicily Channel, the Ligurian Sea, the Gulf of Lion and east of Corsica. Tankers release their ballast to make room for the oil which they are about to load, and therefore the lanes leading to oil terminals and at some distance from it are likely to be contaminated with oil or tar balls, especially if no reception facilities for ballast water are available at the oil terminal. This technology provides a better knowledge but not an entire solution. 80% of the Mediterranean is high seas, areas outside of state jurisdiction.

There are two possibilities to reduce the problem created by dumping in high seas: the creation of Ecological Protection Zone (EPZ) like France in 2004 because it's impossible to have an Exclusive Economic Zone (ZEE) and cooperation between countries.

Following a specific demand from the French authorities, the JRC analysed oil-spill near French coasts (cf. EUR 22158 EN) in order to estimate the impact of the creation of the EPZ on oil spill pollution. This analysis shows a correlation between the legal status of the maritime zone and the degree of pollution observed. The reduction in spills could be interpreted as a consequence of the creation of the French EPZ as a dissuasive measure which nonetheless cannot stop ships from discharging before entering or just after leaving the EPZ. Therefore, the human monitoring remains problematic with regards to the utilisation of satellite images of the high seas. As a consequence, trans-border cooperation between neighbouring countries is extremely helpful in order to establish a system of monitoring in a marine zone larger than the territorial sea. This cooperation encourages the sharing of different technical methods available to each state, combining aerial surveillance with satellite analysis, given the advantages and disadvantages of each (table 1).

Table 1: Advantages & drawbacks of aerial and satellite monitoring

AERIAL SURVEILLANCE		SATELLITE ANALYSIS		
ADVANTAGES	DRAWBACKS	ADVANTAGES	DRAWBACKS	
Polluter identification possible	High cost of personnel and material	Large rapid cover	Cost of acquisition (high resolution)	
Reliability of detection : real dissuasive effect	Weak cover by flight	Regular repetition	Inflexibility	
Flexibility of employment	Limited day/night and all-weather capacity	Reduced costs (quicklooks)	Problem of look-alikes	
Precision of positioning	Volume of oil spills remains undetermined	Day/night capacity and systematic image archiving	Volume of oil spills remains undetermined	

The insoluable link between jurisdictional and technological components, for example the use of aerial surveillance and satellite analysis as evidence in case of offense, is only one side of the complexity of this scenario. Though public opinion plays a vital role, it is directly influenced by the media's distorted projection of the dangers of maritime transport and port activity. Port reaction to the situation is two-sided: environmental goals are set and they are also used for their own marketing, as this is a jungle of competition.

In conclusion, it is fundamental to efficiently manage port activities and to promote an increased willingness on the part of Mediterranean ports to provide themselves with efficient port equipment. According to the type of traffic through the port and the levels of development (on both the north and south sides of the Mediterranean), the effectiveness of equipment will vary: therefore it is necessary to focus on the responsibility to investments both private and public and who in reality will pay the cost of these port-based equipments.

II. From global to local: top-down approach

How many rules exist related to oil spill pollution?

In order to respond to these questions it is necessary to use a legal filter: the summary of existing regulation on international, European, national and local levels (table 2). It is necessary to confront the regulation and to put it in perspective with the application of these different normative frameworks in the local context of each port. Transport and port activities are dominated by rules designed to protect the environment, security and urbanism. This legislation offers a management framework for the reception of ships, for the continuity of port activities, and territorial development. The harmony of the law is at the heart of the problem, faced with the challenge represented by these three domains of intervention, involving interests which are sometimes contradictory.

	International level (principles, conventions, agreements, protocols)					
	EU level (regulation, decisions, directives)					
TOP-DOWN	France	Italy				
TOP-BOWN	International application	International application				
	EU application	EU application				
	Other national laws	Other national laws				
		Other regional laws				
	Orders from port authorities	Orders from port authorities				

Table 2: Multi-level law system

This table of analysis of the regulation allows us to:

- Compare the different national legislations and to highlight their compatibility.
- Evaluate the importance of the regions (for example in Italy ex art. 117 Cost.) the local authorities and the port authorities in environmental matters.
- The complex relationship between international and EU law with the endogamy of EU law that uses guide lines to improve uniformity in EU Countries at national levels.

The goal is to discern:

- How, legally, the passage is made from global to local and more precisely how international and European law is integrated into national legislation.
- What legislative grey-areas exist and to what extent.
- How this passage conditions the local life particular to each port system.

Analysis of the major French and Italian jurisprudence and the range of possible outcomes in future is the framework for this presentation. We can interpret the results of this analysis in the following manner.

Regarding the relationship between international and European law

With the judgment n° C-308/2006 of 03/06/2008, the EC Court of Justice addresses the problem of minimum standards (if European law is to be more rigorous than international law). If the EU is to be subject to international conventions, European law must adapt accordingly. But the EU has not ratified the Marpol Convention; thus,

the Court of Justice has not stated its position on the standards indicated in Marpol. This demonstrates the endogamy of the EU law.

Concerning the transposition of regulation

In Italy, the legal framework regarding the transposition of international law is more restrictive and detailed (Court of Cassation n. 19800 of 14/09/2006). In France, the power lies with the judge to determine the strictness of the application of environmental standards (Court of Cassation n. 06-87.581 of 30/10/2007). The objective is to enforce, through juridical actions, the environmental protection in accordance with international standards.

Is what we observe a reversed hierarchy of standards? No, it is simply a different conception of the role of the State. In Italy, national legislation takes prevalence with a strict national regulation regarding the application of the international law. In France, the degree of application of the regulation depends largely on the decision of the individual judge. The emphasis is on the administration of evidence by the judge, who accepts evidence in order to facilitate convictions (Court of Cassation n. 05-87.363 of 13/03/2007).

From this perspective, would it be possible to sanction port authorities lacking the port reception facilities prescribed by international regulation, or those who charge too much for their use, and if so, by whom? I propose two hypotheses: firstly, shipowners, as they have suffered economic damages as a result of high costs of private reception centres, or because the port is lacking such infrastructure. Secondly, the national authorities with the power to hold the port responsible for failing to apply the regulation issued by an international convention ratified and in force. Nevertheless, considerable efforts have been made since 2000 in Mediterranean Seaports, as shown in the study by REMPEC. We can observe that the European Maritime Security Agency (EMSA) has fulfilled its role and that its monitoring has stimulated the reaction of the ports to enforce the regulation.

In Italy, (Court of Cassation n.19800 of 14/09/2006) the judges did not follow the common French practice, which is essentially centred on evidence and were instead more audacious in their conviction of a ship captain, directly evoking the principle of precaution, even without scientific evidences and analysis of pollutant substances. In France the use of satellite monitoring associated with aerial surveillance is a means to prove liability and would be a preventive measure.

This increase of the tendency to penalise oil-spill pollution has only further complicated the transposition of regulation from a global to local level, reinforcing national jurisdiction, the application of which differs between France and Italy.

III. The seaport's impact on the marine environment: a bottom-up approach

Oil spill pollution is connected to the seaports' development and each port has a different impact (fig. 3) on the marine environment, because each port has a different financial situation (affecting equipment, planning and management of ports). Therefore, focus is needed for development of port reception facilities. The control should lie in the mastery of good management and planning in ports in order to monitor activity. In this case, the sea pollution can be opposed to port pollution.

MARITIME AND SEAPORT ACTIVITY oil spill, garbage and waste, ballast water, ntifouling, introduced alien species, etc. QUALITY OF CONSERVATION OF NATURAL RESOURCES NATURAL ENVIRONMENTS - EMISSIONS -**PORT** marine protected areas, air, noise, water quality, landscape/biodiversity soil pollution, etc. protection, etc. TERRITORIAL PLANNING dredging, terminals building, location of industrial area, etc. Source: Mariantonia Lo Prete (2009)

Figure 3: Impact of the seaport on the environment

How many case-laws exist related to oil spill pollution? Is the legal system really applied?

The second part of the legal filter is in quantitative and qualitative analysis of the case-law. Taking into account the case-law, we can then evaluate the limits of the regulation, according to its application. The contribution of the case-law relative to the realities of the various different French and Italian ports brings into focus the tendency of territory specifically for port reception facilities and infrastructure.

The analysis of the European and national case-law allows us to evaluate the application in the various ports of the regulation. A table of analysis has been developed in order to stock the information contained in the judgments in a hierarchical fashion (tables 3). The databases used are LEXIS NEXIS (France), DEJURE (Italy) containing the judgments of superior jurisdictions (European Community Court of Justice, Cassation Court, State Council, Appeals Court, Administrative Appeals Court and Administrative Tribunal).

Table 3: Parameters of comparative analysis of jurisprudence

Jurisprudence – BOTTOM-UP					
Quantitative analysis	Qualitative analysis				
Analysis of the litigation	Analysis of the case-law				
Parameters: jurisdiction (EU or national),	Parameters: key players, object of conflict				
port, ship flag, judgment number, date,	issues, type of sanction, legal questions,				
relevant laws	jurisprudential orientation				

In this database each judgment must be classed according to the material object of the conflict-issues, or according to the legal question, as the same question could well concern several issues. This comparative analysis of the case-law highlights the discrepancies between the two systems regarding application of the case-law and the effectiveness of the legal framework (table 4):

- The difficulty in transposition of regulation from global to local level.
- The varied legal and technical capacities of a given country, highlighting the importance of the national jurisdiction.

Table 4: Comparative analysis of jurisprudence

Jurisdiction	CJCE	C. Cass IT	C. Cass FR	Others
Port	Ravenna (IT)	Augusta (IT)	Marseille (FR)	
Judgment number, date	n.379 of 14/07/1994	n.19800 of 14/09/2006	n.05-87.363 of 13/03/2007	
Object of conflict - environmental issues	Ship pollution waste	Ship pollution waste	Ship pollution	
Legal questions	Different approach between levels of regulation	Minimum standards	Administration of evidence	
Jurisprudential orientation	No contradiction between Italian and European standards	Local laws are legitimate as they are designed to protect the environment in accordance with international standards.	Judges allow a wide variety of evidence to facilitate convictions	

We can interpret the results of this analysis in the following manner.

Regarding the qualification of the regime of damages to the environment

Jurisprudence has also fostered an improvement in the preservation of the environment, in qualifying the regime of damages. The regime of civil and penal responsibility is not equal, due to the difference in consequence of attacks of hydrocarbons and garbage. The system of civil and criminal responsibility varies according to the attack on the environment and the qualification of what constitutes waste. The conviction of Mesquer (CJCE n. C-188/07 of 24/06/2008) ruled on applicable legislation: that of the Bale convention pertaining to waste or that pertaining to damages caused by oil spills, CLC 1992. The judgement ruled in favour of the application of the CLC convention of 1992, introduced into French law (Court of Cassation n. 04-12.315 of 17/12/2008). This qualification of damage to the environment strongly encourages the exploitation of port equipment.

But, territorial planning is confronted with contradictory trends. While on the one hand the objective of the law is to enforce order, it can also, depending upon political choices, result in a further complication in the application of the regulation. For example, in the case of the port of Cagliari, port reception facilities are being paid by all shipping lines, regardless of their utilization, as stated by the national Italian law. This contradicts the Marpol Convention that states that port reception facilities dues should only be paid if the shipping line uses it (Italian Court of cassation n.2065 of 04/02/2004).

Concerning the matter of the competences of national jurisdictions

The judgment of the CJCE n.440 of 23/10/2007, on the annulment of the decision of the Council regarding the competence of the individual States to impose sanctions, refers to the national jurisdictions pressurising member states to adopt the penal sanctions in cases of illegal dumping of pollutant substances.

To this end, France has adopted very strict legislation, introduced within the environment code. France has applied this law in a very rigorous fashion. Numerous judgments have been delivered by the specialist tribunals of Brest and Marseille and France has made many convictions against Italy (Court of cassation n.8519 of 24/06/1998). Choosing the path of penalisation, France considers the penalty as a means of preventing pollution. Italy, on the other hand, chooses a more pragmatic approach. The problem of the application of these norms is, therefore, linked to the jurisdiction, is dependent and this application risks being unbalanced. Thus, the French conception develops a strict penal vision, multiplying the number of convictions.

From this perspective, the analysis of French and Italian jurisprudence, we will underline many problems in the enforcement of the laws :

- The difficult passage from the global to local level: not all Mediterranean countries are part of international conventions.
- The complex relationship between international laws and EU, the latter not being part of MARPOL and the unilateral nature of EU acts.
- Different national legal and technical capacities emphasising the importance of the national state jurisdiction as condition "sine qua non" for the effectiveness of this multilevel oil spill legal system.
- The lack of normative instruments for the high sea and the right of transit passage through straits used for international navigation.

Comparative analysis of the case-law relating to French and Italian ports confirms the hypothesis that the higher the level of local legislative independence (like the regions of Italy compared to the French State) the greater the autonomy and the disparities in the application of crucial regulation.

The imbalance in the relationship between the regulation, which takes a top-down approach, and the case-law, which takes a bottom-up approach, results in varied interactions between the two from one country or one port to another.

Conclusions

The conclusion of this analysis is three-fold. There is a need for:

- a- Harmonisation of legal and technical actions and sanctions against oil pollution in all Mediterranean Countries.
- b- Identification of instruments used by national jurisdiction to realize the aforementioned harmonisation.
- c- Assessment of impacts in respect of all legislation in the competitiveness of ports.

The complexity of the question and the heterogeneous character of the rules involved make their solution difficult, as it is not contained within a precise and coherent framework. General rules of international law will have to be applied and specific sectoral rules reconciled.

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The case-law analysed for the purposes of this study is the following:

- Concerning the EU, 4 Justice Court judgments have been selected (n. C-188/07 of 24/06/2008; n. C-308/2006 of 03/06/2008; n.440 of 23/10/2007; n.379 of 14/07/1994).
- Concerning France, 4 Court of Cassation judgments have been selected (n.04-12.315 of 17/12/2008; n. 06-87.581 of 30/10/2007; n. 06-85.949 of 9/05/2007 and n. 05-87.363 of 13/03/2007) et and one Administrative Appeals Court judgment (n.05MA02420 of 13/05/2008) regarding the port of Marseille.
- Concerning Italy, 5 Court of Cassation judgments have been selected (n.19800 of 14/09/2006; n.2065 of 04/02/2004; n. 22501 of 12/03/2003; n.8519 of 24/06/1998 and n.612 of 19/11//1996) regarding the port of Augusta, Cagliari, Trieste and Genoa.