Lisa Welming

The Transportation of Nuclear Cargo at Sea

Shrinkage of the Right of Innocent Passage?

Master thesis
20 points

Lars-Göran Malmberg

Public International Law

Autumn 2007
Contents

SUMMARY 1

ABBREVIATIONS 2

1 INTRODUCTION 3
  1.1 Purpose 4
  1.2 Questions and Limitations 4
  1.3 Method and Material 5
  1.4 Terms and Definitions 6
  1.5 The Ordering of the Thesis 7

2 THE TERRITORIAL SEA 8
  2.1 Historical Background 8
  2.2 Sources of the Law of the Sea 8
    2.2.1 International Conventions 9
    2.2.2 Customary Law 9
  2.3 Development of UNCLOS 10
  2.4 Definition of the Territorial Sea 11
  2.5 Jurisdiction over the Territorial Sea 12
    2.5.1 Legislative Jurisdiction 12
    2.5.2 Enforcement Jurisdiction 13

3 RIGHT OF INNOCENT PASSAGE 15
  3.1 Passage and Innocent – What Could the Interpretation Be? 15
    3.1.1 Passage 15
    3.1.2 Innocent 16
  3.2 Article 19 - Exhaustive List? 19
  3.3 Breach of a Coastal State’s Laws 20
  3.4 The Right to Deny and Suspend 21
    3.4.1 Deny 21
    3.4.2 Suspend 22

4 HAZARDOUS CARGO AT SEA - WHAT DANGERS ARE THERE? 24
  4.1 Sea Specific Problems 24
  4.2 Nuclear Cargo 24
  4.3 Regimes Regulating Transportation of Hazardous Cargo at Sea 25
5 THE RIGHT OF INNOCENT PASSAGE VERSUS THE OBLIGATION TO PROTECT THE ENVIRONMENT 31

5.1 The Case For 31
  5.1.1 The Right of Innocent Passage 31
  5.1.2 Article 23 of UNCLOS 32
  5.1.3 The Importance of Being Secret 32

5.2 The Case Against 33
  5.2.1 Safety Concerns 33
  5.2.2 The Obligation to Protect the Environment 33
    5.2.2.1 Precautionary Principle 34
    5.2.2.2 Preventive Principle 34

5.3 State Practice 35
  5.3.1 National Legislation 35
  5.3.2 Regional and Bilateral Agreements 37
  5.3.3 Actions Taken by States 38

6 POSSIBLE SOLUTIONS 39

6.1 Regional Agreements 39
6.2 Universal Sea Lane 40
6.3 Particular Sensitive Sea Areas 40
6.4 Change in the INF Code 41

7 CONCLUSION 42

7.1 Rights and Duties for States in the Territorial Sea 42
7.2 The Meaning of Innocent Passage 43
7.3 The Regulation Concerning Shipping of Hazardous Cargo 44
7.4 Coastal States Versus Shipping States 44
7.5 Responses and Solutions 46
7.6 Final Remarks 47

SUPPLEMENT A 48
Summary

The maritime transportation of hazardous cargo has created a sometimes intense dispute between the shipping industry and coastal states. The arguments feeding this discussion are the right of innocent passage, claimed by shipping states, and on the other hand, the obligation to protect the environment stressed by coastal states. Two sets of rules, both codified in international law, stand in conflict with each other. The contradictory legal norms in addition to conflicting views on coastal state security cause the shipping of hazardous cargo to remain an acute matter of discussion.

Under the law of the sea, a coastal state has sovereign power over its territorial sea. This part of the sea, in most respects, is to be regarded as a continuation of land territory, an area where the coastal state has complete authority. At the same time there is a right, in both treaty and customary law, for foreign ships to travel the territorial seas of other states in innocent passage. Thus, a contradiction is created by which both coastal states and other maritime states are entitled to use the territorial sea. While shipping states are transporting nuclear cargo, using their right of innocent passage, many coastal states are protesting against these shipments because they are inherently dangerous and a threat to their peace and security. There should be no right of innocent passage for these ships, at least not without prior notification. This position is obviously not supported by transporting states. They argue that a nuclear ship is not automatically a threat to the coastal state and should not be regarded as non-innocent.

Because of the specific dangers associated with the maritime transportation of nuclear cargo this matter is regulated by several international conventions. The focus of these arrangements is primarily a preventive one aiming at minimising the risk of marine pollution. Coastal states are not convinced that this regulation is enough and they demand a right to get prior information before a shipment of ultrahazardous nature takes place. State practice and national legislation among affected coastal states indicate a more restrictive interpretation of the right of innocent passage. Even if this practice has not yet turned into customary law, a norm with this content is slowly evolving in international law.

Regardless of who is legally right in this discussion the dispute calls for a solution. Coastal states will continue to protest against these shipments if they are not informed beforehand and safer journeys are in the best interest of all states. Therefore, a more comprehensive solution is needed which must take place outside UNCLOS. There is no future in trying to change the general freedoms of navigation when it comes to the transportation of nuclear cargo. Instead, it is certainly easier for states to agree on specific areas of the sea where the shipment of ultrahazardous cargo may not take place. In these particular sensitive sea areas, it will then be possible to introduce a more restrictive approach towards shipping activities.
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEZ</td>
<td>Exclusive Economic Zone</td>
</tr>
<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
</tr>
<tr>
<td>IAEA</td>
<td>International Atomic Energy Agency</td>
</tr>
<tr>
<td>ICJ</td>
<td>International Court of Justice</td>
</tr>
<tr>
<td>ILC</td>
<td>International Law Commission</td>
</tr>
<tr>
<td>IMDG Code</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
<tr>
<td>IMO</td>
<td>International Maritime Organisation</td>
</tr>
<tr>
<td>INF Code</td>
<td>Irradiated Nuclear Fuel Code</td>
</tr>
<tr>
<td>ISM Code</td>
<td>International Safety Management Code</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships</td>
</tr>
<tr>
<td>NPT</td>
<td>Treaty on the Non-Proliferation of Nuclear Weapons</td>
</tr>
<tr>
<td>PSSA</td>
<td>Particular Sensitive Sea Areas</td>
</tr>
<tr>
<td>SOLAS</td>
<td>International Convention for the Safety of Life at Sea</td>
</tr>
<tr>
<td>TSC</td>
<td>Territorial Sea and Contiguous Zone Convention</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>USSR</td>
<td>Union of Soviet Socialist Republics</td>
</tr>
</tbody>
</table>
1 Introduction

The sea has always been used as a mean of transporting goods. In earlier days, the cargoes carried around the seas were not as dangerous as they are today. The most dangerous cargoes in those days were gunpowder and rum. Today however, the presence of different toxic substances and nuclear power that are being transported around the world is creating a more problematic picture. It has been estimated that more than 50 per cent of the cargoes transported at sea are regarded as dangerous.\(^1\) The transportation of hazardous goods by sea, and in particular radioactive materials, has grown in the last decades. In 1992, several high-risk transportations of nuclear fuel and nuclear waste took the route from Japan to France and the United Kingdom.\(^2\) These shipments were carried out in secret without coastal states’ knowledge of when the vessels were to travel through their territorial seas. During the transportations the ships carrying the highly toxic material passed through many states’ coastal waters, travelling close to their coasts. Numerous states protested against these shipments taking place without their knowledge or approval and some states refused a right of innocent passage for these ships.\(^3\)

The hazardous cargo that is being carried over seas, and through other states’ territorial seas, is a sensitive issue in international law, especially the above-mentioned shipments of radioactive cargo. These shipments have created a sometimes rough discussion between the shipping industry and coastal states. The coastal states are worried about the environmental impact of the nuclear cargo and the consequences to the marine environment if such a ship would founder or accidentally leak some of its cargo into the sea. Therefore, some coastal states have denied these shipments passage through their territorial seas and exclusive economic zones (EEZ). Other states will not allow a passage without a prior notification from the shipping state. The shipping states on the other hand believe that there is nothing stopping them from transporting dangerous cargo, such as radioactive materials, in this manner. The basis for this position is the right of innocent passage, stipulated under international law, which allows foreign ships to pass through the territorial seas of other states.

The clash between coastal and shipping states lies in their different views on the regulation in international law regarding coastal and shipping states’ rights and obligations. The debate among states, regarding shipments of hazardous cargo, is due to a conflict between two sets of rules competing

---


with each other. These are the rules on the right of innocent passage and the obligation to protect the environment.

However, this debate is not just a result of conflicting international regimes, instead the dispute has to do with conflicting views on state security. The shipping states has an interest in keeping their transportsations secret to avoid a scenario were radioactive cargo is taken over by terrorists or pirates. On the other hand coastal states have concerns regarding the environmental security of their nations. If an accident, involving a ship loaded with radioactive cargo, were to happen within the territorial sea it would have devastating consequences on the life and economy of the affected coastal state. Until a satisfying solution on the transnational shipments of nuclear cargo at sea is at hand the animosity between shipping and coastal states will go on. In this thesis I will try to account for the two positions in this debate and hopefully come up with a proposition on improvements concerning transnational shipping of nuclear cargo.

1.1 Purpose

My purpose for this text is to describe the right of innocent passage and the legal regulations concerning transportations of hazardous cargo at sea. By doing this I aim at identifying and describe the two claims in the conflict between the right of innocent passage and the obligation to protect the environment. The main object for this thesis is to examine whether there is a right under international law for a state to transport nuclear cargo through the territorial sea of another state or if a coastal state has a right to deny such passage.

1.2 Questions and Limitations

To meet the purpose of my thesis I have to ask the legal world and myself a few questions. These are:

1. What constitutes the territorial sea, and what rights and duties are there for coastal and shipping states in this area of the sea?
2. What is the meaning of innocent passage, especially what is meant by ‘innocence’ and ‘passage’?
3. What specific dangers are there regarding hazardous and nuclear cargo transported at sea and how are the transportations of such goods regulated?
4. How have states reacted to shipments of hazardous and nuclear cargo in the past and how did they argue?

---

Dixon, supra note 3, pp. 2-3.
These questions will also serve as the boundaries of my text. It is not possible, within the framework of a master thesis, to cover all the relevant angles on the shipment of hazardous cargo. I have chosen to focus on the right of innocent passage and the opposing obligation of coastal states to protect the environment. The primary attention will be on the shipment of nuclear cargo. Because of this limitation, I have left out several possible questions. For example, I have excluded the rules on liability in the field of maritime carriage of nuclear cargo. Since I have chosen to concentrate mainly on the transportation of nuclear goods, other dangerous materials such as oil, are not considered in this thesis.

It should be mentioned that not only ships carrying nuclear cargo create problems and discussion in international law. In addition, nuclear powered vessels generate issues in connection to passage through the territorial sea.\(^5\) Some coastal states demand prior authorisation for these types of ships and there is support in international law for a right to require prior notification.\(^6\) However, the discussion about nuclear powered ships will only be addressed briefly in this thesis and my focus is on ships carrying nuclear cargo.

### 1.3 Method and Material

In this thesis, I have for the most part relied on the works of others. I feel comfortable in trusting those with greater knowledge in the field of public international law. My way of collecting information for this thesis has been focused on different kinds of literature such as books and articles in legal journals. The great World Wide Web has also been helpful in finding information for this text. Most international organisations and governmental institutions have useful information accessible through the Internet. Finally, I have studied the texts of several conventions, treaties and codes on this subject, the main one being the United Nations (UN) Convention on the Law of the Sea\(^7\) (UNCLOS). This convention function as a constitution for the sea and therefore it is obvious to focus the work around these regulations.

In my preparation for this thesis I was sure that I would be completely covered in books and publications on my topic. Instead, it has been a struggle to acquire relevant and diverse literature. There are a few books published on the right of innocent passage for ships carrying hazardous cargo, but the specific question on the possibility of denying such passage has, as far as I have discovered, not been dealt with specifically. The discussion on this subject is, for the most part carried out in legal journals and other publications. Therefore, most of the materials used in connection


with the key question are articles written by legal scholars with different opinions on the topic. However, to create a background picture and to describe the legal framework of the territorial sea and the right of innocent passage I have used general books in international law. *The Law of the Sea*, by Churchill and Lowe, is one of the most important and comprehensive publications on the law of the sea and has been consulted throughout the work on this thesis.

A rather big section of this thesis is dedicated to state practice and the argumentation among states on the right, or non-right, of innocent passage for ships carrying hazardous cargo through the territorial sea. Evidence of state practice can be found for example in national legislation and declarations made by states when ratifying or signing a treaty. When describing state practice I have acquired the information from secondary sources rather than studying national legislation directly. The time and space limitations for this thesis have made it impossible to go through the national legislation state by state. This is why I have chosen to take the information for the section on state practice from other writers instead of inventing the wheel twice.

Finally, the method used for this thesis is a mix of description and analysis. For the most part this thesis has a descriptive character but since such texts sometimes can turn out a bit flat I will try to complete the work with some reflections on future solutions to unresolved issues.

### 1.4 Terms and Definitions

In a legal text of any kind, there are always words and expressions that call for an explanation and a more detailed description. In this thesis there are of course also terms in need of clarification. The choice of expression must be motivated and their connection to other definitions should be discussed.

To begin with there are several ways of describing the sea closest to the shoreline of a state. The most common term is ‘the territorial sea’ and this is the definition I intend to use for this text. Another term that I could have chosen is ‘the territorial water’ but instead of mixing the two expressions, I decided to go for one definition.

In the discussion on the transportation of hazardous cargo at sea there are essentially two opinions among states, those who are against the right of innocent passage for ships carrying hazardous cargo and those in favour of such a right. In order to separate the states and their different opinions in this discussion the states against will be called ‘coastal states’ and the states in favour ‘shipping states’ or on some occasions ‘transporting states’. Another word for shipping state is maritime state and in some cases flag state, to indicate what state is responsible for the ship. These definitions will not be used to the same extent as shipping and transporting state in this text. I have decided to refer to the states involved in transportation at sea as
shipping or transporting state because I believe this best illustrate the view and interests of this group.

1.5 The Ordering of the Thesis

In order to make this thesis as easy to read as possible I will conduct my writing in a chronologic way, starting with the history of the territorial sea. In this section, I will also describe the development of the legal framework regarding the territorial sea and the sources of the law of the sea. In addition, this chapter includes a description of the legislative and enforcement jurisdiction of the coastal state in its territorial sea, as well as the rights and duties of the shipping state.

Secondly, I will dissect the rule of innocent passage and define in more specific terms what is meant by the expressions ‘innocent’ and ‘passage’. The right of the coastal state to deny and suspend innocent passage will also be addressed.

In the third section, my attention will be on the existing regulation regarding transportations of hazardous cargo at sea and what specific dangers there are when it comes to such shipments. Two international conventions, The International Convention for the Prevention of Pollution from Ships\(^8\) (MARPOL) and the International Convention for the Safety of Life at Sea\(^9\) (SOLAS), is discussed in greater detail as well as other important conventions on this subject.

The fourth part is concerned with the main question of this text, namely the right of innocent passage in contrast to the obligation to protect the environment. In this section, I will explore the two different positions among coastal and shipping state on this issue. The case in favour of a right of innocent passage for ships carrying nuclear cargo and the case against such a right are both described. By analysing state practice and argumentation, as well as different opinions among legal writers I intend to give a broad picture on the different positions in this discussion.

The thesis ends with a part named Conclusion were I present the main findings of the work. Further, some reflections on the current legal position are made together with a few suggestions regarding future shipments of nuclear cargo.


2 The Territorial Sea

A coastal state has, in the name of sovereignty, demands regarding the water closest to its coast. The idea that the coastal state has certain rights in these waters, the territorial sea, is a relatively new phenomenon in the history of the law of the sea.

2.1 Historical Background

In today’s international law the idea of states having sovereign power over their coastal waters is a given but this has not always been the case. During medieval times, the attitude among ocean states was one of power, domination and control. States was keen to take control over big territories of waters in order to get ‘the better hand’ and during long time there was a constant struggle for title over sea territories. It was not until Hugo Grotius published his book *Mare liberum* in 1609 that the discussion about a free and open use of the seas could begin. In his book, Grotius proposes that the seas should be open for everyone but he also consider the possibilities for ownership of parts of the sea. He finds that the open sea cannot be in the possession of any state but that a coastal state has a right to control the waters that lies within its eyesight. The concept of closed seas, for the individual use of powerful states, began to fade and the new idea about open seas started to develop. Hand in hand with this development the notion of coastal state sovereignty over its adjacent waters grew. As the principle of open seas began to spread it became clear that the coastal state should have rights regarding its coastal waters. This sovereign right over the coastal waters is today not an issue in international law, however its scope and content is under discussion. What can be debated, and certainly has been, is how far and wide these sovereign rights can be upheld. Before I move on to look at this I want to give an outline of the sources of the law of the sea and the development of this branch of international law.

2.2 Sources of the Law of the Sea

The law of the sea is not to be found in one comprehensive document but rather in a quilt of customary and treaty law. Several treaties both multilateral and bilateral govern the use of the sea, and for the matters not regulated by a treaty there is, in most cases, customary law to consult. As with other sections of international law, the sources of the law of the sea are

---

to be found in article 38 of the Statute of the International Court of Justice. This article declares that the court, when deciding in a case, shall apply international conventions, custom, general principles of law, judicial decisions and the work of scholars and writers. This is the general catalogue of the sources of international law and they are applicable to the law of the sea. For my part, I will limit this presentation to conventions and customary law.

2.2.1 International Conventions

The making of a convention is the easiest and most clear way through which states can regulate their affairs. It is also by the use of a treaty that states can modify the rights and duties attaching to them under customary international law. It is only the states parties to the convention that are bound by it. However, other states can become obliged by the rules of the treaty if these transform into customary law. There are both multilateral and bilateral treaties dealing with the law of the sea, one very important and wide-ranging treaty is UNCLOS. Another type of treaty is the multilateral conventions that are governing special and technical aspects of the sea and its use, an example of such a convention is MARPOL.

2.2.2 Customary Law

Besides UNCLOS and other conventions in this field, the importance of customary law must also be stressed. To a large extent UNCLOS simply codified customary law as it stood at the time of its drafting but in many ways the convention has also contributed to create new rules of customary international law. Customary law consists of two elements namely Opinio Juris and state practice. For customary law to exist there is a need for both these elements. Opinio Juris can be described as a state’s belief that something is legally binding. This belief has to be accompanied by a clear and consistent practice. Customary law is in general binding upon states but there are possibilities for states to ‘stay out’ of the custom by not giving its consent to a new rule. By means of being a persistent objector to the developing rule, a state can avoid being bound by its contents. This was the situation in the Anglo-Norwegian Fisheries case, where Norway continually objected to the practice of a ten-mile territorial sea used by other

---

states.\footnote{\textit{Anglo-Norwegian Fisheries} case (United Kingdom v. Norway), 18 December 1951, ICJ, \textit{I.C.J. Reports} 1951.} As a result, of not accepting the developing custom Norway managed to avoid being bound by the new rule.

In the field of the law of the sea, the single most important international organisation is the International Maritime Organisation (IMO). The IMO is the only organisation with authority in this field and its influence on the development of the law of the sea is vast. The organisation’s mandate includes, \textit{inter alia}, encouraging the general adoption of the highest possible standard when it comes to maritime safety and the prevention and control of marine pollution from ships.\footnote{The official homepage of the International Maritime Organisation. Available at <www.imo.org>, under ‘About IMO’, last accessed 20 January 2008.} Even though many of the codes and treaties produced by the IMO are not binding, they may transform into customary law by the widespread implementation in national legislation or by references in other conventions. Through this type of action, the IMO treaties may become binding upon states. In this way, the IMO is one of the creators of new norms when it comes to the law of the sea and the transportation of dangerous goods.\footnote{H. Ringbom (ed.), \textit{Competing Norms in the Law of Marine Environmental Protection}, (Kluwer Law International: The Hague, 1997) p. 49.}

\section*{2.3 Development of UNCLOS}

The procedure of developing written rules about the use of the sea is a lengthy process. One early attempt was the League of Nation’s effort to codify three areas of law in the 1930s. This attempt did not pay off and the conference only managed to adopt a few draft articles on the subject of territorial waters. After this, the task of codification fell on the International Law Commission (ILC). The commission started its work in 1949 and in 1956 the ILC presented its Final Report on the Law of the Sea.\footnote{C.L. Rozakis and C. A Stephan (eds.), \textit{The New Law of the Sea}, (Elsevier Science Publisher: Amsterdam, 1983) p. 11.} This report then formed the basis for the first United Nations Conference on the Law of the Sea held in 1958. This conference managed to adopt four conventions relating to the following subjects: the territorial sea and the contiguous zone, the high seas, the continental shelf and fishing and living resources.\footnote{The 1958 Geneva Convention on The Territorial Sea and the Contiguous Zone, adopted at Geneva 29 April 1958, 516 U.N.T.S. 206. The 1958 Geneva Convention on The Continental Shelf, adopted at Geneva 29 April 1958, 499 U.N.T.S. 312. The 1958 Geneva Convention on The High Seas, adopted at Geneva 29 April 1958, 450 U.N.T.S. 12. The 1958 Geneva Convention on The Fishing and Conservation of Living Resources of the High Seas, adopted at Geneva 29 April 1958, 559 U.N.T.S. 286.} One major issue, which the first UN conference could not solve, was the question about the width of the territorial sea. Due to this difficulty a second
conference was held in 1960, however, this conference did not succeed on the matter either.\textsuperscript{23}

Up to this point the law of the sea consisted mainly of the four Geneva conventions from 1958, but this was about to change. Due to concerns regarding over-fishing and marine pollution along with the presence in the UN of many new independent states, not members when the Geneva conventions were drafted, a need for revision was rising. The law of the sea was in need of a facelift through which the different parts of the law of the sea could be legally integrated. This whole revision on the law of the sea took place in a third UN conference and resulted in UNCLOS from 1982. The convention entered into force in 1994 and has today almost a universal acceptance among states.\textsuperscript{24} The more exhaustive UNCLOS has suppressed the earlier UN conventions on the law of the sea. However, for states not party to the latest convention, for example the USA, and for matters not governed by it the conventions from 1958 will continue to regulate the relations between states parties to them.\textsuperscript{25} UNCLOS can be described as a constitution for the sea. It has a wide-ranging scope and regulates almost every human activity in the sea. Because of this and the high number of parties, this convention has been described as one of the most important legal documents in international public law.\textsuperscript{26} It is also in this document that one can find a good definition of what constitutes the territorial sea.

### 2.4 Definition of the Territorial Sea

The water adjacent to a state’s coast is called the territorial sea. In these waters, the state has sovereign rights and the water can be seen as a prolongation of the state’s land territory. The territorial sea is in the power and control of the coastal state in contrast to the high seas, which are open to all states.\textsuperscript{27} The territorial sea is defined in article 2(1) of UNCLOS and the article provides:

“The sovereignty of a coastal state extends, beyond its land territory and internal waters and, in the case of an archipelagic state, its archipelagic waters, to an adjacent belt of sea, described as the territorial sea.”

This is the general definition of the territorial sea in international law and the provision is, as well as other parts of UNCLOS, accepted as customary international law. The territorial sea is sometimes categorised as the marginal belt or territorial waters but the most common and well-accepted

\textsuperscript{23} Churchill and Lowe, \textit{supra} note 14, p. 15
\textsuperscript{24} Churchill and Lowe, \textit{supra} note 14, pp. 16 and 22.
\textsuperscript{25} Dixon, \textit{supra} note 15, p. 208.
term is territorial sea. As article 2(1) stipulates the coastal state has, in the name of sovereignty, demands regarding the water closest to its coast. The next section will describe what this sovereignty entails and what restrictions there are to this power.

2.5 Jurisdiction over the Territorial Sea

Since the coastal state holds sovereignty in the territorial sea it also has jurisdiction over these waters. Even though the coastal state is ‘in possession’ of its territorial sea the sovereignty that the coastal state enjoys is subject to a number of conditions. The state’s law applies in this area of the sea but there are some restrictions to when the state can exercise its powers. The most important restriction of the coastal state’s right to exercise sovereignty is the right of innocent passage. This right, regulated in article 17 of UNCLOS, entitles ships from all other states to cross the territorial sea of the coastal state without acquiring permission. I will describe this right in detail later.

2.5.1 Legislative Jurisdiction

A coastal state’s competence to make law regarding its territorial sea is restricted in some ways. The state is not entirely free to enact laws as it sees fit. Instead, the sovereign right of the coastal state to legislate is limited by the duty to respect the right of innocent passage of foreign vessels. The coastal state is entitled to enact laws and regulations relating to the right of innocent passage but the state is restricted to the topics in article 21 of UNCLOS. A coastal state can only legislate regarding areas covered by the article. These are as follows:

- a) the safety of navigation and the regulation of maritime traffic;
- b) the protection of navigational aids and facilities and other facilities or installations;
- c) the protection of cables and pipelines;
- d) the conservation of the living resources of the sea;
- e) the prevention of infringement of the fisheries laws and regulations of the coastal state;
- f) the preservation of the environment of the coastal state and the prevention, reduction and control of pollution thereof;
- g) marine scientific research and hydrographic surveys;
- h) the prevention of infringement of the customs, fiscal, immigration or sanitary laws and regulations of the coastal state.

Further, foreign ships that exercise the right of innocent passage should, according to article 21(4), comply with the laws and regulations of the

31 Churchill and Lowe, *supra* note 14, p. 94.
coastal state. However, at the same time the coastal state is not allowed to enact laws in a way that has the practical effect of denying or hindering innocent passage. This limitation on the legislative power of the coastal state is a way to balance the interests of the coastal with the concerns of the flag state. \(^{32}\)

### 2.5.2 Enforcement Jurisdiction

In theory, the coastal state has full legislative jurisdiction in the territorial sea but since these waters are simultaneously used by other states there are some restrictions to when the state can enforce its legislation. Even if the state is legally entitled to exercise jurisdiction it should not always do so out of respect for other states. \(^{33}\)

The enforcement jurisdiction of the coastal state is limited, according to article 27(1) of UNCLOS, to acts, which for example affect the peace of the country or the good order of the territorial sea. As stated in article 27(2), the coastal state must also acknowledge the interest of navigation when deciding if, or how, it should carry out an arrest in the territorial sea. \(^{34}\)

Some breaches of the coastal state’s laws can have the effect of making the foreign ship’s passage non-innocent. If committing such a breach the ship is no longer entitled to innocent passage and the coastal state is in its power to take necessary steps to stop the passage. This is stated in article 25(1) of UNCLOS. \(^{35}\) What kind of methods the coastal state can use to prevent the non-innocent passage is not described in UNCLOS but procedures commonly used are verbal warnings, the firing of warning shots and the boarding of the offending vessel. \(^{36}\) Further, there are other specific circumstances when the coastal state can take enforcement actions against foreign ships in its territorial sea. Article 220(2) in UNCLOS regulates the case of vessel-source pollution and the article stipulates:

> “Where there are clear grounds for believing that a vessel navigating in the territorial sea of a state has, during its passage therein, violated laws and regulations of that state adopted in accordance with this convention or applicable international rules and standards for the prevention, reduction and control of pollution from vessels, that state, without prejudice to the application of the relevant provisions of Part II, section 3 [i.e. innocent passage] may undertake physical inspection of the vessel relating to the violation and may, where the evidence so warrants, institute proceedings, including detention of the vessel.”

What this rule lays down is a right for the coastal state to use enforcement actions against a foreign ship even if the vessel is travelling through the

---


\(^{33}\) Dixon, *supra* note 15, pp. 210-211.


territorial sea under the right of innocent passage. In these situations the right of innocent passage does not hinder the coastal state from taking actions to stop the ship and make inspections.\textsuperscript{37}

3 Right of Innocent Passage

As mentioned earlier a coastal state enjoys sovereignty over its territorial sea. The state is the master of its coastal waters in the same way as it controls its land territory. This is true apart from for one big exception – the right of innocent passage for foreign ships. On land a state can exclude and hinder persons and entities from other countries almost as it please but at sea the rules are somewhat different. The right of innocent passage, as stated in UNCLOS article 17, gives foreign ships the opportunity to cross the territorial sea of another state without having to obtain permission.

The right of innocent passage is a well-established rule in international law, but this does not mean that the rule and its scope are not open for discussion. Even if there have been attempts from the international legal community to clarify its contents there are still debates about the true interpretation regarding some elements of the right of innocent passage.\textsuperscript{38}

3.1 Passage and Innocent – What Could the Interpretation Be?

The right of innocent passage consist of two elements. For a foreign ship to be allowed to cross the territorial sea of another state the ship has to be in ‘passage’ and this passage has to be ‘innocent’. To be able to grasp the real meaning of innocent passage there is a need to understand these two terms. I will now try and describe these expressions in detail starting with ‘passage’.

3.1.1 Passage

It should be rather easy to define what passage really means. Simply put passage is when something or someone is moving from one place to another, but the tricky question in this case is in what manner this movement should be carried out in order to fulfil the criterion of innocent passage.

The idea in international law is that a ship exercising its right of innocent passage should be in the process of travelling through the territorial sea. The movement should be continuous and speedy. A ship is not free to cruise around in the territorial sea without any obvious goal or purpose. Such undetermined behaviour would not be a case of passage.\textsuperscript{39} Even if a hovering ship would be ‘innocent’ the ship is not engaged in passage and therefore its actions is not in accordance with the right of innocent passage.

\textsuperscript{39} Evans, supra note 34, p. 633.
For a ship to be in innocent passage its purpose must be to simply cross the territorial sea. It should not take any breaks unless stopping or anchoring is part of normal navigation. The words used in article 17 to describe how the passage should be carried out are ‘expeditious’ and ‘continuous’. These words indicate that the passage should be quick, but it is not a question about rushing through the territorial sea. In the French version of UNCLOS the world rapide is used and in the Spanish rapido. However, a proposal to change the English text to ‘rapid’ was rejected by the third UN conference on the law of the sea. The proposal was set aside since a replacement of the word ‘expeditious’ might indicate that ships in innocent passage have to hurry through the territorial sea in all cases. The interpretation of passage should not be one of full speed ahead, but it must be clear that the ship is simply passing and not hanging about in the territorial sea without reason. The foreign ship should refrain from manoeuvring if this is not necessary and it should not be engaged in any other activity than the passage itself.

### 3.1.2 Innocent

Defining passage is fairly easy but to find out what is ‘innocent’ is not as straightforward. In article 14(4) of the Territorial Sea and Contiguous Zone convention it is stated that “[p]assage is innocent so long as it is not prejudicial to the peace, good order or security of the coastal state”.

Whether a passage is innocent or not is to be decided on a case-to-case basis. It seems to be the manner in which the passage is carried out, rather than the intent or purpose, which should be the basis for deciding if a particular crossing is innocent or not. This was stated by the International Court of Justice (ICJ) in the famous Corfu Channel case.

In the Corfu Channel case, the court tried to define the right of innocent passage and answer the question of what can be seen as innocent. The reason behind this dispute between the United Kingdom and Albania was the passage of a British naval force through the Corfu Channel. The incident included a number of passages and during the first one two British warships were fired upon from the Albanian shore. After this, diplomatic correspondence followed between the two countries, during which the UK claimed the right of innocent passage while Albania wanted to get prior notification and authorisation for a passage by foreign vessels. Despite the diplomatic attempts, the dispute remained unresolved. At this point, the UK

---

40 Churchill and Lowe, supra note 14, p. 82.
41 Dixon, supra note 15, p. 211.
42 Yang, supra note 38, p. 152.
45 Churchill and Lowe, supra note 14, p. 103.
46 McDougal and Burke, supra note 5, p. 204.
decided to test the Albanian attitude by sending more warships through the Corfu Channel. During this second voyage, two British vessels struck mines, which caused large damages and loss of life. The channel had previously been swept for mines and was regarded as a safe passage. The UK declared an intention to sweep the area again and shortly thereafter this was carried out without the consent of Albania.\textsuperscript{47}

When the dispute finally was taken before the ICJ, Albania declared that its sovereignty had been violated by the unlawful passage of the British vessels. There had been no prior notification or authorisation. The ships had been proceeding in battle formation and at action. Due to these circumstances, the passage could not be regarded as innocent. The UK claimed a right of innocent passage through the channel and asserted that the ships had not been travelling in battle formation but on a strait line. Albania had not been given prior notification however, such notice was not necessary when exercising the right of innocent passage.\textsuperscript{48}

When the ICJ was to decide on the right of innocent passage in this case it laid its focus on the manner in which the passage was carried out and not on the voyage as such. If the crossing did not constitute any threat to the coastal state the passage was regarded as innocent. In its judgement the court declared that “[i]t remains, therefore, to consider whether the manner in which the passage was carried out was consistent with the principle of innocent passage”\textsuperscript{49}

After having considered the formation of the warships during the passage, the position of their armament and the manoeuvring in the territorial sea the court concluded that the United Kingdom did not violate the sovereignty of Albania when passing through Albania’s territorial sea.\textsuperscript{50} The court declared that as long as a passage is innocent a state has, in time of peace, a right to travel with their warships through international straits without previous authorisation from the coastal state. Due to the tense situation in the area, between Albania and Greece, Albania might have been justified in using special regulations regarding foreign warships. However, the situation did not necessitate prohibition of passage.\textsuperscript{51} Further, it was stressed in the judgement that the character of the vessel does not determine by itself if the passage is innocent or not. The type of vessel should not be of influence in connection to this determination, only the way the passage is carried out should be of importance.\textsuperscript{52}

The decision in the \textit{Corfu Channel} case restricted the coastal states ability to decide what was innocent or not. According to this judgement a breach of a

\textsuperscript{47} McDougal and Burke, \textit{supra} note 5, p. 205.


\textsuperscript{49} \textit{Corfu Channel} case, \textit{supra} note 44, p. 30.

\textsuperscript{50} \textit{Ibid.}, pp. 31-32.

\textsuperscript{51} Shearer, \textit{supra} note 48, p. 312.

\textsuperscript{52} McDougal and Burke, \textit{supra} note 5, p. 206.
coastal state’s law would not automatically render the passage non-innocent. Instead the decisive factor is, according to the court, the conduct of the passing ship.\textsuperscript{53}

The central question in the discussion on the meaning of innocent is whether the term innocent should be left to the subjective determination of the coastal state, or if there should be an objective standard qualifying what is innocent behaviour and what is not. Those supporting the objective view believe that a passage is innocent until it is proven otherwise. They are of the opinion that activities prejudicial to the coastal states interests must take place for a passage to be rendered as non-innocent. In this case the burden of proof lies with the coastal state that has to identify an activity taken by the ship that threatens the coastal state. Contrary, those supporting the subjective position are of the opinion that innocent passage can only occur when no actions are taken to threaten the coastal state. In this view, non-innocence can occur even if there is no obvious act involved. In this case, the burden of proof shifts to the ship that has to show no harmful intent.\textsuperscript{54}

The basis for this discussion, on an objective or subjective determination of the right of innocent passage, has to do with how to balance the interest of the coastal state with the interest of navigation of other states. The balance in the TSC is in favour of the coastal state and the subjective determination of innocent passage.\textsuperscript{55} The provision in article 14 does not require the commission of any act or the violation of the coastal state’s laws for a passage to be non-innocent. The mere presence of a ship involved in passage can be a threat to the coastal state and can therefore be regarded as non-innocent.\textsuperscript{56} With this article, the coastal state is given big freedom to decide what passage is prejudicial to its security. It was the subjective view of the coastal state that was given priority in the TSC but things changed and in UNCLOS the tide has turned in the other direction. Due to expanding claims to territorial seas the provision of article 14 in the TSC became out of date. As more states claimed larger territorial seas, the maritime states feared that the freedom of navigation was threatened. These states thought there was a need for firmer rules and clearer regulations as to what would be considered as innocent passage. During the third UN conference on the law of the sea the definition of innocent passage was discussed and article 19 in the new UNCLOS came to include a more detailed description of innocent passage.\textsuperscript{57} This article describes conduct that is not innocent and stipulates that passage is innocent as long as the passing ship does not engage in any of the listed activities. The foreign ship is for example not allowed to engage in the threat or the use of force, breach of customs, fiscal, immigration and sanitary regulations or serious and wilful pollution.\textsuperscript{58}

\textsuperscript{53} Churchill and Lowe, \textit{supra} note 14, p. 83.
\textsuperscript{54} Ngantcha, \textit{supra} note 6, p. 47.
\textsuperscript{55} Evans, \textit{supra} note 34, p. 632.
\textsuperscript{56} Churchill and Lowe, \textit{supra} note 14, p. 84.
\textsuperscript{57} Brownlie, \textit{supra} note 28, p. 193.
Even if the regulations on innocent passage in UNCLOS can be seen as a way of giving more opportunity for the objective determination of the term innocence there is support for the subjective view as well. Some would argue that the list in article 19, of activities rendering the passage as non-innocent, minimise the coastal state’s possibilities to subjectively decide what is non-innocent. However, there are also some vague formulations in article 19 that opens up for a subjective determination of innocent passage. These ‘catch-all’ phrases give the coastal state a greater power to decide what shall be regarded as non-innocent.\(^{59}\)

An example of such loose formulations is the provision in subparagraph (2)(a), which stipulates that a passage of a foreign ship shall be considered as non-innocent if it is in “any other manner in violation of the principles of international law embodied in the Charter of the United Nations”. Another example appears in (2)(l) were “any other activity not having a direct bearing on passage” is considered prejudicial to the security of the coastal state and thus non-innocent.

The determination of innocence cannot be deemed as completely objective or subjective, instead both elements are represented in article 19 of UNCLOS. On one hand there is a list of pre-decided activities rendering the passage as non-innocent but at the same time there is room for the subjective assessments of the coastal state.

### 3.2 Article 19 - Exhaustive List?

Regardless of the regulation in article 19 of UNCLOS the question can still be asked about what kind of activities that can render a passage non-innocent. Is it only the conducts listed in article 19 that render a passage non-innocent, or are there other factors that come into play? The problem is how article 19 should be interpreted and if the list of activities should be regarded as exhaustive or not.

In favour of considering the list as exhaustive is the joint statement from USA and the USSR on the interpretation of innocent passage issued in 1989. In this statement the two states declare that as long as a ship is not engaged in any of the activities listed in article 19(2) the ship is in innocent passage.\(^{60}\) The USA/USSR declaration provides that:

“All ships, including warships, regardless of cargo, armament or means of propulsion, enjoy the right of innocent passage through the territorial sea in accordance with international law, for which neither prior notification nor authorisation is required.”\(^{61}\)

---

\(^{59}\) Ngantcha, *supra* note 6, p. 51.

\(^{60}\) Shaw, *supra* note 30, p. 510.

However, not all commentators or states supports this opinion presented by the USA and USSR. There are states claiming that prior authorisation or consent is needed when it comes to nuclear-powered ships or ships carrying nuclear substances through the territorial sea. The wording of article 19 is, as said earlier, ambiguous and the precise scope and meaning of the article is not yet fully established. The view, put forward by the USA and the former USSR, suggesting that the list is now fixed must be balanced against arguments supporting the idea that the right of innocent passage has been limited even further. Even though the list in article 19(2) is long it should not be regarded as an exhaustive catalogue over non-innocent activities. As subparagraph (l) implies “any other activity not having a direct bearing on passage” can also be regarded as non-innocent. This final ‘catch-all’ paragraph, described above, indicates that the list should not be seen as exhaustive. If the list is to be seen as non-exhaustive, as the vague wording implies, article 19(2) has narrowed the right of innocent passage. It is narrower than before since the commission of any of the acts listed renders the passage non-innocent. In the TSC the activity of the ship had to be prejudicial to the peace, good order or security of the coastal state to be regarded as non-innocent. According to the rules in UNCLOS it is enough for the ship to commit one of the activities listed.

Despite the provision in article 19 and the decision in the Corfu Channel case, there are still questions to what implications on the right of innocent passage a breach of a coastal state’s law would have. Does a breach necessarily mean that the passage is non-innocent? This issue is what I will see to next.

### 3.3 Breach of a Coastal State’s Laws

A foreign vessel is, according to article 21(4) in UNCLOS, under the obligation to comply with the laws of the coastal state regarding the territorial sea. Even if there is a duty to act in accordance with coastal state’s laws there is no regulation in UNCLOS stating what effect a breach would have on innocent passage. Some writers argue that it is important to separate the breach of a coastal state’s law and the right of innocent passage. A breach can result in a penalty of some sort, for example a fine, but it does not automatically render the passage non-innocent. In accordance with this line of argument, when a ship has faced its penalty it should be free to proceed with its innocent passage.

Other writers argue that a separation between a breach of a coastal state’s law and the right of innocent passage is not possible. Even if the foreign ship is asserting a right of its own, i.e. the right of innocent passage, it has at...
the same time a duty to comply with the laws of the coastal state. A separation between the breach of a coastal state’s laws and the right of innocent passage cannot be done since it is almost impossible to think of a situation of non-innocent passage that is in accordance with coastal state law. Finally the wording of article 21(4) suggests that a foreign ship is under an obligation, i.e. it shall comply, to adhere with the laws of the coastal state.67

Even if UNCLOS not explicitly states what consequences a breach of a coastal state’s laws has, the text in article 21(4) implicit stipulates that the coastal state should be able to force a foreign ship to comply with its laws. A coastal state must have the power to use enforcement measures in the territorial sea and in some cases interfere with innocent passage.68 In the next section, I am going to illustrate two of the enforcement measures the coastal state has to choose from.

3.4 The Right to Deny and Suspend

The right of innocent passage is not without exceptions and under some certain circumstances a coastal state has the right to deny or suspend the right of such passage.

3.4.1 Deny

The territorial sea is under the sovereignty of the coastal state and the right of other states to navigate through this sea is dependent on the requirements in article 19 of UNCLOS. If a ship ceases to be innocent, or is no longer in passage, its ticket to cross the territorial sea is removed and the coastal state has a right to hinder the passage of the ship.69 According to article 25 (1) of UNCLOS a coastal state is entitled to deny passage, which is non-innocent, and to take necessary steps to prevent such passage.70

To be able to deny passage the coastal state must first determine the passage as non-innocent. As noted above, in the discussion on determination of innocence, in many cases it can be difficult to decide whether a foreign ship is in innocent passage or not. When as ship is allegedly not being innocent the coastal state should inform the ship of its suspicions and allow the foreign ship to adjust its conduct. In this way, there should be room for explanation and correction.71

67 Ngantcha, supra note 6, p. 176.
68 Hakapiä and Molenaar, supra note 37, p. 135.
69 Churchill and Lowe, supra note 14, p. 87.
71 Yang, supra note 38, p. 216.
If a foreign ship is found to be in non-innocent passage, the coastal state may take the necessary steps to prevent this passage. What necessary steps means is not stated in the convention and coastal states take different positions on this. The methods normally used are warning shots, stopping, boarding, inspecting, detaining, diverting or expelling. When a coastal state takes necessary steps, it should be done in line with basic rules of general international law, these being necessity, proportionality and non-discrimination.  

3.4.2 Suspend  

Suspension of innocent passage is regulated in article 25(3) UNCLOS. The right to suspend innocent passage is only of temporary nature and the suspension must take place in order to protect security interests of the coastal state. The security of the state is the essential requirement for a suspension of the right of innocent passage. However, at the same time as a suspension is limited to certain circumstances it is up to the coastal state to decide what security is in the individual case, and if a suspension is necessary.  

It is also stated in the article that a temporary suspension must be carried out without discrimination among foreign ships. A coastal state is not entitled to single out one specific ship and deny this particular vessel the right of passage. For a suspension to be justified a state that is about to suspend the right of innocent passage must do so for all ships and under the same conditions. The right of a coastal state to suspend passage in its territorial sea is restricted to the following conditions:  

1. The suspension cannot be discriminatory. All foreign ships must be banned from passage and the coastal state is not allowed to hinder the passage for just a few selected ships.  
2. The suspension is only to be temporary in time and it must not go on to be a permanent hampering of the passage through the coastal state’s territorial sea.  
3. Only specified areas of the territorial sea can be targets of suspension. It is not permissible to cut off the entire territorial sea.  
4. The suspension must be essential for the safety of the coastal state and there should be no other option.  
5. If all of the above is fulfilled, the final criterion, before a suspension can take place, is that it is published in advance.  

The conditions stipulated above give some restrictions on when and how a coastal state can initiate suspension of innocent passage in its territorial sea.  

---  

72 Yang, supra note 38, p. 217.  
73 Brownlie, supra note 28, p. 189.  
74 Ngantcha, supra note 6, p. 165.  
75 Rothwell, supra note 32, p. 435.  
76 Ngantcha, supra note 6, pp. 165-166.
However, regardless of these limitations it is in the end up to the coastal state to determine what is essential for guarding the state’s security. What can be regarded as security interests is not explicitly defined in article 25(3) and as often when it comes to state security the right to protection has been interpreted liberally.\footnote{Churchill and Lowe, supra note 14, p. 87.}
4 Hazardous Cargo at Sea - What Dangers are There?

The transportation of hazardous cargo at sea has, as stated before, increased the last decades. So has the regulatory response to such shipments. This chapter will focus on the risks associated with transporting hazardous goods at sea and the legal regulation thereof.

4.1 Sea Specific Problems

Hazardous cargo transported at sea is exposed to special influence emanating from the sea itself. This can be for example the direct contact with salt water and the effect thereof on the cargo. It can also be the exposure to rough sea that can damage the cargo and result in a leakage of the dangerous substances. Another aspect when transporting cargo at sea is the various types of weather that the cargo encounters during a long voyage. It is not unusual that a ship during a transport passes through several climate zones and is exposed to both considerable heat and harsh cold.\(^78\) These particular problems related to transportation at sea apply to all types of cargoes carried over seas. Even so, there is one category of cargo that, when transported at sea, creates yet more challenging problems. This is cargo with nuclear or radioactive contents.

4.2 Nuclear Cargo

Nuclear power is a relatively new phenomenon that showed its potential devastating power in the final days of World War II after ruining entire cities and regions. Nuclear substances are a type of material that is especially dangerous to humanity and the environment.

However, it was not until the Chernobyl accident in 1986 that the world really became aware of the potential danger of nuclear power. The risk of being subjected to radioactive contamination and exposed to radiation, which creates long-term health risks, is today evidently a part of our lives.\(^79\)

The impact that nuclear substances can have on land is one thing but the effect of a nuclear accident at sea is much greater. This has to do with the nature of the oceans. They are in constant flow, never still, and they spread throughout the whole world. Consequently, a nuclear accident at sea can


spread quickly and is not restricted to one region only. At land such an accident could more easily be taken care of while at sea it threatens to spread throughout the world and contaminate the entire marine environment. In respect of the specific dangers associated with the transportation of dangerous cargo at sea, the legal world has set up a wide range of legal documents to protect the marine environment from the risk posed by these shipments. Some of these documents, including treaties and codes from the IMO, will be dealt with in the following section.

4.3 Regimes Regulating Transportation of Hazardous Cargo at Sea

The sea is subjected to pollution from different sources. This can be for example shipping activities, dumping, activities on the seabed and pollution from land based sources. There are several bilateral and multilateral treaties on the subject of marine pollution. In this chapter I will discuss the special regimes that exist in the field of marine pollution and the transportation of hazardous materials at sea. However, I will start by addressing the rules in UNCLOS regarding nuclear cargo.

4.3.1 UNCLOS

In article 23 of UNCLOS it is stated that a nuclear powered ship or a ship carrying nuclear cargo is entitled to the right of innocent passage. However, there are several requirements set up for these ships obligating them to carry specific documents and to adhere to international precautionary measures. The documentation and precautionary principles referred to in article 23 is established in several treaties regarding safe transportation of hazardous cargo. These are for example SOLAS and other conventions developed by the IMO. I will return to these conventions later in this chapter.

Under UNCLOS the coastal state is not allowed to hinder the passage of nuclear ships but it may direct vessels to use specific sea lanes when travelling its territorial sea. The power of a coastal state to direct the traffic within its territorial sea is regulated in article 22(1) of UNCLOS.

---

81 Shaw, supra note 30, p. 806.
82 Churchill and Lowe, supra note 14, p. 91.
84 Hakapää and Molenaar, supra note 37, p. 133.
4.3.2 MARPOL

The International Convention for the Prevention of Pollution from Ships deals with all forms of non-accidental pollution from ships, except for intentional dumping which is regulated in other conventions. The convention is applicable to all ships that are under the flag of a state party, but it does not apply to state owned ships used only for non-commercial purposes.\textsuperscript{85} The convention is accompanied by six annexes containing detailed standards on pollution regarding certain substances. These are as follows:

Annex I          Oil
Annex II         Noxious liquid substances in bulk
Annex III        Harmful substances carried by sea in packaged forms
Annex IV         Sewage
Annex V          Garbage
Annex VI         Air pollution

The MARPOL convention establishes a preventive regime with a focus on avoiding pollution from happening in the first place. This is done by setting up standards on ship construction, equipment and handling of the cargo. Annex III is designed to prevent and minimise pollution from harmful substances carried by sea in packaged forms. Thus, the annex contains regulations concerning packaging, marking, labelling, documentation, stowage and quantity limitations.\textsuperscript{86} Some of the occurrences of pollution at sea are the result of accidents such as hull failure, collisions and stranding. In MARPOL there are provisions set to reduce the magnitude of marine pollution when an accident occurs. These rules regulate, for example, the limitations on the size of oil tanks and the requirement of double hulls.\textsuperscript{87}

Annex II and I binds all states parties to the convention while the other annexes are optional. Due to this optional construction regarding the specific anti-pollution regulations the participation among states differs widely. Further, according to article 16 of MARPOL, states are not bound by amendments to the convention that they have not accepted. Taken together this creates a situation were different regulations can be in force for different states.\textsuperscript{88}

4.3.3 SOLAS

The International Convention for the Safety of Life at Sea is another convention that is of importance in this context. This convention is regarded as the most important treaty when it comes to the safety of merchant ships. SOLAS deals with the safety at sea and stipulates several minimum

\textsuperscript{85} Shaw, \textit{supra} note 30, p. 807.
\textsuperscript{86} Churchill and Lowe, \textit{supra} note 14, p. 340.
\textsuperscript{87} \textit{Ibid.}, p. 353.
\textsuperscript{88} Birnie and Boyle, \textit{supra} note 79, p. 363.
requirements regarding construction and seaworthiness standards.\textsuperscript{89} One of the main objectives of the convention is to reduce the risk of pollution from dangerous cargo carried at sea.\textsuperscript{90} With this objective SOLAS prohibits all carriage of nuclear and other dangerous substances at sea, except in accordance with the provisions of the convention. Chapter VII of the convention stipulates several requirements relating to the packaging, marking and stowage of dangerous cargo.\textsuperscript{91} The cargo must be categorised and there has to be specific documentation accompanying the goods during its transportation. In addition, SOLAS lays down rules on how ships carrying dangerous cargoes should be constructed and what equipment they must have. Finally, ships transporting substances in packaged form or in bulk must have a certificate that specify what type of dangerous cargo the ship is permitted to transport.\textsuperscript{92} The ships that hold a certificate in accordance with the convention is subjected to control in the ports of states parties to the convention. The first step in these controls is to make sure there is a valid certificate in place. If however there are clear grounds for believing that the ship and its equipment is not fit for duty the port state may take actions to make sure that the ship stays harboured until it is ready to sail.\textsuperscript{93}

There is a specific amendment to SOLAS regarding oil and chemical tankers that came into force in 1998. This amendment makes it compulsory for such tankers to comply with the International Maritime Organisation’s Code on International Safety Management\textsuperscript{94} (ISM Code). For a ship to be certified under the amendment the operator of the ship must have safety and environmental policies in place which are in accordance with the code. The ISM Code is a powerful tool since without certificate the ship cannot operate.\textsuperscript{95}

\textbf{4.3.3.1 The IMDG Code}

There are additional IMO regulations that relates to the transportation of hazardous cargo at sea. One is the International Maritime Dangerous Goods Code\textsuperscript{96} (IMDG Code).\textsuperscript{97} The development of the IMDG Code was created to establish a uniform international code for the transportation of dangerous goods by sea, which could complement SOLAS. Before this, the maritime countries had different regulations concerning the transportation of

\textsuperscript{90} Churchill and Lowe, supra note 14, p. 342.
\textsuperscript{91} Supra note 78, p. 67.
\textsuperscript{93} Brown, supra note 83, p. 382.
\textsuperscript{95} Birnie and Boyle, supra note 79, p. 361.
\textsuperscript{96} International Maritime Dangerous Goods Code, IMO Doc. MSC.122(75).
\textsuperscript{97} Dixon, supra note 3, p. 21.
dangerous cargo by sea, especially in labelling and packaging. This obviously created difficulties for transporting states since there were different rules to follow. The need for a common international regulation on this subject was recognised by the SOLAS conference and the IMO was appointed to develop an international code. The IMDG Code was developed within a working group of the IMO and was concluded in 1965.\textsuperscript{98} In the beginning, the code was only recommendatory but this changed and since January 2004 the code is mandatory and is included in SOLAS as an amendment. First and foremost, the code is focused on the packing, stowage and the separation of incompatible substances. The dangerous cargoes are further divided into different classes, according to their hazards, and general rules and restrictions are made for each group.\textsuperscript{99}

\subsection*{4.3.3.2 The INF Code}

One arrangement especially focusing on nuclear cargo is The IMO Code for the Safe Carriage of Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships (INF Code).\textsuperscript{100} The development of the INF Code was initiated to create rules regarding the shipment of nuclear cargo. Before this initiative there had been no requirements at all concerning ships carrying this type of cargo. The code was developed through the work of the IMO and it was adopted on a voluntary basis in 1993. Three categories of ships are defined by the code, INF1, INF2 and INF3, each one allowed to carry a fixed amount of nuclear cargo. In 1998 there was further rules amended to the code, including regulations regarding emergency plans and a duty to notify coastal states in the event of an accident.\textsuperscript{101} In 2001 the INF Code became mandatory.\textsuperscript{102}

\subsection*{4.3.4 The Basel Convention}

During the third UN conference on the law of the sea there were discussions on including a rule on prior notification or approval for ships carrying hazardous cargo. This proposal however was not realised in UNCLOS. Instead these types of ships are required to carry documentation and to take precautionary measures when travelling through the territorial sea. Nonetheless, these requirements are not enough to address the worries among many coastal states regarding the transportation of hazardous and

\textsuperscript{100} The International Maritime Organisation’s Code for the Safe Carriage of Irradiated Nuclear Fuel, Plutonium and High-Level Radioactive Wastes on Board Ships, adopted at London 4 November 1993, IMO Doc. MSC.118(74).
\textsuperscript{102} Ibid., section 7.
nuclear cargo. Due to this dissatisfaction with the regulation of these shipments, the creation of the Basel Convention\textsuperscript{103} was initiated.\textsuperscript{104}

The primary concern of the Basel Convention is to minimise the dangers to human health and environment caused by transboundary movement of hazardous waste. This should, according to the convention be achieved by reducing the movement of such waste in the first place. Therefore the convention is focused on making the state parties minimise their export of hazardous waste. The transboundary movement of hazardous waste is permissible under the Basel Convention only when there is no other, more environmentally sound alternative.\textsuperscript{105}

The scope of the convention is rather limited even if the definition of waste, substances that are disposed of or intended for disposal, seems quite broad. What is included in this definition though is in reality only household and hazardous waste. What is regarded as hazardous is restricted to substances listed in the annexes to the Basel convention. Finally nuclear substances fall outside the scope of the convention since other treaties and conventions already cover these materials.\textsuperscript{106}

The crucial point in the discussion on transportation of hazardous cargo at sea is the right of the coastal state to require prior notification and authorisation over foreign ships passing through their territorial sea. In article 6 of the Basel Convention there is a requirement for the shipping state to inform concerned coastal states of any proposed transportation of wastes. Such a movements must also, according to the article, be approved by the coastal states.\textsuperscript{107} This duty to notify the transit states is also relevant when it comes to coastal states not parties to the convention. All transit states are ‘concerned states’ according to article 2(13) and should be informed in advance of any transportation of hazardous waste through their waters. A transit state is defined in article 2(14), as any state, other than the state of export or import, through which a movement of hazardous waste is planned or takes place. Transportation is not allowed to take place unless every transit state has given its consent, which should be in writing.\textsuperscript{108}

The requirement of prior consent in the Basel Convention has its roots in the basic rule of state sovereignty. A sovereign state has a right to control its territory and should be able to regulate the activities taking place there. However, most states argue that when it comes to transportation through the territorial sea no such right to prior authorisation exist since a foreign ship has a right of innocent passage. Nevertheless, not all states accept this view.

\textsuperscript{104} Yang, supra note 38, p. 235.
\textsuperscript{105} Ringbom, supra note 20, p. 102.
\textsuperscript{106} Birnie and Boyle, supra note 79, p. 431.
\textsuperscript{107} Hakapää and Molenaar, supra note 37, p. 141.
\textsuperscript{108} Ringbom, supra note 20, pp. 89-90.
and these states maintain a requirement for prior notice and consent for ships carrying hazardous waste through their territorial seas.\textsuperscript{109}

### 4.3.5 Regulations by the IAEA

An international organisation concerned with nuclear substances and the transportation of such cargo is the International Atomic Energy Agency (IAEA). The basis for the IAEA’s regulations on this subject is found in the Treaty for the Non-Proliferation of Nuclear Weapons\textsuperscript{110} from 1968 (NPT). In article 3 of the treaty it is stated that all state parties must accept the safeguards negotiated and concluded within the IAEA’s safeguards system.\textsuperscript{111}

One specific instrument concerned with the shipment of nuclear materials is the IAEA Code of Practice on the International Transboundary Movement of Radioactive Waste\textsuperscript{112}, which was adopted in 1990. This code is focused on the transportation of radioactive cargo and affirms the sovereign right of states to prohibit the entry of or the transportation of radioactive waste through their territory. The IAEA code also reaffirms the duty to notify and to obtain consent from the exporting, importing and transit states.\textsuperscript{113} These rules are, however, only non-mandatory recommendations and it is stated that the code is subsidiary to the rules of UNCLOS and customary international law.\textsuperscript{114}

\textsuperscript{109} Birnie and Boyle, \textit{supra} note 79, p. 432.
\textsuperscript{111} Dixon, \textit{supra} note 3, pp. 18-19.
\textsuperscript{114} Dixon, \textit{supra} note 3, p. 20.
5 The Right of Innocent Passage Versus the Obligation to Protect the Environment

In the discussion on the right of innocent passage for ships carrying nuclear cargo states are divided into two groups. The first group is the ‘everyone can go everywhere-group’. These states represent the idea of the open sea, a sea that is free to use for everyone and where nuclear materials can be transported anywhere under the right of innocent passage. The other group, the ‘environmentalists’, emphasise the strong environmental approach that exists in UNCLOS. According to them, certain provisions in UNCLOS require states to inform the coastal state of any hazardous transportation and to seek authorisation before they can enter the territorial sea of the other state. Many shipping states argue that the denial of innocent passage to nuclear ships is a violation of international law. In doing so the coastal states may even force the ship into rougher weather and more dangerous routes. In response, the coastal states may argue that they are simply following international law by protecting their marine environment from a potential nuclear disaster. This disagreement is the product of two conflicting norms both codified in international law, the right of innocent passage and the obligation to protect the marine environment.

In this chapter, I will scrutinise the two contrasting positions in this debate. To complete the picture I will also look at state practice and the different opinions among legal writers on this subject. I will start with the case for and against a right of innocent passage for nuclear ships.

5.1 The Case For

This is the standpoint among shipping states wanting to transport hazardous cargo freely at sea.

5.1.1 The Right of Innocent Passage

Shipping states, transporting hazardous material, usually claim that they have a right to do so and that this right is absolute and cannot be prohibited. They base this argument on the idea of an open sea, a sea open for all states. The shipping states also point to the right given to them under international law.

116 Marin, supra note 80, p. 369.
law to pass through other states’ territorial seas, this is the right of innocent passage.\textsuperscript{117} The right of innocent passage under UNCLOS is not restricted to flag, cargo or type of vessel, instead all ships from all states are entitled to navigate through the territorial sea of other states. A nuclear vessel has the same right as other ships to pass the territorial sea as long as its passage is innocent.\textsuperscript{118} The passage of a ship with nuclear cargo is not automatically considered as non-innocent. According to UNCLOS the ship must be engaged in one of the activities listed in article 19(2) to be considered as non-innocent. The transportation of nuclear cargo for the sole purpose of passing through the territorial sea is not one of the listed activities. Therefore, such passage should be allowed.\textsuperscript{119} There is one paragraph in article 19(2) that could be applicable to ships with hazardous cargo. In subparagraph (h) it is stated that an act of wilful and serious pollution will render the passage non-innocent. However, this provision relates to wilful pollution and not accidentally. The rule does not hinder the mere passage of a ship with nuclear cargo, a ship without the intention to pollute the waters of the coastal state.\textsuperscript{120}

\textbf{5.1.2 Article 23 of UNCLOS}

One strong argument in favour of the right for nuclear ships to travel through foreign states’ territorial seas is the declaration in article 23 of UNCLOS. The article states that:

“Foreign nuclear-powered ships and ships carrying nuclear or other inherently dangerous or noxious substances shall, when exercising the right of innocent passage through the territorial sea, carry documents and observe special precautionary measures established for such ships by international agreements.”

In the passage “when exercising the right of innocent passage”, we have an explicit right for ships carrying nuclear cargo to pass the territorial seas of other states using their right of innocent passage.\textsuperscript{121}

\textbf{5.1.3 The Importance of Being Secret}

The third argument by shipping states is the right of secrecy and the privilege of the transporting state not to make known the planned route. If the transporting state were required to inform the coastal states of its planned course the shipment would be in danger of for example terrorist attacks. In today’s world of rogue states supporting terrorist networks this


\textsuperscript{119} Al-Ajmi, \textit{supra} note 117, p. 44.

\textsuperscript{120} Dixon, \textit{supra} note 3, p. 24.

\textsuperscript{121} Henry, \textit{supra} note 1, p. 100.
fear is in fact very real. In connection to this, article 302 in UNCLOS can be mentioned. Here it is stated that a state party should not, in the fulfilment of its obligations under the convention, be required to disclose information, which could be contrary to its essential security interests.\textsuperscript{122}

\section*{5.2 The Case Against}

This is the view taken by several coastal states not wanting to grant ships carrying nuclear or other ultrahazardous substances the right of innocent passage. At least not without the prior notification and authorisation.

\subsection*{5.2.1 Safety Concerns}

Coastal states have several reasons to be worried by the shipping of nuclear materials taking place in their territorial seas since the safety of these shipments can be questioned. One issue, which contribute to the unsafe conditions of these transportations, is the problem with boarding. Environmental activists have boarded ships carrying nuclear cargo and this shows how exposed these shipments are to terrorist or pirate attacks. The danger of such a scenario with terrorists getting their hands on big quantities of nuclear material can easily be imagined.\textsuperscript{123} Another issue is the falsifying of safety inspection records. In 1999, it became known that the British Nuclear Fuels, a company that owns ships for the transportation of nuclear cargo, had falsified cargo safety records during their shipments. This incident shows that coastal states may have a legitimate demand when denying passage of these ships, since the coastal state cannot be sure of the safety of these transportations.\textsuperscript{124} Finally, there is the problem of responsibility when an accident occurs. There have been incidents where the transporting state has not salvaged lost cargo after an accident at sea. This was the case when the MSC Carla sank in 1997, outside the coast of the Azores, and the United Kingdom decided not to salvage the lost radioactive cargo. This kind of behaviour is hardly an encouragement for coastal states to grant innocent passage for these ships.\textsuperscript{125}

\subsection*{5.2.2 The Obligation to Protect the Environment}

Some coastal states argue that ships carrying nuclear cargo are inherently dangerous and a threat to the peace and security of the state. Because of their extremely dangerous nature, such shipments are not entitled the right

\begin{footnotesize}
\begin{enumerate}
\item[122] Al-Ajmi, \textit{ supra} note 117, p. 44.
\item[123] Dixon, \textit{ supra} note 3, pp. 8-9.
\item[124] Marin, \textit{ supra} note 80, p. 372.
\end{enumerate}
\end{footnotesize}
of innocent passage. Further coastal states have an obligation to protect their marine environment. This obligation in article 194 of UNCLOS states that the coastal state shall take all necessary measures to prevent, reduce and control pollution of the marine environment. As a result of this, the coastal states must have a right to stop the passage of nuclear materials through their territorial seas in cases when this is needed for the protection of the marine environment.

Except for the obligation under UNCLOS for the coastal state to protect the marine environment there are other requirements under international environmental law. The shipping state is under the obligation to take precautionary and preventive measures when conducting transportations at sea.

5.2.2.1 Precautionary Principle

According to article 15 in the Rio Declaration of 1992 a maritime state is required to thoroughly study all possible environmental consequences before transporting hazardous substances over seas. These precautionary measures include, among others, to make an environmental impact assessment (EIA) through which the potential risks can be evaluated. Further precautionary measures are provided for in article 205 of UNCLOS and according to this article the shipping state must make the information, which it obtained through the EIA, available for all concerned coastal states. This to ensure the coastal states that the shipment is carried out in a safe and responsible manner and that the shipment is of little or no risk at all to the marine environment.

The shipping state is further under an obligation to take several preventive measures before commencing a transportation of hazardous cargo such as nuclear substances. These duties are found in the basic principles of international environmental law.

5.2.2.2 Preventive Principle

According to the preventive principle a state is not permitted to take actions or allow activities taking place within its territory without paying due respect to the rights of other states. This means that states are not allowed to injure the rights of other states through their actions. This statement is sometimes referred to as the principle of good neighbourliness. Specifically, this principle creates a duty for states to prevent transboundary harm and to co-operate in the management of environmental risks through actions such as notification and negotiation. The preventive principle is a rule of taking

---

126 Churchill and Lowe, supra note 14, p. 91.
127 Marin, supra note 80, pp. 363 and 368.
130 Birnie and Boyle, supra note 79, pp. 104-105.
action in advance instead of just doing something about the effects. This rule has been confirmed in several international legal instruments such as Principle 21 of the Stockholm Declaration\textsuperscript{131} and in Principle 2 of the Rio Declaration. These principles declare that states are obligated not to cause harm to the environment of other states, and this creates restrictions on what activities the state can carry out within its territory or in areas under its control.\textsuperscript{132}

The preventive principle, or precautionary as it is sometimes called, is based on the notion that a state is free to use its resources as it wishes, but if such usage might harm other nations, it is the duty of the first state to notify the affected states. In line with this, coastal states argue that in the case of nuclear transportation at sea a shipping state would be entirely free to use its resources, i.e. the nuclear material, and take this through other states’ territorial seas. However, if this action could harm coastal states’ environment the transporting state would have to inform the other states before commencing any activities.\textsuperscript{133}

### 5.3 State Practice

There is no explicit support in UNCLOS for a right to prior notification and authorisation when it comes to transport of nuclear cargo. Regardless of this, states are continuously claiming a right of prior information and in some cases the right to deny the passage of ships carrying nuclear cargo. In this section, I will present different examples of state practice in the field of nuclear transportation at sea. Evidence of state practice can be found in national legislation and regional agreements, as well as in declarations and statements made by states when ratifying or signing a treaty. Actions taken by states against foreign ships in their territorial sea can obviously also be referred to as evidence of state practice.

#### 5.3.1 National Legislation

To illustrate the discussion on the right of prior notification and authorisation I will draw attention to a table used in the article \textit{Innocent passage – past and present} by Hakapää and Molenaar. In this part of their article the writers has focused on national legislation and declarations made upon the ratification to UNCLOS and the Basel Convention. The states in the table are divided into five groups, each one representing their own interpretation and view on the transportation of hazardous cargo.\textsuperscript{134}

\textsuperscript{133} Marin, \textit{supra} note 80, p. 374.
\textsuperscript{134} Hakapää and Molenaar, \textit{supra} note 37, p. 142.
Group A: These states are opposing the right of prior notification, and authorisation. They also believe that there is no right for a coastal state to prohibit shipments of nuclear cargo.

Group B: The ambiguous ones. In their declarations, when signing the Basel Convention, they simply stated that the convention protects their rights as coastal states.

Group C: Supporters of a right of prior notification.

Group D: The states in this group affirm a right of prior authorisation. This position indicates greater interference with the navigational rights of foreign ships in their territorial sea. Sometimes this can even mean the denial of passage altogether.

Group E: These states explicitly prohibit passage through their territorial sea for ships carrying nuclear cargo.

<table>
<thead>
<tr>
<th>Coastal state rights over ships carrying hazardous cargoes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group A</strong> Opposing</td>
</tr>
<tr>
<td>Germany</td>
</tr>
<tr>
<td>Italy</td>
</tr>
<tr>
<td>Japan</td>
</tr>
<tr>
<td>Netherlands</td>
</tr>
<tr>
<td>Russian Fed.</td>
</tr>
<tr>
<td>Singapore</td>
</tr>
<tr>
<td>Thailand</td>
</tr>
<tr>
<td>United Kingdom</td>
</tr>
<tr>
<td>United states</td>
</tr>
</tbody>
</table>

The states in the table above interpret UNCLOS in different ways. However, a common trend among the states in groups C, D and E is towards a stricter approach regarding the right of innocent passage. The national legislations of these states include rules of prior notification and consent of the coastal states in case of passage of nuclear ships. Some of these states take an even more restrictive position and prohibit completely the passage of such ships through their territorial seas. These states, objecting to the right of innocent passage for ships carrying nuclear cargo, represent about one third of the international community. The number of states is too small to create customary international law but they do represent a significant proportion of the world’s states that are not satisfied with the regulation in UNCLOS. These states believe that there should be a right to restrict the freedom of navigation, which goes beyond the limited security reasons in article 135 Roscini, *supra* note 2, pp. 255-256.
Even if these unilateral actions cannot be seen as customary international law yet they are evidence of an emerging acceptance of a customary right to regulate the transport through the territorial sea based on the type of cargo transported and the threat it creates. This is the case regardless of the regulation in UNCLOS and the limits provided for in this convention.  

### 5.3.2 Regional and Bilateral Agreements

The unilateral actions among states described above are to some extent also reflected in the development on the regional level. The regional agreements that have been concluded to regulate the transportation of hazardous cargo may also give some indications as to what state practice is in this field. One example is the 1991 Bamako Convention that stipulates a requirement of prior informed consent of the transit state before a passage through the territorial sea can take place. Other agreements, such as the Izmir Protocol, also include conditions of prior notification for the passage of nuclear ships and under this protocol the exporting state must inform the transit state of its entry. Another regional agreement on the same topic is the 1998 Tehran Protocol to the 1978 Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment from Pollution. This protocol gives the transit states a right to demand prior consent when a shipment of hazardous waste is supposed to take place through its territorial sea.

On several occasions, the passing of nuclear-powered ships and the problems connected with this has been regulated through bilateral agreements. This was the case with the American vessel Savannah for which USA concluded bilateral agreements with more than a dozen transit states. This also took place in connection to the German vessel Otto Hahn for which Germany had to enter five transit agreements with affected states. The passages of these ships, and the agreements concluded on behalf of them, indicates that a transit for such ships through the territorial sea call for the prior authorisation of the coastal state.

---

137 Nadelson, *supra* note 125, p. 223.
142 Yang, *supra* note 38, pp. 236-237
5.3.3 Actions Taken by States

Several states have protested against the increasing shipments of nuclear cargo through their territorial waters during the last decade. These shipments of highly radioactive cargo commenced in 1992 when Japan transported plutonium from France to Japan with the ship Akatsuki Maru. In connection with this shipment, the Heads of Government of the Caribbean Community issued a statement declaring that radioactive cargo should not be transported through the waters of the Caribbean states.\textsuperscript{144}

One specific shipment that attracted big scale protests was the transportation of nuclear waste by the British vessel Pacific Pintail from France to Japan in 1995. There were many coastal states that refused the ship from travelling through their territorial seas, and some states even prohibited the ship from entering their EEZs. As a result of the strong protests from coastal states the Pacific Pintail altered its planned course to avoid the coastal waters of the objecting states.\textsuperscript{145}

On several other occasions, coastal states have denied ships carrying nuclear cargo to enter their territorial seas. In 1999, South Africa did not allow two ships to enter its territorial sea since the ships were carrying a large quantity of mixed oxide. Further, in 2001 an Argentine court ordered the Government to prevent a British ship from entering the territorial sea of the state. This because the ship’s cargo, 80-ton of highly radioactive spent nuclear fuel, would arguably put the coastline at risk of a noxious spill.\textsuperscript{146} Argentina is one of the countries that most strongly have protested against the shipments of nuclear cargo through its territorial sea. In 1996, the government of Argentina filed a proposal with the IMO stating that ships carrying irradiated nuclear fuel would have to avoid the territorial seas of other states until these states gave their permission. The IMO did not act on this suggestion but at the same time the organisation did not reject it.\textsuperscript{147}

Another example of actions taken by states is the joint statement issued in 2002 by Spain and France after the disaster involving the oil tanker Prestige. The statement declared that “all oil tanker traversing through these two countries’ EEZ will have to provide prior notice to the coastal countries about the cargo, destination, flag and operation”. Arguably, even though this statement is concerned with oil shipments it is applicable to the transportation of nuclear cargo as well, simply because the later material is more dangerous than oil. In addition, if these two states require prior notification before allowing entrance to their EEZs the same would certainly be the case regarding their territorial seas since these waters are closer to their coastlines.\textsuperscript{148}

\textsuperscript{145} Dixon, \textit{supra} note 3, pp. 5-6.
\textsuperscript{146} Roscini, \textit{supra} note 2, pp. 256-257.
\textsuperscript{147} Richardson and Van Dyke, \textit{supra} note 115, section 9.
\textsuperscript{148} Al-Ajmi, \textit{supra} note 117, p. 52.
6 Possible Solutions

There is support for both sides in the discussion on the right of innocent passage for vessels transporting hazardous cargo. Shipping states make a strong case in emphasising the basic right of innocent passage for foreign ships through the territorial sea of other states. This is a general rule in international law, with vast support in the world community, and as long as there is no change in customary international law this right lies still. On the other side of the fence, the coastal states make bold but important statements on the right to deny passage for ships carrying hazardous cargo. The trend among a big proportion of the coastal states is towards a more restrictive interpretation of the right of innocent passage.

The key issues in the discussion are the right of prior notification and the obligation to carry out prior consultation with affected coastal states. The shipping states are reluctant to undertake such notification and consultation since they believe this is against their right of free navigation. They argue further that a discloser of the planned route would put the shipments in danger of terrorist attacks. These arguments are somewhat one-sided and even the shipping states must be convinced that prior consultation, including route and emergency planning, creates safer voyages and this is in the best interest of everyone.\textsuperscript{149} To create arrangements that can enable ships to carry out safer journeys there is a need for communication among shipping and coastal states. Instead of holding on to a conflict it should be in the interest of all states to find a way of dealing with the problems associated with the shipping of nuclear and other ultrahazardous cargo. Some possible solutions to this issue are illustrated below.

6.1 Regional Agreements

The marine environment and the population of coastal states are at risk due to the transportation of hazardous cargo in the territorial sea, and there is a need for new arrangements in this field. One possible way could be through regional agreements by which the necessary safety standards for the shipping of nuclear cargo can be maintained. These agreements should include an obligation to make an EIA and the duty to notify affected states and to consult with them. This should be coupled with the duty to prepare emergencies and rescuing plans if an accident were to occur.\textsuperscript{150}

A problem with this proposal is that it could, and most certainly will, create conflicting bodies of international law. This would only generate excessive problems for the shipping industry, which would have to comply with diverse regulations emanating from both the IMO and the different regional

\textsuperscript{149} Van Dyke, \textit{supra} note 144, p. 84.
\textsuperscript{150} \textit{Ibid.}, p. 92.
agreements. Most likely this solution would, instead of minimising the conflicts between coastal and shipping states, create even more conflicts among states.\textsuperscript{151}

6.2 Universal Sea Lane

Another suggestion for the solution of the conflict between the right of innocent passage and the obligation to protect the marine environment could be to establish a universal sea lane. By setting up a single predetermined route for all ships carrying nuclear cargo the worries of the coastal states as well as the requests among shipping states could be fulfilled. By using a universal route, the ships could cross the smallest area of territorial sea as possible. The waters used would only be the ones of accepting coastal states and by agreeing in advance all transit states would be informed and warned about the passing of nuclear ships.\textsuperscript{152}

This solution is however not a hundred percent reliable. This proposal would not create a final solution to the conflicting norms in international law. Instead, it would halt the positions as they are now without creating any clarity as to what the legal response to this situation would be. Another difficulty is how to negotiate an arrangement like this. There is for example the obvious problem of states supporting the idea as long as it is not taking place in their waters, the ‘not-in-my-backyard’ position.\textsuperscript{153}

6.3 Particular Sensitive Sea Areas

States seems reluctant to agree on rules that interfere with the general rights of navigation, since they fear their navigational freedom will be reduced and hinder them from using the seas for shipping. What is more likely to work is for states to agree on regulations regarding restricted areas of the sea. In this way, the general regime of free navigation lies still and more comprehensive restrictions are set up in areas of special need for protection. Already there is a model for this, called Particular Sensitive Sea Areas (PSSA). This concept was developed to enable the protection of sensitive areas from shipping activities.\textsuperscript{154} The classification of an area as a PSSA is made in broad terms and includes factors of both ecological and social-economic art. This approach indicates a respect and recognition of the different problems facing coastal states dependant on tourism or fishing.\textsuperscript{155} As it stands today, the PSSA regime is not able to handle all the problems connected with the shipping of nuclear cargo. However, by developing the concept of the PSSA and giving it a distinct legal status, there might be a solution to the dispute

\textsuperscript{151} David, supra note 3, pp. 31-32.
\textsuperscript{152} Marin, supra note 80, pp. 375-376.
\textsuperscript{153} Dixon, supra note 3, p. 32.
\textsuperscript{154} Nadelson, supra note 125, p. 237.
\textsuperscript{155} Ibid., pp. 239-40.
on nuclear shipments. For this to work the declaration of a PSSA must have a firm legal basis, probably best created by a separate international agreement.\textsuperscript{156}

\section*{6.4 Change in the INF Code}

A fourth solution would be for the IMO to incorporate precautionary principles in the INF Code. In addition, this is in accordance with the requirement in article 211 of UNCLOS, which stipulates that the community should work through the competent international organisation, namely the IMO, to create new international rules for the protection of the marine environment. This would arguably be the most efficient solution since an incorporation of precautionary principles into the INF Code would make them mandatory. However, since the work through international organisations is slow and difficult it may be a lengthy process to reach this goal.\textsuperscript{157}

\textsuperscript{156} Nadelson, \textit{supra} note 125, p. 243.

\textsuperscript{157} Ibid., p. 31.
7 Conclusion

After the above description of the relevant pieces in the puzzle of the right of innocent passage, it is time for a wrapping up of this subject. In this closing chapter, I will summarise what the findings of this thesis are and what the answers to the initial questions might be. I will conduct these concluding remarks in the same way as I started this text, namely in a chronological manner starting with the regulation of the territorial sea.

7.1 Rights and Duties for States in the Territorial Sea

After a closer look at the rules in UNCLOS, concerning the territorial sea, it is evident that there exists a wide-ranging privilege of free navigation under this convention. All states should have access to, and be able to use, the sea for navigation and transportation. This applies also to the territorial seas of other states. However, coastal states have, in the name of state sovereignty, special rights in its territorial sea. What is important to note though is that this sovereignty is restricted in some ways. Most significantly, this is done by giving ships from foreign states the right to travel the territorial sea in innocent passage.

The coastal state has both legislative and enforcement jurisdiction in the territorial sea. The state may enact laws for this territory but its law-making competence is somewhat limited since the state can pass laws only in connection to the areas mentioned in article 21 of UNCLOS. Shipping states are required to respect the laws of the coastal state but at the same time the coastal state is constrained by the provision in article 21(4) stating that it may not enact laws which have the practical effect of denying or hindering the right of innocent passage. Instead, the coastal state shall at all time respect the right of innocent passage and not try to hinder the peaceful passage of foreign ships through its territorial seas.

When it comes to the enforcement powers of the coastal state the picture is similar to the one of legislative capacity. In theory, the coastal state has full enforcement jurisdiction in the territorial sea. Nevertheless, in real life the freedom of action is restricted by the fact that other states are entitled to use this part of the sea. The coastal state cannot enforce its laws at all times or in all cases. The coastal state may only use its enforcement action when an activity, such as the passage of a foreign ship, affects the peace of the country or the good order of the territorial sea.

Further there is a more specific rule, in article 220(2), concerning vessel-source pollution which gives the coastal state a right to take actions against polluting ships. Here the state can take enforcement action if a foreign ship
has violated laws and regulations of the coastal state enacted for the prevention, reduction and control of pollution from vessels. With this rule there might be a possibility for the coastal state to act against a foreign ship carrying hazardous materials, even if this ship is in innocent passage.

Except for the provision in article 220(2) it appears like the rules in UNCLOS creates a limitation on the coastal state’s freedom over its territorial sea. In a way the hands of the coastal state is tied and the possibility for a coastal state to hinder a foreign ship carrying nuclear or other hazardous cargo is, after a first look at UNCLOS, rather limited.

7.2 The Meaning of Innocent Passage

The right of innocent passage, through the territorial sea of a coastal state, is created in favour of the navigational rights of the maritime community. It should be possible for foreign ships to pass the waters of other states but this must be carried out in a peaceful and innocent way.

The central question in this context is whether the determination of innocence should be left to the subjective view of the coastal state or if the objective criterion should rule. In UNCLOS, there is room for both an objective and subjective determination of innocence. Therefore, it is hard to tell what should be decisive in determining the innocence of a passage with hazardous cargo. It is not entirely clear if it is the objective criterion of UNCLOS, or the concerns of the affected coastal states, that ought to be the primary source of guidance. States and legal writers argue in both directions.

Further, the enforcement measures available to a coastal state wanting to hinder the passage of a ship transporting hazardous cargo are not of much help. The existing enforcement measures are the denial of innocent passage and the suspension of such passage. However, for a coastal state to be able to deny passage the state must first determine the ship as non-innocent. How to do this is not clear and what should be seen as innocent is not fixed. The possibility of suspending the territorial sea from a transportation of hazardous cargo is also not likely. Since a suspension can only take place for security interests and without discrimination it is not possible for a coastal state to carry out a suspension against one specific ship or type of ships.

The right of innocent passage is working mainly in favour of the free navigation of other states through the territorial sea of the coastal state. The foreign ship must behave in an innocent way and abide the laws of the coastal state. Except for these basic principles there is nothing explicitly expressed in UNCLOS, which hinders a state from transporting hazardous cargo through the territorial sea of another state.
7.3 The Regulation Concerning Shipping of Hazardous Cargo

The transportation of hazardous materials is always potentially dangerous but when these transportations are carried out at sea even greater problems arise. The sea itself and the influence it has on the cargo create problematic issues that have to be considered before a shipment takes place. The combination of nuclear materials, which are especially dangerous to humanity and the environment, and the transportation at sea makes these types of shipments even more risky. Contrary to an accident at land a mishap involving radioactive cargo at sea would not be fixed to one limited area. Instead radiation may move and spread over the world endangering the entire marine environment.

Because of the dangers associated with the transportation of hazardous cargo at sea there are several international regimes regulating these types of shipments. The risk of marine pollution and the control thereof is the subject of many conventions, however, the focus of these agreements is mainly preventive. They seek to reduce the risk of pollution and this is done by setting up restrictions and requirements on the shipment of hazardous cargo. However, in most cases these regimes do not indicate a power to hinder the innocent passage of nuclear ships.

In article 23 of UNCLOS it is stated that ships carrying nuclear cargo are obliged to hold specific documentation and that they must adhere to international precautionary principles. The coastal state may direct these ships to special sea lanes but the coastal state has no authority to hinder a ship in innocent passage. The MARPOL and SOLAS conventions both work in preventive ways by trying to reduce the risk of marine pollution caused by the transportation of hazardous cargo at sea. These two conventions establish requirements on the construction and equipment of ships together with the packaging and handling of the cargo.

The Basel Convention is an agreement with a somewhat different focus. Under this convention, there are demands on prior notification and approval. A shipping state is obliged to notify concerned transit states about a planned transportation of hazardous cargo, and affected coastal states must approve of the transportation for it to take place. However, the scope of the Basel Convention does not include nuclear substances, only hazardous materials listed in the annexes to the convention is included.

7.4 Coastal States Versus Shipping States

Shipping states are supporting a right of innocent passage for ships carrying nuclear cargo. This right is absolute and it cannot be hindered, also the right of innocent passage may not be restricted because of the type of cargo or vessel. Only when a ship is engaged in an activity that threatens the security of the coastal state may a passage be hindered. A ship loaded with nuclear
goods is not *per se* a threat, and as long as the ship is innocent it shall have the right to pass. Further, UNCLOS gives an explicit right to nuclear ships to exercise the right of innocent passage through the territorial seas of other states. Because of these reasons, a ship carrying nuclear cargo may cross the territorial sea in innocent passage.

Coastal states on the other hand argue for a right not to grant ships carrying nuclear cargo the right of innocent passage, at least not without prior notification or authorisation. The reasons behind this standpoint are numerous. The falsifying of safety inspection records and the issue of responsibility and rescue of cargo when an accident occurs are two problems making coastal states reluctant to give right to passage for these types of ships. The main motive for coastal states wanting to regulate the right of innocent passage is, however, their duty to protect the environment. This duty is codified in UNCLOS and the coastal state is under an obligation to control the pollution of the marine environment. Therefore, a coastal state must have the right to hinder a ship carrying nuclear cargo if this is necessary to protect the marine environment. In addition, states are under a general obligation not to harm the environment of other states. If actions taken by a state are likely to cause transboundary harm the state has a duty to notify affected states about the situation. In line with this, a state wanting to transport nuclear cargo has an obligation to notify and inform concerned states.

Even if there is no explicit right under UNCLOS, states still claim a right to prior notification and authorisation when it comes to the transportation of nuclear cargo through their territorial sea. Numerous states have over the years moved towards a stricter interpretation of the right of innocent passage and their national legislation includes rules on prior notification and authorisation. In addition, several regional and bilateral agreements indicate the same concerns.

The right of innocent passage is a well-established rule in international law with a corresponding customary rule with big support among states. The contradiction however is that UNCLOS recognises both the shipping states’ right of innocent passage and the sovereign right of the coastal state over its territorial sea. Two disputing interests collide here, the right of free navigation and the sovereign power of the coastal state.\(^{158}\) The trend emerging in international law regarding this disagreement is one of increased power of the coastal state. Through different conventions, such as the Basel Convention, the coastal state is getting more capacity to act and interfere with the right of innocent passage. The duty to protect the marine environment coupled with enlarged jurisdiction makes it easier for coastal states to interfere with the right of innocent passage.\(^{159}\)

In many aspects, the regime of the law of the sea has turned and its focus is now concentrated mainly on environmental interests, the prevention of

\(^{158}\) Ngantcha, *supra* note 6, pp. 2-3.
\(^{159}\) Yang, *supra* note 38, pp. 266-268.
marine pollution and varying security interest of the coastal state. The sovereign power of the coastal state is expanding and thus interfering with the right of innocent passage. UNCLOS seems to be working more and more in favour of the coastal state and the right of innocent passage is slowly being tarnished. The continuing right of innocent passage is resting in the willing, or unwilling, hands of coastal states. However, there is not too much reason to worry since the right of innocent passage is constructed in a reciprocal way. This means that on some occasions the former coastal state might take the role of the shipping state, thus wanting to use the right of innocent passage. This vouches for a reasonable interpretation of sovereignty in the case of innocent passage.

7.5 Responses and Solutions

There are several possible solutions to the argument between coastal and shipping states described in the literature. They all recommend different responses to the issues related to the transportation of hazardous and nuclear cargo. One way to go is through regional agreements in which safety standards can be concluded together with requirements on information and prior notification to the coastal states. The focus in this case is on consultation and mediation. However, the construction of different regional arrangements is likely to result in competing bodies of international law, both on the international and regional level.

An alternative approach would be to create a universal lane, which shall be used for the transportation of nuclear cargo. This enables ships to cross the least amount of territorial sea as possible and only through states agreeing to it beforehand. Although an interesting suggestion, the creation of a universal route is not without obstacles. To begin with, how would the negotiation of such a sea lane be carried out?

Since states are reluctant to agree on rules affecting their general navigational rights it might be easier to create an arrangement focusing on restricted areas of the sea. One way of doing this is through an elaboration of the system of PSSA. In this scenario, the general regime of navigational rights lies still and instead a more restrictive approach can be taken regarding limited areas of the sea. To function right, the regime of PSSA must be given a firm legal basis, preferably in a separate international agreement.

A final solution to the problem with transportation of hazardous cargo at sea would be to incorporate precautionary principles in the INF Code. This is probably the most efficient method since the principles would become mandatory under the INF Code. However, the work through international

160 Ngantcha, supra note 6, p. 195.
161 Ibid., pp. 198-199.
organisations such as IMO is slow and it might take some time for a solution like this to develop.

7.6 Final Remarks

The right of innocent passage is a well-established regime under the law of the sea. Before the transportation of ultrahazardous cargo became regular and widespread there was relatively little contradictions between coastal and shipping states on the right of innocent passage. However, the fear of radioactive disasters has led to demands among coastal states to get prior notification and to be able to deny the right of innocent passage for ships carrying nuclear cargo.

Even if the right of innocent passage is deep-rooted in international law it may still be open for interpretation. Through the creation of article 19 of UNCLOS, there was an attempt to fix the definition of innocent passage and to regulate more firmly what behaviour was to be regarded as non-innocent. This attempt, however, left some questions open of its own and the convention did not clearly establish if the objective or subjective view should be decisive when deciding on innocence. Therefore, states are arguing both ways and the interpretation of the right of innocent passage is fragmented. The rules of UNCLOS have not changed over the years but several states have indicated through their practice that they support an interpretation more in favour of the coastal state and its interests. A more restrictive concept of innocence is developing and a broader notion of security for the coastal state is emphasised.

The demands among coastal states on the right of prior notification is not in conflict with UNCLOS since this enables coastal states to protect the marine environment and fulfil their obligations in this field. By getting prior information and notification, they are able to face potential accidents in a more competent way. Even tough there is not yet a customary law including prior notification, state practice is going in that direction and a customary rule is slowly evolving. A claim for prior authorisation however is more problematic since this cuts off other states from the territorial sea in which they have the right to pass under the right of innocent passage.

There is probably not a single resolution to the conflict among coastal and shipping states on the issue of transportation of ultrahazardous cargo at sea. What is evident though is that rules on packaging and quantity limitations is not enough to settle the worried minds of affected coastal states. What is evident is that there is a need for a bigger and stronger response, which must take place outside UNCLOS. A possible solution could be the creation of restricted areas in which the transportation of nuclear cargo is not allowed to take place. By giving these areas special protection from nuclear shipping activities the concerns of the coastal states can be addressed without changing the basic regime of navigational rights.
Supplement A

United Nations convention on the Law of the Sea

PART II
TERRITORIAL SEA AND CONTIGUOUS ZONE

SECTION 1. GENERAL PROVISIONS

Article 2
Legal status of the territorial sea, of the air space over the territorial sea and of its bed and subsoil
1. The sovereignty of a coastal state extends, beyond its land territory and internal waters and, in the case of an archipelagic state, its archipelagic waters, to an adjacent belt of sea, described as the territorial sea.
2. This sovereignty extends to the air space over the territorial sea as well as to its bed and subsoil.
3. The sovereignty over the territorial sea is exercised subject to this convention and to other rules of international law.

SECTION 2. LIMITS OF THE TERRITORIAL SEA

Article 3
Breadth of the territorial sea
Every state has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from baselines determined in accordance with this convention.

Article 4
Outer limit of the territorial sea
The outer limit of the territorial sea is the line every point of which is at a distance from the nearest point of the baseline equal to the breadth of the territorial sea.

Article 5
Normal baseline
Except where otherwise provided in this convention, the normal baseline for measuring the breadth of the territorial sea is the low-water line along the coast as marked on large-scale charts officially recognized by the coastal state.

Article 6
Reefs
In the case of islands situated on atolls or of islands having fringing reefs, the baseline for measuring the breadth of the territorial sea is the seaward low-water line of the reef, as shown by the appropriate symbol on charts officially recognized by the coastal state.

Article 7
Straight baselines
1. In localities where the coastline is deeply indented and cut into, or if there is a fringe of islands along the coast in its immediate vicinity, the method of straight baselines joining appropriate points may be employed in drawing the baseline from which the breadth of the territorial sea is measured.
2. Where because of the presence of a delta and other natural conditions the coastline is highly unstable, the appropriate points may be selected along the furthest seaward extent of the low-water line and, notwithstanding subsequent
regression of the low-water line, the straight baselines shall remain effective until changed by the coastal state in accordance with this convention.

3. The drawing of straight baselines must not depart to any appreciable extent from the general direction of the coast, and the sea areas lying within the lines must be sufficiently closely linked to the land domain to be subject to the regime of internal waters.

4. Straight baselines shall not be drawn to and from low-tide elevations, unless lighthouses or similar installations which are permanently above sea level have been built on them or except in instances where the drawing of baselines to and from such elevations has received general international recognition.

5. Where the method of straight baselines is applicable under paragraph 1, account may be taken, in determining particular baselines, of economic interests peculiar to the region concerned, the reality and the importance of which are clearly evidenced by long usage.

6. The system of straight baselines may not be applied by a state in such a manner as to cut off the territorial sea of another state from the high seas or an exclusive economic zone.

Article 8
Internal waters
1. Except as provided in Part IV, waters on the landward side of the baseline of the territorial sea form part of the internal waters of the state.

2. Where the establishment of a straight baseline in accordance with the method set forth in article 7 has the effect of enclosing as internal waters areas which had not previously been considered as such, a right of innocent passage as provided in this convention shall exist in those waters.

Article 9
Mouths of rivers
If a river flows directly into the sea, the baseline shall be a straight line across the mouth of the river between points on the low-water line of its banks.

Article 10
Bays
1. This article relates only to bays the coasts of which belong to a single state.

2. For the purposes of this convention, a bay is a well-marked indentation whose penetration is in such proportion to the width of its mouth as to contain land-locked waters and constitute more than a mere curvature of the coast. An indentation shall not, however, be regarded as a bay unless its area is as large as, or larger than, that of the semi-circle whose diameter is a line drawn across the mouth of that indentation.

3. For the purpose of measurement, the area of an indentation is that lying between the low-water mark around the shore of the indentation and a line joining the low-water mark of its natural entrance points. Where, because of the presence of islands, an indentation has more than one mouth, the semi-circle shall be drawn on a line as long as the sum total of the lengths of the lines across the different mouths. Islands within an indentation shall be included as if they were part of the water area of the indentation.

4. If the distance between the low-water marks of the natural entrance points of a bay does not exceed 24 nautical miles, a closing line may be drawn between these two low-water marks, and the waters enclosed thereby shall be considered as internal waters.

5. Where the distance between the low-water marks of the natural entrance points of a bay exceeds 24 nautical miles, a straight baseline of 24 nautical miles shall be drawn within the bay in such a manner as to enclose the maximum area of water that is possible with a line of that length.

6. The foregoing provisions do not apply to so-called "historic" bays, or in any case where the system of straight baselines provided for in article 7 is applied.
Article 11

Ports

For the purpose of delimiting the territorial sea, the outermost permanent harbour works which form an integral part of the harbour system are regarded as forming part of the coast. Off-shore installations and artificial islands shall not be considered as permanent harbour works.

Article 12

Roadsteads

Roadsteads which are normally used for the loading, unloading and anchoring of ships, and which would otherwise be situated wholly or partly outside the outer limit of the territorial sea, are included in the territorial sea.

Article 13

Low-tide elevations

1. A low-tide elevation is a naturally formed area of land which is surrounded by and above water at low tide but submerged at high tide. Where a low-tide elevation is situated wholly or partly at a distance not exceeding the breadth of the territorial sea from the mainland or an island, the low-water line on that elevation may be used as the baseline for measuring the breadth of the territorial sea.

2. Where a low-tide elevation is wholly situated at a distance exceeding the breadth of the territorial sea from the mainland or an island, it has no territorial sea of its own.

Article 14

Combination of methods for determining baselines

The coastal state may determine baselines in turn by any of the methods provided for in the foregoing articles to suit different conditions.

Article 15

Delimitation of the territorial sea between states with opposite or adjacent coasts

Where the coasts of two states are opposite or adjacent to each other, neither of the two states is entitled, failing agreement between them to the contrary, to extend its territorial sea beyond the median line every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial seas of each of the two states is measured. The above provision does not apply, however, where it is necessary by reason of historic title or other special circumstances to delimit the territorial seas of the two states in a way which is at variance therewith.

Article 16

Charts and lists of geographical coordinates

1. The baselines for measuring the breadth of the territorial sea determined in accordance with articles 7, 9 and 10, or the limits derived therefrom, and the lines of delimitation drawn in accordance with articles 12 and 15 shall be shown on charts of a scale or scales adequate for ascertaining their position. Alternatively, a list of geographical coordinates of points, specifying the geodetic datum, may be substituted.

2. The coastal state shall give due publicity to such charts or lists of geographical coordinates and shall deposit a copy of each such chart or list with the Secretary-General of the United Nations.

SECTION 3. INNOCENT PASSAGE IN THE TERRITORIAL SEA

SUBSECTION A. RULES APPLICABLE TO ALL SHIPS

Article 17

Right of innocent passage
Subject to this convention, ships of all states, whether coastal or land-locked, enjoy the right of innocent passage through the territorial sea.


does not include stopping and anchoring, but only in so far as the same are incidental to ordinary navigation or are rendered necessary by force majeure or distress or for the purpose of rendering assistance to persons, ships or aircraft in danger or distress.

Article 19
Meaning of innocent passage
1. Passage is innocent so long as it is not prejudicial to the peace, good order or security of the coastal state. Such passage shall take place in conformity with this convention and with other rules of international law.
2. Passage of a foreign ship shall be considered to be prejudicial to the peace, good order or security of the coastal state if in the territorial sea it engages in any of the following activities:
   
   (a) any threat or use of force against the sovereignty, territorial integrity or political independence of the coastal state, or in any other manner in violation of the principles of international law embodied in the Charter of the United Nations;
   (b) any exercise or practice with weapons of any kind;
   (c) any act aimed at collecting information to the prejudice of the defence or security of the coastal state;
   (d) any act of propaganda aimed at affecting the defence or security of the coastal state;
   (e) the launching, landing or taking on board of any aircraft;
   (f) the launching, landing or taking on board of any military device;
   (g) the loading or unloading of any commodity, currency or person contrary to the customs, fiscal, immigration or sanitary laws and regulations of the coastal state;
   (h) any act of wilful and serious pollution contrary to this convention;
   (i) any fishing activities;
   (j) the carrying out of research or survey activities;
   (k) any act aimed at interfering with any systems of communication or any other facilities or installations of the coastal state;
   (l) any other activity not having a direct bearing on passage.

Article 20
Submarines and other underwater vehicles
In the territorial sea, submarines and other underwater vehicles are required to navigate on the surface and to show their flag.

Article 21
Laws and regulations of the coastal state relating to innocent passage
1. The coastal state may adopt laws and regulations, in conformity with the provisions of this convention and other rules of international law, relating to innocent passage through the territorial sea, in respect of all or any of the following:
   (a) the safety of navigation and the regulation of maritime traffic;
   (b) the protection of navigational aids and facilities and other facilities or installations;
   (c) the protection of cables and pipelines;
   (d) the conservation of the living resources of the sea;
   (e) the prevention of infringement of the fisheries laws and regulations of the coastal state;
   (f) the preservation of the environment of the coastal state and the prevention, reduction and control of pollution thereof;
   (g) marine scientific research and hydrographic surveys;
   (h) the prevention of infringement of the customs, fiscal, immigration or sanitary laws and regulations of the coastal state.

2. Such laws and regulations shall not apply to the design, construction, manning or equipment of foreign ships unless they are giving effect to generally accepted international rules or standards.

3. The coastal state shall give due publicity to all such laws and regulations.

4. Foreign ships exercising the right of innocent passage through the territorial sea shall comply with all such laws and regulations and all generally accepted international regulations relating to the prevention of collisions at sea.

**Article 22**

*Sea lanes and traffic separation schemes in the territorial sea*

1. The coastal state may, where necessary having regard to the safety of navigation, require foreign ships exercising the right of innocent passage through its territorial sea to use such sea lanes and traffic separation schemes as it may designate or prescribe for the regulation of the passage of ships.

2. In particular, tankers, nuclear-powered ships and ships carrying nuclear or other inherently dangerous or noxious substances or materials may be required to confine their passage to such sea lanes.

3. In the designation of sea lanes and the prescription of traffic separation schemes under this article, the coastal state shall take into account:
   (a) the recommendations of the competent international organisation;
   (b) any channels customarily used for international navigation;
   (c) the special characteristics of particular ships and channels; and
   (d) the density of traffic.

4. The coastal state shall clearly indicate such sea lanes and traffic separation schemes on charts to which due publicity shall be given.

**Article 23**

*Foreign nuclear-powered ships and ships carrying nuclear or other inherently dangerous or noxious substances*

Foreign nuclear-powered ships and ships carrying nuclear or other inherently dangerous or noxious substances shall, when exercising the right of innocent passage through the territorial sea, carry documents and observe special precautionary measures established for such ships by international agreements.

**Article 24**

*Duties of the coastal state*

1. The coastal state shall not hamper the innocent passage of foreign ships through the territorial sea except in accordance with this convention. In particular,
in the application of this convention or of any laws or regulations adopted in conformity with this convention, the coastal state shall not:

(a) impose requirements on foreign ships which have the practical effect of denying or impairing the right of innocent passage; or
(b) discriminate in form or in fact against the ships of any state or against ships carrying cargoes to, from or on behalf of any state.

2. The coastal state shall give appropriate publicity to any danger to navigation, of which it has knowledge, within its territorial sea.

Article 25

Rights of protection of the coastal state

1. The coastal state may take the necessary steps in its territorial sea to prevent passage which is not innocent.
2. In the case of ships proceeding to internal waters or a call at a port facility outside internal waters, the coastal state also has the right to take the necessary steps to prevent any breach of the conditions to which admission of those ships to internal waters or such a call is subject.
3. The coastal state may, without discrimination in form or in fact among foreign ships, suspend temporarily in specified areas of its territorial sea the innocent passage of foreign ships if such suspension is essential for the protection of its security, including weapons exercises. Such suspension shall take effect only after having been duly published.

Article 26

Charges which may be levied upon foreign ships

1. No charge may be levied upon foreign ships by reason only of their passage through the territorial sea.
2. Charges may be levied upon a foreign ship passing through the territorial sea as payment only for specific services rendered to the ship. These charges shall be levied without discrimination.

SUBSECTION B. RULES APPLICABLE TO MERCHANT SHIPS AND GOVERNMENT SHIPS OPERATED FOR COMMERCIAL PURPOSES

Article 27

Criminal jurisdiction on board a foreign ship

1. The criminal jurisdiction of the coastal state should not be exercised on board a foreign ship passing through the territorial sea to arrest any person or to conduct any investigation in connection with any crime committed on board the ship during its passage, save only in the following cases:

(a) if the consequences of the crime extend to the coastal state;
(b) if the crime is of a kind to disturb the peace of the country or the good order of the territorial sea;
(c) if the assistance of the local authorities has been requested by the master of the ship or by a diplomatic agent or consular officer of the flag state; or
(d) if such measures are necessary for the suppression of illicit traffic in narcotic drugs or psychotropic substances.

2. The above provisions do not affect the right of the coastal state to take any steps authorized by its laws for the purpose of an arrest or investigation on board a foreign ship passing through the territorial sea after leaving internal waters.
3. In the cases provided for in paragraphs 1 and 2, the coastal state shall, if the master so requests, notify a diplomatic agent or consular officer of the flag state before taking any steps, and shall facilitate contact between such agent or officer...
and the ship's crew. In cases of emergency this notification may be communicated while the measures are being taken.

4. In considering whether or in what manner an arrest should be made, the local authorities shall have due regard to the interests of navigation.

5. Except as provided in Part XII or with respect to violations of laws and regulations adopted in accordance with Part V, the coastal state may not take any steps on board a foreign ship passing through the territorial sea to arrest any person or to conduct any investigation in connection with any crime committed before the ship entered the territorial sea, if the ship, proceeding from a foreign port, is only passing through the territorial sea without entering internal waters.

Article 28

Civil jurisdiction in relation to foreign ships

1. The coastal state should not stop or divert a foreign ship passing through the territorial sea for the purpose of exercising civil jurisdiction in relation to a person on board the ship.

2. The coastal state may not levy execution against or arrest the ship for the purpose of any civil proceedings, save only in respect of obligations or liabilities assumed or incurred by the ship itself in the course or for the purpose of its voyage through the waters of the coastal state.

3. Paragraph 2 is without prejudice to the right of the coastal state, in accordance with its laws, to levy execution against or to arrest, for the purpose of any civil proceedings, a foreign ship lying in the territorial sea, or passing through the territorial sea after leaving internal waters.

SUBSECTION C. RULES APPLICABLE TO WARSHIPS AND OTHER GOVERNMENT SHIPS OPERATED FOR NON-COMMERCIAL PURPOSES

Article 29

Definition of warships

For the purposes of this convention, "warship" means a ship belonging to the armed forces of a state bearing the external marks distinguishing such ships of its nationality, under the command of an officer duly commissioned by the government of the state and whose name appears in the appropriate service list or its equivalent, and manned by a crew which is under regular armed forces discipline.

Article 30

Non-compliance by warships with the laws and regulations of the coastal state

If any warship does not comply with the laws and regulations of the coastal state concerning passage through the territorial sea and disregards any request for compliance therewith which is made to it, the coastal state may require it to leave the territorial sea immediately.

Article 31

Responsibility of the flag state for damage caused by a warship or other government ship operated for non-commercial purposes

The flag state shall bear international responsibility for any loss or damage to the coastal state resulting from the non-compliance by a warship or other government ship operated for non-commercial purposes with the laws and regulations of the coastal state concerning passage through the territorial sea or with the provisions of this convention or other rules of international law.

Article 32

Immunities of warships and other government ships operated for non-commercial purposes
With such exceptions as are contained in subsection A and in articles 30 and 31, nothing in this convention affects the immunities of warships and other government ships operated for non-commercial purposes.

Article 194

Measures to prevent, reduce and control pollution of the marine environment

1. States shall take, individually or jointly as appropriate, 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.

2. States shall take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other states and their environment, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with this convention.

3. The measures taken pursuant to this Part shall deal with all sources of pollution of the marine environment. These measures shall include, inter alia, those designed to minimize to the fullest possible extent:

   (a) the release of toxic, harmful or noxious substances, especially those which are persistent, from land-based sources, from or through the atmosphere or by dumping;

   (b) pollution from vessels, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, preventing intentional and unintentional discharges, and regulating the design, construction, equipment, operation and manning of vessels;

   (c) pollution from installations and devices used in exploration or exploitation of the natural resources of the seabed and subsoil, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, and regulating the design, construction, equipment, operation and manning of such installations or devices;

   (d) pollution from other installations and devices operating in the marine environment, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, and regulating the design, construction, equipment, operation and manning of such installations or devices.

4. In taking measures to prevent, reduce or control pollution of the marine environment, states shall refrain from unjustifiable interference with activities
carried out by other states in the exercise of their rights and in pursuance of their duties in conformity with this convention.

5. The measures taken in accordance with this Part shall include those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life.

SECTION 4. MONITORING AND ENVIRONMENTAL ASSESSMENT

Article 204

Monitoring of the risks or effects of pollution

1. States shall, consistent with the rights of other States, endeavour, as far as practicable, directly or through the competent international organizations, to observe, measure, evaluate and analyse, by recognized scientific methods, the risks or effects of pollution of the marine environment.

2. In particular, States shall keep under surveillance the effects of any activities which they permit or in which they engage in order to determine whether these activities are likely to pollute the marine environment.

Article 205

Publication of reports

States shall publish reports of the results obtained pursuant to article 204 or provide such reports at appropriate intervals to the competent international organisations, which should make them available to all states.

Article 211

Pollution from vessels

1. States, acting through the competent international organisation or general diplomatic conference, shall establish international rules and standards to prevent, reduce and control pollution of the marine environment from vessels and promote the adoption, in the same manner, wherever appropriate, of routeing systems designed to minimize the threat of accidents which might cause pollution of the marine environment, including the coastline, and pollution damage to the related interests of coastal states. Such rules and standards shall, in the same manner, be re-examined from time to time as necessary.

2. States shall adopt laws and regulations for the prevention, reduction and control of pollution of the marine environment from vessels flying their flag or of their registry. Such laws and regulations shall at least have the same effect as that of generally accepted international rules and standards established through the competent international organisation or general diplomatic conference.
3. States which establish particular requirements for the prevention, reduction and control of pollution of the marine environment as a condition for the entry of foreign vessels into their ports or internal waters or for a call at their off-shore terminals shall give due publicity to such requirements and shall communicate them to the competent international organisation. Whenever such requirements are established in identical form by two or more coastal states in an endeavour to harmonize policy, the communication shall indicate which states are participating in such cooperative arrangements. Every state shall require the master of a vessel flying its flag or of its registry, when navigating within the territorial sea of a state participating in such cooperative arrangements, to furnish, upon the request of that state, information as to whether it is proceeding to a state of the same region participating in such cooperative arrangements and, if so, to indicate whether it complies with the port entry requirements of that state. This article is without prejudice to the continued exercise by a vessel of its right of innocent passage or to the application of article 25, paragraph 2.

4. Coastal states may, in the exercise of their sovereignty within their territorial sea, adopt laws and regulations for the prevention, reduction and control of marine pollution from foreign vessels, including vessels exercising the right of innocent passage. Such laws and regulations shall, in accordance with Part II, section 3, not hamper innocent passage of foreign vessels.

5. Coastal states, for the purpose of enforcement as provided for in section 6, may in respect of their exclusive economic zones adopt laws and regulations for the prevention, reduction and control of pollution from vessels conforming to and giving effect to generally accepted international rules and standards established through the competent international organisation or general diplomatic conference.

6. (a) Where the international rules and standards referred to in paragraph 1 are inadequate to meet special circumstances and coastal states have reasonable grounds for believing that a particular, clearly defined area of their respective exclusive economic zones is an area where the adoption of special mandatory measures for the prevention of pollution from vessels is required for recognized technical reasons in relation to its oceanographical and ecological conditions, as well as its utilization or the protection of its resources and the particular character of its traffic, the coastal states, after appropriate consultations through the competent international organisation with any other states concerned, may, for that area, direct a communication to that organisation, submitting scientific and technical evidence in support and information on necessary reception facilities. Within 12 months after receiving such a communication, the organisation shall determine whether the conditions in that area correspond to the requirements set out above. If the organisation so determines, the coastal states may, for that area, adopt laws and regulations for the prevention, reduction and control of pollution from vessels implementing such international rules and standards or navigational practices as are made applicable, through the organisation, for special areas. These laws and regulations shall not become applicable to foreign vessels until 15 months after the submission of the communication to the organisation.
(b) The coastal states shall publish the limits of any such particular, clearly defined area.

(c) If the coastal states intend to adopt additional laws and regulations for the same area for the prevention, reduction and control of pollution from vessels, they shall, when submitting the aforesaid communication, at the same time notify the organisation thereof. Such additional laws and regulations may relate to discharges or navigational practices but shall not require foreign vessels to observe design, construction, manning or equipment standards other than generally accepted international rules and standards; they shall become applicable to foreign vessels 15 months after the submission of the communication to the organisation, provided that the organisation agrees within 12 months after the submission of the communication.

7. The international rules and standards referred to in this article should include *inter alia* those relating to prompt notification to coastal states, whose coastline or related interests may be affected by incidents, including maritime casualties, which involve discharges or probability of discharges.

---

**Article 220**

*Enforcement by coastal states*

1. When a vessel is voluntarily within a port or at an off-shore terminal of a state, that state may, subject to section 7, institute proceedings in respect of any violation of its laws and regulations adopted in accordance with this convention or applicable international rules and standards for the prevention, reduction and control of pollution from vessels when the violation has occurred within the territorial sea or the exclusive economic zone of that state.

2. Where there are clear grounds for believing that a vessel navigating in the territorial sea of a state has, during its passage therein, violated laws and regulations of that state adopted in accordance with this convention or applicable international rules and standards for the prevention, reduction and control of pollution from vessels, that state, without prejudice to the application of the relevant provisions of Part II, section 3, may undertake physical inspection of the vessel relating to the violation and may, where the evidence so warrants, institute proceedings, including detention of the vessel, in accordance with its laws, subject to the provisions of section 7.

3. Where there are clear grounds for believing that a vessel navigating in the exclusive economic zone or the territorial sea of a state has, in the exclusive economic zone, committed a violation of applicable international rules and standards for the prevention, reduction and control of pollution from vessels or laws and regulations of that state conforming and giving effect to such rules and standards, that state may require the vessel to give information regarding its identity and port of registry, its last and its next port of call and other relevant information required to establish whether a violation has occurred.

4. States shall adopt laws and regulations and take other measures so that vessels flying their flag comply with requests for information pursuant to paragraph 3.
5. Where there are clear grounds for believing that a vessel navigating in the exclusive economic zone or the territorial sea of a state has, in the exclusive economic zone, committed a violation referred to in paragraph 3 resulting in a substantial discharge causing or threatening significant pollution of the marine environment, that state may undertake physical inspection of the vessel for matters relating to the violation if the vessel has refused to give information or if the information supplied by the vessel is manifestly at variance with the evident factual situation and if the circumstances of the case justify such inspection.

6. Where there is clear objective evidence that a vessel navigating in the exclusive economic zone or the territorial sea of a state has, in the exclusive economic zone, committed a violation referred to in paragraph 3 resulting in a discharge causing major damage or threat of major damage to the coastline or related interests of the coastal state, or to any resources of its territorial sea or exclusive economic zone, that state may, subject to section 7, provided that the evidence so warrants, institute proceedings, including detention of the vessel, in accordance with its laws.

7. Notwithstanding the provisions of paragraph 6, whenever appropriate procedures have been established, either through the competent international organisation or as otherwise agreed, whereby compliance with requirements for bonding or other appropriate financial security has been assured, the coastal state if bound by such procedures shall allow the vessel to proceed.

8. The provisions of paragraphs 3, 4, 5, 6 and 7 also apply in respect of national laws and regulations adopted pursuant to article 211, paragraph 6.

--------------------

Article 302

Disclosure of information

Without prejudice to the right of a state Party to resort to the procedures for the settlement of disputes provided for in this convention, nothing in this convention shall be deemed to require a state Party, in the fulfilment of its obligations under this convention, to supply information the disclosure of which is contrary to the essential interests of its security.
Bibliography

Conventions, IMO Documents and Other Official Documents


International Maritime Dangerous Goods Code, IMO Doc. MSC.122(75).


Books


**Articles**


**Internet References**

The official homepage of the IMO. Available at <www.imo.org>, last accessed 10 January 2008.


**Other Sources**

Table of Cases

Anglo-Norwegian Fisheries case (United Kingdom v. Norway),

Corfu Channel case (United Kingdom v. People’s Republic of Albania),