#### **INTERNATIONAL COURT OF JUSTICE**

### THE PEACE PALACE THE HAGUE, THE NETHERLANDS

### THE CASE CONCERNING BEAKED WHALES AND MARINE SEISMIC SURVEYS

THE KINGDOM OF ADUNCUS (APPLICANT)

v.

THE REPUBLIC OF MERSENNE (RESPONDENT)

MEMORIAL FOR THE RESPONDENT

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#### **INDEX OF AUTHORITIES**

#### TREATIES AND CONVENTIONS

Convention on Biological Diversity, 31 I.L.M. 818 (1992).	10, 12, 13
Convention on Environmental Impact Assessment in a Transboundary Context, Feb. 25, 1991, 1989 U.N.T.S. 309, 30 I.L.M. 802.	1, 2, 3, 4, 5, 7, 12
Second Amendment to the Espoo Convention, June 4, 2004.	3
U.N. CHARTER.	9
Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331.	3, 4, 11
Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 3.	10, 12
U.N. DOCUMENTS	
Addendum-Eighth Report on State Responsibility by Mr. Roberto Ago, Special Rapporteur-the Internationally Wrongful Act of the State, Source of International Responsibility(part I) U.N. Doc.A/CN.4/318/Add.5-7 (1980).	21, 23
Agreed General Principles to Minimise the Risks of Adverse Impacts of Whalewatching on Cetaceans (1996).	19
Consideration of Prevention of Transboundary Harm from Hazardous Activities and Allocation of Loss in the Case of Such Harm, G.A. Res. 62/68 U.N. Doc.A/RES/62/452 62 <sup>nd</sup> sess. Agenda item 84 (2008).	15
Declaration on Principles of International Law Concerning Friendly Relations and Co-operation among States, annex, 25 UNGA Res.2625 (XXV), U.N. GAOR, Supp. (No.28), U.N. Doc.A/5217 (1970), at 121.	9
Report of the International Law Commission on the Work of its Fifty-Third Session (2001), U.N. Doc.A/56/10.	15, 16
Responsibility of States for Internationally Wrongful Acts, G.A. Res. 56/83, Annex, U.N. Doc. A/RES/58/83/Annex (2002).	11, 21
Rio Declaration on Environment and Development, U.N. Doc.A/CONF.151/26 (1992).	20
Stockholm Declaration on the Human Environment, U.N.Doc.A/CONF.48/14/Rev.1 (1973).	10, 15

#### JUDICIAL AND ARBITRAL DECISIONS

Corfu Channel (U.K. v. Alb.), 1949 I.C.J. 4.	15
EC Measures Concerning Meat and Meat Products (Hormones), WT/DS48/AB/R, (1998).	18
Flexi-Van Leasing, Inc. v. Iran, 12 Iran-U.S.C.T.R. 335 (1985).	11
Gabčíkovo-Nagymaros Project (Hung. v. Slovk.), 1997 I.C.J. 7.	21, 22
International Technical Products Corp. v. Iran, 9 Iran-U.S.C.T.R. 206.	11
Lac Lanoux (Fr. v. Spain), 12 R.I.A.A. 281 (1957).	16
Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. 226.	13
LG&E Capital Corp. v. Argentine Republic, ICSID (W.Bank) Case No.ARB/02/1, 2006 WL2985837 (2006).	22
MOX Plant, Order No. 3 (Ir. v. U.K.) Perm. Ct. Arb., 42 I.L.M. 1187 (2003).	13
SEDCO, Inc. v. National Iranian Oil Co., 15 Iran-U.S.C.T.R. 23 (1987).	11
Trail Smelter Arbitration (U.S. v. Can.), 3 R.I.A.A. 1905 (1938/1941).	14, 16
BOOKS, TREATISES, DIGESTS AND RESTATEMENTS	
Atapattu, Emerging Principles of International Environmental Law (2006).	8
BIRNIE & BOYLE, INTERNATIONAL LAW AND THE ENVIRONMENT (2002).	18, 20
BOYLE & CHINKIN, THE MAKING OF INTERNATIONAL LAW (2007).	19
British Columbia Ministry of Energy and Mines, Sonar versus Seismic: What are the Differences? (2003).	1
Brownlie, Principles of Public International Law (2003).	9, 18
Craik, The International Law of Environmental Impact Assessment (2008).	1, 19
CRAWFORD, THE INTERNATIONAL LAW COMMISSION'S ARTICLES ON STATE RESPONSIBILITY: INTRODUCTION, TEXT AND COMMENTARIES (2002).	11
CROOK, OIL TERMS: A DICTIONARY OF TERMS USED IN OIL EXPLORATION AND	2

DEVELOPMENT (1975).

DAMROSCH, ET AL., INTERNATIONAL LAW: CASES AND MATERIALS (2001).	18
FITZMAURICE, RESERVATIONS TO MULTILATERAL TREATIES (1953).	3
Gales, et al., Marine Mammals: Fisheries, Tourism and Management Issues (2003).	17
HIGHAM & LUCK, MARINE WILDLIFE AND TOURISM MANAGEMENT (2008).	17
Hyne, Nontechnical Guide to Petroleum Geology, Exploration, Drilling and Production (2001).	1,2,3
International Whaling Commission, Annex K: Report of the Standing Working Group on Environmental Concerns, 58th Meeting of the International Whaling Commission (2006).	8
Jahn, Cook & Graham, Hydrocarbon Exploration and Production (2008).	1,2,3
Louka, International Environmental Law: Fairness, Effectiveness, and World Order (2006).	18
McNair, The Law of Treaties (1961).	4
SANDS, PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW (2003).	4,9,10,19
SHAW, INTERNATIONAL LAW (2008).	10,3
	,
SINCLAIR, THE VIENNA CONVENTION ON THE LAW OF TREATIES (1973).	4
SINCLAIR, THE VIENNA CONVENTION ON THE LAW OF TREATIES (1973).  ESSAYS, ARTICLES AND JOURNALS	4
	21
ESSAYS, ARTICLES AND JOURNALS  Ahlund, Major Obstacles to Building the Rule of Law in a Post-Conflict	·
ESSAYS, ARTICLES AND JOURNALS  Ahlund, Major Obstacles to Building the Rule of Law in a Post-Conflict Environment, 39 New Eng. L. Rev. 39 (2004).  Barlow & Gisiner, Mitigating, Monitoring and Assessing the Effects of Anthropogenic Sound on Beaked Whales, 7 J. Cetacean Res. Manage. 239	21

13

Law: Challenge of Implementation (1996).	
Cassar, Transboundary Environmental Impact Assessment in International Watercourse Management, 12 N.Y.U. Envtl. L.J. 169 (2003).	8
Clermont, 2003 Legislative Review, 10 Animal L. 363 (2004).	15
Cox, et al., <i>Understanding the Impacts of Anthropogenic Sound on Beaked Whales</i> , 7 J. CETACEAN RES. MANAGE. 177 (2006).	6, 7, 14
Cray & Drutman, <i>Corporations and the Public Purpose: Restoring the Balance</i> , 4 SEATTLE J. SOC. JUST. 305 (2005).	21
Cunningham, Do Brothers Divide Shares Forever? Obstacles to the Effective Use of International Law in Euphrates River Basin Water Issues, 21 U. PA. J. INT'L ECON. L. 131 (2000).	15
Fernandez, et al., "Gas and Fat Embolic Syndrome" Involving a Mass Stranding of Beaked Whales (Family Ziphiidae) Exposed to Anthropogenic Sonar Signals, 42 Vet. Pathol 446 (2005).	6
Gordon, et al., <i>A Review of the Effects of Seismic Surveys on Marine Mammals</i> , 37 Marine Technology Society J. 16 (2004).	8
Handl, Environmental Security and Global Change: The Challenge of International Law, in Environmental Protection and International Law (1994).	19
Hathaway & Cusick, <i>Refugee Rights are not Negotiable</i> , 14 GEO. IMMIGR. L.J. 481 (2000).	13
Klein, et al., <i>Modernizing Water Law: The Example of Florida</i> , 61 FLA. L. REV. 403 (2009).	16
Mank, Can Plaintiffs Use Multinational Environmental Treaties as Customary International Law to Sue under the Alien Tort Statute?, 2007 UTAH L. REV. 1085 (2007).	13
Parente, et al., Diversity of Cetaceans as Tool in Monitoring Environmental Impacts of Seismic Surveys, 7 BIOTA NEOTROP 50 (2007).	6
Streever, et al., Managing Marine Mammal Issues: Corporate Policy, Stakeholder Engagement, Applied Research, and Training, 2 SPE 111479 (2008).	6, 17

Tanaka, Lessons from the Protracted MOX Plant dispute: A Proposed Protocol

on Marine Environmental Impact Assessment to the United Nations Convention on the Law of the Sea, 25 Mich. J. Int'l L. 337 (2004).	
Thompson, A Multifaceted Approach to the Regulation of Cyanide in Gold Mining, 29 Suffolk Transnat'l L. Rev. 79 (2005).	13
Tinker, State Responsibility and the Precautionary Principle, in The Precautionary Principle and International Law: The Challenge of Implementation (1996).	18, 19
Tucker, Constitutional Codification of an Environment Ethic, 52 FLA. L. REV. 299 (2000).	12
Weir, Short-Finned Pilot Whales: Respond to an Airgun Ramp-up Procedure off Gabon, 34 AQUATIC MAMMALS 349 (2008).	8
Zhu, Chinese Practice in Public International Law, 6 CHINESE J. INT'L L. 711 (2007).	9
MISCELLANEOUS	
Status of Treaties, Amendment to the Convention on Environmental Impact Assessment in a Transboundary Context, available at <a href="http://treaties.un.org/Pages/ViewDetails.aspx?">http://treaties.un.org/Pages/ViewDetails.aspx?</a> src=TREATY&mtdsg_no=XXVII-4-c&chapter=27⟨=en> (last accessed Nov. 18, 2009).	3

#### **STATEMENT OF JURISDICTION**

The Kingdom of Aduncus and the Republic of Mersenne submit the following dispute to the International Court of Justice. Pursuant to Article 40 of the Statute of the International Court of Justice, States may bring cases before the Court by special agreement [Statute of the International Court of Justice, art. 40, T.S. No. 993 (1945)]. On June 16, 2009, the parties signed a special agreement and submitted it to the Registrar of the Court. *See* Special Agreement Between the Kingdom of Aduncus and the Republic of Mersenne for Submission to the International Court of Justice of Differences Between Them Concerning Beaked Whales and Marine Seismic Surveys, June 16, 2009. The Registrar addressed notification to the parties on June 30, 2009.

#### **QUESTIONS PRESENTED**

- I. WHETHER THE ACTIONS OF MERSENNE ELECTRIC COMPANY WITHIN THE REPUBLIC OF MERSENNE'S EEZ REQUIRE THE PREPARATION OF AN EIA.
- II. WHETHER THE ACTIONS OF MERSENNE ELECTRIC COMPANY VIOLATE INTERNATIONAL LAW.

#### **STATEMENT OF FACTS**

The Kingdom of Aduncus and the Republic of Mersenne are coastal states with adjacent boundaries (R.1).

Aduncus has approximately 240,000 inhabitants (R.2). Aside from remittances from its nationals abroad, Aduncus' eco-tourism is the second largest source of hard currency, with more than 80,000 international visitors participating (R.2). Aduncus' ecotourism activities include beach resorts, sport fishing charters and whale watching trips (R.2).

Mersenne has approximately 22,000,000 inhabitants (R.3). As a newly industrialized country, Mersenne is committed to energy independence (R.20). In 2007, Mersenne began to experience electricity crisis because of insufficient quantities of energy sources (R.3). To address the problem, Mersenne granted permission to MECO to explore for hydrocarbon reserves in Mersenne's territory (R.17).

In August 2008, Aduncus claimed that MECO's activities were causing noise adverse to marine animals (R.19). Mersenne addressed Aduncus' concern, assuring that MECO is only in its exploration stage (R.20) and undertakes mitigation measures in every survey activity (R.26). MECO also requires that survey vessels have on-board observers and that airguns not be used within 500 meters from a whale (R.26).

In January 2009, twelve beaked whales were stranded on Mersenne's shoreline (R.24). Autopsy reports on the whales were inconclusive (R.24).

Aduncus and Mersenne submitted to an inquiry commission the question of significant adverse transboundary impacts, if any, of MECO's activities (R.27). Two members found that

MECO's seismic surveys could not cause any significant adverse transboundary impacts and the adoption of mitigation measures makes its occurrence unlikely (R.28).

Failing to resolve the dispute, parties agreed to submit the matter to the I.C.J (R.30).

#### **SUMMARY OF ARGUMENTS**

MECO is not obligated to prepare an EIA under the Espoo Convention, UNCLOS and CBD. MECO's actions, being exploration activities, do not necessitate the conduct of an EIA under Appendices I and III of the Espoo Convention. Moreover, MECO's actions employ mitigation measures thereby complying with the obligation to prevent harm under international law.

MECO's actions do not cause significant adverse transboundary harm. MECO's actions did not violate the precautionary principle. In permitting MECO's activities, Mersenne exercised its sovereign right to exploit its natural resources as MECO's actions are necessary to address Mersenne's energy needs and economic survival.

#### **ARGUMENT**

I. MECO'S ACTIONS WITHIN MERSENNE'S EXCLUSIVE ECONOMIC ZONE ("EEZ") DO NOT REQUIRE THE PREPARATION OF AN ENVIRONMENTAL IMPACT ASSESSMENT ("EIA").

The Convention on Environmental Impact Assessment in a Transboundary Context ("Espoo Convention") requires that an EIA must be prepared prior to a decision to authorize or undertake a proposed activity only when such activity (a) falls under Appendix I of the Espoo Convention; and (b) is likely to cause significant adverse transboundary impact. Here, both conditions do not apply.

- A. THE MARINE SEISMIC SURVEYS UNDERTAKEN WITHIN MERSENNE'S EEZ ARE ACTIVITIES NOT LISTED IN APPENDIX I OF THE ESPOO CONVENTION.
  - 1. The marine seismic surveys are exploration activities.

Marine seismic surveys are exploration activities conducted for the purpose of determining petroleum traps to be drilled in search for hydrocarbons.<sup>2</sup>

In the exploration of petroleum traps, sound pulses are projected into the earth's crust and are used to create images of layers of sediment, rock and hydrocarbons.<sup>3</sup> These activities are conducted through the use of airgun arrays, which shoot into several streams towed behind the

<sup>&</sup>lt;sup>1</sup> Convention on Environmental Impact Assessment in a Transboundary Context, Feb. 25, 1991, art.2(3), 1989 U.N.T.S. 309, 30 I.L.M. 802 [Espoo]; CRAIK, THE INTERNATIONAL LAW OF ENVIRONMENTAL IMPACT ASSESSMENT 135 (2008).

 $<sup>^2</sup>$  Jahn, Cook & Graham, Hydrocarbon Exploration and Production 19 (2008); Hyne, Nontechnical Guide to Petroleum Geology, Exploration, Drilling and Production 213 (2001).

<sup>&</sup>lt;sup>3</sup> British Columbia Ministry of Energy and Mines, Sonar versus Seismic: What are the Differences? (2003) [Seismic versus Sonar].

vessel containing arrays of hydrophones. <sup>4</sup> At this stage, no drilling and extraction are yet conducted.

In contrast, "offshore hydrocarbon production," listed under Appendix I,<sup>5</sup> takes place after the area's geological history is studied and the likelihood of hydrocarbons being present is quantified.<sup>6</sup> At this point, the "spudding in" or the operation of boring a hole in the earth's crust is conducted for the production of hydrocarbons.<sup>7</sup> There is production only when "the first commercial quantities of hydrocarbons ('first oil') (start) flowing from the wellhead."

Hydrocarbon explorations, such as MECO's activities, are limited at finding locations that are viable hydrocarbon sources. Once an exploration is successful in finding hydrocarbons, considerable effort is still necessary in order to accurately assess the potential of such finding. Consequently, extraction will only take place until after years of careful assessment and discovery of the necessary volumes of hydrocarbons. In this case, MECO only began exploration for hydrocarbons in mid-December 2007 (R.17) and there is yet no extraction of hydrocarbons to date (R.20).

<sup>&</sup>lt;sup>4</sup> JAHN, COOK & GRAHAM, *supra* note 2, at 32.

<sup>&</sup>lt;sup>5</sup> Espoo, appendix I, ¶15.

<sup>&</sup>lt;sup>6</sup> JAHN, COOK & GRAHAM, *supra* note 2, at 3; HYNE, *supra* note 2, at 213, 241.

<sup>&</sup>lt;sup>7</sup> Crook, Oil Terms: A Dictionary of Terms Used in Oil Exploration and Development 57 (1975); Hyne, *supra* note 2, at 241.

<sup>&</sup>lt;sup>8</sup> JAHN COOK & GRAHAM, *supra* note 2, at 5.

<sup>&</sup>lt;sup>9</sup> *Id.* at 3.

<sup>&</sup>lt;sup>10</sup> *Id*.

Under the Vienna Convention on the Law of Treaties ("VCLT"), <sup>11</sup> giving its ordinary meaning based on the actual text of the agreement and measured against its object and purpose, <sup>12</sup> "offshore hydrocarbon production" should be interpreted simply as "extraction" of petroleum, which pertains to the "spudding of the well." <sup>13</sup> As MECO's activities have not led to any extraction of petroleum, such cannot clearly be categorized as hydrocarbon production.

2. The marine seismic surveys do not constitute hydrocarbon production as clarified by the Second Amendment to Appendix I of the Espoo Convention ("Second Amendment").

The Second Amendment explains "offshore hydrocarbon production" as the "extraction of petroleum and natural gas for commercial purposes where the amount extracted exceeds 500 metric tons/day in the case of petroleum and 500,000 cubic metres/day in the case of gas." Where no amount is extracted, it cannot be considered as offshore hydrocarbon production under Appendix I. In this case, MECO's marine seismic surveys do not amount to offshore hydrocarbon production as they have not led to the extraction of petroleum or natural gas (R.20).

Although the Second Amendment is not yet in force, <sup>15</sup> Aduncus is bound by the clarification of what constitutes "offshore hydrocarbon production" because it consented to be

<sup>&</sup>lt;sup>11</sup> Vienna Convention on the Law of Treaties, May 23, 1969, art.31(1)(a), 1155 U.N.T.S. 331 [VCLT].

<sup>&</sup>lt;sup>12</sup> VCLT, art.31(1); Shaw, International Law 932-33 (2008); Fitzmaurice, Reservations to Multilateral Treaties 7-8, 13-14 (1953).

<sup>&</sup>lt;sup>13</sup> JAHN, COOK & GRAHAM, *supra* note 2, at 5; HYNE, *supra* note 2, at 241.

<sup>&</sup>lt;sup>14</sup> Second Amendment to the Espoo Convention, June 4, 2004, appendix, ¶15.

<sup>&</sup>lt;sup>15</sup> Status of Treaties, Amendment to the Convention on Environmental Impact Assessment in a Transboundary Context, available at <a href="http://treaties.un.org/Pages/ViewDetails.aspx?">http://treaties.un.org/Pages/ViewDetails.aspx?</a> src=TREATY&mtdsg\_no=XXVII-4-c&chapter=27&lang=en> (last accessed Nov. 18, 2009).

bound by this provision through its act of ratification.<sup>16</sup> Aduncus' act of ratifying the Second Amendment (R. 8), in effect,<sup>17</sup> placed certain limitations upon their freedom of action during the period, which precedes its entry into force. <sup>18</sup> Aduncus is therefore bound by the Second Amendment although it has not yet entered into force.

# B. THE MARINE SEISMIC SURVEYS DO NOT CAUSE SIGNIFICANT ADVERSE TRANSBOUNDARY IMPACT BASED ON THE CRITERIA PROVIDED IN APPENDIX III OF THE ESPOO CONVENTION.

To assist Mersenne in determining whether the seismic surveys are likely to cause significant adverse transboundary impact, it may consider one or more of the general criteria under Appendix III, such as: (a) the proposed activity's size relative to its type; (b) its location relative to an area of special environmental sensitivity or importance; or (c) its effects are particularly complex and potentially adverse, including those resulting to serious effects on humans or valued species.<sup>19</sup>

In this case, Mersenne is still not obligated to undertake an EIA because MECO's activities do not cause any significant adverse transboundary impact following the Appendix III criteria.

<sup>&</sup>lt;sup>16</sup> VCLT, arts. 11 & 39; Espoo, art.14(4); McNair, The Law of Treaties 132 (1961); Sinclair, The Vienna Convention on the Law of Treaties 38 (1973).

<sup>&</sup>lt;sup>17</sup> MCNAIR, *supra* note 16, at 132.

<sup>&</sup>lt;sup>18</sup> VCLT, art.18; McNAIR, *supra* note 16, at 199; SINCLAIR, *supra* note 16, at 39.

<sup>&</sup>lt;sup>19</sup> Espoo, appendix III, ¶1; SANDS, PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW 815 (2003).

### 1. As the seismic surveys are only conducted by two vessels relatively modest in size, they are not large enough to cause significant transboundary impact.

Under Appendix III, one of the criteria in determining significant adverse transboundary impact is the size activity. <sup>20</sup> In this case, the marine seismic surveys are conducted by two vessels, which are relatively modest in size (R.22). Taking into account the type of vessel involved, the seismic surveys cannot be considered a large activity, which may cause significant adverse transboundary impact.

#### 2. The marine seismic surveys are undertaken entirely within Mersenne's EEZ.

For a proposed activity to be considered as likely to cause a significant adverse transboundary impact, it must be "located in or close to an area of special environmental sensitivity or importance" and in "locations where the characteristics of proposed development would be likely to have significant effects on the population." In this case, the marine seismic surveys are undertaken entirely within Mersenne's EEZ (R.17). In fact, MECO's seismic surveys are conducted far from the Aduncus MPA or approximately 250 nautical miles away from the Aduncus EEZ (R.17).

### 3. There is no specific evidence that marine seismic surveys caused the stranding of the beaked whales.

The third criterion under Appendix III is the existence of "particularly complex and potentially adverse effects" of the activity on humans or on valued species or organisms.<sup>22</sup> This criterion is not met.

<sup>&</sup>lt;sup>20</sup> Espoo, appendix III,  $\P1(a)$ .

<sup>&</sup>lt;sup>21</sup> Espoo, appendix III, ¶1(b).

<sup>&</sup>lt;sup>22</sup> Espoo, appendix III, ¶1(c).

Whether a particular individual animal is affected will depend on many variables such as:

(a) frequency of the sound and decibel level; (b) distance between the sound and the animal; (c) the hearing sensitivity and frequency range of the animal; (d) and whether the sound is impulsive or continuous (R.15). The effect on animals of a particular type of activity varies depending on the acoustic characteristics of the environment and hearing sensitivity of the animal. <sup>23</sup> Consequently, the noise emitted by seismic survey airguns causes different effects on different species of cetaceans. <sup>24</sup> The effects therefore of seismic surveys on other types of cetaceans, such as the stranding of adult male humpback whales in Brazil, cannot be applied similarly to beaked whales. <sup>25</sup> It is not acceptable to extrapolate the results obtained for some species to others due to the variation in the acoustic characteristics of the environment and the potential differences in sensitivity between the animals. <sup>26</sup>

There are a number of activities producing underwater sound, which negatively impact cetaceans such as fishing, tourism and other industrial activities. <sup>27</sup> Significantly, the mass stranding of beaked whales recorded in different parts of the world such as in Greece in 1996 and the Bahamas in 2000, are all attributable to military naval sonar exercises and not on marine seismic surveys. <sup>28</sup> The stranding of two beaked whales in the Gulf of California in 2002

<sup>&</sup>lt;sup>23</sup> Parente, et al., *Diversity of Cetaceans as Tool in Monitoring Environmental Impacts of Seismic Surveys*, 7 BIOTA NEOTROP 50 (2007).

<sup>&</sup>lt;sup>24</sup> Id.; Streever, et al., Managing Marine Mammal Issues: Corporate Policy, Stakeholder Engagement, Applied Research, and Training, 2 SPE 111479 (2008).

<sup>&</sup>lt;sup>25</sup> Parente et al., *supra* note 23, at 50.

<sup>&</sup>lt;sup>26</sup> *Id*.

<sup>&</sup>lt;sup>27</sup> *Id*.

<sup>&</sup>lt;sup>28</sup> Cox, et al., Understanding the Impacts of Anthropogenic Sound on Beaked Whales, 7 J. CETACEAN RES. MANAGE. 177, 178-80 (2006); Fernandez, et al., "Gas and Fat Embolic Syndrome" Involving a Mass Stranding of Beaked

included two other acoustic sources other than the seismic airguns: a sub-bottom profiler and multi-beam sonar system. <sup>29</sup> This underlines the uncertainty as to which sound sources or combinations of sound sources may have caused the beaked whales to strand. <sup>30</sup>

Furthermore, the final opinion of the inquiry commission also failed to establish a conclusive causation between MECO's activities and the stranding (R.28). At most, the link, according to one member, is a mere "likelihood" (R.28). Another member did not even consider the link probable (R.28). The autopsy results on the beaked whales were also found to be inconclusive (R.24). Clearly, these cannot support Aduncus' claim that MECO's activities caused the stranding.

Following the Appendix III general criteria of the Espoo Convention that the marine seismic surveys are (a) conducted by only two vessels relatively modest in size; (b) entirely within Mersenne's territory; and (c) having no specific evidence that the seismic surveys caused the stranding of the beaked whales, such seismic surveys are not likely to cause significant adverse transboundary impact. Mersenne is therefore not obligated to conduct an EIA.

C. EVEN ASSUMING THAT THE MARINE SEISMIC SURVEYS FALL UNDER APPENDIX III,

MERSENNE HAS ALREADY COMPLIED WITH ITS OBLIGATIONS UNDER THE ESPOO

CONVENTION BY UNDERTAKING MITIGATION MEASURES.

The Espoo Convention requires States to "take all appropriate and effective measures to prevent, reduce and control significant adverse transboundary impact from proposed activities."<sup>31</sup>

Whales (Family Ziphiidae) Exposed to Anthropogenic Sonar Signals, 42 Vet. Pathol 446 (2005); Sonar Versus Seismic, supra note 3.

<sup>&</sup>lt;sup>29</sup> Cox, et al., *supra* note 28, at 178-80.

<sup>&</sup>lt;sup>30</sup> *Id*.

<sup>&</sup>lt;sup>31</sup> Espoo, art.2(2).

As the main goal of the Espoo Convention is the avoidance and mitigation of significant adverse transboundary impacts, <sup>32</sup> employing mitigation measures ensures that such impacts will not arise. <sup>33</sup> In this case, MECO employs the *ramp-up* procedure in conducting its seismic surveys (R.22).

The *ramp-up* procedure is the most widely used mitigation measure in marine seismic surveys.<sup>34</sup> This standard procedure, which is used within the geophysical industry operating offshore, mitigates the potential impacts of seismic airgun sound on marine mammals.<sup>35</sup> It uses a gradual build-up of airgun sound level over time usually 20-40 minutes, to warn marine mammals, allowing them to depart from the vicinity of an airgun source before full operating level is projected.<sup>36</sup> Here, every survey activity conducted by MECO begins with the firing of a single airgun, the smallest airgun in terms of energy output and volume (R.22). Additional airguns are gradually activated over a period of 20-40 minutes until the desired operating level of the airgun array is reached (R.22). To ensure that no harm is caused to the whales, MECO has taken the additional step of requiring that all survey vessels have an on-board observer and the airguns may not be used when a whale is spotted within 500 meters of the vessel (R.26).

<sup>32</sup> Cassar, Transboundary Environmental Impact Assessment in International Watercourse Management, 12 N.Y.U. ENVIL. L.J. 169 (2003).

<sup>&</sup>lt;sup>33</sup> ATAPATTU, EMERGING PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW 290 (2006).

<sup>&</sup>lt;sup>34</sup> Barlow & Gisiner, *Mitigating, Monitoring and Assessing the Effects of Anthropogenic Sound on Beaked Whales,* 7 J. Cetacean Res. Manage. 239 (2006); International Whaling Commission, Annex K: Report of the Standing Working Group on Environmental Concerns, 58th Meeting of the International Whaling Commission 73 (2006).

<sup>&</sup>lt;sup>35</sup> Weir, Short-Finned Pilot Whales: Respond to an Airgun Ramp-up Procedure off Gabon, 34 AQUATIC MAMMALS 349 (2008); Gordon, et al., A Review of the Effects of Seismic Surveys on Marine Mammals, 37 MARINE TECHNOLOGY SOCIETY J. 16-34 (2004).

<sup>&</sup>lt;sup>36</sup> Weir, *supra* note 35, at 349.

By using the *ramp-up* procedure and other precautionary measures, MECO has been acting with due diligence in ensuring that no significant adverse transboundary impact is caused. Accordingly, MECO has satisfied the provisions of the Espoo Convention.

#### D. MERSENNE HAS THE SOVEREIGN RIGHT TO CONDUCT THE MARINE SEISMIC SURVEYS.

#### 1. Aduncus must not interfere with the internal affairs of Mersenne.

A State may not interfere with the internal affairs of another State<sup>37</sup> to preserve the independence and equality of States.<sup>38</sup> The exploration activities of MECO are conducted entirely within Mersenne's exclusive economic zone (R.17) and are therefore completely within Mersenne's internal affairs.<sup>39</sup>

A State may only interfere where the other State's activities cause significant environmental damage to shared resources such as to migratory species, or affect vital economic interests. As previously discussed, the marine seismic surveys do not cause any significant environmental damage based on the general criteria under Appendix III, and such are conducted entirely within Mersenne's territory. 41

<sup>&</sup>lt;sup>37</sup> Declaration on Principles of International Law Concerning Friendly Relations and Co-operation among States, annex, 25 UNGA Res.2625 (XXV), U.N. GAOR, Supp. (No.28), U.N. Doc.A/5217 (1970), at 121; U.N. CHARTER, art.2(7).

<sup>&</sup>lt;sup>38</sup> Brownlie, Principles of Public International Law 290 (2003).

<sup>&</sup>lt;sup>39</sup> Zhu, *Chinese Practice in Public International Law*, 6 CHINESE J. INT'L L. 711 (2007).

<sup>&</sup>lt;sup>40</sup> SANDS, *supra* note 19, at 238.

<sup>&</sup>lt;sup>41</sup> See supra discussion Part I(B)(2).

#### 2. Mersenne has the sovereign right to exploit its own natural resources.

States have, in accordance with the United Nations Charter and International Law, the sovereign right to exploit their own resources pursuant to their own environmental policies. <sup>42</sup> The sovereign right to exploit natural resources includes the right to be free from external interference over their exploitation, <sup>43</sup> provided that it does not violate legitimate rights. <sup>44</sup> As Mersenne has not breached any of its obligations under International Law, <sup>45</sup> its sovereign right to exploit its own resources should not be impaired.

### E. MERSENNE IS NOT OBLIGATED TO CONDUCT AN EIA UNDER THE PROVISIONS OF THE UNCLOS AND THE CBD.

As will be further discussed below,<sup>46</sup> Article 206 of the UNCLOS<sup>47</sup> and Article 14 of the CBD,<sup>48</sup> which provide for the preparation of an environmental assessment, are merely directory in nature and impose no mandatory obligation on a State to conduct an EIA of proposed projects. Consequently, Mersenne is not obligated to prepare an EIA under the aforementioned provisions.

<sup>&</sup>lt;sup>42</sup> SANDS, *supra* note 19, at 235; Stockholm Declaration on the Human Environment, prin.21, U.N. Doc.A/CONF.48/14/Rev.1 (1973).

<sup>&</sup>lt;sup>43</sup> SANDS, *supra* note 19, at 237.

<sup>&</sup>lt;sup>44</sup> SHAW, *supra* note 12, at 211.

<sup>&</sup>lt;sup>45</sup> See infra discussion Part II.

<sup>&</sup>lt;sup>46</sup> See infra discussion Part II(B)(1)(b).

<sup>&</sup>lt;sup>47</sup> Convention on the Law of the Sea, Dec. 10, 1982, art.206, 1833 U.N.T.S. 3.

<sup>&</sup>lt;sup>48</sup> Convention on Biological Diversity, art.14, 31 I.L.M, 818 (1992) [CBD].

#### II. MECO'S ACTIONS ARE CONSISTENT WITH INTERNATIONAL LAW.

#### A. THE ACTS OF MECO ARE NOT ATTRIBUTABLE TO MERSENNE.

The acts of a person or entity are attributable to the State only where the internal law of the State grants such person or entity the status of an organ,<sup>49</sup> or where it empowers such person or entity to exercise elements of governmental authority.<sup>50</sup> The presumption is that acts of a State-owned corporation are not attributable to the State.<sup>51</sup>

Here, the fact that MECO is state-owned does not show that it is under the direction and control of Mersenne. Neither is it a State organ, nor does it exercise elements of governmental authority.<sup>52</sup> Therefore, the acts of MECO cannot be attributed to Mersenne.

### B. EVEN ASSUMING THAT MECO'S ACTIONS ARE ATTRIBUTABLE TO MERSENNE, THEY DO NOT VIOLATE TREATY AND CUSTOMARY INTERNATIONAL LAWS.

#### 1. Under treaty law, Mersenne is not obligated to prepare an EIA.

Pursuant to *pacta sunt servanda*, <sup>53</sup> Mersenne complied with all its international obligations in good faith.

<sup>&</sup>lt;sup>49</sup> Responsibility of States for Internationally Wrongful Acts, G.A. Res. 56/83, Annex, U.N. Doc. A/RES/58/83/Annex (2002), art.4(2) [Articles on State Responsibility]; CRAWFORD, THE INTERNATIONAL LAW COMMISSION'S ARTICLES ON STATE RESPONSIBILITY: INTRODUCTION, TEXT AND COMMENTARIES 94 (2002).

<sup>&</sup>lt;sup>50</sup> Articles on State Responsibility, art.5; CRAWFORD, *supra* note 49, at 100-01.

<sup>&</sup>lt;sup>51</sup> CRAWFORD, *supra* note 49, at 112; *see* SEDCO, Inc. v. National Iranian Oil Co., 15 Iran-U.S.C.T.R. 23 (1987); International Technical Products Corp. v. Iran, 9 Iran-U.S.C.T.R. 206; Flexi-Van Leasing, Inc. v. Iran, 12 Iran-U.S.C.T.R. 335, 349 (1985).

<sup>&</sup>lt;sup>52</sup> CRAWFORD, *supra* note 49, at 101.

<sup>&</sup>lt;sup>53</sup> VCLT, art.26.

## a. MECO's exploration activities do not belong to the activities listed under Appendices I and III of the Espoo Convention.

Appendix I of the Espoo Convention requires the preparation and submission of an EIA for offshore hydrocarbon production.<sup>54</sup>

As previously discussed, MECO's activities cannot be considered as offshore hydrocarbon production but only as hydrocarbon exploration.<sup>55</sup>

## b. The provisions of the UNCLOS and the CBD relating to the undertaking of an EIA are merely directory.

Article 206 of the UNCLOS provides that when States have reasonable grounds to believe that planned activities may cause substantial pollution or significant and harmful changes to the marine environment, they shall, "as far as practicable," assess the potential effects of such activities on the marine environment.<sup>56</sup> Meanwhile, Article 14 of the CBD provides that each Contracting Party shall "as far as possible and as appropriate," introduce environmental impact assessment on its proposed projects that are likely to have significant adverse effects on biological diversity.<sup>57</sup>

Both of the foregoing provisions are not adequate instructions to States, and therefore cannot be an enforceable basis of an international obligation.<sup>58</sup> First, the provisions include the terms, "as far as possible," "as appropriate," and "as far as practicable," which universally

<sup>&</sup>lt;sup>54</sup> Espoo, appendix I, ¶15.

 $<sup>^{55}</sup>$  See supra discussion, Part I(A)(1)&(2).

<sup>&</sup>lt;sup>56</sup> UNCLOS, art.206.

<sup>&</sup>lt;sup>57</sup> CBD, art. 14.

<sup>&</sup>lt;sup>58</sup> Tucker, Constitutional Codification of an Environment Ethic, 52 FLA. L. REV. 299, 305 (2000).

suggest discretion by the States concerned.<sup>59</sup> Second, the abovementioned provisions fail to identify which State should be responsible for assessing the impacts if an activity falls under the concurrent jurisdiction of several States. Third, the provisions do not specify the factors to be considered in evaluating the impacts of proposed activities. Finally, they are silent as to the applicable international standards for conducting environmental impact assessments.<sup>60</sup> In *MOX Plant*,<sup>61</sup> the Permanent Court of Arbitration ruled that Article 206 of the UNCLOS failed to "give any clear guidance to the United Kingdom of what conduct is required of it pending a final decision (to conduct an EIA)."<sup>62</sup> At most, Article 206 is only directive, its observance being based on the discretion of the concerned State. In this case, as the abovementioned provisions are merely directory in nature, Mersenne committed no violation of the above provisions when it exercised its discretion not to prepare an EIA.

#### 2. Under treaty and custom, MECO's actions did not cause transboundary harm.

The Principle against Transboundary Harm is binding on Mersenne under treaty<sup>63</sup> and customary<sup>64</sup> laws. In this case, MECO's actions are consistent with the Principle.

<sup>&</sup>lt;sup>59</sup> Thompson, A Multifaceted Approach to the Regulation of Cyanide in Gold Mining, 29 SUFFOLK TRANSNAT'L L. REV. 79, 90 (2005); Hathaway & Cusick, Refugee Rights are not Negotiable, 14 GEO. IMMIGR. L.J. 481, 510 (2000).

<sup>&</sup>lt;sup>60</sup> Mank, Can Plaintiffs Use Multinational Environmental Treaties as Customary International Law to Sue under the Alien Tort Statute?, 2007 UTAH L. REV. 1085, 1156 (2007); Tanaka, Lessons from the Protracted MOX Plant dispute: A Proposed Protocol on Marine Environmental Impact Assessment to the United Nations Convention on the Law of the Sea, 25 MICH. J. INT'L L. 337, 382 (2004).

<sup>&</sup>lt;sup>61</sup> MOX Plant, Order No. 3 (Ir. v. U.K.) Perm, Ct. Arb., 42 I.L.M. 1187, ¶63 (2003).

<sup>&</sup>lt;sup>62</sup> MOX Plant, ¶63; Tanaka, supra note 60, at 393.

<sup>&</sup>lt;sup>63</sup> CBD, art.3.

<sup>&</sup>lt;sup>64</sup> Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. 226, 241-42.

## a. <u>Preliminarily, there is no clear and convincing evidence that MECO's actions</u> caused harm.

The *Trail Smelter Arbitration* requires that the nexus between the alleged harmful activity and the transboundary harm must be established by clear and convincing evidence.<sup>65</sup> In that case, the United States claimed damages for the failure of the reproduction of its trees and pines allegedly caused by fumigations from factories in Canada. While the Tribunal admitted that the fumigation may, to some extent, have caused the non-reproduction, it also admitted that there are other factors, which caused the problem. Consequently, the Tribunal ruled that the claim of the United States was speculative and could not justify an award of damages.

Past strandings have always been attributed mainly to sonar-type anthropogenic activities, and not to seismic activities. <sup>66</sup> Here, MECO's hydrocarbon explorations are conducted by seismic surveys, and not by sonar activities.

Aduncus also failed to establish by clear and convincing evidence that MECO's activities caused the stranding of the beaked whales as findings of the commissioners were divided (R.28) and the autopsy results were inconclusive (R.24).<sup>67</sup>

Moreover, there is no evidence that the stranded beaked whales impaired the viability of the ecotourism industry's whale-watching activities in Aduncus. Accordingly, Aduncus failed to clearly and convincingly prove that MECO's exploration activities caused the stranding and seriously affected its ecotourism industry.

<sup>&</sup>lt;sup>65</sup> Trail Smelter Arbitration (U.S. v. Can.), 3 R.I.A.A. 1905, 1965 (1938/1941).

<sup>&</sup>lt;sup>66</sup> Cox, et.al, *supra* note 28, at 178.

<sup>&</sup>lt;sup>67</sup> See supra discussion Part I(B)(3).

#### b. Even assuming that there was harm, it is not transboundary.

To be considered transboundary, the harm must have been caused in the territory of a State *other than* the State of origin. <sup>68</sup>

Here, if there was any harm, it was entirely within Mersenne's territory as the beaked whales were stranded on Mersenne's shoreline (R.24). Also, the activity, which allegedly caused the harm, is MECO's undertaking of marine seismic surveys (R.19, 21, 25). This undertaking is likewise located within Mersenne's territory, particularly in its northern EEZ (R.17). Hence, even if there was harm, it is not transboundary as both the harm and the activity alleged to cause the harm, occurred in Mersenne.

Furthermore, Aduncus has not established that the beaked whales are part of its natural resources thereby causing it harm. As the beaked whales, which travel between the EEZs of Aduncus and Mersenne (R.19), are migratory, they do not belong to any one Nation. <sup>69</sup> Therefore, the death of the beaked whales did not impair Aduncus' natural resources.

#### c. Even assuming that there is risk of harm, it is not significant.

For transboundary harm to be significant;<sup>70</sup> there must be a real detrimental effect on matters such as human health, property or environment in other States,<sup>71</sup> and not simply noticeable<sup>72</sup> *de minimis* harm<sup>73</sup> or minor incidents causing minimal damages.<sup>74</sup>

<sup>&</sup>lt;sup>68</sup> Consideration of Prevention of Transboundary Harm from Hazardous Activities and Allocation of Loss in the Case of Such Harm, art.2(c), G.A. Res. 62/68 U.N. Doc.A/RES/62/452 62<sup>nd</sup> sess. Agenda item 84 (2008); Stockholm Declaration, prin.21.

<sup>&</sup>lt;sup>69</sup> Clermont, 2003 Legislative Review, 10 ANIMAL L. 363, 376 (2004).

<sup>&</sup>lt;sup>70</sup> Report of the International Law Commission on the Work of its Fifty-Third Session (2001), 150-51, U.N. Doc.A/56/10 [ILC Report]; Corfu Channel (U.K. v. Alb.), 1949 I.C.J. 4, 22.

<sup>&</sup>lt;sup>71</sup> ILC Report, *supra* note 70, at 150.

<sup>&</sup>lt;sup>72</sup> Cunningham, Do Brothers Divide Shares Forever? Obstacles to the Effective Use of International Law in Euphrates River Basin Water Issues, 21 U. PA. J. INT'L ECON. L. 131, 153 (2000).

Here, the stranding merely involved twelve beaked whales (R.24). Even if MECO caused the stranding in Mersenne, it is minimal and isolated. Therefore, the harm is not significant.

As likewise earlier illustrated, the risk that MECO's acitivities will cause transboundary harm is not significant following the general criteria in Appendix III because they were conducted by vessels relatively modest in size, within Mersenne's territory, and there is no specific evidence that they caused the stranding.<sup>75</sup>

# d. In any case, the undertaking of marine seismic surveys, as an appendage to Mersenne's economic policy, is not an activity within the contemplation of transboundary harm.

Transboundary harm must be due to the "physical consequences" of activities.<sup>76</sup> Under this Principle, transboundary harm caused by State policies in monetary, socio-economic or similar fields is excluded.<sup>77</sup>

In this case, Mersenne is suffering from electricity and economic crises, which were aggravated by the global financial crisis in 2008 (R.3). These resulted in further upsetting the competitiveness of Mersenne's products and bringing down its employment rate (R.3). As a solution, it granted MECO the permission to conduct hydrocarbon exploration in the hope of finding alternative sources of energy that could provide an impetus to revive its economy (R.17).

<sup>&</sup>lt;sup>73</sup> Klein, et al., *Modernizing Water Law: The Example of Florida*, 61 FLA. L. REV. 403, 447 (2009).

<sup>&</sup>lt;sup>74</sup> Trail Smelter, 3 R.I.A.A. 1905; Lac Lanoux (Fr. v. Spain), 12 R.I.A.A. 281 (1957).

<sup>&</sup>lt;sup>75</sup> See supra discussion, Part I(B)(3).

<sup>&</sup>lt;sup>76</sup> ILC Report, *supra* note 70, at 151.

<sup>&</sup>lt;sup>77</sup> *Id*.

Thus, MECO's activities only relate to Mersenne's economic policy and are excluded from the scope of transboundary harm.

### e. On the contrary, it is more likely that noise produced by whale-watching vessels and chase tactics have a greater impact on marine mammals.

The whale-watching vessels, through noise production and chase tactics, are more likely to have a greater impact on these marine mammals (R.22), and caused them to strand.<sup>78</sup> The continuous underwater sound produced from a vessel's propellers (R.15) can adversely affect cetaceans such as the beaked whales.<sup>79</sup> It is more likely that the noise produced by Aduncus' vessel propellers and its chase tactics in whale-watching excursions of approximately 12,000 participants annually (R.2), have a greater impact on the beaked whales.

In conducting its chase tactics, Aduncus caused greater impact to the beaked whales in violation of the International Convention for the Regulation of Whaling ("ICRW"). The International Whaling Commission's ("IWC") Scientific Committee's General Principles for Whalewatching <sup>80</sup> states that Parties to the ICRW should "not pursue, head off, or encircle cetaceans." The chase tactics of Aduncus (R.22) fall under ICRW's definition of "pursue," which is to "chase," causing the whale to change its course or speed. <sup>82</sup> Aduncus is bound by these Principles laid down by the IWC being a State-Party to the Convention (R.11). Under the ICRW, the IWC "may amend from time to time the provisions of the Schedule by adopting

 $<sup>^{78}</sup>$  Higham & Luck, Marine Wildlife and Tourism Management 322 (2008); Gales, et al., Marine Mammals: Fisheries, Tourism and Management Issues 9 (2003).

<sup>&</sup>lt;sup>79</sup> HIGHAM & LUCK, *supra* note 78, at 322; Streever, et al., *supra* note 24, at 2.

<sup>&</sup>lt;sup>80</sup> Agreed General Principles to Minimise the Risks of Adverse Impacts of Whalewatching on Cetaceans, ¶3(vii) (1996).

<sup>&</sup>lt;sup>81</sup> *Id*.

<sup>&</sup>lt;sup>82</sup> *Id*.

regulations with respect to the conservation and utilization of whale resources." <sup>83</sup> Such amendment shall become effective with respect to all contracting governments, which have not presented objections prior to the expiration of the ninety-day period. <sup>84</sup> Aduncus, not having objected thereto, is bound by the Principles adopted by the IWC in accordance with its obligations under the ICRW.

#### 3. There is no violation of the Precautionary Principle.

#### a. The Precautionary Principle is not customary.

Mersenne cannot be bound by the Precautionary Principle as such has not yet crystallized into Customary International Law.

While some treaties include a provision on the Precautionary Principle, there is lack of State practice and *opinio juris* that could evidence adherence to such.<sup>85</sup> To date, the great variety of interpretations given to the Precautionary Principle, and the novel and far-reaching effects of some applications, clearly indicate that there is no common rule that could bring the Principle within the realm of Customary International Law.<sup>86</sup> Absent strong evidence of State practice and

<sup>&</sup>lt;sup>83</sup> ICRW, art.V(1).

<sup>&</sup>lt;sup>84</sup> ICRW, art.V(3)(c).

<sup>&</sup>lt;sup>85</sup> EC Measures Concerning Meat and Meat Products (Hormones), WT/DS48/AB/R, ¶123 (1998); LOUKA, INTERNATIONAL ENVIRONMENTAL LAW: FAIRNESS, EFFECTIVENESS, AND WORLD ORDER 51, 397 (2006); BROWNLIE, *supra* note 38, at 275; DAMROSCH, ET AL., INTERNATIONAL LAW: CASES AND MATERIALS 1509-12 (2001).

<sup>&</sup>lt;sup>86</sup> Cameron & Abouchar, *The Status of the Precautionary Principle in International Law, in* The Precautionary Principle and International Law: Challenge of Implementation 37 (1996).

*opinio juris*, it cannot be concluded that the Precautionary Principle is customary.<sup>87</sup> At best, such Principle is merely emerging; hence, *de lege ferenda*.<sup>88</sup>

Even if the Precautionary Principle is embodied in a treaty, it is still necessary to examine the precise language to determine the State-Party's obligation. For example, the Stockholm and Rio Declarations mention the Principle but do not impose a direct obligation on the part of the States-participants, including Mersenne. 90

#### b. Even if it is customary, Mersenne did not violate the Precautionary Principle.

#### i. The Precautionary Principle does not apply in this case.

The Precautionary Principle only applies to situations where there is a likelihood of "significant" harm to the environment. Other international agreements similarly use the term "significant" in the context of defining an appropriate threshold of environmental harm to trigger the application of the Precautionary Principle. The intent of qualifying the Precautionary Principle in this manner is to ensure that States carry on with activities which have impacts falling below the threshold. 93

<sup>&</sup>lt;sup>87</sup> BIRNIE & BOYLE, INTERNATIONAL LAW AND THE ENVIRONMENT 98 (2002); Tinker, *State Responsibility and the Precautionary Principle*, *in* The Precautionary Principle and International Law: The Challenge of Implementation 53 (1996); Handl, *Environmental Security and Global Change: The Challenge of International Law*, *in* Environmental Protection and International Law 59-87 (1994).

<sup>&</sup>lt;sup>88</sup> BOYLE & CHINKIN, THE MAKING OF INTERNATIONAL LAW 212 (2007); Boyle, *Soft Law in International Law-Making, reprinted in* International Law 142 (2006).

<sup>&</sup>lt;sup>89</sup> Tinker, *supra* note 87, at 57.

<sup>&</sup>lt;sup>90</sup> Cameron & Abouchar, *supra* note 86, at 41.

<sup>&</sup>lt;sup>91</sup> CRAIK, *supra* note 1, at 60; SANDS, *supra* note19, at 270.

<sup>&</sup>lt;sup>92</sup> CRAIK, *supra* note 1, at 60.

<sup>&</sup>lt;sup>93</sup> *Id*.

What constitutes "significant" is determined in relation to a specific factual context.<sup>94</sup> In this case, it has not been shown that MECO's marine seismic surveys will cause any significant transboundary harm.<sup>95</sup> Therefore, the Precautionary Principle does not apply.

### ii. Even if the Precautionary Principle applies, Mersenne has made the necessary precautions according to its capabilities.

Precautionary measures must be applied by States according to their capabilities, economic and social priorities, cost-effectiveness of preventive measures, and nature and degree of environmental risk.<sup>96</sup>

Mersenne properly undertook the necessary precautions. While Mersenne has experienced economic growth only recently, economic contraction was subsequently brought about by the 2008 global financial crisis (R.3). Mersenne is further restricted by its energy crisis (R.3), which is an imminent threat to Mersenne's economic policy of energy independence (R.20). Yet despite these, Mersenne has acted with due care and foresight and has taken its obligations seriously (R.26). MECO has adopted all possible mitigation measures to subdue any possible harm (R.22). The vessels used are modest in size (R.22). Mersenne was not negligent when the mass stranding occurred as immediate attempt of rescue was done on the beaked whales (R.24). Afterwards, an autopsy was even conducted to investigate the cause of the accident (R.24) and additional safeguard measures were implemented like the installation of an on-board observer and the cessation of the use of airguns when a whale is spotted within 500 meters (R.26). As if these were not enough, Mersenne submitted itself to an inquiry commission

<sup>&</sup>lt;sup>94</sup> *Id*.

<sup>&</sup>lt;sup>95</sup> See supra discussions Parts I(B);II(B)(2).

<sup>&</sup>lt;sup>96</sup> Rio Declaration on Environment and Development, prin.15, U.N. Doc.A/CONF.151/26 (1992); BIRNIE & BOYLE, *supra* note 87, at 120.

to determine the effects of the hydrocarbon exploration (R.26). Taken together, these acts are more than enough precautions and compliance with international obligation.

### C. EVEN ASSUMING THAT THERE MAY BE A VIOLATION OF INTERNATIONAL LAW, ANY SUCH ACTION IS EXCUSED UNDER THE DOCTRINE OF NECESSITY.

Necessity may not be invoked for precluding the wrongfulness of an act unless the act: (1) is the only means for the State to safeguard an essential interest against a grave and imminent peril; and (2) does not seriously impair an essential interest of another State.<sup>97</sup> In this case, both conditions are fulfilled.

### 1. MECO's actions are the only means of safeguarding the economic survival of Mersenne.

In *Gabčíkovo-Nagymaros*, the I.C.J. further broke down this condition, to wit: (a) the act must have been occasioned by an "essential interest" of the State which is the author of the act; (b) that interest must have been threatened by a "grave and imminent peril;" and (c) the act must be the only means of safeguarding that interest.<sup>98</sup>

#### a. Mersenne's economy is an essential interest.

According to Special Rapporteur Ago, essential interest may contemplate grave threats to the economic survival of the State or even the continued functioning of an essential service, 99 such as the supply of electricity. 100

98 Gabčíkovo-Nagymaros Project (Hung. v. Slovk.), 1997 I.C.J. 7, 40-41.

<sup>&</sup>lt;sup>97</sup> Articles on State Responsibility, art.25.

<sup>&</sup>lt;sup>99</sup> Addendum-Eighth Report on State Responsibility by Mr. Roberto Ago, Special Rapporteur-the Internationally Wrongful Act of the State, Source of International Responsibility(part I)14 U.N.Doc.A/CN.4/318/Add.5-7 (1980).

<sup>&</sup>lt;sup>100</sup> Ahlund, *Major Obstacles to Building the Rule of Law in a Post-Conflict Environment*, 39 NEW ENG. L. REV. 39, 42 (2004); Cray & Drutman, *Corporations and the Public Purpose: Restoring the Balance*, 4 SEATTLE J. SOC. JUST. 305, 342-43 (2005).

Here, in the light of the unfolding crisis, Mersenne's recent industrialized economy (R.3), may be considered to be in a precarious state. The sustainability of this economic growth, dependent on Mersenne's commitment on energy independence (R.20), is necessary to support its 22-million-strong population (R.3). Thus, any interference related to MECO's activities would be prejudicial to its economic survival and national security (R.20).

### b. A grave and imminent peril exists and MECO's activities were the only means to safeguard Mersenne's economy.

For a peril to be considered as grave and imminent, it must have been a threat to the interest at the actual time. <sup>101</sup> A peril, however, is not rendered less certain and inevitable by the mere fact that its realization might be far off. <sup>102</sup>

In *LG&E Capital Corp. v. Argentine Republic*, Argentina's economy was suffering from a crisis. There, Argentina experienced its highest unemployment rate at 25%, the lowest drop in their currency value, decreasing productivity, and increasing foreign debt. Eventually it was unable to service its international debts but was exonerated to allow its economic survival. <sup>103</sup>

Similarly, Mersenne was suffering economic contraction, its highest unemployment rate of 23%, and a decrease in the production and demand of Mersenne's commodities. This situation was further aggravated by Mersenne's electricity crisis (R.3) and the 2008 global financial crisis, which was the worst economic conditions since the 1930s (R.26). In any case, the peril to Mersenne's economy is not rendered any less certain or inevitable as its realization, if unabated, will sooner or later reach the level of Argentina's.

<sup>&</sup>lt;sup>101</sup> Gabčíkovo-Nagymaros, 1997 I.C.J. at 42.

<sup>&</sup>lt;sup>102</sup> Id.

<sup>&</sup>lt;sup>103</sup> LG&E Capital Corp. v. Argentine Republic, ICSID (W.Bank) Case No.ARB/02/1, 2006 WL2985837, 256 (2006).

Moreover, MECO's activities were the only way for Mersenne to sustain its oil and natural gas supply, considering Mersenne has not been able to import sufficient quantities of these resources despite repeated efforts (R.20).

#### 2. MECO's activities do not seriously impair any essential interest of Aduncus.

For the invocation of necessity to prosper, the essential interest being safeguarded must be of greater importance compared to the interest of the foreign State, which is to be sacrificed.<sup>104</sup> Determining which interest outweighs the other is not a matter of higher value, but merely a matter of proportion.<sup>105</sup>

Here, the balance tips in favor of Mersenne's economic survival rather than Aduncus' ecotourism industry. The latter's ecotourism industry is only a portion of its entire tourism industry (R.2), while Mersenne pertains to its entire economy. Moreover, such impairment on Aduncus' ecotourism industry can be mitigated since most of the inhabitants of Aduncus depend on artisan fishing and agriculture (R.2). Further, these kinds of undertaking only exploit certain marine resources like fish for human consumption, and not beaked whales. And while Aduncus' economy has to support only a population of 240,000 (R.2), Mersenne has 22,000,000 people, virtually a hundred times as much. Thus, it is much more essential to safeguard Mersenne's economic survival.

#### 3. Mersenne did not contribute to the situation of necessity.

Because there is a global economic crisis (R.3), Mersenne does not have a hand in the economic condition that now threatens its survival.

<sup>&</sup>lt;sup>104</sup> U.N.Doc.A/CN.4/318/Add.5-7, 20.

<sup>&</sup>lt;sup>105</sup> *Id*.

#### CONCLUSION AND PRAYER FOR RELIEF

Respondent, Republic of Mersenne, respectfully requests that the I.C.J. adjudge and declare that:

- MECO's actions within Mersenne's EEZ do not require the preparation of an EIA;
   and
- 2. MECO's actions are consistent with International Law.

Respectfully submitted,

AGENTS OF RESPONDENT