

WMU Studies in Maritime Affairs 2

Maximo Q. Mejia, Jr.
Chie Kojima
Mark Sawyer *Editors*

Piracy at Sea

WMU Studies in Maritime Affairs

Volume 2

Series Editors:

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Piracy at Sea

 Springer

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ISSN 2196-8772

ISBN 978-3-642-39619-9

DOI 10.1007/978-3-642-39620-5

Springer Heidelberg New York Dordrecht London

ISSN 2196-8780 (electronic)

ISBN 978-3-642-39620-5 (eBook)

Library of Congress Control Number: 2013954809

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Printed on acid-free paper

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Foreword

In September 2011, the International Maritime Organization (IMO) observed its annual World Maritime Day with a call-to-action to the international community, military forces, shipowners, and seafarers, reminding them of the integral role they play in helping rid the world of modern-day piracy, especially off the coast of Somalia and in the Indian Ocean.

In Secretary-General Mitropoulos' World Maritime Day message, he stated: "To alleviate this unacceptable situation, no effort should be spared. . .". It was in this spirit that I encouraged my colleagues at the World Maritime University (WMU) to organize the International Conference on Piracy at Sea (ICOPAS) and provide an appropriate rallying point around which all those who can make a difference can focus their efforts. ICOPAS, held from 17 to 19 October in Malmö, Sweden, was the joint WMU-IMO response to the theme for World Maritime Day 2011.

Maritime security is a priority area for research and teaching at WMU. Through ICOPAS, WMU highlights a salient contemporary maritime problem. We wanted ICOPAS to serve as a forum for the exchange of views and ideas on the complex issues behind piracy, to examine and review current responses and initiatives, and discuss ways for an integrated solution to eradicate piracy and other violent crimes at sea.

Even today, hundreds of seafarers on board dozens of vessels are still being held against their will by Somali pirates. Seafarers are being subjected to torture and abuse, resulting in long-lasting effects even after they are released.

The Indian Ocean is not new to piracy. It was in 1695 that Henry "Long Ben" Avery from his base in Madagascar captured the fleet of the Lord Mughal of India in the Arabian Sea on the return of the fleet from Mecca, laden with riches and the harem of the Grand Mughal. Henry Avery was never captured and later briefly settled among pirates in the Bahamas before apparently living out his days in England.

Whereas piracy is currently focused on the Gulf of Aden, the Indian Ocean, and waters around Somalia, in the early 1700s, the focus was on the Bahamas, where the Republic of Pirates for two decades was a menace to shipping and trade, and mostly every ship sailing from the Caribbean to Europe had to pass through

the pirate-infested waters of the Florida Current passing by the Bahamas, truly a maritime choking point. Many of the pirates eventually ended up hanging from the gallows of the tidal Flatlands of the Thames.

At the same time, the boundaries between privateering and piracy were not always so clear. From 1715 to 1721 in the Baltic, the Shipping Queen Ingela Gatenhielm, first together with her husband, and later on her own, was a successful Swedish privateer by day, not only a menace to Danish and Russian shipping and trade, but also a much-feared pirate by night. Piracy at sea is nothing new.

We gave ICOPAS the theme *Save Our Seafarers* to demonstrate our solidarity with everyone who has expressed frustration with the current situation. The *Save our Seafarers* (SOS) campaign is one of the biggest-ever maritime industry efforts, comprising 28 global organizations that have joined together to raise awareness of the human and economic cost of piracy.

While there has been numerous conferences on piracy, it is important that we keep discussing the problem, until the international community finally coordinates a durable solution. We should not allow our decision-makers to forget that there is problem that requires a solution.

Keynote addresses were delivered by the heads of IMO and BIMCO, and a senior representative from NATO, and some 50 presentations were given by experts, practitioners, and leading authorities on maritime piracy. ICOPAS concluded with a distinguished panel that discussed and examined the possible ways forward. ICOPAS culminated in the adoption of the *Malmö Declaration*, setting out specific points to combat and hopefully help solve the problem of piracy at sea in the twenty-first century. WMU has circulated the declaration among our more than 3,000 alumni, many who are in senior positions in their respective governments and maritime administrations, asking them to contribute to the effort to *Save our Seafarers*.

As an institution of higher learning and research, it is WMU's duty to disseminate the wealth of information and ideas that were exchanged during the conference. I therefore congratulate Dr. Mejia, Dr. Kojima, and Lt. Cdr. Sawyer for editing this volume and compiling an impressive selection of papers based on ICOPAS presentations. It is our hope that the ideas contained in this volume may contribute to global efforts towards finding a lasting solution to the problem of piracy not only off the coast of Somalia but also in all the world's oceans.

Malmö, Sweden
March 2013

Björn Kjerfve
World Maritime University

Acknowledgements

This volume is a selection of papers from the International Conference on Piracy at Sea (ICOPAS) held in Malmö on 17–19 October 2011. ICOPAS was organized by the World Maritime University (WMU) in cooperation with the International Maritime Organization (IMO) and Malmö University. The editors would like to take this opportunity to acknowledge the contribution and assistance of numerous individuals, colleagues, friends, and benefactors whose efforts led to the successful execution of ICOPAS, and which therefore made the publication of this book possible.

We would first like to thank Dr. Björn Kjerfve, President of WMU, for providing the leadership and vision, and also Professors Neil Bellefontaine, P.K. Mukherjee, Olof Linden, and Patrick Donner for their guidance during the many meetings of the organizing committee. Our special appreciation to Ms. Mia Hedin, Senior Faculty Assistant and Events Coordinator at WMU, whose dedication ensured the smooth execution of the conference and made sure that ICOPAS was not wanting in expert liaison, secretariat, coordination, logistics, and other practical services. We thank Ms. Sue Jackson for patiently working with us on the flyer and poster, Mr. Saul Isaacson for designing the ICOPAS logo, Mr. Erik Ponnert for setting up the web site, and Messrs. Johan Bolmsten and Christian Wallentin for IT support. Our thanks also to students of the WMU MSc Class of 2011 and 2012 for their assistance with ushering and making ICOPAS participants welcome, and the students of the WMU-Lund University LLM (Maritime Law) Class of 2012 for their help with taking conference notes. We would like to acknowledge the support of Rita Sanguineti, Conference Manager at Malmö University, with all the practical and technical arrangement at the conference venue.

The editors further acknowledge the invaluable suggestions made by the ICOPAS International Advisory Board Members, particularly Ms. Kimberly Karlshøj of the TK Foundation, Mr. Giles Noakes of BIMCO, and Dr. Sascha Pristrom of IMO. Our appreciation also goes to the members of the International Scientific Board who helped review abstracts and papers for the conference—Prof. Jingjing Xu, Prof. Henri Fouché, Prof. Samuel Pyeatt Menefee, Prof. John Dinwoodie, Dr. Gotthard Gauci, Dr. Azfar bin Mohamad Mustafar,

Dr. Sascha Pristrom, Dr. Paul Wambua, and Ms. Anna Petrig. Special thanks go to the sponsors of ICOPAS for generously providing the foundation of success for the conference. ICOPAS sponsors include the Swedish Maritime Administration, TK Foundation, Orange County Community Foundation, AKE, Sea-Hawk, Scandinavian Risk Solutions (SRS), and Sony Ericsson.

There are countless others who made significant contributions to the success of ICOPAS. While their names may for the moment inadvertently escape the editors, the debt of gratitude owed to them is sincerely acknowledged.

Last but not least, the editors express their deepest gratitude to the authors of the different chapters in this book as well as to all the participants who attended ICOPAS. Their valuable insights contributed to some very lively discussions that led to the adoption of the Malmö Declaration, which is included as Annex 1 of Chapter 1 of this book. This volume is therefore dedicated to the 408 participants who selflessly contributed their opinions to encourage policies that are necessary to prevent, deter, and punish acts of piracy and to provide assistance to the seafarers whose lives and families have been and continue to be threatened by piracy at sea.

March 2013

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The Malmö Declaration: Calling for a Multi-Sectoral Response to Piracy

Maximo Q. Mejia, Jr., Chie Kojima, and Mark Sawyer

1 Introduction

Over the more than three decades starting with the 1990s, at least 6,000 robberies and violent attacks against merchant vessels have been reported to the International Maritime Bureau (IMB) of the International Chamber of Commerce (ICC).¹ Pirates and armed robbers prey upon merchant ships with impunity in many of the world's waters. In 2010 alone, 1,181 persons were reported taken hostage, 37 were injured, and 8 were killed. During the same year, 196 ships were boarded, 107 were fired upon, and 53 were hijacked.² In 2011, 802 were taken hostage, 42 injured, and 8 were killed; 176 ships were boarded, 113 ships fired upon, and 45 were hijacked.³ In 2012, 585 people were taken hostage, 28 were injured, and 6 were killed; while 174 ships were boarded, 28 were fired upon, and 28 were hijacked.⁴

The grave threat of piracy to the security and efficiency of marine transportation, particularly to the men and woman carrying out this important function, led the International Maritime Organization (IMO) to adopt the theme “*Piracy*:

¹ A specialised division of the ICC, the IMB is a non-profit making organisation, established in 1981 to act as a focal point in the fight against all types of maritime crime and malpractice. For over 25 years, the IMB has used industry knowledge, experience and access to a large number of well-placed contacts around the world to protect the integrity of international trade by seeking out fraud and malpractice. “ICC Commercial Crime Services,” <http://www.icc-ccs.org>, accessed 31 January 2013.

² ICC-IMB (2011).

³ ICC-IMB (2012).

⁴ ICC-IMB (2013).

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orchestrating the response” for World Maritime Day in 2011. To commemorate this theme and contribute to the efforts of maritime industry stakeholders and the international community at large to identify, monitor, study, research, and implement preventive measures to combat violent crime against merchant shipping, the World Maritime University (WMU) hosted the International Conference on Piracy at Sea (ICOPAS 2011) from October 17 to 19, 2011 at Orkanen, Malmö Högskola in Malmö, Sweden. The Conference was organized in cooperation with IMO. The programme is available as Annex 1 of this chapter.

ICOPAS 2011 brought together more than 400 industry practitioners, government officials, academics, and researchers in a 3-day conference where they exchanged views and ideas on the complex web of underlying factors behind the phenomenon of piracy, examined and reviewed current responses and initiatives, as well as discussed ways whereby industry stakeholders and the many disciplines engaged in maritime research might better work towards an integrated approach to control or eradicate piracy and other violent crimes at sea. They shared their views in developing the Malmö Declaration, the conference resolution that calls on all participants and their organizations to use their resources and energies in the most optimal manner to meet the goals set and agreed upon at the conference.

2 Conference Theme: “Save Our Seafarers”

The Conference aligned itself with the maritime industry’s initiative—*Save Our Seafarers*—that placed a particular emphasis on the human cost of piracy, focusing on the seafarers that are risking their lives each and every day while transiting the world’s pirate infested waters. These are the individuals that are most directly affected by maritime piracy, not to mention their families that are at home worrying about the safety of their loved ones at sea. Special attention was also given to piracy’s long-term effects on seafarers as well as joint initiatives to provide rehabilitation and sustained support for affected seafarers.

3 Keynote Speakers

The welcoming remarks by Dr. Björn Kjerfve, President of the World Maritime University were followed by the addresses of three Keynote Speakers—IMO Secretary General Efthimios Mitropoulos, BIMCO Secretary General Torben Skaanild-Secretary, and NATO Deputy Assistant Secretary General Richard Froh. They challenged all conference participants to refrain from being mere bystanders in eradicating piracy and use the conference as a venue for being active parts of the solution. They emphasized the significant effort that is already being exerted; the need to develop further long-term measures; the significant, life-changing impact of these on seafarers; and the need for further collaboration and support among all stakeholder groups not only to pursue viable solutions, but also

the timely implementation and ownership of these solutions. The common message was that the problem of piracy could only be controlled through the combined and focused efforts of all.

4 Human Cost of Piracy

In support of the Conference theme, an entire session was focused on the human cost of piracy chaired by Mr. Peter Swift, Chairman, Programme Steering Committee of the Maritime Piracy Humanitarian Response Programme (MPHRP). During this session, conference attendees had the privilege of listening to the moving reflections of Capt. Calixto Caniete as he retold his encounter with pirates before, during, and after being held hostage for 133 days. He eloquently communicated the bravery of his crew and brought to light the heavy price that the captive seafarers and their families pay. After Capt. Caniete's presentation, representatives from MPHRP explained the development of a system of first responders that are now readily available. These first responders are a cadre of trained professionals, ready to assist mariners in rehabilitation after a piracy incident and lend an ear to seafarers as they voice their concerns over the threat, helping them to cope with the fear as well as prepare them for the perils of being attacked and held hostage.

5 Launching of the Seafarers Emergency Fund Foundation (SEFF)

In consideration of seafarers' welfare, Ms. Kimberly Karlshoej, Director and Program Officer of the TK Foundation used ICOPAS 2011 as an opportunity to announce the launch of the Seafarers Emergency Fund Foundation (SEFF). SEFF was established to provide immediate and essential aid to seafarers and their families, when the former are directly involved in sudden and unforeseen crises. This fund is channeled through seafarer welfare organizations and other welfare organizations and is designed to provide the means to purchase goods and/or services for seafarers and/or the spouse or children of seafarers to alleviate the burden brought about by the crises. The SEFF may be used to cover costs related to immediate needs such as psychological counseling, medical expenses or repatriation. Further information is available at <http://www.thetkfoundation.com>.

6 Panel Discussion and Conference Conclusions

The final day of the Conference began with a panel discussion chaired by Craig Eason of Lloyd's List, with discussants Annika Engblom (Member, Swedish Parliament), Michael Gilday (Rear Admiral (USN), Director of Operations, Joint

Force Command Lisbon, NATO), Peter Hinchliffe ((OBE), Secretary General, International Chamber of Shipping and International Shipping Federation), Sascha Pristrom (Technical Officer, Sub-Division for Maritime Security and Facilitation, International Maritime Organization), and Jon Whitlow (Secretary, Seafarers, Fisheries and Inland Navigation, International Transport Workers' Federation). The recurring theme during the panel, and indeed throughout the Conference, was that the long and arduous voyage to curtailing the threat of piracy can only be navigated through the dedicated commitment of efforts and resources as well as sincere collaboration between a multitude of agencies and organizations. While there are numerous current initiatives toward mitigating risks and solving the symptoms of piracy, it was noted that most are only short-term measures; everyone was in agreement that the key to a lasting solution to the problem of piracy can only be found ashore. The problem will persist until Somalia and countries in the Horn of Africa and other piracy hotspots are able to develop the infrastructure and resources to address the issue at its roots. It is therefore incumbent upon all stakeholders to work not only towards mitigating the threat, but also to grow and implement solutions that focus on capacity-building, political stability, and socio-economic development in the affected regions.

7 Malmö Declaration

Mr. Giles Noakes of BIMCO led Conference participants in drafting and fine-tuning two documents that reflect the most significant and recurring points raised during each of the sessions at ICOPAS 2011. On the second day of the Conference, following the conclusions of the thematic sessions, conference participants were invited to share their time and collective expertise by meeting in the plenary hall to scrutinize and add value to these two documents. Finalized on the third day, they reflect the general consensus reached at the Conference. The first document—*Malmö Declaration*—is a call to action for the international community as a whole to support counter-piracy programmes and is reproduced in this chapter as Annex 2. The second—*Conference Summary and Conclusions*—summarizes the Conference findings and is reproduced in this chapter as Annex 3.

8 This Volume

This book includes 19 chapters comprising a selection of papers presented at ICOPAS 2011, beginning with the keynote addresses by IMO Secretary-General Efthimios Mitropoulos and BIMCO Secretary-General Torben C. Skaanild. Chapters from the session “Piracy and the world public order” include an examination of legal uncertainty in the treatment of human rights in counter-piracy operations by Anna Petrig, the use of ship-riders to assert jurisdiction over piracy

and armed robbery off Somalia by Efthymios Papastavridis, a law enforcement approach to overcoming challenges to effective investigation and prosecution of Somali pirates by Henri Fouché, the protection of flagged-out ships under the new Japanese Anti-Piracy Law by Kentaro Furuya, the law and economics of piracy at sea by Caitlin Stapleton Kaprove, an overview of the economic implications of piracy and armed robbery against ships in Nigeria by John A. Wajilda, China's efforts to fight piracy at sea by Lin Zhen, lessons from Puntland State of Somalia by Ahmed Khalif Bile, the North American Maritime Security Initiative by Ricardo Eliseo Valdés, and economic, political, and social implications of piracy in the Gulf of Guinea by Yusuf Mohammad Bala.

From the session “Industry response to piracy at sea,” there are chapters on following the money trail of piracy and organised crime at sea by Marelize Schoeman and Benjamin Häefele, core strategies of security to thwart success in piracy by Joan P. Mileski et al., risk modelling of non-lethal response to maritime piracy and estimating its effect by George Ad Psarros et al., and understanding the criminal business model of Somali piracy by George Kiourktsoglou and Alec D. Coutroubis. From the session “Humanitarian response to piracy at sea,” there are chapters on the 133 days of captivity of the crew of the *MV Renuar* by Calixto Caniete, and the human cost of Somali piracy by Kaija Hurlburt.

Together, these chapters bring together views and insights from a wide a spectrum of maritime stakeholders—seafarers, shipowners, industry practitioners, government officials, academics, and researchers—presenting different aspects of the problem in an open manner and presenting their thoughts on how to deal with a truly complex situation. Through this volume, the World Maritime University aims to consolidate the ideas brought out at the conference and encapsulate this collective wisdom in a publication that can serve as easy reference for practitioners as well as researchers, and hopefully contribute to more concrete action.

Annex 1

International Conference on Piracy at Sea (ICOPAS)

17–19 October 2011

Orkanen, Malmö Högskola, Malmö, Sweden

Conference Programme

Monday, 17 October

09:30–10:45 Opening session

Welcome remarks, Björn Kjerfve, President, World Maritime University

Keynote address, Efthymios Mitropoulos, Secretary General, International Maritime Organization (IMO)

Keynote address, Torben Skaanild, Secretary General, Baltic and International Maritime Council (BIMCO)

Keynote address, Richard Froh, Deputy Assistant Secretary General for Operations, North Atlantic Treaty Organization (NATO)

11:15–12:00 Session 1: Piracy and the world public order

Session keynote: Maritime piracy—the reality across the globe, Cyrus Mody, Manager, International Maritime Bureau

Session keynote: Countering piracy off the coast of Somalia: current legal challenges, Thomas Winkler, Ambassador, Under Secretary for Legal Affairs, Ministry of Foreign Affairs of Denmark

13:30–17:30 Parallel session 1-A: Restoring public order through law enforcement (Session chair: Hugh Williamson, Lead Investigator/Project Manager, Dalhousie Marine Piracy Project, Marine Affairs Program, Dalhousie University)

Human rights and counter-piracy operations: a special focus on transfers of pirates for prosecution and enforcement of sentences, Anna Petrig, Head of the Sea Piracy Project, Max Planck Institute for Foreign and International Criminal Law, Freiburg, Germany

Djibouti Code of Conduct and the assertion of jurisdiction over pirates: lessons from the Caribbean concerning questions of international responsibility, Efthymios Papastavridis, Lecturer in Public International Law, University of Thrace; Research Fellow, Academy of Athens

Sea piracy—the law enforcement approach: overcoming challenges to effective investigation and prosecution of Somali pirates, Henri Fouché, Professor Extraordinarius, Department of Police Practice, University of South Africa

Japanese anti-piracy law: protection of flagged-out ships, Kentaro Furuya, Japan Coast Guard Academy International Research Centre for Marine Policy; Japan Association of Marine Safety, London Research Office

The law and economics of piracy at sea, Caitlin Stapleton, Associate, Greenberg Traurig, LLP (Global and Government Contracts Groups) Former Law Clerk, International Court of Justice

An overview of the economic implications of piracy and armed robbery against ships in Nigeria, John A. Wajilda, Nigerian Shippers' Council

Combating piracy: the Indonesian case, Melda Kamil Ariadno, Senior Lecturer of International Law, Faculty of Law, Universitas Indonesia

13:30–17:30 Parallel session 1-B: Suppressing piracy: operational and economic issues (Session chair: Suzanne B. D. Lassen, Strategic Facilitator and Integrator)

Somali piracy: a view from the ground, Robert Young Pelton, Publisher, Somalia Report

Anti-piracy operations and the lack of policing in the global commons, Lars Bangert Struwe, Research Fellow, Faculty of Social Sciences, Centre for Military Studies, Denmark

Naval operations in the Gulf of Aden: a perspective from the Swedish Navy, Frank Johnsson, Commander, Swedish Navy

Warships alone will not curb piracy off the Somali coast: lessons from Puntland, State of Somalia, Ahmed Khalif Bile, Puntland Development Research Center

Fresh thinking on deterring and defeating piracy, Christopher J. Parry (CBE), Rear Admiral (RN) (ret.) Director, Merl House

The North American Maritime Security Initiative (NAMSI), Ricardo Eliseo Valdés Cerda, Lieutenant Commander, Secretariat of the Navy, Mexican Navy

The economic, political and social implications of piracy in the Gulf of Guinea and world trade: Nigeria as a case study, Yusuf Bala, Nigerian Maritime Administration and Safety Agency

Tuesday, 18 October

09:00–12:00 Session 2: Industry response to piracy at sea

Session keynote: The SOS campaign, Bill Box, Senior Manager for External Relations and Communications, INTERTANKO

Parallel session 2-A: Piracy, technological developments, and the multisectoral response (Session chair: Proshanto K. Mukherjee, Professor of Maritime Law, World Maritime University and Lund University)

The hijacking of the CEC Future, Gary S. Porter, Corporate Security Manager, Clipper Ferries/Ro-Ro

Piracy: organised crime at sea—following the money trail, Marelize Schoeman and Benjamin Häefele, Department of Criminology Security Science, Faculty of Law, University of South Africa

The industry-military interface: successes to date and challenges for the future, Martin Ewence, Commander (RN) (OBE), Maritime Security Advisor to EUNAVFOR

Polarimetric radars detect pirates at sea, Sten Wärnfeldt, Area Manager, Sea-Hawk Navigation

Improvement of maritime safety and security at sea with blackbox and DGMIS, Michael Bochmann, Prof. Ing. (mul.), Nautical Department, University Applied Science, Leer

How to thwart success in piracy: core strategies of security, Joan P. Mileski, Department of Maritime Administration, Texas A & M University at Galveston; Maximo Q. Mejia, Jr., Maritime Law and Policy, World Maritime University; Arielle D. Carchidi, Department of Maritime Administration, Texas A & M University at Galveston

Parallel session 2-B: Privately contracted armed security personnel (Session chair: Giles Noakes, Chief Maritime Security Officer, BIMCO)

IMO guidance regarding the use of privately contracted armed security personnel, Sascha Pristrom, Technical Officer, Sub-Division for Maritime Security and Facilitation, International Maritime Organization

- The use of armed guards on board ships: an industry perspective*, Giles Noakes, Chief Maritime Security Officer, BIMCO
- Setting up and managing a private maritime security company: legal and business risks*, Thomas Bennett, Solicitor, Member of PVI's General Counsel
- Security Association for the Maritime Industry*, Peter Cook, Secretariat, Security Association for the Maritime Industry
- A risk based methodology for shipping companies' response to piracy*, Richard Filon, Director of Maritime Services, AKE Group
- Risk modelling of non-lethal response to maritime piracy and estimating its effect*, George Psarros and Rolf Skjong, Det Norske Veritas AS; Ronald Kessel and Chris Strode, NATO Undersea Research Centre
- Somali piracy: understanding the criminal business*, George Kiourktsoglou, PhD Candidate, University of Greenwich; Alec D. Coutroubis, Principal Lecturer and Teaching Fellow, University of Greenwich

- 13:30–17:30 Session 3: Humanitarian response to piracy at sea (Session chair: Peter Swift, Chairman, Programme Steering Committee, Maritime Piracy Humanitarian Response Programme (MPHRP))
- Session keynote: The crew of the MV Renuar: 133 days of fear, helplessness, and hopelessness*, Calixto Caniete, Master Mariner
- Good practice guides for seafarers and their families*, Roy Paul, Programme Coordinator, MPHRP
- Seafarers' pre-piracy training*, Toon van de Sande, Assistant Programme Coordinator, MPHRP
- Psychosocial response*, Colm Humphries, Psychosocial Consultant, MPHRP
- Welfare organisations as first responders*, Ken Peters, Rev Canon, ICMA/Mission to Seafarers
- Managing the practical aspects of the humanitarian response*, Ole Månsson, Lead Instructor, Safety and Security Department, Maersk Training Svendborg A/S
- Piracy at sea: the human impact*, Hugh Williamson, Lead Investigator/Project Manager, Dalhousie Marine Piracy Project, Marine Affairs Program, Dalhousie University
- Oceans Beyond Piracy: the human cost of Somali piracy*, Kaija Hurlburt, Research Associate, Oceans Beyond Piracy Project, One Earth Future Foundation

Wednesday, 19 October

- 09:00–10:30 Panel discussion
- Moderator:* Craig Eason, Technical Editor, Lloyd's List
- Members:* Annika Engblom, Member, Swedish Parliament
- Michael Gilday, Rear Admiral (USN), Director of Operations, Joint Force Command Lisbon, NATO
- Peter Hinchliffe (OBE), Secretary General, International Chamber of Shipping and International Shipping Federation

Sascha Pristrom, Technical Officer, Sub-Division for Maritime Security and Facilitation, International Maritime Organization
Jon Whitlow, Secretary, Seafarers, Fisheries and Inland Navigation, International Transport Workers' Federation
11:00–12:30 *Presentation and Adoption of Conference Declaration*, Giles Noakes, Chief Maritime Security Officer, BIMCO
Presentation of the Seafarers Emergency Fund Foundation (SEFF), Kimberly Karlshoej, Director and Program Officer, TK Foundation
Closing Remarks, Neil Bellefontaine, Vice President (Academic), World Maritime University

Annex 2

**International Conference on Piracy at Sea (ICOPAS)
17–19 October 2011
Orkanen, Malmö Högskola, Malmö, Sweden**

Malmö Declaration

The participants at the International Conference on Piracy at Sea (ICOPAS):

HAVING EXAMINED the current scourge of piracy from a number of different angles;

AGREEING that the humanitarian and economic costs of piracy at sea and on land are unacceptable;

RECOGNIZING the need for the international community to coordinate efforts and for States to demonstrate political will not only to deter and suppress piracy, but also eliminate the root causes;

CALL ON the international community as a whole to:

- Support legal capacity building and maritime governance in affected States;
- Urge the United Nations, once the Transitional Federal Government (TFG) of Somalia claims its exclusive economic zone (EEZ), to create a “Maritime Enforcement Mandate” to protect Somali and international interests;
- Enhance cooperation among national, regional, and international law enforcement agencies and institutions;
- Support the progressive development of international law to overcome the constraints of national boundaries and jurisdiction in dealing with piracy;

- Maintain the strategic commitment of, and enhance coordination among, the multinational naval forces in the area;
- Establish better co-operation mechanisms and harmonize efforts by all international organizations involved;
- Foster the engagement of the TFG and promote the sustainable economic development of resources in the Somali EEZ;

URGE States to:

- Fulfil their responsibility to successfully prosecute and punish for the universal crime of piracy, regardless of the place where it is committed, and to criminalize conspiracy to commit piracy, with due regard to international human rights law;
- Cooperate with relevant international organizations to develop the infrastructure for prosecution and incarceration in affected States;
- Provide full Long Range Identification and Tracking (LRIT) details to the multinational naval forces and facilitate the use of vessel protection detachments (VPDs);
- Adopt, through the International Maritime Organization (IMO) and other international organizations, standardised training for seafarers to increase awareness of risks, and to cope with eventual piracy incidents;
- Coordinate with relevant human rights organizations in dealing with the issue of juvenile pirates;

CALL ON companies and individuals to:

- Facilitate prosecutions by assisting the International Criminal Police Organization (Interpol) response teams, where possible, in preserving evidence at the scene of the crime;
- Ensure the full and effective implementation of the latest version of Best Management Practices for Protection against Somalia Based Piracy (BMP);
- Maintain the position that seafarers should not be armed;
- Apply risk assessment methodologies, in accordance with IMO MSC Circular 1405, in determining the use of advanced security measures such as the employment of privately contracted armed security personnel (PCASP);
- Treat the employment of PCASPs as a palliative, and not an institutional, measure;
- Consider the growing number of technologies available, such as advanced radar systems and citadels, to mitigate risks;
- Implement the “good practice” guides for companies and welfare associations for the humanitarian support of seafarers and their families;
- Recognize the high level of anxiety that piracy incidents cause in seafarers and their families and
 - Conduct further research into the true human cost of piracy; and
 - Ensure that the psychosocial support provided meets the highest standards of quality and efficacy;

URGE all concerned to do their utmost to coordinate efforts in combating piracy and other violent crimes at sea.

Adopted in Malmö, Sweden on 19 October 2011.

Annex 3

**International Conference on Piracy at Sea (ICOPAS)
17–19 October 2011
Orkanen, Malmö Högskola, Malmö, Sweden**

Conference Summary and Conclusions

The participants at the International Conference on Piracy at Sea (ICOPAS) examined the current scourge of piracy from a number of different angles. The purpose of this document is to summarise the findings and conclusions of the conference.

Piracy and the World Public Order

The humanitarian and economic costs of piracy are unacceptable and there is no such thing as an acceptable level of piracy. The keynote speakers expressed serious concerns about the need for greater political unity and resolve to deter and defeat piracy at its roots.

The UN Convention on the Law of the Sea (UNCLOS) guarantees the freedom of navigation for all ships on the high seas and obligates all States to cooperate to the fullest possible extent in the repression of piracy on the high seas.

There is a clear growth in maritime crime in and off the waters of “weak” and “failed” States, with a particular increase in the use of violence everywhere. Seafarers should not have to be subjected to this.

There is a growth in “vessel hijacking” and “hostage taking”, in the Indian Ocean. This occurs now as much in the Gulf of Guinea as in the Indian Ocean and there is a worrying resurgence of attacks in East Asian waters. The hijacking of yachts, fishing vessels, and their respective crews, as well as tourists is increasing.

Conclusions on Restoring Public Order Through Law Enforcement

- States, in particular flag States, should extradite or prosecute persons suspected of having committed piracy and/or armed robbery at sea according to their obligations under international law and by respecting international human rights law. They should comprehensively criminalize piracy and armed robbery at sea under their domestic law.
- Greater political effort should be exercised to bring an end to the “Catch and Release” practice.
- Cooperation among law enforcement agencies and institutions should be enhanced; in particular, the interface between military forces, national police organizations, and International Criminal Police Organization (Interpol) must be promoted.
- Ship operators and crews should facilitate prosecutions by assisting Interpol response teams, where possible, in preserving evidence at the scene of the crime.
- Continued support should be given to UNODC and other efforts in legal capacity building including the promotion of prisoner exchange.
- There is a need to continue to develop innovative international tools to overcome the constraints of national boundaries and jurisdiction in dealing with piracy, i.e.,
 - Whilst regional capacity remains inadequate, prosecution and incarceration elsewhere should be exercised through, amongst others, national courts in the region or an “International Court with a Legal Mandate - ‘Piracy Chambers’” followed by post-trial transfer to Somalia, in accordance with international human rights law.
 - Concurrently, a “Maritime Enforcement Mandate” should be created within the Somali exclusive economic zone (EEZ) once established, to protect Somali and international interests.
- In general, a means must be found to strengthen maritime governance in weak and failed states to prevent piracy from breaking out.
- Regional judicial and enforcement training is essential to enhancing the capability to successfully prosecute pirates.

Conclusions on Suppressing Piracy: Operational and Economic Issues

- Operational:
 - Enhance co-ordination and de-confliction of coalition naval assets to effectively and efficiently mitigate the threat from Piracy.
 - Strive for greater integration of independent and regional forces and efforts—including the basing of maritime patrol aircraft.
 - Continue strategic commitment of the coalition navies in the area.
 - There should be full and total Flag State and Industry cooperation in order to provide full long range identification and tracking (LRIT) details to the

coalition navies and remove all obstacles to the use of military vessel protection detachments (VPDs) both for World Food Programme (WFP) escorts and indeed, for all vessels identified as vulnerable.

- Economic:
 - Improve supranational and regional initiatives external funding.
 - Establish better co-operation mechanisms and harmonize efforts by the Working Groups of the Contact Group on Piracy off the Coast of Somalia (CGPCS WG) with those of other organizations—including United Nations Development Programme (UNDP), United Nations Political Office for Somalia (UNPOS), United Nations Office on Drugs and Crime (UNODC), International Contact Group on Somalia (ICG), International Maritime Organization (IMO), African Union (AU), African Union Mission in Somalia (AMISOM), Indian Ocean Commission (IOC), European Union (EU), and North Atlantic Treaty Organization (NATO)—and develop one point of contact for all.
 - Promote Somali engagement and a better understanding of perspectives by looking at a bottom up rather than top down approach.
 - Establish the Somali EEZ now, at the same time as addressing related economic, social and environmental concerns; capacity building programmes have to address all of these simultaneously.
 - There is room to consider a Maritime Mandate that could be policed by the international community to fill the maritime law enforcement gap until a Somali legal and law enforcement structure is effectively established.

Conclusions on Piracy, Technological Developments, and Multisectoral Response

- While there is positive and close co-operation between industry and the multinational naval forces, industry must work harder to ensure full and effective implementation of Best Management Practices for Protection against Somalia Based Piracy (fourth ed.) (BMP4) in order to inform and help seafarers whilst transiting the region.
- There is a very clear requirement to use risk assessment methodologies across the spectrum of stakeholder interests—including whether to use armed guards.
- There are a growing number of technologies available to mitigate risk that can be considered from effective application of razor wire through advanced radar systems to effective citadels.

Conclusions on Privately Contracted Armed Security Personnel

- The consensus is very clear: seafarers should not be armed.
- IMO does not endorse the use of privately contracted armed security personnel (PCASP) and agreed that this is a matter for Flag states.
- Industry would prefer where risk analysis suggests the requirement for the use of a VPD, that they are provided by Flag states to enhance the legitimate use of such armed security and reduce potential liability.
- Industry also recognises that ship owners use PCASPs to discharge their duty of care to the seafarers who are employed on their vessels and as a result of risk analysis. However, there are other issues that need to be addressed such as regulatory, commercial, corporate social responsibility (CSR), and liability.
- The use of PCASPs should only be accepted as a temporary measure and the industry maintains this position in order to avoid their use becoming institutionalized and in order to avoid to the greatest possible extent a further escalation Somali piracy.
- Industry is of the view that self regulation, through the transparent due diligence operations of developing maritime security accreditation organizations and the implementation by PCASPs of guidelines provided in IMO MSC Circular 1405, might be sufficient for the short term.
- If the application of the guidelines provided in IMO MSC Circulars 1405 and 1406 proves ineffective, then regulation may have to be addressed.
- It was agreed that accurate and extensive reporting of any incident in which PCASPs acted to protect the vessel and crew is of great importance in assessing the effectiveness of this temporary measure.

Conclusions on the Humanitarian Response to Piracy at Sea

- The potential for being involved in a piracy attack creates a high level of anxiety in many seafarers and their families.
- Greater and more accurate reporting of all piracy incidents is required.
- There is a growing understanding of the actual psychological impact of piracy on seafarers and their families—the human cost of piracy on seafarers' and their families should be further researched.
- The “good practice” guides for companies and welfare associations for the humanitarian support of seafarers and their families should be implemented.
- “Good practice” guidance and appropriate training for responders should be continued and fully implemented a database of such responders should be established.
- There is a requirement for evidence based and appropriately timed post release care/support.
- Psychosocial supports that are designed and implemented must be rigorously researched to ensure quality and efficacy of the highest standards.

- Standardised training for seafarers to survive piracy and increased awareness of the risks involved is essential.
- Organisations seeking to support seafarers and their families are encouraged to work together so that good practice can be affirmed and reinforced.
- There is a need to coordinate with humanitarian organizations in dealing with the issue of juvenile pirates.

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International Conference on Piracy at Sea: Keynote Address

Efthimios E. Mitropoulos

Excellencies, heads of international organizations, admirals, WMU President, distinguished participants, lecturers, media representatives and students, ladies and gentlemen.

When IMO was established in 1948, it was unthinkable, by any stretch of the imagination on the part of the founding fathers, that 60 odd years later, the Organization would direct its attention and spend its time and resources in dealing with unlawful acts at sea. And yet this has become the reality starting in the late 1970s, when the Organization was forced, owing to political problems in eastern Mediterranean to consider cases of barratry, unlawful seizure of ships and their cargoes and other forms of maritime fraud; moving on to consider piracy and armed robbery against ships in 1982; terrorism threatening shipping in 1985/1988; and illicit drug trafficking, stowaway cases and illegal migrants moving by sea over the last two decades.

Of all these worrying developments, the escalation of piracy in recent years, in particular off the coast of Somalia and in the wider expanse of the western Indian Ocean, has been a matter of great concern to the entire maritime community and, indeed, has become one of the rare maritime issues that has made headlines in the general media attracting the attention of a global audience. The severity of the situation is such that IMO has made combating piracy a central theme of our work this year—and I congratulate the organizers of this Conference for their timely and appropriate initiative to choose “piracy” as the topic of the meeting.

I am very pleased that the general theme of the Conference is supplemented by the sub-title “Save our Seafarers”—indeed, it is for them, in the first place, and with their plight in mind that we do what we do to stem the menace.

The reality, of course, is that piracy, as it presents itself off Somalia nowadays, is too complex and has become too entrenched for any one entity to deal with it effectively. The United Nations, Governments acting collectively or individually,

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political and defence alliances, shipping companies, ship operators, ships' crews, among others, all have a crucial part to play if shipping is to be rid of this crime and the integrity of strategically important shipping lanes is to be maintained. What is needed is a collective effort, which explains why IMO chose "Piracy: Orchestrating the response" as its theme for World Maritime Day 2011.

Even before the year started, IMO, in collaboration with industry and seafarer representative organizations, devised a multi-faceted action plan, designed to address the problem at several levels. Although the waters off the coast of Somalia and in the wider Indian Ocean constitute the current piracy "hot spot", the action plan agreed draws heavily on the Organization's considerable experience of tackling piracy in other parts of the world, most notably in the Straits of Malacca and Singapore and in the South China Sea.

The plan focuses on the achievement of six main objectives:

- One, to increase pressure at the political level to secure the release of all hostages being held by pirates;
- Two, to review and improve the relevant IMO guidelines to Administrations and seafarers and promote compliance with industry best management practices and the recommended preventive, evasive and defensive measures ships should follow;
- Three, to promote greater levels of support from, and coordination with, navies;
- Four, to promote anti-piracy coordination and co-operation procedures between and among States, regions, organizations and industry;
- Five, to assist States to build capacity in piracy-infested regions of the world (and elsewhere) to deter, interdict and bring to justice those who commit acts of piracy and armed robbery against ships; and
- Six, to provide care for those attacked or hijacked by pirates, and for their families.

I will not go into too much detail here about the action plan itself, suffice it to say that it has backing at the highest level, and was launched at IMO Headquarters in the presence of UN Secretary-General Ban Ki-moon and the Executive Heads of both the World Food Programme and the United Nations Office on Drugs and Crime, with which IMO has established partnerships to ensure, with the support of the EU and NATO, delivery of humanitarian aid to Somalia, and to help establish and strengthen anti-piracy legislation in countries in the region. Present were also representatives of the diplomatic community in London and senior officials from the shipping industry and seafarers' organizations—which demonstrates the wide interest and seriousness with which the problem is being addressed in international circles.

Furthermore, in his own message to mark World Maritime Day on 29 September 2011, Mr. Ban once again stressed his concern over the situation, when he said "The international community must do more to combat this lawlessness, not only off the coast of Somalia, in the Gulf of Aden and in the Western Indian Ocean, but anywhere in the world." I am sure by this he meant the Gulf of Guinea, theatre of several pirate attacks recently.

We are seeking solutions in three distinct time horizons. In the immediate term, our aim is to contain piracy, thwart pirate attacks and punish those responsible for such attacks; in the mid-term, our strategy is to undermine organized crime gangs that plan and mastermind pirate operations and make it harder for them to engage in, and conduct, such operations; while the long term solution should be for the international community to help the people of Somalia to rebuild their country, including establishing law and order conditions such that crime will no longer be a preferred option for several of them.

Despite the number of attacks overall continuing to cause concern, there is, nevertheless, some cause for cautious optimism. The percentage of successfully concluded attacks—meaning that the ships attacked have fallen in the hands of pirates—has dropped, from more than 40 % historically, to less than 20 % this year—testimony, no doubt, to the effectiveness both of the naval presence in the region and the application of best management practices developed by the industry itself. From a peak of 31 ships with a total of 714 seafarers in the hands of pirates in February 2011, the number of those held hostage by October the same year has reduced to less than half: 316 seafarers on 15 ships—although even one seafarer in captivity is one too many! And, of course, this relatively good news should not allow any room for complacency, especially now that the monsoon period that has kept the pirates at bay for some time has come to an end—on the contrary, we should intensify our efforts to stem the unacceptable phenomenon that piracy presents today.

One IMO initiative, that is helping to build a solid regional infrastructure to tackle the problem successfully in the medium to long term, is the Djibouti Code of Conduct. This has now been signed by 18 States, each of which has pledged to co-operate in the implementation of measures aimed at suppressing the scourge, including in the investigation, arrest and prosecution of pirates; the interdiction and seizure of suspect ships; the rescue of ships, persons and property subject to piracy and armed robbery and the facilitation of proper care, treatment and repatriation of piracy victims; and in sharing operations—both among signatory States and with navies from countries outside the region; and the sharing of information.

A Project Implementation Unit was established within the IMO Secretariat in April 2010 to coordinate and manage the execution of relevant capacity-building activities aimed at promoting effective implementation of the Djibouti Code of Conduct. These activities are being funded by a Trust Fund established by IMO specifically for the purposes of the Djibouti Code.

The Implementation Unit is currently focusing on the development of maritime situational awareness within the signatory States; exchanging piracy-related information via three regional counter-piracy information sharing centres recently commissioned in Dar es Salaam, Mombasa and Sana'a; establishing a regional training facility in Djibouti; reviewing national legal frameworks and helping the development of national legislation to prosecute pirates; and assisting regional States to develop their coast guard capabilities. Training and assessment missions to the region are also being conducted, with more planned for next year.

It is unrealistic to expect IMO alone to provide a comprehensive solution to the problem of piracy off the coast of Somalia—particularly since, although it manifests itself at sea, its roots are to be found ashore. Nevertheless, through our action plan and other initiatives, such as the Djibouti Code, we feel confident we will be able to make a difference where the problem is being most acutely felt—at sea.

There are few shipping nations whose ships or seafarers have been immune from the despicable crimes that are taking place in the western Indian Ocean nowadays. It is, therefore, crucial that the political will among those Governments that have the potential to make a difference is translated into their acting in a manner that matches their political ambition and the severity of the issue demands. Resources (in the form of naval vessels and military aircraft) being made available; legislation to ensure that pirates do not escape prosecution being expeditiously adopted and rigorously enacted; and strongly recommending that ships flying their flag comply, while sailing through piracy-infested areas, with the best management practices and, when transiting the Gulf of Aden, keep within the internationally recommended corridor—all these should be high on the agenda of, and acted upon by, Governments and all other entities affected by piracy as it presents itself in the western Indian Ocean these days.

Of course, much has already been done to counter the threat, as you will hear during this Conference. But more—much more—still needs to be done. This conference will do a great deal to help identify the future strategies and levels of commitment that will be needed to stem this unacceptable tide. These range from ‘front line’ operations such as those being carried out with great effect by the combined naval forces operating in the region, to the less obvious, but no less important, work being undertaken to address the complex jurisdictional issues surrounding piracy. Technological innovations to help stave off pirate attacks and efforts to trace, and then interrupt, the flow of illegal money emanating from pirate activities are further examples of what a multi-faceted and complex issue this has become.

These 3 days you will hear a lot and analyse as many issues surrounding piracy off Somalia: “Mother ships”, “human shields”, “citadels”, armed guards (a generic form for “privately contracted armed security personnel on board ships”, “vessel protection detachments” even “UN blue berets”) have become so much in vogue recently that cannot surely escape the attention of a conference like this.

And I note, with satisfaction, that a considerable portion of this conference will be devoted to addressing the human side of piracy when, among other things, we shall learn about efforts being made to ensure that proper medical and psychological assistance is available to the victims of pirate attacks and to their families. This is an aspect that has, perhaps, been somewhat overlooked until relatively recently and it deserves our full attention.

As I alluded to, when referring to the recently reported falling percentage of attacks that end up with ships being taken by pirates, some success in thwarting pirate attacks can be claimed. But the fact that the incidence of pirate attacks, overall, still shows little sign of weakening has only served to strengthen our

determination to meet the challenge. We believe that we can use the experience gained and the successes achieved in reducing piracy elsewhere in the world to good effect in the current arena too—but, as our World Maritime Day theme clearly suggests, to do so requires a well-devised and coordinated response.

No effort should be spared to alleviate this unacceptable situation. Shipping companies must ensure that their ships rigorously apply the IMO guidance and the industry-developed best management practices in their entirety, so that, when venturing into high-risk areas, they comply with all the recommended measures. No ship is invulnerable, in particular those with relatively low freeboards and slow steaming speeds. And, as I referred to earlier, Governments need to back up their oft-stated concern over the situation by deploying military and other resources commensurate, in numbers and technology, with the scale of the problem and with a realistic chance of dealing with it effectively.

As the statistics so bleakly indicate, piracy and armed robbery against ships remain real and ever-present dangers to those who use the seas for peaceful purposes. So long as pirates continue harassing shipping, hijacking ships and seafarers, we are neither proud of, nor content with, the results achieved so far.

Ladies and gentlemen, let me conclude by thanking the World Maritime University for organizing such an insightful and stimulating conference, which, I am confident, will highlight that a great deal more needs to be done if the ultimate goal of consigning piracy to the realms of history is to be achieved. We hope that our choice of theme for 2011 will continue to provide an appropriate rallying point around which all those who can make a difference can focus their efforts—now, and into the future.

A recent report has put the annual cost of piracy to the world economy between 7 and 12 billion US dollars. Shocking though this is, it is the human cost that, to my mind, is far worse and which should concern us above all else. Many seafarers today go about their daily business in ships sheathed in razor wire, in a state of constant wariness as they run the gauntlet of pirate gangs. Most, thankfully, sail undisturbed by pirates into more hospitable waters, but others are far less fortunate. This is a tragic situation for them and their families, and one from which we can take no comfort whatsoever.

And, as the year we have dedicated to orchestrating the response against the scourge of modern-day piracy draws to a close, I think it appropriate for us to remember the very real humanitarian cost of piracy. Our thoughts and prayers are with those seafarers, who, at present, are in the hands of pirates. May they all be released unharmed and returned to their families soon.

Ladies and gentlemen, let me wish you every success in this conference and let us all, during these three days, consciously undertake to strengthen our collective resolve to eradicate this appalling and costly crime-wave.

Piracy: Armed Robbery, Kidnapping, Torture and Murder at Sea

Torben C. Skaanild

1 Introduction

Before addressing the challenging issues of today's topic, I wish to officially acknowledge the significant contributions from the International Maritime Organization (IMO) and especially its Secretary General, Mr. Mitropoulos, for the untiring efforts in bringing the menace of the variety of criminal activities at sea to the attention of governments but also for striving to find lasting solutions to these unacceptable and unlawful activities. In an effort to reach a wider audience and enhance public attention, the IMO launched two important campaigns starting with the "Year of the Seafarer" in 2010, to pay tribute to the world's seafarers for their unique contribution to society and in recognition of the risks they shoulder in the execution of their duties in an often hostile environment and by titling its 2011 World Maritime Day theme "Piracy – Orchestrating the Response", with a number of significant and ambitious objectives. I applaud the Secretary General, his staff and IMO in general for taking these initiatives and for so tangibly showing concern for the well-being of our seafarers and for the shipping industry in general.

I also wish to applaud the President of the World Maritime University (WMU) and his staff for contributing to this movement by arranging this most timely International Conference on Piracy at Sea, and for providing us all with the opportunity to address the variety of challenges facing the ship operators, the seafarers and most certainly also the international community and world trade. Allow me also to draw attention to the Save Our Seafarers (SOS) campaign that was launched earlier this year and which is now supported by 28 industry organisations.

As an employer, the ship-owner, ship-operator or manager has an obligation to offer a safe and secure working environment ashore as well as at sea, however, vessels trading internationally are faced with a number of additional challenges.

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The master is the representative of the employer and must ascertain that the ship is safe and secure, and he is largely dependent for protection against criminal actions, including piracy, on individual states for protection in the territorial waters through which the ship passes, or the international community in respect of trading on the high seas. I want to be very clear that the views and policies held by the Baltic and International Maritime Council (BIMCO) serve the primary purpose of protecting the crew, ship and cargo, against such criminal activity, and most of all the crew, a fundamental view, I believe can be shared by all!

2 The Human Cost of Piracy

In 2010, some 26 % of seafarers attacked by armed pirates were ultimately taken hostage. Of these, 59 % faced increased levels of violence, including abuse and forced involvement in mothership operations.

The start position of the industry on the issue of piracy, from the outset then, is that the freedom of navigation on the high seas is enshrined in the United Nations Convention on the Law of the Sea (UNCLOS), leaving contracting governments with an obligation to cooperate to the fullest possible extent in the repression of piracy on the high seas. Despite the deployment of naval assets to affected areas however, by contracting and other states, the current anti-piracy resources continue to be inadequate to deter and defeat piracy.

3 The Economic Cost of Piracy

The international community should also recognize that the cost of piracy is rising not just in the awful cost to seafarers and their families but also in real financial terms. The world is faced with a growing geo-political problem that is the vital interests of all trading nations to address. For example re-routing a tanker from Saudi Arabia to the USA via the Cape of Good Hope means 2,700 extra miles on the voyage. Over a year this reduces the number of voyages the ship can do from six to five round trips (a 26 % drop). Additional fuel costs over the year would be \$3.5 million. Reflecting this, the Suez Canal Authority has reported that only 76 laden very large crude carriers and suezmaxes have transited the Suez Canal so far this year, suggesting around 100 transits over the full year 2011. By comparison, more than 220 very large crude carriers and suezmaxes were reported to have passed laden through the canal on voyages from the Middle East in 2008—representing a fall of more than 50 % from 2008 to 2011.

4 The Problems

I would like to: first, identify some of the problems facing the international community and the industry because of the rapid expansion of piracy attacks and further, look at the issues facing BIMCO members and others involved in the transportation of goods by sea; second, identify what changes the major stakeholders need to be considering and implement; and finally outline the main effort of our current strategy.

Firstly there are some worrying global trends that are identifiable today; most of these are well known. There is a clear growth in illegal maritime activities in/off coastal failed/weak states and such trends particularly include:

- Growth in the use of violence—everywhere. Why should seafarers be subjected to this on a daily basis?
- Growth in “vessel” and “people” hijacking, i.e., vessel and crews in the NW Indian Ocean and also yacht crews and now tourists. This occurs now as much in the Gulf of Guinea as in the NW Indian Ocean. There is a worrying return of events in the South China Sea.
- Growth in fuel hijacking from product tankers. In West Africa this is a particularly swiftly developing crime, as is the taking of tugs in the South China Sea.
- Growth in lack of reporting (except NW Indian Ocean) and this is exacerbating the lack of reaction by governments! If incidents are not reported then the industry cannot address the problem with governments realistically.

Piracy, armed robbery, kidnapping, torture and murder committed at sea continue therefore to plague the shipping industry. They place the most critical shipping industry resource—the seafarer—in life-threatening and dangerous situations and could seriously risk the continued ability to trade the NW Indian Ocean and quite possibly elsewhere. There has to date however been a seeming lack of political will and military robustness to address issues such as the arrest and prosecution of pirates and to take effective action against the use of mother ships.

Recent events might put this last into question after the robust action by the UK and the USA in the recent incident of the *Monte Cristo*. Also the recent series of developments and calls in the EU and Italy are at least positive steps in the right direction albeit with some worrying issues attached. The EU call for a land based, possibly UN controlled regionally located, military guard force to provide vessel protection detachments (VPDs) is something that BIMCO and other organizations have been calling for, for some time—particularly for the protection of World Food Programme (WFP) vessels. Indeed the Italian government has recently agreed to provide such a force for Italian flagged vessels but which the owner will have to pay for. Of course paying for military protection raises exactly the same issues as the payment of privately contracted armed security personnel (PCASP). Should the industry have to pay for its protection on the high seas? However, as many ship operators already resort to placing armed guards on board and as the placing of military guards from the flag state on board resolves a number of critical liability

issues for the master as well as the ship operator, at least we assume so, the cost would need to be looked at in this perspective, although we fundamentally believe that it is the duty of governments to protect international shipping trading in innocent passage through territorial waters and on the high seas.

The second main problem is one of circular causation in failed/weak states. By this I mean the typical cycle that needs to be broken (to deal with piracy) in that most failed and weak states are in desperate need of assistance with capacity building and financial investment. However, there is no investment because of lack of trust; no investment leads to economic instability; economic instability leads to political and military instability; and political and military instability leads to lawlessness, lack of trust and lack of investment.

There will, therefore, be no solution to maritime crime prevention until this conundrum is resolved. One cannot fight violent illegal maritime activity without law enforcement assets. It is well accepted that the root causes of Somali piracy are to be found ashore and that it will require resolve and robust international intervention to restore law and order; but without such determination by the international community, it is expected that piracy will continue unabated—as whilst there is lawlessness ashore there will always be lawlessness at sea. Indeed, this can be seen in the proliferation in other areas such as in the Gulf of Guinea and the South China Sea.

The third problem area is the inability of some within the shipping industry to address issues from a practical and pragmatic position and take full responsibility for their own risk. For example, some ship owners are employing PCASP, when the risk would seemingly not support their use and are thus contributing to the proliferation of private maritime security companies (PMSCs) unnecessarily and indeed risking the long term use of PCASP. This development is a direct consequence of the inaction by governments and ship operators acknowledging their responsibility for the crews they employ, and must be seen as a temporary measure until governments fulfill their obligations under UNCLOS. Under no circumstance should this prompt governments to be less alert and reactive to piracy by reducing assets in the area. On the contrary! The international community has developed international regulatory instruments and treaties for governments to fulfill and governments must acknowledge these obligations on their part!

Another example is that some ship masters are using citadels in inappropriate circumstances and may thus be exposed to citadels being broken into, with subsequent risk to crew and ship. In October 2011 a vessel was successfully boarded but successfully avoided capture because of the use of a citadel—this is the wrong way round! The objective should be to prevent boarding through effective implementation of the BMP.

5 BIMCO Positions

These problems are seen by BIMCO to manifest themselves in certain key areas and BIMCO takes the following positions on what we see as the major issues that need to be addressed by the many stakeholders involved.

5.1 Arrest and Prosecution

Piracy is a crime, and in accordance with UNCLOS and the Convention for the Suppression of Unlawful Acts of Violence against the Safety of Maritime Navigation 1988 (SUA) it is subject to universal jurisdiction. To ensure effective arrest, prosecution and incarceration of pirates, all states should implement and enforce the relevant international conventions in their national laws, as requested by four successive UN Security Council Resolutions. All entities involved in the operation of ships on the high seas should cooperate with the relevant agencies in securing a steady flow of information and intelligence, contributing to the successful arrest and prosecution of pirates.

5.2 BMP

For the majority of ships the effective implementation of the industry developed Best Management Practices (BMP) measures (onboard non-lethal security measures, other pre-voyage preparations, group transits and the option to use national military convoys where available) whilst transiting the piracy high risk areas of the Gulf Of Aden (GOA) and the NW Indian Ocean, is currently sufficient to deter and repel a pirate attack.

5.3 Citadels

BIMCO only recommends the use of citadels as a potential rescue option when the master has established and can maintain communications with a nearby naval unit.

5.4 Armed Guards

Factors such as routing, the ship's design, speed or planned operations may make the ship so vulnerable, that the use of armed guards becomes a relevant option for

ship operators to consider. Their use may, however, lead to an escalation in the use and type of weaponry exposing both the ship and ship's crew to enhanced risk; moreover, many commercial and legal (liability) implications remain unresolved. These risks should be addressed in the ship's risk analysis. If ship operators do find that implementation of effective BMP measures, as recommended by the industry, do not provide sufficient risk mitigation, BIMCO advocates the use of armed, government provided, vessel protection detachments as the preferred solution. Contracting with a private maritime security company to provide armed services should be a measure of last resort to be considered only after the PMSC has been subjected to a detailed due diligence process on the company, its services, and after having obtained the permission of the flag state; all in accordance with IMO MSC.1 Circulars 1405 and 1406. Recommending caution and drawing attention to the continued unresolved legal liability issues, BIMCO respects the decision of companies who are forced into this choice due to the lack of any other alternative.

5.5 *Ransoms*

BIMCO believes that the option of paying ransom for the release of the crew and ship is an owner's right and should not be hindered. Any restriction on this option leaves the owner and his crew severely exposed.

You will no doubt address and debate these issues at length during this conference, but I do not intend to expand on theme in detail save to say that the practicalities of addressing them need to be viewed through what we at BIMCO see as some essential paradigm changes. BIMCO, therefore, calls upon all stakeholders involved to comply with (or calls upon all the conference participants to discuss?):

- Requirement for regional governments to start implementing the law as best possible and building trust to encourage investment, capacity building and development,
- Requirement for regional navies to support the efforts of the international forces to restore law and order—law enforcement on the high seas is an essential prerequisite for this to be successful,
- Requirement for all stakeholders to act as the catalyst for discussion on capacity building in order to acquire assets—industry stakeholders must also be involved,
- Requirement for the shipping industry to comply with common sense requirements of passive defence as outlined in BMP4 as a minimum—the insurance industry should reward this effort to both encourage it and, to be more transparent itself, and
- Requirement for international governments—particularly the major oil importers to “sniff the geopolitical coffee” or accept the consequences.

6 BIMCO's Strategy

BIMCO therefore will continue to address the issue of piracy with all stakeholders involved, in order to ensure that the international community provides the necessary political will and resources to protect seafarers and maintain safe and secure freedom of navigation on the high seas for its members. BIMCO will:

- Advocate at the Contact Groups on Piracy off the Coast of Somalia (CGPCS), IMO and other affected parties including direct contact with individual governments and government agencies for an appropriate governmental response to the threat of piracy as it unfolds in each region of the world,
- Advocate for the implementation of sufficiently robust action and national laws to facilitate the capture of pirates and removal of their supporting infrastructure (mother ships, shore side safe havens) including supporting the efforts by the UN Secretary General to establish options for potential new judicial mechanisms,
- Advocate for enhanced cooperation between naval forces in the area and the optimisation of all assets, including the use of UN VPDs for the World Food Programme, and
- Advocate that part of the solution to the piracy situation off the coast of Somalia lies ashore, and includes the establishment of effective local and regional Coast Guards. BIMCO will therefore explore all avenues, conventional or otherwise, to assist in this development.

7 BIMCO Roles in Combating Piracy

BIMCO fulfills this strategy by constantly advocating together with other industry associations for more robust governmental action while participating in numerous supranational and regional forums such as the UN CGPCS and IMO and at the same time provides practical advice to its members in conjunction with industry colleagues such as the BMPs and “From Capture to Release”.

8 Conclusion

I would just like to leave you with this final message: we must start to think of alternative approaches—however difficult politically and economically they may be. This will encourage the conference to look at as many options as it can to help resolve the problem by thinking laterally “outside the box”. Thank you very much for your attention.

Human Rights in Counter-Piracy Operations: No Legal Vacuum but Legal Uncertainty

Anna Petrig

1 No Legal Vacuum but Legal Uncertainty

The Security Council has set an ambitious goal for itself: the full and durable eradication of piracy.¹ In order to achieve this objective, it has amongst others set up an *ad hoc* legal framework authorizing States and regional organizations to take counter-piracy enforcement measures in Somali territorial waters² and on its mainland.³ The powers conferred by the Resolutions supplement the existing legal instruments to combat piracy on the high seas, such as the United Nations Convention on the Law of the Sea.⁴

Establishing security in the region should not compromise the freedom of the high seas and its most important component, liberty of navigation. To preserve the free flow of movement, the Security Council requested in Resolutions 1897 and 1950 that cooperating States take appropriate steps to ensure that the use of enforcement measures as authorized by the Resolutions “do not have the practical effect of denying or impairing the right of innocent passage to the ships of any third State”.⁵ However, a similar request preserving the individual liberties of piracy

The main ideas of this paper stem from two earlier publications: Geiss and Petrig (2011) and Duttwiler and Petrig (2009). This paper was submitted in October 2011 and reflects the state of law and practice at that time.

¹ UNSCR 1846, preambular para 10; UNSCR 1897, preambular para 13.

² UNSCR 1846, para 10; renewed by UNSCR 1897, para 7, and later by UNSCR 1950, para 7.

³ UNSCR 1851, para 6; renewed by UNSCR 1897, para 7, and later by UNSCR 1950, para 7.

⁴ United Nations Convention on the Law of the Sea, adopted 10 December 1982, 1883 U.N.T.S. 3 (hereinafter *UNCLOS*).

⁵ UNSCR 1897, para 10; UNSCR 1950, para 10.

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suspects subject to enforcement measures is absent from the respective Security Council Resolutions. The absence of a *caveat* that the human rights of piracy suspects must be respected is not unique to the counter-piracy Resolutions conferring broad enforcement powers against pirates and armed robbers at sea. Rather, it is reflective of the overall focus governing the counter-piracy legal framework. This framework clearly prioritizes the establishment of security and respect for liberty of navigation, rather than the individual rights of persons subject to the enforcement measures. Accordingly, neither the UNCLOS nor the mission-specific legal frameworks⁶ restrict the broad enforcement powers by explicitly stating whether and which human rights apply when exercising enforcement jurisdiction.

Even though the legal instruments governing counter-piracy operations do not explicitly mention the applicable human rights norms, enforcement powers cannot be exercised in a legal vacuum and *ad libitum*. Rather, their exercise is restricted by the application of general human rights law. This is insinuated by Resolution 1851 deciding that any measure based on the enforcement powers conferred by that Resolution “shall be undertaken consistent with applicable . . . human rights law”.⁷ However, it is submitted here that considerable legal uncertainty arises from the absence of an explicit declaration that human rights apply and a reference to specific individual liberties to be respected in counter-piracy operations since it is far from clear what the *applicable* human rights law is. This uncertainty in terms of applicability of human rights results mainly from two factors: firstly, counter-piracy enforcement powers are generally exercised extraterritorially. Secondly, enforcement measures have thus far mainly been taken at sea. In the following, the focus will be on what bases general human rights law, namely the European Convention on Human Rights,⁸ could apply in counter-piracy operations (Sect. 4). This is done after first providing a brief overview of the existing counter-piracy enforcement powers (Sect. 2) and demonstrating why we have to rely on general human rights law rather than on guarantees specifically tailored to counter-piracy operations (Sect. 3).

⁶ See, for example, European Union, Council Joint Action 2008/851/CFSP of 10 November 2008 on a European Union Military Operation to Contribute to the Deterrence, Prevention and Repression of Acts of Piracy and Armed Robbery off the Coast of Somalia, 2008 O.J. (L 301) 31–37 (EU) (hereinafter *EU Council Joint Action Operation Atalanta*).

⁷ UNSCR 1851, para 6.

⁸ Convention for the Protection of Human Rights and Fundamental Freedoms as Amended by Protocol No. 11, adopted 4 November 1950, 213 U.N.T.S. 222 (hereinafter *ECHR*).

2 Counter-Piracy Enforcement Powers

It is a threefold legal regime that governs enforcement powers against persons and ships allegedly having engaged in piracy and armed robbery at sea. A different legal framework applies depending on whether counter-piracy operations are carried out on the high seas, in Somali territorial waters or on Somali mainland.

On the high seas, enforcement powers are conferred and governed by the UNCLOS.⁹ Article 110 provides a right of visit: if reasonable grounds of suspicion exist that a ship is engaged in piracy, it may be stopped¹⁰ and boarded in order to verify the ship's right to fly its flag. If suspicion remains after the document check, a further examination on board the ship, i.e. a search of the boat and the crew, may be carried out with all possible considerations.¹¹ In cases where the suspicion has been confirmed, i.e. the vessel is identified as a pirate ship in the sense of Article 103 UNCLOS, the enforcement powers stipulated in Article 105 UNCLOS become available: the pirate ship or a ship taken and controlled by pirates may be seized, persons on board arrested and property on board seized.¹²

The UNCLOS enforcement regime only applies to the high seas.¹³ In order to combat piracy-like attacks occurring in Somali territorial waters, the Security Council had to remedy this geographical limitation. It did so by adopting Resolution 1846 which authorizes States and regional organizations to enter the territorial waters of Somalia and to use, within that area, all necessary means to repress acts of piracy and armed robbery at sea.¹⁴ Even though the Resolution allows the use "all necessary means" to repress piracy and armed robbery at sea, the authorization does not go beyond the enforcement measures stipulated in the UNCLOS. This follows from the authorization in Resolution 1846 specifying that enforcement powers are to be exercised "in a manner consistent with action permitted on the high seas with respect to piracy under relevant international law".¹⁵ Thus, under Resolution 1846,

⁹ The Convention on the High Seas, adopted 29 April 1958, 450 U.N.T.S. 11 (hereinafter *Convention on the High Seas*) contains counter-piracy rules similar to the UNCLOS. Since the Security Council Resolutions mainly refer to the UNCLOS as the legal framework applicable to combating piracy and armed robbery at sea (see, for example, UNSCR 1950, preambular para 6), the analysis at hand is limited to this treaty.

¹⁰ The right to stop a vessel is not explicitly stated in Article 110 UNCLOS. However, the right of visit implicitly comprises the right to stop a ship in order to visit it: United Nations (1956), pp. 283–284.

¹¹ For further details on the right of visit, see Geiss and Petrig (2011), pp. 55–58.

¹² *Id.*, p. 56.

¹³ See introductory sentence of Article 105 UNCLOS allowing for the seizure of a pirate ship, arrest of the persons and seizure of the property on board: "On the high seas . . . every State may . . ."; for Article 110 UNCLOS, the right of visit of a ship engaged in piracy, this follows from the fact that according to Article 101 UNCLOS piracy can *per definitionem* only be committed on the high seas and in places outside the jurisdiction of any State.

¹⁴ UNSCR 1846, para 10; renewed by UNSCR 1897, para 7, and later by UNSCR 1950, para 7.

¹⁵ *Id.*

nothing more is allowed than pursuing, stopping, boarding, searching and/or seizing a vessel, seizing the property on board and/or arresting persons on board.¹⁶

In order to allow counter-piracy measures not only in Somali territorial waters but also on its mainland, Security Council Resolution 1851 authorized States and regional organizations “to undertake all necessary measures that are appropriate in Somalia, for the purpose of suppressing acts of piracy and armed robbery at sea.”¹⁷ In juxtaposition to Resolution 1846, enforcement powers that can be used on Somali mainland are not in any way linked or confined by the type of enforcement measures allowed under the UNCLOS regime. Rather, in line with the common understanding of the wording “all necessary means”, Resolution 1851 authorizes the use of a broad range of measures, including military force.¹⁸

Taking enforcement measures against persons suspected of engaging in piracy or armed robbery at sea potentially interferes with their individual rights and freedoms, namely the right to life and liberty. This begs the question whether the exercise of counter-piracy enforcement measures, such as searches, seizures, arrests and holding in custody, is limited either by general safeguards applicable to maritime interception operations and/or by general human rights law.

3 No Explicit and Specific Legal Restrictions on Counter-Piracy Enforcement Powers

The exercise of counter-piracy enforcement powers is potentially limited by two sets of legal provisions: firstly, by general safeguards applicable to maritime interception operations, and secondly, by human rights law. Neither the UNCLOS nor the counter-piracy Security Council Resolutions mention general safeguards applicable to enforcement measures, such as necessity and proportionality in the use of force or the issuance of warnings before force is used.

The SUA Protocol 2005, which entered into force on 28 July 2010,¹⁹ added a boarding provision to the SUA Convention²⁰ which describes safeguards in case a State party takes measures against another vessel based on that provision.²¹ However, the provision only applies if the law-enforcing State and the flag State of the suspected vessel are State parties to the SUA Convention and SUA Protocol 2005.²²

¹⁶ Geiss and Petrig (2011), pp. 76–77.

¹⁷ UNSCR 1851, para 6; renewed by UNSCR 1897, para 7, and later by UNSCR 1950, para 7.

¹⁸ Geiss and Petrig (2011), p. 83.

¹⁹ International Maritime Organization (2011).

²⁰ Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, adopted 10 March 1988, 1678 U.N.T.S. 221 (hereinafter *SUA Convention*).

²¹ Article 8*bis*, para 10, SUA Convention as amended by the SUA Protocol 2005.

²² See, for example, Article 8*bis*, para 5, SUA Convention as amended by the SUA Protocol 2005.

Since Somalia is not a party to these two instruments,²³ the boarding provision containing important safeguards does not apply.

International case law pertaining to the legal confines of counter-piracy enforcement measures seems not to exist. Moreover, jurisprudence on the legal confines of enforcement actions on sea in general is scarce. In *The M/V “Saiga” No. 2*, for example, the International Tribunal for the Law of the Sea stressed that in the absence of express provisions on the use of force in the UNCLOS, general international law and considerations of humanity require that “the use of force must be avoided as far as possible and, where force is unavoidable, it must not go beyond what is reasonable and necessary in the circumstances”.²⁴

It is disputed whether safeguards applicable to maritime interception operations stemming from case law and treaties²⁵ are reflective of pre-existing customary law or whether they only indicate emerging customary standards. Either way, they remain rather vague and provide little guidance for specific operations.²⁶ Furthermore, the safeguards are commonly aimed at the protection of ships, their cargo and the freedom of navigation rather than the preservation of individual rights of persons subject to law enforcement measures.²⁷ Against this background, general human rights law seems to be the primary source to infer limits on the exercise of enforcement powers.

UNCLOS is silent when it comes to the application of human rights to counter-piracy enforcement operations. Similarly, Resolution 1846 (as renewed by Resolutions 1897 and 1950) does not explicitly limit enforcement actions by declaring that specific individual rights and liberties are applicable. Rather than focusing on the human rights of persons subject to counter-piracy enforcement measures, Resolutions 1897 and 1950 stress that cooperating States take appropriate steps to ensure that the use of enforcement measures as authorized by the Resolutions “do not have the practical effect of denying or impairing the right of innocent passage to the ships of any third State”.²⁸ The only Resolution mentioning human rights law in relation to the exercise of counter-piracy enforcement powers is Resolution 1851. However, by stipulating that all enforcement measures taken by virtue of the authorization in the Resolution must be “consistent with *applicable*

²³ International Maritime Organization (2011).

²⁴ International Tribunal for the Law of the Sea, *Saint Vincent and the Grenadines v. Guinea* (The M/V “Saiga” (No. 2) Case), Judgment of 1 July 1999, para 155.

²⁵ In addition to Article 8*bis*, para 10, SUA Convention as amended by the SUA Protocol 2005, see, for example, Article 22, para 1 of the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, adopted 4 August 1995, 2167 U.N.T.S. 3, or Article 22 of the Agreement Concerning Co-Operation in Suppressing Illicit Maritime and Air Trafficking in Narcotic Drugs and Psychotropic Substances in the Caribbean Area, available online: www.state.gov/s/1/2005/87198.htm.

²⁶ Geiss and Petrig (2011), p. 100.

²⁷ Guilfoyle (2009), pp. 266–267.

²⁸ UNSCR 1897, para 10; UNSCR 1950, para 10.

international humanitarian and human rights law”, it does not provide a concrete answer regarding which specific confines apply.²⁹ It rather refers to the general conditions and requirements for the application of human rights. However, these conditions and requirements are not well-established when it comes to enforcement measures taken extraterritorially in a maritime context.

4 Applying General Human Rights Law to Restrict Enforcement Powers

Most enforcement measures against alleged pirates and armed robbers at sea are taken by foreign forces in areas not under their sovereignty, i.e. either in Somali territorial waters or on the high seas, and thus, extraterritorially. The extraterritorial application of human rights has been confirmed by the jurisprudence of various international and regional courts and human rights bodies, such as the International Court of Justice,³⁰ the Human Rights Committee³¹ and the European Court of Human Rights.³²

Even though the case law on the matter remains casuistic, a general requirement for the extraterritorial application of human rights can be identified, that of “effective control over a person” or “effective control over a territory”. Yet, the jurisprudence does not provide a clear answer regarding the meaning of the two criteria in the maritime context. As an example, the following examination of the case law of the European Court of Human Rights discusses whether control over territory or persons can be established at all in law enforcement operations at sea and what this would require. Furthermore, other grounds for the extraterritorial application of human rights considered by the European Court of Human Rights, namely the Flag State Principle, will be examined. In order to assess whether a person is within the jurisdiction of the enforcing State—the requirement stipulated in Article 1 ECHR to apply the rights and liberties of the Convention—a distinction is drawn between the application of human rights to enforcement measures carried out on board a law enforcement vessel and to enforcement powers exercised beyond its railing.

²⁹ UNSCR 1851, para 6 (emphasis added).

³⁰ See, for example, the following cases of the International Court of Justice: *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, Advisory Opinion, 9 July 2004, I.C.J. Reports 2004, p. 180; and *Case Concerning Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)*, Judgment of 19 December 2005, I.C.J. Reports 2005, p. 243.

³¹ See, for example, United Nations, Human Rights Committee, General Comment No. 31, para 10.

³² For the European Court of Human Rights see case law below Sects. 4.1 and 4.2.

4.1 *Enforcement Measures Carried Out on Board a Law Enforcement Vessel*

For enforcement measures taken on board a military or government vessel, such as holding a piracy suspect in custody or making a transfer decision, the human rights obligations of the enforcing State are applicable based on three different titles.³³

4.1.1 The Flag State Principle

On board law enforcement vessels, human rights law applies *qua* the Flag State Principle. According to the second sentence of Article 91, paragraph 1 of UNCLOS,³⁴ ships have the nationality of the State whose flag they are entitled to fly. Among other functions, the nationality of a ship indicates which State is permitted under international law to exercise its jurisdiction.³⁵ Thus, the nationality of a ship denotes a legal relationship between the vessel and its flag State in that the vessel is attached to the flag State that has the right and duty to effectively exercise its jurisdiction to prescribe, enforce and adjudicate over the vessel.³⁶

In various cases, the European Court of Human Rights found that enforcement measures taken on board a ship or aircraft flying the flag of a State party to the ECHR as an exercise of *de jure* jurisdiction of that respective State. In *Banković v. Belgium et al.*, for instance, it held:

Additionally, the Court notes that other recognized instances of the extra-territorial exercise of jurisdiction by a State include cases involving the activities . . . on board craft and vessels registered in, or flying the flag of, that State. In these specific situations, customary international law and treaty provisions have recognized the extra-territorial exercise of jurisdiction by the relevant State.

The Court therefore requires that activities on board a vessel be carried out in conformity with the standards set out in the ECHR.³⁷

4.1.2 Equation of Ships and Territory

The application of human rights obligations can also be based on the “quasi-territoriality” of military and government ships. In the *Lotus* case, the Permanent Court of Justice stated that any act occurring “on board a vessel on the high seas

³³ Geiss and Petrig (2011), p. 104.

³⁴ The second sentence of Article 5, para 1, Convention on the High Seas is similarly worded.

³⁵ König (2008), para 16.

³⁶ König (2008), para 17.

³⁷ *Banković v. Belgium et al.*, app. no. 52207/99, Grand Chamber Decision of 12 December 2001, para 73. See also, for example, *Al-Saadoon and Mufdhi v. United Kingdom*, app. no. 61498/08, decision of 30 June 2009, para 85.

must be regarded as if it occurred on the territory of the State whose flag the ship flies.”³⁸ Accordingly, the body of law in force in the territory of the State whose flag the vessel flies is applicable to acts and omissions on board the respective vessel.³⁹ Therefore, international human rights instruments ratified by the flag State apply on board its counter-piracy enforcement vessels.

However, equating ships and territory as the same for application of law is often regarded as outdated and, in light of the flag principle, perceived as an obsolete concept.⁴⁰ As Brownlie stated correctly “[a]bstract discussion as to whether ships . . . are ‘territory’ lacks reality, since in a legal context the word denotes a particular sphere of legal competence and not a geographical concept.”⁴¹ Through the Flag State Principle, the “sphere of legal competences”, specifically the right and duty to exercise prescriptive, enforcement and adjudicative jurisdiction, applies on board a ship as it does within a State’s territory. Hence, the concept of quasi-territoriality seems indeed obsolete.

4.1.3 “Effective Control Over Persons”

In addition, human rights can also be made applicable to enforcement measures taken on board a law enforcement vessel based on the common criteria for the extraterritorial application of human rights: “effective control over persons”. Warships or governmental vessels, in the sense of Article 107 UNCLOS, are largely made up by State agents exercising effective control over the ship and thereby also over piracy suspects held in custody on board.⁴²

Whether the application of human rights to enforcement measures taken on board a law enforcement vessel is based on the flag principle, on the fiction of territoriality of a ship or on the “effective control over persons”-criterion, leads to the same result. Persons suspected of having engaged in piracy or armed robbery at sea and who are held on board a law enforcement vessel are protected by the human rights law in force in the flag State. Thereby, it does not matter whether the law enforcement vessel is navigating on the high seas or within the territorial waters of Somalia or any other State.⁴³

³⁸ *The Case of the S.S. “Lotus”*, Judgment of 7 September 1927, Collection of Judgments, Series A, No. 10, p. 25; *id.*, Dissenting Opinion Judge Nyholm, p. 62.

³⁹ United States of America, Supreme Court, *United States v. Flores*, 289 U.S. 137, 155ff. (1933); *id.*, *Lauritzen v. Larsen*, 345 U.S. 571, 585 (1953).

⁴⁰ See, for example, United States of America, Supreme Court, *Lauritzen v. Larsen*, 345 U.S. 571, 585 and footnote 18 (1953).

⁴¹ Brownlie (2008), p. 113.

⁴² Geiss and Petrig (2011), pp. 104–106.

⁴³ *Id.*, p. 106.

4.2 *Enforcement Powers Exercised Beyond the Railing of the Enforcement Vessel*

We have seen that human rights can be applied to enforcement actions taken on board a law enforcement vessel based on three distinct grounds. This is different for enforcement measures exercised beyond the railing of the law enforcement vessel (or displaying its effects beyond the railing of the enforcement vessel), namely when the suspected pirate ship is boarded and searched. It can hardly be argued that the flag principle applies to enforcement powers exercised beyond the railing of the law enforcement vessel. Also, the fiction that a ship constitutes a part of the territory cannot be made operable for enforcement measures taken elsewhere than on board the law enforcement vessel. It is thus *qua* the common criterion of “control over persons or territory” that human rights could be applicable to the exercise of enforcement powers beyond the railing of the law enforcement vessel.

4.2.1 *Effective Control Over Territory in the Maritime Context*

The notion of “effective control over territory” is quite well-defined in case law and doctrine when it comes to land-based law enforcement operations and, to some extent, even for aerial operations. However, for enforcement measures taken at sea, the concept is far from settled.

According to Article 1 ECHR, the High Contracting Parties shall secure to “everyone within their jurisdiction” the rights and freedoms of the Convention. Without repeating the entire practice of the European Court of Human Rights regarding the extraterritorial application of human rights,⁴⁴ it is noted that in *Loizidou v. Turkey*⁴⁵ the Court held that the notion of jurisdiction cannot be put on equal footing with the notion of State territory. Rather, it is decisive whether a State exercises effective control over a territory: “[T]he responsibility of a Contracting Party may also arise when as a consequence of military action - whether lawful or unlawful - it exercises *effective control* of an area outside its national territory.”⁴⁶ It also follows from this decision that factual (and not legal) circumstances are decisive in determining whether a State exercises effective territorial control: the obligation to respect the Convention “derives from the fact

⁴⁴ For a discussion of the case-law on the extraterritorial application of the ECHR see Duttwiler and Petrig (2009), pp. 1247–1260.

⁴⁵ The principles developed in the ECtHR: *Loizidou v. Turkey*, app. no. 15318/89, judgment (preliminary objection) of 23 March 1995, were later confirmed in other decisions; see, for example, *Cyprus v. Turkey (GC)*, app. no. 25781/94, judgment (merits) of 10 May 2001, paras 69ff. or the more recent case *Solomou et al. v. Turkey*, app. no. 36832/97, judgment of 24 June 2008, paras 43ff. or *Ilaşcu et al. v. Moldova and Russia*, app. no. 48787/99, judgment (merits and just satisfaction) of 8 July 2004, paras. 376ff.

⁴⁶ *Loizidou v. Turkey*, app. no. 15318/89, judgment (preliminary objection) of 23 March 1995, para 62 (emphasis added).

of such control”.⁴⁷ Furthermore, the Court specified that “effective control” in relation to territory does not mean control over every act or part of a territory, but “effective *overall* control”.⁴⁸ Also, it suffices that control is exercised only temporarily and only over a particular portion of the territory.⁴⁹

In light of these pronouncements, it seems conceivable that a situation of “effective overall control” at sea can arise. Admittedly, vessels are constantly moving and the situation is thus different from the frequent situation where control over a fixed location, such as a detention facility,⁵⁰ is exercised. However, this must not necessarily challenge the assumption that law enforcement vessels are capable of temporarily exercising a certain degree of control within their (geographically changing) operational radius, and thus, beyond their exact nautical position. In contrast to the *Banković* scenario, where the Court decided that NATO airplanes did not exercise effective territorial control when bombing targets, the situation at sea is different from the airspace situation. Flyovers by military planes certainly amounts to a less stable form of control compared to the presence of law enforcement vessels, since battleships can resort to a far larger panoply of enforcement measures than those available to an airplane. A military ship can, for example, dispatch smaller vessels or a helicopter to carry out specific tasks in the proximity of the military ship. Thus, for instance, it is common that piracy suspects are arrested by boarding teams sent out to the suspected ship on smaller vessels—a task that could not be carried out from a fighter plane.⁵¹

To take the thought even further, it could be argued that effective territorial control cannot only be established within the (geographically changing) operational radius of an individual military ship, but even over a joint operational area by the entirety of ships and aircraft deployed. Thus, the various national and multinational operations deployed in the Gulf of Aden could arguably be said to have established a net of effective overall control over that area. In fact, the Internationally Recommended Transit Corridor,⁵² which has been set up to ensure safe and unimpeded passage in the Gulf of Aden, serves as a prime example to demonstrate that it is possible to cast a net of effective overall control through the employment of various vessels.⁵³ In juxtaposition, for the constantly expanding operational area

⁴⁷ *Id.*

⁴⁸ *Cyprus v. Turkey (GC)*, app. no. 25781/94, judgment (merits) of 10 May 2001, para 77 (emphasis added).

⁴⁹ See, for example, ECtHR cases: *Issa et al. v. Turkey*, app. no. 31821/96, judgment (merits) of 16 November 2004, para 74, and *Al-Saadoon and Mufdhi v. United Kingdom*, app. no. 61498/08, decision of 30 June 2009, para 89.

⁵⁰ *Al-Saadoon and Mufdhi v. United Kingdom*, app. no. 61498/08, decision of 30 June 2009.

⁵¹ Geiss and Petrig (2011), pp. 107–109.

⁵² International Maritime Organization, Piracy and Armed Robbery against Ships in Waters off the Coast of Somalia, Information on Internationally Recommended Transit Corridor (IRTC) for Ships Transiting the Gulf of Aden, IMO Doc. SN.1/Circ.281 (3 August 2009).

⁵³ Geiss and Petrig (2011), p. 108.

beyond the Internationally Recommended Transit Corridor,⁵⁴ it seems more difficult to argue that the totality of patrolling naval States exercise effective overall territorial control.

In light of the current jurisprudence of the European Court of Human Rights it seems conceivable to argue that a ship can temporarily exercise effective overall control over a (changing) delimited area of sea similar to territorial control of land. However, thus far no cases exist which specifically discuss the meaning of the “effective control over territory”-criterion in the maritime context. Considerable legal uncertainty persists.

4.2.2 “Effective Control Over Persons” in the Maritime Context

According to the European Court of Human Rights, the extraterritorial application of human rights is also triggered if a State exercises “effective control over a person”.⁵⁵ Human rights could thus be applicable to measures taken beyond the railing of a law enforcement vessel by the mere fact that control over persons is established. However, similar to the “control over territory”-criterion, its meaning in the maritime context has not yet been clarified by the Court. Moreover, even for situations on land, the content of the criterion is contentious. “Control over persons” is rather undisputed in cases of abduction, detention or ill treatment. However, it is less clear regarding the use of firearms or (potentially lethal) force in general. It is mainly the latter situation which is at issue when vessels suspected of being pirate ships are boarded and persons on board arrested. Thus, a clear-cut answer regarding the extraterritorial application of human rights to enforcement measures taken beyond the railing of a law enforcement vessel based on the “effective control over persons” is difficult to provide. Nevertheless, by distinguishing two different phases during the interception of pirate ships, so-called ship-to-ship operations on the one hand and the period of boarding and post-boarding on the other, arguments for and against the application of human rights are presented.

Ship-to-Ship Operations

The first phase pertains to so-called ship-to-ship operations, during which a law enforcement vessel pursues a ship suspected of being a pirate ship and ultimately stops it. During this phase, the distance between the vessels involved may be quite important. Furthermore, the alleged pirate ship generally tries to evade control by

⁵⁴ EUNAVFOR, Mission, available online: www.eunavfor.eu/about-us/mission; the operational area of EUNAVFOR, for example, includes not only the Gulf of Aden but also the south of the Red Sea, the western part of the Indian Ocean including the Seychelles.

⁵⁵ For a rather exhaustive discussion of the “control over persons”-criterion, see, for example, Duttwiler and Petrig (2009), pp. 1254–1257.

the military ship or dispatched smaller vessels. The law enforcement vessel only exerts a limited degree of control over the pursued vessel and its crew, which is not yet physically in the hands of the law enforcement personnel. It could thus be argued that human rights cannot be applied based on the “effective control over persons”-criterion.⁵⁶

However, there is some (rather recent) case law of the European Court of Human Rights supporting the proposition that effective control over persons can be established even before the person is physically in the hands of law enforcement personnel. In *Andreou v. Turkey*, the Court decided that “[t]he opening of fire on the crowd from close range . . . was such that the applicant must be regarded as within [the] jurisdiction of Turkey”.⁵⁷ In that specific case, it was sufficient that the opening of fire was the “direct and immediate cause” for the injuries. The Court neither ascertained nor explicitly required that the victim be under effective control of the acting State, even though it could be said that one person holding another at gunpoint exercises a certain degree of control over the victim. Rather, the Court emphasized the close causal link between the act of the State and the sustained injuries.⁵⁸ In *Isaak v. Turkey*, a Turkish-Cypriot policeman assaulted a Cypriot victim who died as a consequence of the force used against him. The incident occurred in the UN-buffer zone and thus not in the territory of Turkey. The Court held that Turkey, through their *de facto* organs, exercised effective control over the victim. Thus, an assault, and therefore a situation before physical custody over a person is established, was considered to fulfill the “effective control over persons”-criterion.⁵⁹ In *Women on Waves*, the Court also expressed a rather broad understanding of the “control over persons”-criterion. The Convention was declared applicable simply on the basis that a Portuguese military ship intercepted the Dutch vessel *Borndiep* on the high seas off Portugal’s coast (apparently without boarding it) in order to enforce a prohibition on entering Portugal’s territorial waters that had previously been issued to the *Borndiep*.⁶⁰

Considering this jurisprudence, control over persons on board a pursued pirate ship could be assumed even before the suspected vessel has been boarded and physical control over the crew obtained. This even more so since, from the outset, the very objective of counter-piracy interception operations is the establishment of full control over persons. If human rights, notably the right to life, are not applied from the beginning of a specific intervention against piracy suspects, the same law enforcement operation would be governed by two different standards. Human rights

⁵⁶ Geiss and Petrig (2011), p. 110. Another line of reasoning could be that the Flag State Principle applies to enforcement measures taken on board a law enforcement vessel, but displaying its effects beyond the railing and not only to pure “on board situations”.

⁵⁷ *Andreou v. Turkey*, app. no. 45653/99, decision of 3 June 2008, legal considerations, para A.3.c.

⁵⁸ Duttwiler and Petrig (2009), p. 1256.

⁵⁹ *Isaak et al. v. Turkey*, app. no. 44587/98, decision of 28 September 2006, legal considerations, para A.2.b.

⁶⁰ Duttwiler and Petrig (2009), p. 1256: In the case at hand, no other jurisdictional link was given; the victim vessel was namely not in the territorial waters of Portugal and did not fly Portugal’s flag.

law would not apply up until the point of capture and arrest of the person, at which point a panoply of rights would become applicable. To protect individual liberties based on the “effective control over persons”-criterion throughout the whole enforcement operation at sea, including ship-to-ship operations, would be in line with the teleological argument provided in *Issa v. Turkey* where the Court stated that “Article 1 of the Convention cannot be interpreted so as to allow a State party to perpetrate violations of the Convention on the territory of another State, which it could not perpetrate on its own territory”.⁶¹ However, cases that promote a broad understanding of the notion of “control over persons”—encompassing situations beyond immediate physical control over an individual—remain insular. Thus, it cannot be said with certainty that human rights apply to ship-to-ship operations in the Gulf of Aden and Indian Ocean.⁶²

Boarding and Searching a Pirate Ship and Arresting Persons on Board

Once a person has been apprehended, the “effective control over persons”-criterion is certainly fulfilled. This holds true notwithstanding whether the arresting State considers the apprehension to be a formal pre-trial or administrative detention or more colloquially, as a temporary “holding” of the person.⁶³ The more difficult question to answer remains whether human rights already apply with the commencement of the boarding, i.e. before the actual arrest of piracy suspects on board a mother ship is obtained.

If, as argued above, human rights were already applicable during ship-to-ship operations, *a fortiori* they apply during the boarding and post-boarding phase. In the specific context of boarding another vessel by law enforcement personnel, a broadened interpretation of the “control over persons” notion finds support in the decision *Medvedyev and others v. France*. In this case, the Court assumed that from the moment of interception of the Cambodian vessel *Winner* by French forces until its arrival in a French harbor some 2 weeks later, the intercepted vessel and its crew has been under the control, and thus under the jurisdiction, of France for purposes of Article 1 ECHR.⁶⁴ It must be noted that the Court not only emphasized the element of control over persons but also over the vessel. However, regarding the control

⁶¹ *Issa et al. v. Turkey*, app. no. 31821/96, judgment (merits) of 16 November 2004, para 71.

⁶² Geiss and Petrig (2011), p. 111.

⁶³ In the German version of Article 12 EU Council Joint Action Operation Atalanta the word “arrest” (“Festnahme”) was officially changed to “holding” (“Festhalten”): Berichtigung der Gemeinsamen Aktion 2008/851/GASP des Rates vom 10. November 2008 über die Militäroperation der Europäischen Union als Beitrag zur Abschreckung, Verhütung und Bekämpfung von seeräuberischen Handlungen und bewaffneten Raubüberfällen vor der Küste Somalias, 2009 Abl. (L 10) 35 (EU). However, since the “control over persons”-criterion hinges on an exclusively factual assessment and not on terminology, this should be without consequence.

⁶⁴ *Medvedyev et al. v. France*, app. no. 3394/03, judgment of 10 July 2008, para 50.

over the vessel, it did not specify whether it relied on “effective control over persons” or “effective control over territory”.

In *Al-Saadoon and Mufdhi v. the United Kingdom*, the Court asserted jurisdiction based on the “control and authority” the United Kingdom exercised over the place located in Iraq where Al-Saadoon and Mufdhi were detained.⁶⁵ A parallel could be drawn between the assumption of effective control over a vessel at sea (and thereby its crew) and control over specific premises on land (and thereby over the persons detained in those facilities). At least from the point where the persons on board an alleged pirate ship have surrendered to the boarding team, the degree of control is comparable to the detention facility scenario. However, this analogy fails for the phase of the actual boarding and up until the crew has surrendered and the whole ship has been secured.⁶⁶

A broad interpretation of the “effective control over persons”-criterion to include situations where a ship has been boarded by law enforcement officials could be supported by the following argument: once a suspected ship is boarded there may still be resistance in order to hinder total physical control, for instance by an arrest. However, suspects at that moment have no possibility of fleeing the ship. Once being in that inescapable situation they could be said to be under the effective control of law enforcement officials.⁶⁷ At least this scenario resembles the case of *Isaak et al. v. Turkey*, where the Court assumed jurisdiction in a situation that arose prior to the person’s actual arrest and in which the person “could hardly have escaped the control of the security forces”.⁶⁸

5 Conclusion

Despite the absence of explicit references to specific individual liberties in legal instruments conferring enforcement powers against alleged pirates and armed robbers at sea, no legal vacuum exists. By applying general human rights law, the gap can be closed to some extent. However, considerable legal uncertainty results from the fact that the applicability of human rights to extraterritorial counter-piracy operations at sea cannot be affirmed with certainty.

It is relatively easy to argue that human rights apply to enforcement measures taken on board a vessel, namely based on the Flag State Principle and on the “effective control over persons”-criterion. For enforcement powers exercised beyond the railing, however, it seems more difficult to make the case. From the jurisprudence of the European Court of Human Rights, good arguments for the

⁶⁵ *Al-Saadoon and Mufdhi v. the United Kingdom*, app. no. 61498/08, decision of 30 June 2009, para 88.

⁶⁶ Geiss and Petrig (2011), p. 113.

⁶⁷ *Id.*, p. 113.

⁶⁸ *Isaak et al. v. Turkey*, app. no. 44587/98, decision of 28 September 2006, para 115.

application of human rights based on the “effective control over persons”-criterion can be inferred, especially for the phase of boarding and post-boarding. To maintain that law enforcement vessels exercise “territorial control” within their operational radius or even over a specific joint operational area seems more difficult in light of the current debate and jurisprudence. Overall, the issue of extraterritorial applicability of human rights to law enforcement operations at sea leaves room for considerable interpretation. The question whether human rights apply in a specific enforcement situation at sea is only answered *ex post* by human rights bodies, if at all. This unpredictable case-by-case approach leads to considerable legal uncertainty in the current counter-piracy operations.

To remedy this legal uncertainty and to secure the effective protection of the human rights of persons subject to counter-piracy enforcement measures, it would *de lege ferenda* be desirable to identify the applicable human rights law more coherently. Ideally, conferring broad enforcement powers—one of the key elements of the current counter-piracy strategy—would go hand-in-hand with a declaration that human rights apply by the mere fact that those enforcement powers are exercised.

Against the background that multinational law enforcement operations at sea, vested with specific mandates and broad enforcement powers, are likely to increase in the near future,⁶⁹ a coherent application of human rights to extraterritorial law enforcement operations at sea seems all the more important. Rule-of-law adherence and respect for human rights not only contribute to their legitimacy and credibility, but also to their efficiency. It is not rare that criminal prosecutions fail because arrests, investigative steps or handovers are secured in violation of human rights.

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⁶⁹ The President of the Security Council, for example, issued a landmark statement in relation to international drug trafficking where he underlined that illegal drug trade is increasingly a problem that requires an internationally coordinated response: United Nations, Security Council, Statement by the President of the Security Council, U.N. Doc. S/PRST/2009/32 (8 December 2009).

The Use of ‘Ship-Riders’ to Assert Jurisdiction Over Piracy and Armed Robbery Off Somalia: Is the Gulf of Aden the Caribbean?

Efthymios Papastavridis

1 Introduction

It is trite knowledge that the most significant problem in respect of piracy off Somalia is the assertion of jurisdiction over suspected pirates or armed robbers. While the establishment of jurisdiction over piracy *jure gentium* would seem rather unproblematic to a law student reading the UN Convention on the Law of the Sea (1982)¹ and in particular the provision of article 105,² the truth off the waters of Somalia is markedly different. States have been reticent to prosecute pirates and try them before their Courts, mostly because of the anticipated difficulty, expenses or the fear of asylum claims.³ As alternative, they have opted for entering into Memoranda of Understanding with other countries in the region, as for example

The text was submitted on 1 November 2011 and reflects the law as it stood on that date.

¹ See: United Nations Convention on the Law of the Sea, 1833 *UNTS* 397; entered into force 16 November 1994; as at 3 June 2011, LOSC has 162 parties, including the EC; see at <http://www.un.org/Depts/los/reference_files/chronological_lists_of_ratifications.htm#_The_United_Nations_Convention_on_the_Law_of_the_Sea> (last visited 26 October 2011) (hereinafter: LOSC).

² “On the high seas, or in any other place outside the jurisdiction of any State, every State may seize a pirate ship or aircraft, or a ship or aircraft taken by piracy and under the control of pirates, and arrest the persons and seize the property on board. The courts of the State which carried out the seizure may decide upon the penalties to be imposed, and may also determine the action to be taken with regard to the ships, aircraft or property, subject to the rights of third parties acting in good faith”, Article 105 LOSC.

³ In the words of Kontorovich (2009), ‘[p]roving that a group of undocumented men in a boat are pirates could be difficult. Concerns include logistical difficulties, the possibility that pirates could request asylum from the prosecuting state, the possibility that they would invoke the Geneva Conventions, the difficulties of proving a criminal case when the arrest was made by military personnel, and other problems reminiscent of the Guantanamo debate’.

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Kenya and Seychelles, and transferring the suspects to the latter States.⁴ Nonetheless, such agreements have not proved so effective as was initially envisaged and currently the international community is pursuing another solution, namely “the establishment of specialized Somali courts to try suspected pirates both in Somalia and in the region, including an extraterritorial Somali specialized anti-piracy court”.⁵

In the meantime, States have taken up a series of initiatives in order to effectively suppress the scourge of piracy in the region and to address the thorny question of jurisdiction over pirates. To this end, the IMO held a conference in Tanzania in April 2008 to discuss the establishment of a regional counter-piracy arrangement similar to the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP).⁶ Rather than a treaty text, the Tanzanian conference produced a draft non-binding regional Memorandum of Understanding. The choice of a non-binding instrument followed some participants’ concerns that “it would take significantly longer. . . to gain parliamentary support for entering a binding agreement”.⁷ The text of the Draft MOU became, with minor amendments, the Djibouti Code of Conduct concerning the Repression of Piracy and Armed Robbery against Ships in the Western Indian Ocean and the Gulf of Aden on 29 January 2009 (Djibouti Code).⁸ It was not concluded in legally binding form (article 15) and it is to apply only between the participants.⁹

Article 7 of the Djibouti Code concerns “embarked officers,” often called “ship-riders” in other instruments. There are various forms of ship-rider agreements, which involve the hosting of law enforcement officers from one State (‘sending State’) aboard another States’ government vessel (‘host State’). They usually aim at broadening the law enforcement powers that may be exercised by a warship or other government vessel within a third State’s territorial waters. The embarked officials

⁴ See Exchange of Letters between the EU and the Government of Kenya on the conditions and modalities for the transfer of persons suspected of having committed acts of piracy (6 March 2009), Exchange of Letters between the European Union and the Republic of Seychelles on the Conditions and Modalities for the Transfer of Suspected Pirates and Armed Robbers (2 December 2009).

⁵ See UNSC Res. 1976 (2011), at para 26 and the Report of the Special Adviser to the Secretary-General on Legal Issues Related to Piracy off the Coast of Somalia Mr. Jack Lang (annex to document S/2011/30). See also Report of the Secretary-General on the modalities for the establishment of specialized Somali anti-piracy court S/2011/360/15 June 2011.

⁶ See Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (2005), April 28, 2005, 829.

⁷ See Guilfoyle (2010a), 149, at 169.

⁸ See Code of Conduct concerning the Repression of Piracy and Armed Robbery against Ships in the Western Indian Ocean and the Gulf of Aden, adopted in Djibouti on 29 January 2009, available at <<http://www.fco.gov.uk/resources/en/pdf/pdf9/piracy-djibouti-meeting>>.

⁹ The Djibouti Code is open for signature only by the 21 States referred to as ‘Participants’ in the Preamble of the Code. The list includes, *inter alia* Comoros, Djibouti, Egypt, Eritrea, Ethiopia, France, Kenya, Madagascar, Oman et al.

may lawfully take action in the territorial waters of their sending State or, alternatively, can authorize on-spot enforcement action *vis-à-vis* a vessel flying the flag of the sending State on the high seas. The "ship-rider" model has been extensively employed to counter illicit drug-trafficking, especially in the Caribbean Sea.

Having that as precedent, it was contemplated that such model could prove instrumental to the suppression of piracy in the Gulf of Aden and especially to the assertion of jurisdiction over armed robbery within the Somali territorial waters. In more detail, any State willing to exercise its jurisdiction over such offences, would embark an officer on a foreign warship, taking part, for example, in *Operation Ocean Shield* or in EUNAVFOR *Operation Atalanta*. The warship would proceed to the interdiction of the vessel engaged in piracy or armed robbery, while the embarked officer would make the relevant arrest under the laws of the sending State. Obviously, the purpose here would not be to enlarge enforcement powers as such, but rather to enable the exercise of adjudicative jurisdiction over pirates and armed robbers at sea.¹⁰

The use of "ship-riders", in this sense, was also encouraged under Security Council Resolutions 1851 and 1897. Both Security Council Resolutions invited States "to conclude special agreements or arrangements with countries willing to take custody of pirates in order to embark law enforcement officials ("shipriders") from the latter countries, in particular countries in the region, to facilitate the investigation and prosecution of persons detained as a result of operations conducted under this resolution".¹¹

While ship-rider arrangements appear highly desirable, they have not yet been implemented in the Gulf of Aden under the Djibouti Code or as a result of Security Council Resolutions. Nonetheless, such an arrangement has been concluded in the framework of Southern African Development Community (SADC).¹² More specifically, South Africa has signed a Memorandum of Understanding with Mozambique on 1st June 2011, which provide for joint patrols in the area, including the embarkation of law enforcement agents on South African warships, with a view to repressing piratical activities in the region.¹³

It is beyond the compass of the present paper to discuss all the vicissitudes of jurisdiction or of law enforcement over piracy off Somalia. Rather, its purpose will be to assess the employment of "ship-riders" in law-enforcement operations at sea against the background of international law and to explore its potential utility in the context of counter-piracy operations. It is submitted that the ship-rider institution raises a host of perplexing legal questions, especially insofar the international responsibility of States is concerned, which have not been adequately addressed

¹⁰ See Geiss and Petrig (2011), 88.

¹¹ UNSC Res. 1851, para 3 and UN SC Res. 1897, para 6.

¹² See further information on SADC at <<http://www.sadc.int/>>.

¹³ See Memorandum of Understanding on Piracy and Trans-Border Crime between South Africa and Mozambique, signed at 1 June 2011. For more information see at <<http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=18794&tid=34350>> (last visited 30 October, 2011).

in theory and in practice. Accordingly, in the first part of the paper, the ship-rider model, as employed in the Caribbean basin and as envisaged off Somalia, will be discussed, while in the second part, the question of international responsibility in this regard will be canvassed.

Before embarking upon the relevant analysis, an important distinction must be drawn in this regard between the usual type of “ship-riders” and the recent term ‘Vessel Protection Detachment’ (VPD), which describes navy detachments deployed either on board a foreign warship in the context of EUNAVFOR *Operation Atalanta*¹⁴ or on board a merchant vessel flying the same flag with the VPD unit. For present purposes, suffice it to note, on the one hand, that the ship-rider institution, as envisaged in SC Resolutions and as employed in practice, for example in the Caribbean Sea, does not provide for VPDs on board merchant vessels. With regard to VPDs on board foreign warships, on the other, their deployment falls short of qualifying as ‘ship-riding’, since their role is only to provide assistance to the *EUNAVFOR Operation Atalanta* and not to facilitate, in any manner whatsoever, the exercise of enforcement jurisdiction over pirates either on the high seas or in the territorial waters of their sending States.

2 The Ship-Rider Institution in the Caribbean Region and Beyond: Somalia Next Stop?

2.1 *The Ship-Rider Institution in Maritime Law Enforcement Operations*

The concept of ‘ship-riders’, also referred to as ‘integrated cross-border maritime law-enforcement’¹⁵ or ‘joint policing’ has a precedent in the framework of maritime law enforcement, especially in the areas of illicit drug trafficking and in illegal fishing. Also, it is often used in the fight against illicit migration, in particular in the Mediterranean basin.¹⁶ The exact content of existing ship-rider agreements varies; however, all share the common purpose of overcoming the jurisdictional hurdles.¹⁷ In any event, the most extensive use of ship-riders occurs in the counter-drug operations in the Caribbean Sea; thus, it is suggested to have a closer scrutiny at this practice in order to draw certain conclusions concerning the said institution.

¹⁴ See e.g. the Estonian VPD deployed on a French frigate taking part in *Operation Atalanta*; further information available at <<http://www.eunavfor.eu/2011/05/french-naval-ship-embarks-an-estonian-vessel-protection-detachment/>>.

¹⁵ See for this term Framework Agreement on Integrated Cross Border Maritime Law Enforcement Operations between the Government of United States of America and the Government of Canada, adopted May 26, 2009, available at <www.dhs.gov/xlibrary/assets/shiprider_agreement.pdf>.

¹⁶ See relevant discussion in Papastavridis (2010a), 75, at 89.

¹⁷ See Geiss and Petrig (2011), *supra* n. 10, at 86.

First, the 'ship-rider' institution is explicitly provided in article 9 of the relevant regional agreement.¹⁸ Each Party is required to designate law enforcement officials to embark on the vessels of other Parties in order to facilitate the timely provision of authorisations and the exercise of relevant national law enforcement powers within zones of jurisdiction of the former Party. In more detail, such law enforcement officials, when duly authorised, may enforce the laws of the sending Party both in the waters of that Party or seaward of such waters, 'in the exercise of the right of hot pursuit or otherwise in accordance with international law', such as in the proper exercise of contiguous zone jurisdiction. In addition, they may authorise the entry of the vessel on which they are embarked into the territorial sea of the sending Party and authorise the conduct of counter-drug patrols and boarding of suspect vessels therein. Given the obvious complexity of such arrangements from a formal legal perspective, article 9 (4) clarifies that when enforcement action is conducted pursuant to the authority of the embarked law enforcement officials, any search, seizure, detention or use of force shall be carried out by such officials.¹⁹ Also, when the law enforcement vessels and officials on board are in the territorial waters of another Party, they shall 'respect the laws' and the relevant customs and traditions of the latter [article 8 (1)].

In addition to the Caribbean Agreement, reference should be made to the plethora of bilateral arrangements between the US and States in the region that include similar provisions. According to the latest International Narcotics Control Strategy Report (March 2011), 'there are 37 maritime bilateral counterdrug agreements or operational procedures in place between the United States and partner nations'.²⁰ The majority of them concern cooperation in the suppression of drug trafficking in the Caribbean region as well as generally in Central and South America.²¹ In general, these agreements usually take the form of a four parts or six

¹⁸ Agreement Concerning Co-operation in Suppressing Illicit Maritime and Air Trafficking in Narcotic Drugs and Psychotropic Substances in the Caribbean Area, concluded on 10 April 2003, at San José, Costa Rica and entered into force on 18 September 2008. The text and a short commentary is found in W. Gilmore, *Agreement Concerning Co-operation in Suppressing Illicit Maritime and Air Trafficking in Narcotic Drugs and Psychotropic Substances in the Caribbean Area*, (2005) (hereinafter: Caribbean Agreement).

¹⁹ See also *ibid.*, at 21. Provision is also made for the crew members of the vessel to assist in any such action, but only to the extent and in the manner requested. Such requests may only be made and acted upon if the action in question 'is consistent with the applicable laws and procedures of both Parties' (article 9 (4)).

²⁰ See International Narcotics Control Strategy Report (2011), at 48; available at <<http://www.state.gov/documents/organization/156575.pdf>>.

²¹ A list of United States Maritime Law Enforcement Agreements updated until 21 May 2008 was kindly provided to the author by Mr. Brad Kieserman, US Coast Guard (on file with the author). According to this list, US have concluded agreements with Antigua Barbuda, the Bahamas, Barbados, Belize, Colombia, Cook Islands, Costa Rica, Dominica, Dominican Republic, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, St. Kitts and Nevis, St. Lucia, St. Vincent and Grenadines, Suriname, Trinidad and Tobago, Venezuela and UK. See also the recent survey by Guilfoyle (2009), at 89.

parts model. The six parts model includes ‘a) ship boarding, b) entry-to-investigate, c) over flight, d) ship rider, e) pursuit and f) order-to-land’,²² while the four part model excludes airborne provisions.²³ Obviously, of paramount importance in the application of these agreements is the right to enter in territorial waters and the ship-rider element. Such arrangements are prevalent in this context mainly due to the geographic conditions of the area, which require very close cooperation between the interested parties in order to suppress effectively the drug smuggling.²⁴

Thus, for example, the Agreement between US and Trinidad and Tobago stipulates that qualified authorised officers called ‘ship-riders’ of the latter State may board a United States vessel for the purpose of authorising the US Coast Guard to pursue a vessel that is fleeing into Trinidad and Tobago waters as well as to conduct counter drug patrols in Trinidad and Tobago waters.²⁵ They may also enforce the laws of Trinidad and Tobago within that State’s waters or seaward in the exercise of the right of hot pursuit or otherwise in accordance with the international law.²⁶

This Agreement contains also a very doctrinally interesting provision, namely that when a Trinidad and Tobago ship-rider is unavailable to embark on a US vessel, the latter may still enter Trinidad and Tobago waters in order to investigate any suspect aircraft or board any suspect vessel other than a Trinidad and Tobago flag vessel.²⁷ This right to enter in the territorial waters and exercise enforcement jurisdiction is found in various forms in many of the treaties in question.²⁸ What this seemingly innocuous provision actually entails is that third States’ vessels can be subjected to the right of visit in the territorial waters of Trinidad and Tobago by a US cutter without the presence of any officer from the coastal State. Under the Vienna Convention on the Law of Treaties (VCLT, 1969), the bilateral agreement in question cannot entail any obligation for third States if it is not provided therein and the latter States have not assented to it in writing (the rule *pacta tertiis nec*

²² See Kramek (2000), 121, at 133.

²³ See: relevant analysis and relevant chart (valid as of 1999) with the categorization of the agreements to the respective models in J. Kramek, *ibid*, at 150. Also see: Davis-Mattis (2000), 381.

²⁴ According to J. Kramek, ‘the use of ship-riders is sometimes more attractive to nations that do not wish to grant the US Coast Guard blanket consent to enter their territorial seas or board their vessels on the high seas’; *ibid*, at 134 (fn. 81). See also Williams (2000), 163.

²⁵ In this Agreement ‘waters’ mean the territorial sea, archipelagic waters and internal waters and the airspace over such waters; see paragraph 3 of the US-Trinidad and Tobago Agreement. Interestingly in the US-Barbados Agreement only the territorial waters are mentioned (art. 1 (b)).

²⁶ See also, *inter alia*, the Agreements with the eastern Caribbean States, Antigua and Barbuda, St Kitts and Nevis, Dominica, Grenada, St. Lucia and St. Vincent and the Grenadines. For analysis see Davis-Mattis (2000), *supra* n. 23, at 382. On the high seas, however, the authority is granted by the ship-boarding element rather than by the ship-rider.

²⁷ See: article 8 (c) of the US-Trinidad and Tobago Agreement.

²⁸ See: relevant analysis in Williams (1999), 179, at 188 and Guilfoyle (2009), *supra* n. 21, at 89.

nocent nec prosunt).²⁹ Hence, the USCG could not invoke the terms of this Agreement as such in order to board third States' vessels; rather it should base its relevant authority upon the customary and treaty powers that the coastal State enjoys therein and which have been delegated to the US. Accordingly, the source of the relevant obligation for the third State would rather be the relevant provision of LOSC and the corresponding customary rule,³⁰ rather than the US-Barbados Agreement.

In a similar vein, complex issues of international law arise when a US Coast Guard law enforcement detachment (commonly referred to as LEDET), which is used to vest authority to US warships, is deployed on board a third State vessel, usually British or Belgian warships, assigned to patrol off the coasts of their possessions in the West Indies, and boards a vessel flagged in a third State under the authority of a bilateral maritime agreement between the US and the third State.³¹ This scenario highlights again the problematic position of third parties in international law. Usually, there would be an agreement between US and flag State of the boarding vessel, the UK, for example, and another treaty between the US and the flag State of the suspect vessel. In such case, reference should be made to the terms of the former agreement with regard to the scope of the powers attributed to the US LEDET, which *prima facie* would have the power to enforce the provisions of the latter treaty regardless of the vehicle or the platform that it uses, namely the vessel of a third State. Absent a treaty between US and the flag State of the boarding vessel, there could be other issues besides the legal basis for the interdiction,³² such as the question of State responsibility in this regard to be discussed later.

In summary, these agreements, based upon the consent of the States involved, are designed to surmount the legal obstacles that State sovereignty usually places to such operations and guarantee the maximum effectiveness in suppressing drug trafficking. Nonetheless, on the one hand, they are conspicuously unequal, in the sense that they are drawn with the purpose mainly of facilitating the US counter-drug policy and on the other, they may appear problematic in relation to the position of third States. For present purposes, it is readily apparent that the use of ship-riders concerns more the interdiction of the suspect vessel rather than the establishment of enforcement jurisdiction as such. Ship-riders are used to provide the requisite legal basis for the interdiction of sending State's vessels either on the high seas or in the latter State's areas of national jurisdiction. In contrast to the Caribbean Agreement, the bilateral arrangements fail to provide in detail for the establishment of

²⁹ See: article 35 of VCLT, which provides that 'an obligation arises for a third State from a provision of a treaty if the parties to the treaty intend the provision to be the means of establishing the obligation and the third State expressly accepts that obligation in writing'.

³⁰ See: in particular article 27 (1) (d) LOSC with regard to the suppression of illicit traffic in narcotic drugs, which should also be considered as reflective of customary law.

³¹ See analysis of such cases is furnished by Kramek (2000), *supra* n. 22, at 139.

³² In any case, the flag State of the intercepted vessel could give its ad hoc consent in this regard.

jurisdiction and thus the concept of ‘preferential’ jurisdiction of the sending State should be deemed applicable.

2.2 *The Potential Application of Ship-Rider Institution in the Gulf of Aden*

Mindful of such precedent in the context of counter-drug operations, it is not surprising that the idea of adding the shiprider mechanism to the range of tools in the fight against piracy originated from a proposal by the United Nations Office on Drugs and Crimes (UNODC).³³ However, the shiprider agreements called for in the Security Council Resolutions 1851 and 1897 and envisaged in the Djibouti Code are markedly different from previous joint policing model. ‘Whereas a “common” shiprider agreement would have foreseen the embarkation of Somali law enforcement officials who could undertake or authorize law enforcement operations within Somalia’s territorial waters, paragraph 3 of the Security Council Resolution 1851 and paragraph 6 of Security Council Resolution 1897 refer to the embarkation of shipriders from “countries willing to take custody of pirates”. This defies the common rationale for embarking shipriders, which is the authorization of law enforcement measures in the territorial waters of the coastal State’.³⁴ It is to be recalled that such authorization has been already granted pursuant to Security Council Resolution 1846 (para. 10b). In any case, such agreements would not negate the requirement of the “advance consent of the TFG” for the “exercise of third State jurisdiction by shipriders in the Somalia waters” (SC Res. 1851, para 3).

It is obvious that the rationale for the use of ship-riders in counter-piracy operations had been only to facilitate the exercise of adjudicative jurisdiction over pirates and armed robbers at sea by bringing the latter directly within the jurisdiction of the ship-rider’s home State. In the words of UNODC, “shiprider agreements (. . .) would enable a law enforcement official from, for example, Djibouti, Kenya, Tanzania or Yemen to join a warship off the coast of Somalia as a “ship-rider”, arrest the pirates in the name of their country and then have them sent to their national court for trial”.³⁵

It follows that ‘ship-rider agreements’ in the traditional form could be of relevance only in cases of piracy or armed robbery in the waters of third States in the region, in which cases the embarked officers’ would be of the nationality of the latter States. Such agreements may be concluded in order to repress the increasing incidents of armed robbery in waters of Nigeria or Benin. It is reported that there has been a significant increase in the recent months of incidents of armed robbery in

³³ See Geiss and Petrig (2011), *supra* n. 10, 86.

³⁴ *Ibid.*, at 87.

³⁵ UN, UNODC, Annual Report 2009, available at <www.unodc.org/documents/about-unodc/AR09_LORES.pdf>, at 17.

the Gulf of Guinea, mainly within the territorial waters of Nigeria and Benin.³⁶ The use of ship-riders in the traditional form would be particularly useful in this regard and it remains to be seen whether the States in the region will opt for their employment. It is also significant to reiterate that the first MoU in the broader region with ship-rider elements was signed recently between South Africa and Mozambique in the context of SADC.³⁷

It is true that ship-rider agreements attain even more significance in the present context as far as the crime of armed robbery at sea is concerned, since this crime falls short of being subject to universal jurisdiction pursuant to article 105 of LOSC.³⁸ Under a ship-rider agreement, Tanzania, for example, could exercise jurisdiction over a suspect who commits armed robbery within Somalia's territorial waters. This however, would require the prior establishment of prescriptive jurisdiction on the part of the sending State, i.e. Tanzania, which is not always the case, as well as the prior consent of TFG in accordance with SC Resolution 1851.

To surmount jurisdictional hurdles in general, both SC Resolutions and the Djibouti Code make explicit reference to the SUA Convention (1988),³⁹ which could afford the requisite legal basis for the prosecution of suspect pirates. More importantly, the SUA Convention adopts the key element of the mechanism provided in the terrorist conventions, namely the principle *aut dedere aut judicare*.⁴⁰ Consequently, it obliges the state party where the offender is found either to extradite him to another State that has established its jurisdiction or to submit the case without delay to its competent authorities for the purpose of prosecution. Given that in the present context many countries, such as Kenya, are parties to the SUA Convention, the latter treaty may afford the necessary basis for the prosecution of the alleged offenders. However, it must be stressed that the Convention does not apply with regard to offences committed exclusively within Somali territorial waters as well as that the offences must be directed against a vessel of a State party, since Somalia is not a party to the Convention.⁴¹

³⁶ In 2011 there have been 20 incidents of armed robbery in Benin and 7 in Nigeria. See further information at ICC, International Maritime Bureau <<http://www.icc-ccs.org/piracy-reporting-centre>>.

³⁷ See *supra* n. 13. Unfortunately, the text of the agreement is not known to the author.

³⁸ 'Armed robbery at sea is defined any unlawful act of violence or detention or any act of depredation or threat thereof, other than an act of piracy, directed against a ship or against persons or property on board such a ship, *within a state's jurisdiction* (emphasis added). See IMO, Code of Practice for the Investigation of the Crimes of Piracy and Armed Robbery against Ships, adopted 29 November 2001, Res A.922(22), art 2(2), <[http://www.pmaesa.org/Maritime/Res%20A.922\(22\).doc](http://www.pmaesa.org/Maritime/Res%20A.922(22).doc)>. Cf. also art 1 of the ReCAAP (2005), *supra* n. 6.

³⁹ Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, IMO Doc SUA/CONF/15, reprinted in 27 ILM (1988) 67. The SUA Convention was amended by a Protocol adopted in October 2005; IMO Doc LEG/CONF.15/21, 1 November 2005, <<http://www.state.gov/t/isn/trty/81727.htm>>.

⁴⁰ See article 6(4) of SUA Convention.

⁴¹ See relevant discussion in Papastavridis (2010b), 122, at 144.

Notwithstanding the calls of the international community for ship-rider agreements, such arrangements have not yet implemented, at least as far as the Gulf of Aden is concerned. As Guilfoyle mentions, '[t]here are a number of potentially formidable obstacles in practice, not the least of which is national law'.⁴² In more detail, the regional law enforcement officials require appropriate national legal authority in order to board a third State's vessel and conduct piracy-related arrests and evidence-gathering.⁴³ There is also the question of less-developed States' capacity to spare personnel to act as ship-riders. 'Finally, there are a range of practical issues for the State "hosting" a ship-rider. These include: storage of the ship-rider's weapons and ammunition (if any), cabin-space, laundry costs, who will have tactical control during interdictions and the extent of the ship-rider's authority to authorize warning shots or disabling fire'.⁴⁴ Such issues must be resolved in advance between the ship-rider's sending State and the flag State of the warship, as occurs in the Caribbean with the conclusion of the relevant Memoranda of Understanding. Similar provisions are incorporated in the agreements between the European Union and the third States that provide VPDs on board vessels taking part in *Operation Atalanta*.⁴⁵

In any event, it is argued that the use of ship-riders off Somalia has numerous merits: besides facilitating regional criminal prosecution of pirates and armed robbers, it may also enhance policing skills on board military ships as well as serve for training and capacity-building purposes. 'Embarking law-enforcement officials, such as police officers as shipriders, could bring the necessary policing skills on board military vessels. Ideally, they would be familiar with the criminal procedure and evidentiary standards of the jurisdiction where criminal proceedings are later to be brought. Conversely, embarked officers can learn from the military crew of the host vessel (...) embarking law enforcement officials from regional States on board military ships deployed in the Gulf of Aden region could enable them to become familiar with and trained for combating piracy and armed robbery at sea'.⁴⁶ Last but not least, ship-riders may prove of paramount importance in respect of the ongoing menace of armed robbery within third States in the region, such as Nigeria and Benin.

⁴² See Guilfoyle (2010a), *supra* n. 7, at 172.

⁴³ For example, Kenyan police have no powers at Kenyan law outside the territorial sea, see *ibid*, at 172.

⁴⁴ *Ibid*.

⁴⁵ See e.g. Agreement between the European Union and the Republic of Croatia on the participation of the Republic of Croatia in the European Union military operation to contribute to the deterrence, prevention and repression of acts of piracy and armed robbery off the Somali coast (Operation Atalanta), signed at 27 July 2009; available at <<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:202:0084:0089:EN:PDF>>.

⁴⁶ Geiss and Petrig (2011), *supra* n. 10, at 90.

3 Questions of International Responsibility in the Framework of Ship-Rider Agreements

3.1 Responsibility of States Raised by Ship-Rider Agreements

A rather unexplored area in the law of maritime interdiction operations is the issue of the responsibility of States arising from internationally wrongful acts in the course of the interdiction.⁴⁷ Issues of international responsibility may also arise in respect of ship-rider operations, in which the authorities of two or even more States are involved. In such cases, the possibility of joint or concurrent international responsibility looms large. It is suggested to address, first, the general questions of responsibility arising in cases of ship-riders and then shift the focus of our attention to the potential application of international responsibility in counter-piracy operations off Somalia involving ship-riders.

Before embarking upon the relevant analysis, few words on State Responsibility are in order. Under the law of State Responsibility, every internationally wrongful act of a State entails its international responsibility,⁴⁸ while the conditions required to establish such an act are twofold: first, the conduct in question must be attributable to the State under international law and secondly, for responsibility to attach to the act of the State, the conduct must constitute a breach of an international legal obligation in force for that State at that time.⁴⁹ Thus, the whole edifice of State Responsibility is premised upon the existence of a primary rule establishing an obligation under international law for a State.⁵⁰ In the present context, the relevant primary rules would consist mainly of the law of the sea and the international human rights law.

As regards the ship-rider agreements, it is acknowledged that 'a different liability regime might exist for interdiction undertaken under the common shiprider provision. Here the shiprider as agent of the flag State of the boarded vessel permits the interdiction on a case-by-case basis. The decision whether to board or not a certain vessel thus remains under the exclusive control of the flag State'.⁵¹ Hence, in the view of Wendel, the sending State bears the international responsibility for

⁴⁷ An exception is the very interesting treatise of Wendel (2007).

⁴⁸ See article 1 of ILC Articles on Responsibility of States for Internationally Wrongful Acts, UN General Assembly Official Records; 56th Session, Supp. No. 10 at UN. Doc A/56/10; at 31 (hereinafter: ILC Articles); available at: <http://untreaty.un.org/ilc/texts/instruments/english/commentaries/9_6_2001.pdf>.

⁴⁹ See article 2 of ILC Articles.

⁵⁰ See Articles on Responsibility of States for Internationally Wrongful Acts with Commentaries in *Yearbook of the International Law Commission* (2001- II), Part Two, at 31 (hereinafter: ILC Articles Commentary). On the distinction between 'primary' and 'secondary' rules see also Cassese (2005), at 244 and Linderfalk (2009), 53.

⁵¹ Wendel (2007), *supra* n. 47, 223.

any interdiction operation under a typical ship-rider agreement.⁵² He acknowledges, however, that the ‘other State could be liable for its contribution as assisting State’.⁵³

With regard to the responsibility for ‘aiding or assisting’, it is well worth observing that under the US Model Maritime Agreement, for example, which has informed many ship-rider agreements, it is envisaged that crewmembers of the host vessel may assist the shiprider in carrying out enforcement actions, if the latter expressly requests such assistance.⁵⁴ The host State thus may become responsible for its own act in deliberately assisting the sending State to breach an international obligation by which they are both bound.⁵⁵ Under article 16 of ILC Articles, a State may be responsible for its “aid or assistance”, provided that the aid must have been given (1) ‘with a view to facilitating the commission of the specific act in question; (2) with an awareness of the circumstances making the act wrongful; and (3) the completed act must be such that it would have been wrongful had it been committed by the assisting State itself’.⁵⁶ Accordingly, should a breach of an obligation incumbent upon States under the law of the sea or of human rights law occur, the ‘host State’ may also be held responsible for assisting in the commission of such breach, provided that it had knowledge of the breach in question and assisted the ship-rider in this regard.

Nevertheless, it is submitted that the host State may be held responsible not only for ‘complicity’ under article 16, but also on an individual basis. It is possible that there will be a joint commission of an internationally wrongful act and the individual responsibility both of the sending State and of the host State will be engaged. There is no doubt that multiple States can incur responsibility under international law for a single incident. This is confirmed in article 47 of ILC Articles, which articulates that where several States are responsible for the same internationally wrongful act, ‘the responsibility of each State may be invoked in relation to that act’.⁵⁷

This proposition runs counter to the view that the warship is placed at the disposal of the flag State of the ship-rider’s sending State. Under article 6 of ILC Articles, the commission of the wrongful act will be attributed solely to the sending

⁵² *Ibid.*

⁵³ *Ibid.*

⁵⁴ See article 7 of the US Model Maritime Agreement Concerning Cooperation to Suppress Illicit Traffic by Sea, reprinted in Kramek (2000), *supra* n. 22, Appendix B. See also Geiss and Petrig (2011), *supra* n. 10, 91.

⁵⁵ See Crawford (2002), at 151.

⁵⁶ See ILC Articles Commentary, at 66. On complicity in international law in general see also Quigley (1987), 57.

⁵⁷ According to the Commentary, in such cases, ‘each State is separately responsible for the conduct attributable to it’ and ‘responsibility is not diminished or reduced by the fact that one or more States are also responsible for the same act’; see *ILC Articles Commentary*, at 124. On the issue of joint commission of an internationally wrongful act, see *inter alia*, ICJ, *Oil Platforms* (Islamic Republic of Iran v. USA) (Merits) Judgment of 6 November 2003, Separate Opinion Judge Simma, para 74 and Chinkin (2008), 161, at 168 *et seq.*

State, if the warship or coast guard vessel "is acting in the exercise of elements of governmental authority of the State at whose disposal it is placed". This would require that the home State of the warship leaves control or command over the vessel exclusively to the ship-rider, and consequently to the sending State. It is highly unlikely that this is the case in ship-rider operations; rather States are separately responsible for the pertinent violations under general international law. In any event, the application of article 6 would be contingent upon the degree of the control that the ship-rider exercises on the boarding vessel, which, in turn, is a matter to be determined on a case-by-case basis.

It is also possible that both the sending State and the host State will be responsible for different violations in the course of interdiction operations. *Ex hypothesis*, there might be a ship-rider interdiction operation, in which, on the one hand, there would be a disproportionate use of force by the officers of the host State's warship in violation of the relevant legal framework and on the other, a subsequent breach of the prohibition of *non-refoulement* committed under the authority of the ship-rider and under directions of the sending State. In such cases, the host State would incur responsibility for the violation of the relevant obligations under the law of the sea and the sending State would incur separate responsibility for the violation of the relevant obligation under international human rights law.

The potential of separate responsibility in the context of ship-rider interdiction operations is evident also on the face of the relevant agreements, which provide for the non-displacement of the flag State's law police powers, while the vessel is under another State's effective control. They do not require that the interdicting State's officers act in accordance with anything other than their national law.⁵⁸ Telling is also the wording of the US Model Maritime Agreement, which sets forth that 'the requests for assistance may only be made, agreed and acted upon in accordance with the applicable laws and policies of both parties, except for the use of force in self-defense'.⁵⁹

In conclusion, it is indisputable that the use of ship-riders in maritime interdiction operations engenders a host of perplexing legal questions, especially in respect of the law of State responsibility. In addressing such questions, first, recourse should be made to the ship-rider agreement, which may regulate the allocation of responsibility between the sending and the host State. In addition, the facts of each individual case should be carefully scrutinised in order to discern who had effective control over the conduct that, arguably, gave rise to the internationally wrongful act.

⁵⁸ See e.g. article 5 (1) Treaty between the Kingdom of Spain and the Italian Republic to Combat Illicit Drug Trafficking at Sea 1990, 1776 *UNTS* 229. See also Guilfoyle (2009), *supra* n. 21, at 288.

⁵⁹ See article 7 of US Model Maritime Agreement, *supra* n. 54.

3.2 *Questions of International Responsibility Off Somalia*

Questions of international responsibility may equally arise in the context of counter-piracy operations off Somalia. The remarks made above are of relevance also in the present context. Under article 7 (4) of the Djibouti Code, ‘shipriders may assist law enforcement officials of the host vessel or conduct operations from the host vessel ‘in manner that it is not prohibited by the laws and policies of both participants’’. It is obvious that the Djibouti Code foresees the cumulative application of two legal regimes on board of one and the same law enforcement vessel.⁶⁰ Hence, absent of a separate ship-rider agreement,⁶¹ the question of international responsibility for an internationally wrongful act in the course of an interdiction operation off Somalia will be addressed according to the factual assessment as to who exerts effective control over the act in question. This is irrespective of whether, as envisaged in the Djibouti Code, the ship-rider is seen as a guest on the ship, who acts only upon an invitation by the host State, or is considered as the one who is to request the assistance of the host State.

Accordingly, there will be cases that the sending State may incur responsibility for a breach of human rights law jointly with the host State, who may be held liable for the respective violation of the law of the sea. Alternatively, in case of an illegal apprehension under the authority of the embarked official, the host State may also incur responsibility for “aiding and assisting” the ship-rider under article 16 of ILC Articles. The crux of the matter in each case is who exerts control over the wrongful act or omission in question.

There is an additional element in the case of counter-piracy operations off Somalia, which should be taken into serious consideration in this respect, namely the engagement of international organizations in these operations. It is well-known that the majority of warships patrolling waters off Somalia are assets of naval operations either of the European Union, *EUNAVFOR Operation Atalanta*,⁶² or of NATO, *Operation Ocean Shield*.⁶³ This entails that not only the host State of the warship, but also European Union or NATO could be held liable in case of a violation of international law in the course of a ship-rider operation.

It is well beyond the scope of the present enquiry to examine in detail the issue of the responsibility of international organizations. Suffice to note for present purposes that in 2011 the International Law Commission adopted a set of Draft Articles on Responsibility of International Organizations and recommended to the General Assembly to take note of the draft articles in a resolution and to annex them to the resolution, and to consider, at a later stage, the elaboration of a convention on

⁶⁰ See Geiss and Petrig (2011), *supra* n. 10, at 92.

⁶¹ Note here that with regard to the VPDs of third States on board vessels of the EUNAVFOR there are special agreements addressing, *inter alia*, questions of responsibility. See e.g. *supra* n. 45.

⁶² Further information is available at <<http://www.consilium.europa.eu/showPage.aspx?id=1518&lang=EN>>.

⁶³ On *Operation Ocean Shield* see also Geiss and Petrig (2011), *supra* n. 10, at 23.

the basis of the draft articles.⁶⁴ The ILC Draft Articles draw heavily from the respective articles on the responsibility of States adopted in 2001 and adopt the general tenet that 'every internationally wrongful act of an international organization entails the international responsibility of that organization' (article 3). The responsibility of international organizations has been acknowledged both by international jurisprudence⁶⁵ and by international legal doctrine.⁶⁶ As in the case of the responsibility of States, there is an internationally wrongful act of an international organization when conduct consisting of an action or omission: (a) is attributable to the international organization under international law; and (b) constitutes a breach of an international obligation of that international Organization (article 4).

In the context of counter-piracy operations, the crux of the matter is whether the Member State, acting as the host State of the ship-rider, or the international organization, under whose authority the operation takes place, would be held responsible for ostensible violations of international law. The relevant provision of the ILC Draft Articles stipulates that 'the conduct of an organ of a State (. . .) that is placed at the disposal of another international organization shall be considered under international law an act of the latter organization if the organization exercises effective control over that conduct' (article 7). This provision imports the heightened discussion over the question of division of responsibility between international organizations and their Member States, especially in the context of peace-keeping or multi-national operations, which falls outside of the compass of the present paper.⁶⁷ Suffice to note for the present purposes that the prevailing view has been expressed by the UN Secretary-General as follows:

In joint operations, international responsibility for the conduct of the troops lies where operational command and control is vested according to the arrangements establishing the modalities of cooperation between the States or States providing the troops and the UN. In the absence of formal arrangements between the United Nations and the State or States providing troops, responsibility would be determined in each and every case according to the *degree of effective control exercised by either party in the conduct of the operation*.⁶⁸

In 2007, however, the European Court of Human Rights departed from this logical premise and in the celebrated *Behrami and Saramati* case before the Grand

⁶⁴ See ILC Draft Articles on the Responsibility of International Organizations (2011), available at <http://untreaty.un.org/ilc/texts/instruments/english/draft%20articles/9_11_2011.pdf> (hereinafter: ILC Draft Articles).

⁶⁵ See ICJ, *Reparation for Injuries Suffered in the Service of the United Nations*, Advisory Opinion, 1949 *ICJ Reports*, 174 and ICJ, *Difference relating to immunity from legal process of a Special Rapporteur of the Commission on Human Rights*, Advisory Opinion *ICJ Reports*, 1999, at para. 66.

⁶⁶ See *inter alia* Hirsch (1995), Klein (1998).

⁶⁷ See in the regard *inter alia* ILC Draft Articles on the Responsibility of International Organizations with Commentaries (2011), available at <http://untreaty.un.org/ilc/texts/instruments/english/commentaries/9_11_2011.pdf>, Lagrange (2008), 85; Bell (2010), 501; Dannenbaum (2010), 113.

⁶⁸ See A/51/389, paras 17–18, p. 6 reported in ILC Draft Articles Commentary, *ibid*, at 23.

Chamber, held that the acts of KFOR and UNMIC in Kosovo were not attributed to the State concerned, but to the UN itself, as “the United Nations Security Council retained *ultimate authority and control*”.⁶⁹ Even though this *dictum* was upheld in other similar cases (e.g. *Kasumaj v. Greece*),⁷⁰ it was heavily criticized by the majority of legal literature⁷¹ and it was ‘forgotten’ in the recent *Al-Jedda Judgment* of the Strasbourg Court (2011).⁷² More importantly, it was rejected by the final reading of the ILC Draft Articles⁷³; hence, it is submitted that the criterion applicable in order to determine the attribution of the wrongful conduct is the “effective control”.⁷⁴

In applying the above principles to the present context, there must be an assessment of the control over the conduct in question, i.e. whether the act or omission on the part of the host State was dictated either by the international organization (EU or NATO) or by the host State itself. Depending upon this assessment, there might be cases that the sending State would be held individually responsible for a wrongful act and the EU or NATO for aiding or assisting in the commission of this act (article 14 of ILC Draft Articles). Alternatively, both the sending State and the international organization concerned might be jointly responsible for the same or different conduct in the course of a ship-rider operation off Somalia.

Two points call for comment here: first, there might be a situation that the conduct would be attributable to the international organization and not to the Member State, but the former would not be held liable, because it would not be under any primary obligation in this regard. It is tenably argued that not all the provisions of international law of the sea are binding upon European Union or NATO *per se*, as they fall outside the ambit of their respective powers. Such case is obviously the provisions of the law of the sea concerning the high seas and, in particular, piracy *jure gentium*.⁷⁵

In addition, there might be the case that when there is a breach of an obligation under human rights law in the course of a ship-rider operation, responsibility may

⁶⁹ *Behrami and Behrami v. France and Saramati v. France, Germany and Norway* (App. No.71412/01 and 78166/01), Decision on Admissibility (Grand Chamber), 2 May 2007, para 133.

⁷⁰ *Bl. Ilaz Kasumaj v. Greece*, Decision of 5 July 2007, Application No. 6974/05. *Cf. also Slavisa Gajic v. Germany*, Decision of 28 August 2007, Application No. 31446/02; *Dusan Beric and Others v. Bosnia and Herzegovina*, Decision of 16 October 2007, Application Nos 36357/04 et al.

⁷¹ See inter alia Larsen (2008), 509, 521–522; Milanović and Papić (2009), 267 at pp. 283–286; Orakhelashvili (2008), note, 337 at p. 341.

⁷² See *Al-Jedda v. United Kingdom*, Judgment (Grand Chamber), 7 July 2011, <http://cimskep.echr.coe.int>, para 56.

⁷³ See ILC Draft Articles Commentary, *supra* n. 61, at 25–26.

⁷⁴ *Per* this view was also the recent judgment of the District Court of The Hague concerning the attribution of the conduct of the Dutch contingent in the United Nations Protection Force (UNPROFOR) in relation to the massacre in Srebrenica. See Judgment of 5 July 2011, <http://zoeken.rechtspraak.nl>, especially paras 5.8 and 5.9 and comments, *ibid*, at 25.

⁷⁵ See relevant discussion in Talmon (2005), 405, at 411.

arise not only for the sending State but also for both the international organization and the host State. According to Guilfoyle, '[o]ne might be directly responsible for the wrongful conduct (i.e. where the official is acting as its organ), while the other might be in breach of a separate 'due diligence' or similar obligation to take positive steps designed to secure effective human rights protection. Where, for example, an international organization is in a position to regulate acts in territory under its legal or effective control it might perhaps be held responsible for failure to take measures to prevent certain abuses'.⁷⁶

4 Conclusion

Needless to say that the problem of piracy would not be resolved only by the use of ship-riders or by initiatives such as the Djibouti Code, albeit by a concentrated effort with a view to eliminating the real roots of the problem, such as the ongoing civil strife, the depletion of natural resources, the extreme poverty etc. This notwithstanding, measures to facilitate the assertion of jurisdiction on the part of States in the region and to enhance their cooperation in this regard are more than welcome. To this end, the use of ship-riders in the course of maritime interdiction operations may prove extremely helpful. Such option has been extensively employed in the fight against drug-trafficking, especially in the Caribbean region and has also been envisaged by the Djibouti Code and by the relevant SC Resolutions concerning Somalia. Nevertheless, the use of ship-riders in the context of counter-piracy operations remains an unimplemented option, save for a recent MoU between South Africa and Mozambique (June 2011).

It is submitted that the mechanism of ship-riders raises many perplexing legal issues that need careful consideration. Suffice to mention the question of joint international responsibility, namely the possibility of both the ship-rider' home State and the flag State of the warship incurring responsibility for an internationally wrongful act in the course of a ship-rider operation. This issue becomes even more tantalizing in the case of Somalia, as the responsibility of international organizations may also arise. In assessing the question of international responsibility in the course of ship-rider operations, due regard should be paid to the question of who exerts control over the wrongful conduct in question, as the above-mentioned ILC instruments dictate.

⁷⁶ Guilfoyle (2010b), 141, at 154.

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The Law Enforcement Approach to Sea Piracy: Overcoming Challenges to Effective Investigation and Prosecution of Somali Pirates

Henri Fouché

1 Introduction

Piracy, committed on the high seas or in an area outside the jurisdiction of any state, re-emerged in the twenty-first century off the continent of Africa, after having virtually disappeared from the world's oceans. Most of the attacks on ships hitherto had been perpetrated against ships alongside, at anchor or steaming in the territorial waters of states.¹ Such attacks were usually low level and were dealt with by states within the common law as robbery, damage to property and assault or within their national statute laws. With the resurgence in piracy in 2005 and attacks occurring up to 600 nautical miles off the coast of Somalia in the first 6 months of 2009,² many states that were subsequently called upon to prosecute the perpetrators were caught on the back foot by not having criminalised piracy, as defined by article 101 of the United Nations Convention on the Law of the Sea (UNCLOS) in their national laws.³ This led to some states seeking ad-hoc solutions by entering into memorandums of understanding with states in Africa by which the pirates that had been apprehended by their navies would be prosecuted and incarcerated in those African states which were perceived to have established universal jurisdiction for acts of piracy. According to a report of the Special Advisor to the Secretary General

¹ Barry Dubner in Meija and Mukherjee (2004), pp. 301–325.

² International Chamber of Commerce (ICC) International Maritime Bureau (IMB) *Piracy and armed robbery against ships report for the period 1 January – 30 June 2009*.

³ United Nations Convention on the Law of the Sea. Adopted on 10 December 1982 in Montego Bay.

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of the United Nations on legal issues related to piracy off the coast of Somalia,⁴ the position with regard to the prosecution of Somali pirates is that 738 persons suspected or found guilty of piracy are being detained. Of the 738 detainees 556 are being detained in countries in Africa, 132 in the Middle East, 38 in Europe and 12 in the United States of America. Over half of the suspected pirates apprehended since 2008, have been released without prosecution and as of May 2010, more than nine out of every ten captured pirates are not being prosecuted.⁵ Article 5 of the European Convention on Human Rights (ECHR),⁶ makes provision for the lawful arrest and detention of a person suspected of having committed an offence, or to prevent that person from committing an offence or to flee after having done so. The purpose of the arrest and detention must be for the purpose of bringing that person before a legally competent authority. Arrest and subsequent detention followed by release without appearing before a judicial authority could be construed as being in breach of article 5 of the ECHR. The situation begs the question as to why captured suspected pirates are being released without being prosecuted and what can be done to overcome a situation in which persons are committing piracy with virtual impunity. The answer to eradicating the phenomenon of Somali piracy is of course multilayered and complex and requires inputs from divergent disciplines. Providing a deterrent to the commission of piracy through successful prosecution and incarceration of offenders, although not the complete answer to the problem is a small, albeit necessary step towards the eventual eradication of Somali piracy.

2 The Law Enforcement Approach

The key to the successful prosecution of suspected pirates lies in adopting a law enforcement investigative approach in which the suspected perpetrators are arrested, an investigation is conducted as to whether a crime has been committed and if so what crime, and whether there is sufficient evidence to prosecute the suspects for a criminal offence in a court of law. On 29 May 2009 the Secretary General of Interpol, Mr. Ronald Noble referred to the law enforcement approach as the “missing link” in the fight against maritime piracy. He elaborated by explaining that the law enforcement approach could provide the link between the military interventions which led to the arrests and the prosecution of the pirates.⁷ In

⁴ Report of the Special Advisor to the Secretary-General on Legal Issues Related to Piracy off the Coast of Somalia. Annex to UNSC S/2011/30 dated 25 January 2011 from the Secretary-General to the President of the Security Council of the United Nations, p. 20.

⁵ *Id.*, p. 21.

⁶ European Convention on Human Rights (ECHR) (1950). Rome, 4 November. Available online <http://www.hri.org/docs/ECHR50.html>.

⁷ Interpol media release 29 May 2009. Law Enforcement is “missing link” in fight against maritime piracy, INTERPOL chief tells G8 meeting. Available online www.interpol.int.

September 2009, Mr. Louboutin, Interpol's executive director of police services, reiterated that while a military response is necessary to intervene on the high seas against well armed pirates, such a response on its own is insufficient when it comes to investigating this form of organized crime.⁸ The International Maritime Organization (IMO) Code of Practice for the Investigation of Crimes of Piracy and Armed Robbery Against Ships⁹ describes investigators as the persons appointed by the relevant state to investigate an act of piracy or armed robbery against a ship, after the event has occurred. The persons responsible for crime investigation in a state are usually members of an investigative or detective branch of the states police force. The Code goes on to state that conventional detective methods offer the best chance of identifying and apprehending pirates and perpetrators of armed robbery. An investigation usually begins at the crime scene where physical evidence is collected to identify and link the suspect to the crime. Becker states that the investigator and the forensic scientist work cooperatively on the task of evidence collection and that the investigator generally locates the prospective evidence and leaves it to trained technicians to process.¹⁰ Saferstein in turn points out that physical evidence can be optimally utilised in an investigation only when the collection is performed selectively by a collector who knows the capabilities, techniques and limitations of the crime laboratory which is to process the collected material.¹¹ It can thus be seen that the collection and processing of evidence is a task best left to expert personnel specifically trained for that purpose. The specific challenges to carrying out the investigative task in a maritime environment will be discussed later in this chapter.

3 Effectively Investigating Somali Sea Piracy

An investigation can be considered effective if it provides answers to the questions as to whether a criminal violation of a code or statute occurred, the time place and date of the occurrence, who the individuals are who were involved in the planning, execution and after effects of the violation, if there is a witness to the criminal activity present, whether there is evidence of the criminal offence, the manner in which or the method used to perpetrate the crime and whether there is indications of guilt or innocence to assist officials during the criminal proceedings.¹² Investigations should ideally be conducted by law enforcement officials who are employed by a states police force that is empowered by an act of that states

⁸ Interpol media release 17 September 2009. Interpol maritime piracy working group aims to enhance international police collaboration. Available online www.interpol.int.

⁹ Code of Practice for the Investigation of Crimes of Piracy and Armed Robbery Against Ships. IMO Resolution A.1025 (26) adopted on 2 December 2009.I:\ASSEMBLY\26\RES\1025.doc.

¹⁰ Becker (2000), p. 9.

¹¹ Saferstein (2004), p. 34.

¹² Gilbert (2010), p. 34.

legislature to maintain law and order, combat and investigate crime and ensure that offenders are brought to justice. Due to the complexity of investigating an offence which has been committed in one jurisdiction with multiple role players involved and which will in all probability be prosecuted in a different jurisdiction it is essential that the different facets, phases and progress of the investigation be coordinated by a central body that can communicate with all the role players and coordinate the eventual prosecution. Given that the task of investigating piracy is best handled by trained police officials, and that piracy is a transnational crime, it would stand to reason that the international organisation best suited to coordinate the investigation of piracy would be the international police organisation, Interpol, that has 188 member countries police forces as members and whose involvement in dealing with maritime piracy goes as far back as 1985 when a resolution dealing with international terrorism and unlawful interference with civil aviation was discussed at the 54th session of the general assembly in October in Washington.¹³ For many years Interpol's anti-terrorism branch dealt with maritime piracy together with terrorism, firearms and explosives, and attacks and threats against civil aviation. In 2001 an Interpol project was initiated which would deal specifically with piracy. The project was designed, amongst other, to build a data base of new information and assist local police operationally with incident response teams (IRT) as well as with training.¹⁴ During the period of catch and release of suspected pirates practiced by warships in the coalition of navies and states national navies conducting anti-piracy patrols in the vicinity of Somalia and the Gulf of Aden pursuant to UNSC 1816 since 2008, valuable information was accessed with which to populate Interpol's data base.¹⁵ This information was to prove its worth when utilised by the IRTs during forensic investigations conducted onboard vessels released by the Somali pirates after being held hostage for extended periods off the coast of Somalia. One of the first challenges which had to be addressed was ship owners and ship operators' reluctance to subject their vessels to what they perceived would be prolonged investigations resulting in delays and the subsequent requests for witnesses to be made available to give evidence in the courts of the state where prosecution may eventually be initiated. This hurdle was addressed by UNSC resolution 1950 which underlines the importance of the collection, preservation and transmission of evidence of acts of sea piracy to the relevant authorities.¹⁶ Resolution 1950 also notes the importance of enabling seafarers to give evidence in criminal proceedings if prosecutions are to be successful. The work of the IMO, Interpol and industry groups in developing guidelines for seafarers on the preservation of crime scenes following acts of piracy is also acknowledged. The resolution also calls upon all states and in particular flag,

¹³ AGM/54/RES/1 (Washington DC 1985).

¹⁴ Interpol. Report on Project BADA. Available online <http://i247.ip/1247/Public/icpo/governance/ec/default.asp>.

¹⁵ S.C. Res.1816, U.N. Doc. S/RES/1816 (June 2, 2008).

¹⁶ S.C. Res.1950, U.N. Doc. S/RES/1950 (November 23, 2010).

port, and coastal states and other states with the relevant jurisdiction under international law and national legislation to cooperate in determining jurisdiction and in the investigation and prosecution of all persons responsible for acts of piracy and armed robbery off the coast of Somalia. The IMO has provided the Code of Practice for the Investigation of Crimes of Piracy and Armed Robbery Against Ships¹⁷ as an aid to member states and their police forces to facilitate the effective investigation of these crimes. The Code encourages states to implement the provisions of UNCLOS and the Convention for the Suppression of Unlawful Acts against the Safety of Navigation (SUA),¹⁸ to cooperate fully in the investigation of armed robbery incidents, together with other states that have an interest, such as the flag state. The Code provides guidance for the training of investigators and points out the importance of the securing of evidence, particularly if expert examination is needed, the sharing of information to help prevent other offences and cooperation with the authority responsible for dealing with the specific incident. The need to train investigators to handle persons who have been severely traumatised and the necessity for training for investigators in this regard is emphasised. The Code underlines the importance of the recovery of forensic material from a crime scene and points out that such material has the potential to provide evidence to identify offenders. The Code reminds investigators of the risk of contamination particularly during the initial phases of law enforcement response which presents the greatest risk of scene contamination.

4 Challenges to Effective Investigation of Somali Sea Piracy

Mr. Jack Lang, Special Advisor to the Secretary-General of the United Nations on Legal Issues Related to Piracy off the Coast of Somalia in a report dated 24/01/2011 cites the difficulty of assembling evidence as the main reason why pirates escape punishment.¹⁹ He goes on to recommend that in order to facilitate effective prosecution the construction of a case should be initiated with a set of evidence commencing with the documentation of the behaviour of the suspects and the type of equipment and weapons they have in their possession when first observed. The report highlights the importance of identifying and gathering evidence as a prerequisite for successful prosecution and to this end proposes that the investigative capacity of states in the region be enhanced by way of training and support under the auspices of Interpol. The report proposes further that special regional teams be established to investigate piracy and that such teams commence with evidence

¹⁷ See n. 9 above.

¹⁸ Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA) 10 March 1988.

¹⁹ See n. 4 above.

gathering immediately after an attack is thwarted, during hostage-taking, negotiation and payment of ransom and immediately after release. The report mentions that the major difficulty in evidence gathering is whether the evidence will be admissible before the courts.

Between 14 and 24 April 2011 the author participated in an Interpol maritime piracy IRT in the port of Durban, South Africa. The team was assembled to conduct an investigation at the first port of call of a very large crude carrier (VLCC) the Greek flagged *MT Irene SL* which had been hijacked by Somali pirates, anchored off the coast of Somalia and released after being detained for 58 days. Some of the investigative challenges experienced by the team are reflected upon here. Before the arrival of the vessel the communication with the ships local representatives was inadequate, possibly also due to the lack of information concerning the time of arrival and the other issues surrounding the state of the vessel and the crew. The representatives from the agency office and the ownership of the vessel needed to be convinced of the necessity for an investigation team to board the vessel and to conduct an investigation which would entail interviewing crew members and collecting evidence. One of the main concerns raised was the possibility that the vessel would be delayed by the investigation, secondly the size of the team necessary to conduct such an investigation in an acceptable time, without causing delays, was a point of contention. The team that eventually boarded the vessel consisted of 28 including detectives who were responsible for identifying possible evidence and taking statements from the victims and forensic investigators responsible for collecting, recording and preserving the evidence for forensic investigation and evaluation. The forensic investigators were hampered by the amount of technical equipment, including a body fluid detection dog, which had to be transported to the vessel at sea off Durban in order to be self-contained on the vessel. To ensure that no further crime scene contamination would take place all members of the boarding team were issued with DNA protective clothing. The boarding by the investigation team was preceded by the boarding of the owners who wanted to talk with the crew before they could be interviewed by the investigation team. Upon the arrival of the investigation team on board the vessel an estimated three quarters of possible available evidence had been contaminated due also to, *inter alia*, a necessity to clean the ship immediately, the prior boarding of the vessel by a team of first responders from a warship who did not adhere to crime scene management principles,²⁰ and the degradation of some evidence such as fingerprints and DNA due to moisture particularly on the decks where it had come into contact with seawater. The crime scene had been occupied for a prolonged period due to the hostage taking and much of the incriminating evidence had been discarded by having been thrown overboard. All of the detectives assigned to identifying possible evidence and obtaining statements from the victims had vast experience in conventional criminal investigative techniques. With the exception of

²⁰ In particular, this team of first responders destroyed exhibits such as equipment used by the perpetrators to board the ship by dumping them in the ocean.

the commander of the detectives none of them, however, had been onboard a vessel at sea before and had no maritime knowledge. This resulted in them being disorientated onboard the vessel (crime scene) due to the unfamiliar surroundings and the use of unfamiliar terminology by the victims when referring to persons, places and procedures onboard the vessel. Many of the victims could also barely speak English and were severely traumatised which did not improve matters. The detectives were also hampered by their unfamiliarity with the *modus operandi* of the suspects and the number of suspects involved. They were daunted by the sheer size of the crime scene and experienced difficulty in cordoning off many different scenes over a large area. In this regard far more planning and control had to be exercised in regard to the crime scene than they would have normally had to apply. Normal procedure would require witnesses to be removed from the crime scene and interviewed separately. In this case, however, the vessel's crew members had to stay aboard and could not be removed out of the crime scene during the processing of the scene as well as for interviews. There was also a very limited period in which to take the statements due to the witnesses having to be available to hand over to the oncoming crew and the witnesses having to be available during the conducting of technical tests to the vessel. This also led to interruptions during some of the interviews which exacerbated an already difficult process. The detectives were also uncertain of their competencies and jurisdiction in terms of the crime scene with the master of the vessel being effectively in control of the crime scene and in a position to dictate to the investigation team. The forensic investigators on the other hand experienced challenges with the equipment which they had taken aboard, some of it being more suitable for processing terrestrial scenes at higher altitudes and affected by moisture and climatic changes. Power sources with compatible current were also not readily available onboard. The movement of the vessel due to rough weather also hampered the process of collection, which at times had to be stopped due to the motion. Time exposures during photography for example were difficult due to the instability of the vessel. Marking of the position of exhibits were also difficult due to the motion. For safety reasons limits were placed on the use of equipment onboard such as flash photography, electrostatic dust lifters and other specialised equipment. These challenges were compounded by many of the members of the investigation team falling victim to motion sickness.

The main challenges relating to evidence collection remains the contamination of the crime scene before the arrival of the specialist investigation team. In most cases of investigation into piracy and armed robbery investigators will not have the opportunity to work a crime scene in its untouched state. Article 8 of the SUA Convention defines the role of the master of a ship of a state party in delivering to the authorities of any other state party any person believed to have committed an offence under article 3, which includes the hijacking of a vessel. The master is also required to furnish the receiving state with all the evidence relative to the offence, in his possession. Such obligation would imply the preservation and avoidance of contamination of such evidence. The preservation of evidence and maintaining the chain of custody for presenting the evidence in court remains one of the biggest challenges to presenting evidence in court so that it is not excluded from the

proceedings and deliberations due to irregularities during collection or during the period between collection and presentation in court.

5 Prosecuting Somali Sea Pirates

The inability of Somalia's Transitional Federal Government (TFG) to patrol the territorial waters of Somalia and to interdict pirates and secure the international sea lanes off its coast is recognised in UNSC Resolution 1816 (2008).²¹ The resolution thus calls on all states to, amongst others, cooperate with the prosecution of persons responsible for acts of piracy and armed robbery off the coast of Somalia. In February 2009, Antonio Maria Costa, executive director of the United Nations Office on Drugs and Crime (UNODC) outlined three options that states could adopt in assisting with the prosecution of Somali pirates.²² The first is that suspected pirates should be prosecuted in their country of origin or in the flag state of the vessel that was subject to attack. The second option is that the suspected pirates be prosecuted in the country of the arresting warship and the third option is that they are arrested by shipriders, and prosecuted in the country which provided the shipriders.²³

In terms of the first option, foreign navies have not been able to or were unwilling to transfer suspected pirates to Somali custody. They proved also to be uncertain as to how to deal with suspected pirates seized in international waters,²⁴ and opted rather to release them without prosecution. Flag states in most cases simply do not have the resources to prosecute suspected pirates who hijacked ships sailing under their flag, particularly in cases of ships sailing under flags of convenience and registered in weak coastal states. For the second option to be successful the states whose navies arrested the suspected pirates would have to have national laws which criminalise piracy, subject to that state's membership of UNCLOS. Kontorovich points out that because the state which arrests and intends to prosecute the pirates bears the costs, states will be prepared to accept the high cost of prosecution only if their own interests are affected or their ships and crew are attacked by the pirates. He also believes that international law provides sufficient grounds to prosecute pirates and that states that protest otherwise do so to conceal their political unwillingness to prosecute.²⁵

²¹ See n. 15 above.

²² Costa (2009).

²³ Shipriders. S.C. Res.1851, U.N. Doc. S/RES/1851 (December 16, 2008) provides for states to nominate law enforcement officials to patrol with ships of other states, with the aim of assisting the host state, and to conduct operations from the host participants ship.

²⁴ See n. 4 above.

²⁵ Kontorovich (2009).

The third option, to make use of shipriders, is based on a project of the UNODC in conjunction with the Contact Group on Piracy off the Coast of Somalia (CGPCS)²⁶ to facilitate the application of the law enforcement approach in regional context to combat piracy off the coast of Somalia.²⁷ UNSC Resolution 1851 encourages the use of shipriders by inviting all states and regional organisations fighting piracy off the coast of Somalia to conclude agreements with countries, willing to take custody of pirates, in order to embark law enforcement officials (shipriders) from those countries, and in particular countries in the region to facilitate the investigation and prosecution of persons detained for acts of piracy and armed robbery at sea off the coast of Somalia. On 29 January 2009 a regional agreement was adopted in Djibouti by states in the region at a meeting convened by the IMO. Article 7 of the agreement provides for participating states to nominate law enforcement officials to patrol with the ships of other participants. The aim of article 7 is to give effect to UNSC Resolution 1851 by embarking regional law enforcement officers on the host participant's vessels to assist with the arrest of piracy suspects and to conduct the investigation necessary for prosecution in the state which provided the shipriders.²⁸ This option is unfortunately not widely used by states in the region and in all probability for the reasons discussed above.

Another option for prosecution which was adopted was for states to have Memorandums of Understanding (MoU) with third states in the region to undertake the prosecution and incarceration of suspected and convicted pirates. One of the first states to accept suspected pirates for prosecution under such an MOU was Kenya. In 2006 Kenya instituted judicial proceedings, in terms of section 69 of Kenya's 1967 Penal Code, against eight pirates who had been arrested by a US warship after having attacked an Indian-flagged ship on the high seas. Between 2009 and 2010 50 pirates were sentenced in Kenya in terms of section 69 of the Penal Code.²⁹ In March 2010, however, Kenya declared its intention to withdraw from the transfer agreements to which it was party citing as reason the threat of retaliation and the need to see other states sharing the burden.³⁰ Other countries in the region including Tanzania, the Seychelles, Mauritius and the Maldives are being assisted by the UNODC with judicial, prosecutorial and police capacity-building programmes to enable them to assist with the prosecution of pirates.³¹

²⁶ Contact Group on Piracy off the Coast of Somalia (CGPCS). Available online <http://www.thecgpcs.org>.

²⁷ Congressional Research Service (CRS) Report for Congress: Piracy off the Horn of Africa. CRS 7-5700 www.crs.gov R40528, p. 25.

²⁸ Djibouti Code. Instrument concerning the repression of piracy and armed robbery against ships in the Western Indian Ocean, the Gulf of Aden and the Red sea area adopted as the Djibouti code of Conduct at a meeting, attended by delegations from states in the region, in Djibouti in January 2009. Available online <http://www.imo.org/Mediacentre/Pages/Home.aspx>.

²⁹ UNODC and piracy. Available online <http://www.unodc.org/easternafrika/en/piracy/index.html>.

³⁰ See n. 4 above, p. 27.

³¹ See n. 29 above.

Tanzania, the Seychelles and Mauritius are member states of the Southern African Development Community (SADC) which recognises that the problems of piracy and armed robbery off the coast of Somalia have a direct impact on the SADC maritime security in that pirates are being pushed further south, beyond the patrolling navies in the Gulf of Aden, off the coast of Somali and in the Indian ocean into the Mozambique channel and the oceans of members of SADC on the eastern seaboard of Africa. South Africa's Minister of Defence, Lindiwe Sisulu has called for an end to the catch and release of pirates, stating that it allows experienced pirates to execute more sophisticated acts of piracy. Minister Sisulu stated that the SADC will need to take responsibility for its own maritime security in cooperation with other regions, task forces, navies and role players.³² Any action taken by the SADC countries towards assisting in the prosecution of pirates would therefore be in line with SADC and African Union (AU) strategy and initiatives on maritime security and piracy.

On 01 July 2011 the ICC-IMB called on governments to step up international efforts to halt piracy and to ensure that piracy suspects are swiftly brought to justice and not sent back to Somalia without being held accountable for their crimes.³³ UNSC Resolution 1950 issued on 23 November 2010 reaffirms that international law as reflected in the United Nations Convention on the Law of the Sea³⁴ contains the legal framework for combating piracy and armed robbery at sea. Current thinking favours the "Somalization" of solutions which foresee a strengthening of the rule of law by the establishment of a court system comprised of a specialised court in Puntland, a specialised court in Somaliland, and an extraterritorial Somali specialised court.³⁵

On 14 July 2011, because of the high numbers of captured pirates being released without prosecution, the ninth plenary session of the contact group on piracy (CGPCS) off the coast of Somalia noted the urgent need to increase the number of prosecutions of Somali pirates as a top priority.³⁶ The CGPCS also noted the need for mechanisms to enable navies operating off Somalia to quickly hand over captured pirates to competent state authorities for prosecution using, in particular, evidence collected on board naval vessels. A report issued by the Secretary General of the United Nations to the UNSC, pursuant to a request in Resolution 1918, identifies seven possible options to further the aim of prosecuting and imprisoning persons responsible for acts of piracy and armed robbery at sea.³⁷ The seven options include the UN provision of assistance to regional states to prosecute and imprison

³² PMAESA (2011).

³³ International Chamber of Commerce (ICC) International Maritime Bureau (IMB) *Piracy and armed robbery against ships report for the period 1 January – 30 June 2011*.

³⁴ See n. 3 above.

³⁵ See n. 4 above, p. 38.

³⁶ See n. 26 above. The ninth Plenary Session of the CGPCS took place on 14 July 2011 in New York.

³⁷ See n. 15 above. UNSC S/2010/394. 26 July 2010.

persons responsible for piracy and armed robbery off the coast of Somalia. The other options include a Somali court sitting in a third state in the region, a special chamber within the jurisdiction of a state or states in the region, the establishment of a regional tribunal based on a multilateral agreement between the regional states, and the establishment of an international tribunal. The first option is already operating. To implement the other options would require huge financial commitments from the participating states as well as the political will to establish and operate such courts in their territory.

6 Challenges to Prosecuting Somali Sea Pirates

One of the main challenges to prosecution is that many states have not criminalised piracy in their national legislations, pursuant to the requirements of membership of UNCLOS. This hinders such states in instituting criminal proceedings against suspected pirates and results in their release without prosecution. This seeming impunity further emboldens the pirates and swells the numbers of their ranks. UNSC Resolution 1950 addresses this shortcoming by calling on all states to criminalise piracy under their national law and to consider undertaking the prosecution of suspected pirates apprehended off the coast of Somalia. Jack Lang, in his January 2011 report to the Secretary-General of the United Nations points out and discusses the following challenges to effective prosecution. The failure of states to harmonise their national legislation with the definitions of UNCLOS; the failure to claim universal jurisdiction over acts of piracy; the need to adopt a legal framework for detention at sea in compliance with international human rights law and operational constraints at sea; the need to formulate an international model case report for setting out the facts of the case as part of the evidence required in judicial proceedings for successful prosecution of acts of piracy and armed robbery against ships; raising awareness of the need for victims to be available to give testimony and encouraging the use of videoconference to obtain testimony; overcoming legal hurdles and the lack of political will on the part of states to prosecute offenders. As of 31 December 2012 suspected Somali pirates still held 8 vessels with 104 crew members of different nationalities as hostages with an additional 23 kidnapped crew members being held on land.³⁸ (NOTE: update these figures from the latest IMB statistics?) The IMO's Code of Practice for the Investigation of Crimes of Piracy and Armed Robbery Against Ships³⁹ emphasises the need for recognition to be given to the different national interests which may be involved in each case to be investigated. The Code mentions, amongst other, the interests of the flag state of the

³⁸ ICC-IMB Piracy and armed robbery against ships. Report for period 1/1/2012 to 31/12/2012. As of December 2012 suspected Somali pirates still held 8 vessels with 104 crew members of different nationalities as hostages with an additional 23 kidnapped crew members being held on land. p. 20.

³⁹ See n. 9.

ship, the country of the nationality of the persons on board, the country of the ownership of the cargo and the country where the suspected perpetrators come from. The Code recommends in cases of piracy that the flag state of the ship take the lead responsibility and that in the case of armed robbery the state in whose territorial waters the attacks took place take the lead. Clearly in the case of attacks in Somali territorial waters the state of Somalia does not have the capacity to investigate and prosecute perpetrators of armed robbery against ships in their territorial waters. In such a case, by default, the flag state would need to initiate and lead the investigation with a view to prosecution. The IMO Code emphasises that in all cases the legitimate interests of all the states involved should be taken into account and that liaison and cooperation between such states is a prerequisite for successful investigation and prosecution of such cases. In this instance Interpol can also play a role in facilitating communications between investigators and prosecuting authorities in the different member states. One of the first steps which need to be taken to initiate criminal proceedings in regard to any suspected crime is to report the suspected crime to a police station where a case will be registered for investigation. One of the challenges to successful prosecution of Somali pirates is to identify a state that is willing to institute criminal proceedings and for the ship owner or ship operator to report the crime to the relevant law enforcement authority in that state. Such a step is also necessary to enable Interpol to issue a red notice to its member states for the arrest and extradition of the suspected perpetrator. Such a notice cannot be issued unless the state to which the suspect must be extradited to is identified and a valid warrant of arrest for the suspect has been issued and is in force in that state. Given that ship operators are often reluctant to co-operate with law enforcement after the release of the vessel by the hostage takers this could present a challenge to initiating criminal proceedings.

Another challenge to prosecution is the seeming difference in priorities between the patrolling military forces off the coast of Somalia and law enforcement ultimately responsible for the prosecution of apprehended pirates. UNSCR 1950 makes a strong call for the collection, preservation and transmission of evidence of acts of piracy and armed robbery at sea off the coast of Somalia for the purpose of prosecution. The ICC-IMB in July 2011,⁴⁰ in pointing out that UNSC 1950 calls for the seizure and disposal of vessels, weapons and equipment used or suspected of being used for piracy, calls on countries operating naval vessels in the region to adopt and incorporate these terms of UNSC 1950 into their rules of engagement for their naval commanders. This call for action, however, may be interpreted by naval commanders as a call for the immobilisation of such pirate resources through destruction on the scene, thus inadvertently destroying potential evidence/exhibits useful for the investigation and prosecution of the suspected pirates. Mr. Lang, Special Advisor to the Secretary General of the UN on Legal Issues Related to Piracy off the Coast of Somalia emphasises the need for collecting evidence such as the weapons and equipment used in the commission of piracy, in order to facilitate prosecution. He also points out some of the challenges in this regard by

⁴⁰ See n. 33 above.

emphasising the need for continuity in the collection and production of evidence for successful prosecution and highlighting the operational difficulty of maintaining the necessary chain of custody when transferring to another ship or aircraft so as not to invalidate the chain of custody required by court proceedings. Another challenge highlighted by Mr. Lang is the need for naval forces to have command, and to take into account a range, of complex criminal procedures that vary according to the state where prosecution may be conducted. All of these constraints present a challenge to successful prosecution.⁴¹

7 Conclusion

Successful prosecution of Somali pirates is possible and also necessary if piracy is to be curbed and eventually eradicated. Although the ideal situation would be for Somalia to prosecute pirates apprehended by foreign navies on its behalf due to its inability to police its own waters, such a step would require assistance and financial inputs from regional states and international bodies such as the UNODC in terms of capacity building which would have to include the provision of effective security.

A prerequisite for successful prosecution is efficient and effective investigation at the crime scene and the collection and preservation of evidence to prove that a crime has been committed and to identify and link the perpetrator to the crime. Such an investigation will almost inevitably have to be conducted in less than ideal circumstances due to the huge potential for crime scene contamination in the maritime domain. The problem of piracy and armed robbery at sea off the coast of Somalia will in all probability not be eradicated in the short term and will consequently have far reaching negative implications for all the countries, littoral and landlocked, as well as regional economic communities, in Africa.

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Japanese Anti-Piracy Law: Protection of Flagged-Out Ships

Kentaro Furuya

1 Introduction

The threat of piracy off Somalia is expanding. The central government of Somalia lost control in 1991 and is still unable to exercise its power to enforce laws over piracy and armed robbery. According to the International Maritime Bureau of the International Chamber of Shipping, the number of piracy cases has increased, and the record has been renewed every year. It also indicates that the geographical area of piracy has been expanded to the West Indian Ocean.¹ It is often pointed out that the use of mother ships, which pirates take control of and utilise to accommodate their attacking skiff, enables them to sail out up to the Arabian Sea and the Mozambique Channel from the Somali coast, since such ships are often bigger than their boats and have a greater ocean-going capability. In addition, it has often been pointed out that pirates have become more violent than ever and that captives face beatings, abuse, and torture.² A recent research paper anticipated that “piracy attacks will increase, numbers of hostages will increase, and the violence will increase as a result of the growing danger and complexity of Somali piracy”.³

Some legal issues were revealed when the Japanese Government determined that it would deploy its forces to the Gulf of Aden to escort ships transiting the vicinity.

The views expressed in this article are those of the author’s and not necessarily reflected the view of the Government of Japan and the Japan Coast Guard.

¹ International Chamber of Commerce - IMB (2010), p. 23.

² Howden (2011) (last visited on 4 February 2011).

³ Hurlburt et al. (2011) (last visited 30 June 2011).

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Although the Convention on the High Seas (HSC) and the Law of the Sea Convention (UNCLOS) authorise every state to exercise jurisdiction over piracy,⁴ the Japanese legal regime had not defined piracy and established universal jurisdiction over piracy. For example, the Japanese Penal Code restricts the application of universal jurisdiction only when conventions, to which Japan is a party, obliges to criminalise certain acts. Art. 105 of the UNCLOS authorises but does not obligate states to assert jurisdiction over piracy; therefore, it would not be applicable. Furthermore, considering the *modus operandi* of Somali pirate attacks, once they board another ship, they would take crew as hostages and human shields by using arms such as Rocket-Propelled Grenades (RPGs) and AK-47s, so Japanese forces on the scene would find it necessary to stop pirates approaching and boarding another ship. However, the Japanese general rules on the use of forces by law enforcement officers did not clearly authorise warning shots to deter and scatter pirate ships. In addition, firing against a pirate ship to physically stop it from approaching and boarding another ship was considerably restricted since it might injure the persons on board. Moreover, it would be potentially unconstitutional if Japanese officers used force against a suspect pirate ship operated by *de-facto* state agents such as the self-proclaimed Coast Guard.

After thorough consideration, the Japanese Government determined that it would develop new legislation in order to rectify legal deficiencies to carry out counter piracy operations appropriately and effectively. In June 2009, the Government adopted the “Law on Punishment of and Measures against Acts of Piracy” (Act No. 55 of 2009, “Japanese Anti-piracy Act”)⁵ in accordance with the relevant provision of the UNCLOS. This paper discusses the role of the Japanese Anti-piracy Act vis-à-vis international law in counter-piracy operations in the context of Japan. It examines the legal challenges before the introduction of the Act and highlights how it addresses these issues. Finally, it argues future challenges, which was revealed as a pirate case, which the Government accepted the chance to prosecute in a Japanese court.

2 The Impact of Somali Piracy and Initiation of Japanese Counter Piracy Operations

2.1 *Characteristics of the Japanese Shipping Industry and Its Legal Implication*

The shipping industry is substantial for Japan. Since it is an island country, the shipping industry is the primary mode of international trade. According to statistics

⁴The Convention of the High Seas Art. 19 and The Law of the Sea Convention Art. 105.

⁵Law on Punishment of and Measures against Acts of Piracy, Act No. 55, 2009; an unofficial translation of the Act can be downloaded in English from the website of the Ocean Policy Research Foundation, available online <http://www.sof.or.jp/en/topics/pdf/09_01.pdf> (last visited on 16 September 11).

sourced from the Japanese Shipowners' Association, 99 % of goods in weight were transported to and from Japan by the sea in 2009.⁶ In fact, since the Gulf of Aden is a vital sea route connecting Asia and the Middle East to the European States via the Suez Canal, it may not be surprising that each year approximately 10 % of the 18,000 ships steaming off the Gulf of Aden are Japanese-related ships, which are either Japanese registered ships or ships operated by a Japanese company,⁷ which often carry Japanese cargo.

Despite these facts, it has been pointed out that the number of ships registered in Japan is relatively small. According to the Maritime Bureau of Japan, Japanese shipping companies employed more than 2,700 ships for international trade in 2010.⁸ The statistics also reveal that only 119 ships were registered in Japan, which represents only 4.3 % of the ships employed. The pertinent fact is that most of the other ships were registered in states other than Japan and chartered by Japanese companies, and are often called 'flagged-out ships'. Despite the substantial role of the shipping industry in Japanese international trade, it has been pointed out that there is a significant imbalance in the number of these flagged-out ships and ships flying under the Japanese flag.

The legal implication of this imbalance is that Japan has limited jurisdiction over a great number of these flagged-out ships carrying Japanese interests on the high seas. Art. 92 of the UNCLOS stipulates that ships are under the exclusive jurisdiction of the flag state on the high seas unless "cases expressly provided for in international treaties or in this Convention",⁹ such as piracy under Art. 105, right of visit under Art. 110 and Right of hot pursuit under Art. 111; otherwise, Japan would not have jurisdiction over those flagged-out ships.

2.2 *Japanese Initiative in Countering Piracy off Somalia in 2009*

The surging wave of the threat has reached Japan, which invoked Japanese counter piracy operations. In 2007, *M/V Golden Nori*, a chemical tanker owned and operated by a Japanese company, was attacked and hijacked. In 2008, a Japanese tanker, *Takayama*, and three other ships were attacked and hijacked, during which

⁶ Japanese Shipowners' Association, "Nihon Kaiun no Genjo", *Japanese Shipowners' Association*, available online <<http://www.jsanet.or.jp/data/pdf/genjo2011.pdf>> (last visited on 16 September 2011).

⁷ Statement made in the 171st Diet Session, during the deliberation of the draft Japanese anti-piracy Law at the Lower House Special Committee on Anti-Piracy Measures, Prevention of International Terrorism, and Japan's Cooperation and Support of on 23 April 2009.

⁸ Maritime Bureau, *Kaiji Report*, Ministry of Land Infrastructure, Transportation and tourism, available online <http://www.mlit.go.jp/maritime/kaijireport/report_H23_11.pdf> (last visited on 16 September 2011).

⁹ UNCLOS Art. 92.

one Japanese seafarer became a captive. Amidst the uprising of the public opinion against piracy, the Japanese Government determined that it would deploy the Japan Maritime Self-Defence Forces (JMSDF) for its Maritime Security Operation (MSO) under Art. 82 of Self-Defence Force Act (Act No. 165, 1954) with Japan Coast Guard (JCG) officers. Although the MSO was not developed to counter piracy off Somalia, but to maintain security and legal order for Japanese nationals and property, it seemed reasonable to dispatch the JMSDF under the legal regime that existed at this time. It was a significant political decision since it was the third time they had invoked the MSO for more than 50 years from its adoption.

At the same time, Japan had started to develop an anti-piracy law, since there were a couple of major concerns in the MSO. Firstly, since the MSO was originally designed to carry out missions in order to protect *Japanese nationals and property*, ships subject to escort were restricted to Japanese ships, ships carrying Japanese nationals, and ships operated by a Japanese company and carrying Japanese interests. Secondly, considering the *modus operandi* of piracy off Somalia, it is pointed out that the regime of the use of force under the MSO would not be sufficient.

In June, 2 months after the deployment of JMSDF and JCG, the Government adopted a Japanese Anti-piracy Act based upon the relevant provision of the UNCLOS.¹⁰ The Act provides, *inter alia*, the definition of acts of piracy, the introduction of universal jurisdiction over piracy, and the legal basis of the JMSDF to take the “Anti-Piracy Response Operation” (APRO).¹¹ It further authorises the use of force in counter piracy operations in accordance with Art. 7 of the Police Duties Execution Law (Act No. 136, 1948),¹² which prevails the use of force by law enforcement officers.

3 Restrictions in Application of the Japanese Legal Regime Before the Act

Asserting universal jurisdiction on the high seas to suppress piracy could be challenging. Piracy is subject to universal jurisdiction under international law where every state may exercise jurisdiction on the high seas. HSC Art. 19 and UNCLOS Art. 105 authorise every state to seize a pirate ship, arrest the person, and seize property on board.¹³ However, it is not enough to assert jurisdiction over

¹⁰ Statement made in the 171st Diet Session, during the deliberation of the draft Japanese anti-piracy Law at the Upper House Committee on Foreign Affairs and Defense on 9 June 2009.

¹¹ See n. 5 above. Art. 7.

¹² Police Duties Execution Law, Act No. 136, 1948; unofficial translation of the Act can be downloaded in English from the website of the Police Policy Research Center, available online <<http://www.npa.go.jp/english/seisaku7/hourei1-4.pdf>>.

¹³ The Convention of the High Seas Art. 19 and The Law of the Sea Convention Art. 105.

Somali piracy. Although acts of piracy are defined in international law, there is no international court to hear a pirate case, and only a domestic court can hear such a case. International law only authorises states to assert exercise jurisdiction, but it would not exercise jurisdiction at a court. Therefore, acts of piracy ought to be defined and criminalised in municipal laws and necessary jurisdiction should be established so that an international court can deal with piracy cases.

3.1 Application of Acts of Piracy Under the Japanese Penal Code (Act No. 45 of 1907)¹⁴

There is no provision that sets out the definition of acts of piracy under the Japanese Penal Code. When the Japanese Government ratified the UNCLOS, it was considered that the elements of acts of piracy would constitute crimes in the Japanese Penal Code. For example, the Code provides for homicide (Art. 199), injury (Art. 204), capture and confinement (Art. 220), intimidation (Art. 222) and robbery (Art. 236). The Government considered that it would not be necessary to have a provision dedicated to criminalise acts of piracy since pirates would commit one of these crimes during an attack.

There are, however, jurisdictional restrictions in the application of the Code regarding Somali pirates. The Code establishes jurisdiction based on territoriality, which includes ships registered in Japan (Art. 1). The Code extends extraterritorial jurisdiction for certain crimes based upon the Protective Principle (Art. 2), the Nationality Principle (Art. 3), and the Passive Nationality Principle (Art. 3-2). These provisions limit the application of the Code against Somali pirates, since the designated crimes set out in Art. 2 are not related to acts of piracy, and Art. 3 and 3-2 will only apply when the pirates are Japanese or a victim of a pirate attack is Japanese, respectively.

In addition, Art. 4-2 further extends jurisdiction over “Crimes Committed outside Japan Governed by a Treaty” in which the Code would apply to anyone who commits an offence outside the territory of Japan. The Article, however, would not be applicable over piracy cases since it has been interpreted to be applicable when an international treaty *obliges* to criminalise its party states.¹⁵ In this context, Article 105 of the UNCLOS reads, “. . . every State *may* seize a pirate ship or aircraft, . . . and arrest the persons and seize the property on board . . .” (emphasis added)¹⁶ and it allows the court of the state, which seized the ship, a *right* to decide

¹⁴ Japanese Penal Code, Act No. 45, 1907, unofficial translation of the Code can be downloaded in English from the website of the Cabinet Secretariat, available at <<http://www.cas.go.jp/jp/seisaku/hourei/data/PC.pdf>>.

¹⁵ Tsuruta (2011), pp. 237–245.

¹⁶ The Law of the Sea Convention Article 105.

penalties to impose. They do not, however, *oblige* a party state to criminalise acts of piracy; therefore, the Article is not applicable to piracy cases.

Thus, the application of Japanese Penal Code is considerably restricted over Somali piracy since offenders are often Somali nationals, ships are registered in different states, and victims are the crew from various states. Therefore, unless either a Japanese ship or a Japanese national is involved, Japan would not have jurisdiction under the Penal Code. Considering the number of Japanese ships, Japan would have less nexus, and fewer opportunities to exercise its power.

3.2 *Duty and Authority of the Japan Coast Guard Officers*

A number of authorities are granted to JCG officers to carry out their duties under the Japan Coast Guard Act (Act No. 28, 1948).¹⁷ The pertinent power to counter piracy operations would be general duty to enforce law at sea, boarding inspection, and the use of force by JCG officers.

Firstly, the JCG officers have the general duty to enforce laws and maintain good order at sea under the JCG Act. Art. 2 reads:

The Japan Coast Guard shall, for the purpose of ensuring safety and order at sea perform the duties concerning enforcement of laws and regulations at sea . . . prevention and suppression of crimes at sea, detection and arrest of criminals at sea. . .¹⁸

The meaning of “at sea” in this provision is construed as being extended to beyond the Japanese territorial sea and to the high seas insofar as it relates to the Japanese lawful limit.¹⁹ For example, a ship flying under Japanese flag on the high seas is under Japanese jurisdiction, and it is considered to be within the Japanese lawful limit. On the other hand, a ship flying under a foreign flag on the high seas is under exclusive jurisdiction of the flag state, and it is outside of lawful limit.

Secondly, the JCG officers have been authorised to board and inspect ships under Japanese jurisdiction. Art. 17 of the JCG Act grants JCG officers to stop and inspect a ship in order to verify:

the identity. . .place of departure, port or place of destination. . .and all other particulars about vessels, cargo and navigation which are deemed important; or question the crew and passengers on matters necessary for the performance of his duties,²⁰

¹⁷ Japan Coast Guard Act, Act No. 28, 1948, unofficial translation of the Code can be downloaded in English from the website of the Nippon Foundation, available online <<http://nippon.zaidan.info/seikabutsu/2001/00500/contents/00021.htm>> (last visited on 10 August 2011).

¹⁸ *Id.*

¹⁹ Statement made in the 113th Diet Session, during the deliberation of the policy on security and protection of the nuclear fuel transportation at the Upper House Committee on the Cabinet on 20 October 1988.

²⁰ See n. 17 above.

which may allow them to distinguish what the intention of the crew of a ship is. It is noteworthy that this inspection is not a warrantless search or for the purpose of investigation, but solely for administrative purposes. Therefore, this inspection is not compulsory or forced in nature. A rejection of an inspection without good reasons, however, may lead to an immediate effect where the inspection becomes compulsory under administrative law, although it would not constitute an offence under the JCG Act.

In the Somali piracy context, JCG officers may inspect a suspected pirate ship. Art. 105 authorises every state to seize a pirate ship, arrest persons, and seize the property on board. Art. 110 of the UNCLOS grants a military ship the right of visit if there are reasonable grounds to suspect that the ship is engaged in piracy. These provisions extend the Japanese lawful limit to a pirate ship, and JCG officers may be allowed to conduct a boarding inspection in order to identify a pirate ship.

Thirdly, JCG officers are authorised to use force. Art. 20 of the JCG Act stipulates, “Article 7 of the Law Concerning the Execution of Duties of Police Officials (Law No. 136 of 1948) shall apply *mutatis mutandis* to the use of arms by Coast Guard officers”.²¹ Art. 7 of the Law Concerning the Execution of Duties of Police Officials is the general rule of the use of force by Japanese law enforcement officers. The article reads:

ARTICLE 7

A police officer may use his weapon in case there is reasonable ground to deem it necessary for the apprehension of a criminal or the prevention of his or her escape, self-protection or protection of others or suppression of resistance against the execution of his official duty within the limits judged reasonably necessary in the situation. However, he shall not inflict any injury upon any person except the case falling under the category of the provisions of Article 36 (Legal Defence) of the Criminal Law (Law No. 45, 1907) or of Article 37 (Emergency Refuge) of the same law, or the case falling under any of the following categories. . .²²

3.2.1 Restrictions to Exercise Duties Against Somali Piracy

First, there is a legal restriction. JCG officers would not be allowed to exercise compulsory and forced measures against Somali pirates, which are stipulated in the Code of Criminal Procedure (Act No. 131 of 1948) unless the Japanese Penal Code criminalises the act in question and has established jurisdiction. For example, JCG officers can carry out a boarding inspection under Art. 17 of the JCG Act against a ship that is reasonably suspected to be a pirate ship. The inspection might reveal that the ship is a pirate ship, and the crew is responsible for a pirate attack against another ship. The officers, however, would not be able to seize the ship and arrest the crew members unless the Japanese Penal Code is applicable because a Japanese court would not be allowed to hear the case. Even if the officers intercept a pirate

²¹ *Id.*

²² See n. 12 above.

ship in *flagrante delicto*, a Japanese court would not be able to hear the case if Japan does not have jurisdiction; therefore, what they can do is notify and hand them over to a state that has jurisdiction over the case and wishes to prosecute them, or release them immediately.

Secondly, in the Somali context, there may be a restriction regarding resources. Since one of the pertinent duties of the JCG is to maintain good order at sea, the repression of piracy is arguably one of them. The JCG has, however, decided not to deploy its patrol vessels to the Gulf of Aden for a couple of reasons. First, the distance between the Gulf of Aden and Japan is more than 10,000 km, which may take about a month for a single trip. Ships deployed on the scene may stay up to a couple of months before returning to their homeport. Such long deployment and the available resources of JCG may imply a hole in regular patrol and the search and rescue mission around the Japanese coast, which may be the priority. Second, Somali pirates could use RPGs and AK-47s during attacks, which may cause severe damage to patrol ships deployed at the scene, and other governments already have deployed their naval fleets and airplanes,²³ which use covert military communication units. Considering these facts, it is deemed that JMSDF fleets are more suitable to deploy off the coast of Somalia.

3.3 Deployment of Japanese Maritime Self-Defence Forces Under a Maritime Security Operation

The MSO is a constabulary operation by JMSDF, which can be ordered under circumstances beyond the capability of the JCG to maintain the security and protection of human life and property at sea. Under the MSO, the JMSDF can certainly protect ships from pirate attacks.

There were, however, two major restrictions in the operation, namely the limitation of the ships subject to escort and use of force. Firstly, the MSO is restricted to protecting the life and property of Japanese nationals. Since it is designed in order to maintain the good order of Japanese jurisdiction, the term “life and property” is construed as referring to *Japanese* life and property.²⁴ Therefore, only Japanese ships, ships carrying Japanese nationals on board, and ships whose operator or cargo is linked to a Japanese company and carrying Japanese interests, are subject to escort by the JMSDF under the MSO. On the other hand, ships registered in a state other than Japan, and their foreign nationals

²³ Statement made in the 171st Diet Session, during the deliberation of the draft Japanese anti-piracy Law at the Lower House Special Committee on Anti-Piracy Measures, Prevention of International Terrorism, and Japan’s Cooperation and Support of on 14 April 2009.

²⁴ Statement made in the 171st Diet Session, during the deliberation of the draft Japanese anti-piracy Law at the Lower House Special Committee on Anti-Piracy Measures, Prevention of International Terrorism, and Japan’s Cooperation and Support of on 19 March 2009.

and properties, are out of scope of this operation. Such restrictions would be considered less cooperative when maximising an international naval effort and where resources to counter piracy is substantially limited on the high seas.

Secondly, there was a concern that the use of force in the MSO was significantly restricted. Art. 93 of the Self-Defence Force Act provides that Art. 7 of the Law Concerning the Execution of Duties of Police Officials²⁵ shall apply *mutatis mutandis* to the use of arms by JMSDF officers under the MSO. Therefore, the use of force is authorised pursuant to the Article. However, there are a couple of restrictions. First, Art. 7 only authorises the use of force “for the apprehension of a criminal or the prevention of his or her escape, self-protection or protection of others or suppression of resistance against the execution of his official duty”.²⁶ Therefore, warning shots in order to deter a pirate attack or scatter pirate ships would be controversial unless there was a definite necessity to use weapons to suppress the resistance against the execution of the operations. Second, the provision restricts the use of force in a manner not to injure a person, except where it is Legal Defence, Emergency Refuge or in the cases that are set out in the subparagraphs. Therefore, JMSDF would not be allowed to fire against a pirate ship unless, for example, pirates fire against a JMSDF fleet or its convoy. Consequently, it was reported that JMSDF often deterred acts of piracy by *inter alia*, lighting up suspect ships with searchlights and using Long Range Acoustic Devices (LRAD) to warn the ship not to approach.

4 The Role of the Japanese Anti-Piracy Act

4.1 *Criminalisation Acts of Piracy Under the Japanese Anti-Piracy Act*

In order to compare and contrast, first, it highlights the definition of piracy under the UNCLOS. It provides the definition in Article 101, which reads,

Piracy consists of any of the following acts:

- (a) any illegal acts of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed:
 - (i) on the high seas, against another ship or aircraft, or against persons or property on board such a ship or aircraft;
 - (ii) against a ship, aircraft, persons or property in a place outside the jurisdiction of any State;

²⁵ See n. 12 above.

²⁶ *Id.*

- (b) any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts making it a pirate ship or aircraft;
- (c) any act of inciting or of intentionally facilitating an act described in subparagraph (a) or (b).²⁷

Based on this definition, the Japanese Anti-piracy Act provides the definition in Art. 2, which reads:

The term “acts of piracy” as used in this Law shall mean the acts falling under any of the following items committed for private ends on the high seas . . . by crew or passengers of a ship (except for warships and other government ships):

- (i) seizing another ship in navigation or taking control of the operation of another ship by rendering persons irresistible by assault, intimidation or any other means;
- (ii) robbing property on board another ship in navigation or obtaining or causing others to obtain an unlawful profit by rendering persons irresistible by assault, intimidation or any other means;
- (iii) kidnapping a person on board another ship in navigation for the purpose of taking the person hostage to demand a third person to deliver any property or to take any other unobligated action or to waive that person’s right;
- (iv) demanding a third person to deliver any property or to take any other unobligated action or to waive that person’s right by taking a person, on board a robbed ship or a ship whose control is taken or kidnapped on board another ship in navigation, hostage;
- (v) breaking into or damaging another ship in navigation for the purpose of committing the acts of piracy as referred to in each of the preceding items;
- (vi) operating a ship and approaching in close proximity of, beleaguering, or obstructing the passage of another ship in navigation for the purpose of committing the acts of piracy as referred to in items (i) to (iv) above; and
- (vii) preparing weapons and operating a ship for the purpose of committing the acts of piracy as referred to in items (i) to (iv) above.²⁸

4.1.1 Introduction of Universal Jurisdiction and Seriousness of the Act

One significant nature of the Act is that it introduced universal jurisdiction over piracy. Piracy is often described as *hostis humani generis* (enemy of all mankind) and is subject to universal jurisdiction under the law of nations.²⁹ In order to introduce universal jurisdiction over piracy, the definition of the Act does not specify the nationalities of ships or the crewmembers involved in pirate attacks, and Art. 3 of the Act provides penalties to be imposed. It suggests that the Act can be applicable without these legal nexus to Japan. This combination of international law and municipal law is the key to exercise jurisdiction over piracy by naval forces and guarantee prosecution at a national court.

A Japanese criminal court may impose more serious penalties against pirates than the similar acts in the Penal Code. The acts associated with subparagraph (i)–(iv) are subject to imprisonment with work either for life or a definite term of not

²⁷ UNCLOS Art. 101.

²⁸ See n. 5 above.

²⁹ Bingham et al. (1932), pp. 739–885.

less than 5 years and imprisonment with work less than 5 years for subparagraph (v).³⁰ On the other hand, robbery in the Penal Code is subject to imprisonment with work for a definite term of not less than 5 years, and breaking into a house or a ship imprisonment with work for not more than 3 years or a fine of not more than 100,000 Japanese yen.

4.1.2 Languages Used in the Definition of Piracy

The languages used in the definition of piracy in the Act are substantially different from that of UNCLOS. The terms used in the definition in UNCLOS are more general, such as illegal violence, detention, and depredation. On the other hand, the definition of the Act is more concrete and specific, such as seizing another ship, robbing property, and kidnapping a person. This is mainly because Japanese criminal legal regime strictly follows the principle of *nulla poena sine lege*, or no punishment without law where the definition of a crime ought to be prescribed in a definite manner. Because the definition of UNCLOS is too general and vague, the Japanese legal regime could not accept simply incorporating it into the Act.

There may be a legal implication because of the different languages. When the Act was discussed in the Diet, the Government simply explained that it was an interpretation of the UNCLOS. When a state codifies a domestic law, it is often necessary to interpret the international law and clarify ambiguities, which might not be explicitly stated in the relevant provisions. Such interpretation and clarification may be necessary to legislate an enforceable domestic law, in which an authority would be granted competency concerning what practical measures could be taken under certain circumstances.³¹

Nevertheless, there would be an act that is piracy under international law, but not an act of piracy under the Act since UNCLOS does not restrict acts of illegal violence and the kinds of violence that constitute acts of piracy. For example, killing a person for private ends would be an illegal act of violence; therefore, it could be an element of acts of piracy under international law. However, it would not constitute an act of piracy under the Act. It might be a controversial question whether a single murder on the high seas constitutes piracy,³² but one could say that the Japanese definition is so clear that it can exclude other acts of violence than those prescribed in the Act, which may fall into an act of piracy under international law. It might be a weak point of the definition in terms of intercepting a pirate ship by a warship.

³⁰ See n. 5 above. Art. 3 and 3(3).

³¹ Statement made in the 171st Diet Session, during the deliberation of the draft Japanese anti-piracy Law at the Upper House Committee on Foreign Affairs and Defense on 2 June 2009.

³² There may be an argument whether single murder could constitute piracy. O'Connell (1982), p. 970.

4.1.3 Consistency of the Definition in the Act and International Law

There may be an argument of whether the definition in the Act is consistent with UNCLOS. It is pertinent since piracy *jure gentium* is subject to universal jurisdiction while piracy under a municipal law that goes beyond piracy *jure gentium* is subject to national jurisdiction.³³ For example, armed robbery at sea goes beyond piracy *jure gentium* since it is committed within the jurisdiction of a coastal state. It could be piracy under municipal law and, only, subject to national jurisdiction.

Since piracy under the Act have to be committed for private ends, on the high seas against another ship, the consistency with Art. 101 (a) might be up to whether acts in this article amount to illegal violence under the article. Apparently, subparagraph (i)–(v) have a factor of illegal violence. Seizing, robbing, kidnapping, demanding, and breaking into another ship are arguably acts of illegal violence.

On the other hand, subparagraph (vi) might not fall under Art. 101 (a) of the UNCLOS, which is considered to be the reflection of piracy under customary international law.³⁴ Practically speaking, as far as the definition is within the definition of Art. 101 either (a), (b) or (c), it may not raise an issue in terms of intercepting a pirate ship. Nevertheless, the Government believes that subparagraph (vi) considers piracy to be under Art. 101 (a), since the penalty imposed is legislated in the same way as subparagraph (v), which is arguably under Art. 101 (a).

Theoretically, it would be an issue concerning when acts of piracy commence and what the substances of the illegal acts of violence in Art. 101 (a) are. One could argue that the first action pirates most probably take is approaching and boarding another ship to take control. Therefore, an act of piracy may commence when pirates approach another ship in close proximity so that they can board the ship.

In addition, ships are obliged to be at a safe distance in order to avoid collision.³⁵ Approaching another ship to close proximity may be a substantially dangerous operation and even a hostile manoeuvre against another ship rather than an unusual manoeuvre, which may be seen as illegal violence. Criminalisation of these acts as piracy would be acceptable among international society since it would be deemed to be a part of piracy and contribute to countering it.

Subparagraph (vii) might raise another question as to whether it would fall under the definition within Art. 101 (b) or whether it is an attempt of piracy under customary international law and, thus, subject to universal jurisdiction. When the definition of piracy of UNCLOS was discussed, the UK suggested including attempts of piracy as piracy under Art. 101, which was subsequently rejected by vote.³⁶ On the other hand, the definition of a pirate ship under Art. 103 suggests even though a ship has not committed piracy yet, it may be a pirate ship if the crew

³³ *Id.*

³⁴ Nandan and Rosenne (1995), p. 200.

³⁵ For example, The International Regulations for Preventing Collisions at Sea 1972, Rule 8(d).

³⁶ United Nations Conference on the Law of the Sea Official Records Volume IV Second Committee (1958). A/CONF.13/40. Geneva: United Nations Publications.

of the ship intends to commit piracy, which is subject to interception by a foreign warship and prosecution by a national court of the flag state of the warship under Art. 105 of UNCLOS. In addition, an attempt of piracy under customary international law is piracy *jure gentium* and subject to universal jurisdiction,³⁷ so it would not raise an issue if a warship were to exercise jurisdiction. Nevertheless, an issue may arise if a state does not criminalise attempts of piracy since the state cannot prosecute pirates. It might be left to a party to state whether it wishes to punish attempts of piracy and, as such, the Government seemed to clarify such acts as those of piracy.

4.1.4 Application of the Act: *Mens Rea*

There is a discussion of how law enforcement officers could distinguish that the purpose would be “private ends” or “purpose of committing acts of piracy” in the subparagraphs when they observe acts in question. It would be almost impossible to learn what other people might think without asking the person. In addition, it is not an act of piracy if the purpose of the person is not private ends but other purposes.³⁸ In this case, officers on the scene might not be able to distinguish whether the action in question constitutes an act of piracy; thus, they cannot take necessary measures against suspects. It could be an issue when officers find that the situation amounts to using forces against a suspect ship to physically stop it. Consequently, officers would not have the opportunity to ask the intention of the crew face-to-face whether their assumption is right and whether the acts in question constitute piracy under the Act.

On the other hand, there would be cases in which officers become confident to assume what the purpose of a suspect ship is through intelligence and careful observation. For example, first, officers may obtain intelligence, such as the existence of a pirate ship, from other military authorities and piracy cases as they relate to past incidents. Second, officers may carefully observe the general view of the ship in question, the manner of sailing, the behaviour of the crew, and the circumstantial situation of the scene. They can integrate these observances and could become confident that the intention of the ship is to commit piracy.³⁹

³⁷ *In Re Piracy Jure Gentium* [1934] AC 586, 598.

³⁸ Geib and Petrig (2011), pp. 61–62.

³⁹ Statement made in the 171st Diet Session, during the deliberation of the draft Japanese anti-piracy Law at the Lower House Special Committee on Anti-Piracy Measures, Prevention of International Terrorism, and Japan’s Cooperation and Support of on 17 April 2009.

4.1.5 Application of the Act: Geographical Scope

It is noteworthy that the Japanese unit is not supposed to conduct operations in Somali waters. UNSCR 1816 grants, under Chapter VII of the Charter, those states “cooperating with the TFG in the fight against piracy” entrance into Somali territorial water and use all necessary means insofar as allowed on the high seas under international laws to repress pirates.⁴⁰ Moreover, UNSCR 1851 allows states to “undertake all necessary measures that are appropriate in Somalia, for the purpose of suppressing acts of piracy and armed robbery at sea”⁴¹ insofar as they are consistent with applicable international humanitarian and human rights laws. Nevertheless, the Minister of Land, Infrastructure, Transport and Tourism has stated that he would not assume the Japanese unit would enter into Somali water unless in cases where Japanese nationals have been taken as hostages,⁴² since the Act is developed solely along with the UNCLOS but not UNSCRs in the Diet.

A question may arise that Somalia claimed 200NM of the territorial water in 1972.⁴³ It is not clear whether the Government of Somalia still persists in this position, since Somalia did not declare the claim when it signed and ratified the UNCLOS. Besides, it has not established an effective government through which a statement could be made on this issue. If the Japanese Government respects the claimed territorial water, for any reasons, these considerable areas of sea are out of scope of the Act. Thus, Japanese forces might not be able to enter for counter piracy operations, and the Government might not be able to accept pirates who committed piracy within the territorial sea, which significantly undermines the effectiveness of the Act.

4.1.6 Piracy Under Art. 101(c) and the Act

The Japanese Anti-piracy Act does not include incitement and facilitation of piracy, as set out in Art. 101 (c). They will be covered by Article 60–62 of the Japanese Penal Code, which supplement co-principals, inducement, and accessoryship respectively. They would be applied to Somali pirates as well, since Article 8 of the Code provides that they are applicable “to crimes for which punishments are provided by other laws and regulations”.⁴⁴ Art. 60–62 read:

⁴⁰ The U.N. Security Council Resolution 1816, 2008.

⁴¹ The U.N. Security Council Resolution 1851, 2009.

⁴² He did not deny Japanese Unit entering into the Somali water when it is requested or permitted under international law. See n. 39 above.

⁴³ Somali national legislation. *Law No. 37 on the Territorial Sea and Ports*, of 10 September 1972 English Translation available online at <<http://somalitalk.com/2011/badda/law37.html>> last accessed 16 July 2012.

⁴⁴ See n. 14 above.

Article 60. (Co-Principals)

Two or more persons who commit a crime in joint action are all principals.

Article 61. (Inducement)

- (1) A person who induces another to commit a crime shall be dealt with in sentencing as a principal.
- (2) The same shall apply to a person who induces another to induce.

Article 62. (Accessoryship)

- (1) A person who aids a principal is an accessory.
- (2) A person who induces an accessory shall be dealt with in sentencing as an accessory.⁴⁵

4.1.7 Pirate Aircraft Under the Act

The Japanese Anti-piracy Act is silent on the subject of pirate aircrafts. The issue of air piracy is inserted in the High Seas Convention 1958, and most of these provisions were succeeded to the UNCLOS. Nevertheless, the reason for not including air piracy was that a piracy case in which an aircraft is used to commit piracy has never been observed.⁴⁶ In addition, it would be technically impractical for a pirate aircraft to fly over and stop above another ship and let pirates down to the ship to commit piracy.⁴⁷ Consequently, it was omitted from the draft.

4.2 *Anti-Piracy Response Operations Under the Japanese Anti-Piracy Act*

The Act authorises JMSDF to carry out the Anti-Piracy Response Operation (APRO) instead of the MSO. Basically, repression of pirates is the duty of the JCG, which is clearly stipulated in Article 5 of the Act. Nevertheless, when “extraordinary necessity” exists, the Defence Minister can request authorisation from the Prime Minister to order JMSDF to carry out the APRO under Art. 7 of the Act. The term “extraordinary necessity” is construed as a situation beyond the capability of the JCG, and Somali piracy would be a typical example.⁴⁸

The most significant difference between the counter-piracy operation under the MSO and the APRO is flags of ships subject to escort. The purpose of the Act is to provide legal basis to take necessary action against piracy, which would not restrict ships subject to protect. Besides, because of the introduction of universal

⁴⁵ *Id.*

⁴⁶ Statement made in the 171st Diet Session, during the deliberation of the draft Japanese anti-piracy Law at the Upper House Committee on Foreign Affairs and Defense on 22 April 2009.

⁴⁷ *Id.*

⁴⁸ See n. 23 above.

jurisdiction over piracy, the Japanese forces may take legal measures to protect its convoys, seize a pirate ship and properties in the ship, and arrest pirates so as to prosecute them at a Japanese criminal court regardless of the flags that the ships fly.

In order to support judicial procedures, eight JCG officers have continued to board the JMSDF destroyer as well. Their duty is to cooperate with JMSDF and to collect evidence and statements of witnesses for prosecution of pirates and exercise arrest warrants, since JMSDF officers are not authorised to act as judicial police officers under the Code of Criminal Procedure.⁴⁹ This combination of JMSDF officers and JCG officers enables them to provide protection to ships sailing off Somalia regardless of their flags and substantially increase the effectiveness of counter piracy operations since they can perform suppression and investigation operations simultaneously.

The APRO would further enhance the capability of the international coalition force. Nowadays, it is essential to maximise naval efforts through close cooperation and coordination, since pirates have extended their geographical areas of activity by the use of a mother ship. Eventually, it has become beyond the capacity of military power of one state and requires international cooperation and coordination to deal with.⁵⁰ Therefore, states participating in counter-piracy operations in the area are supposed to be cooperative and avoid duplication so that their efforts can be maximised.

4.3 Use of Force in Counter Piracy Operations

Another relevant role of the Act is to authorise the use of force in counter piracy operations. First, officers on the scene may employ warning shots. A ship approaching in close proximity of, beleaguering, or obstructing the passage of another ship would constitute acts of piracy *per se* under the Act. Because persons on board have committed piracy, officers may use force in order to apprehend and suppress suspects.

Another question may arise of whether officers on scene can use force against a pirate ship. Art. 7 of the Law Concerning the Execution of Duties of Police Officials⁵¹ provides exceptions for use of weapons in a manner that may cause injury to a person. They are, namely, Legal Defence, Emergency Refuge or the cases falling under situations prescribed in the subparagraphs. The relevant subparagraph would read:

⁴⁹ The Code of Criminal Procedure, Act No. 131, 1948, unofficial translation of the Act can be downloaded in English from the website of the Japanese Law Translation, available online <<http://www.japaneselawtranslation.go.jp/law/detail/?id=15&vm=04&re=01&new=1>> (last visited on 19 September 2011).

⁵⁰ Homan and Kamerling estimated the size of the Gulf of Aden as the size of France and a piracy prone area the size of Western Europe. Homan and Kamerling (2010), p. 69.

⁵¹ See n. 12 above.

- (1) In case a person, who is actually in the act of committing, or has sufficient grounds to be suspected of having committed, a violent and dangerous crime which deserves a death penalty, perpetual penal servitude or imprisonment, or penal servitude or imprisonment for a maximum period of not less than three years, resists the police officer against the execution of his duty to the subject person or attempts to escape or a third person resists the police officer with the object of letting the subject person escape; provided there is reasonable grounds on the part of the police officer to believe that there exists no other means but to do so either for the prevention of such resistance or escape or for the apprehension of such persons.⁵²

Since the seriousness of the acts of piracy under the Act is enough to meet the criteria of the subparagraph, the argument is whether ignoring and disobeying the order to stop, and also ignoring the warning shots, could be considered as ‘resisting’ law enforcement officers against the execution of his duty in subparagraph (1), at which point they are allowed to fire against a pirate ship.

The interpretation of resistance may be controversial. For example, if perpetrators use their weapons, they are arguably *resisting* against the duty of the officers. On the other hand, what if they ignored and disobeyed the warnings and continued to attack another ship? It would be controversial whether it could amount to the decision of whether to use force against a suspect pirate ship.

Art. 6 of the Act clarifies the word *resist* in this context. This Article explicitly states that ignoring and disobeying officers’ warning to stop and continuing to chase a ship may constitute to “*resisting* the police officer against the execution of his duty” (emphasis added) in the subparagraph (1) of Art. 6.⁵³ Therefore, the Japanese forces may, when it is deemed necessary, fire against a suspect pirate ship in order to force it stop.

4.3.1 Incidental Use of Force Against a *De-Facto* Governmental Organisation

Another argument concerning the use of force is whether firing against a pirate ship could be an unconstitutional operation. Article 9 of the Japanese Constitution strictly prohibits the use of force as a measure for the solution of an international conflict.⁵⁴ The government construes “international conflict” as a conflict between state and state or *de-facto* states. Although most of the states deploying their naval forces consider counter piracy operations to be constabulary operations, and the use of force would not be conducts of hostilities, the use of force by JMSDF against an organisation or *de-facto* organisation of a state in order to eliminate obstructions against execution of duties of the Self-Defence forces could be unconstitutional.

A question arises of what if persons on board a ship, which JMSDF fires against, incidentally turn out to be members of a *de-facto* governmental organisation, such

⁵² *Id.*

⁵³ See n. 5 above.

⁵⁴ The Constitution of Japan (Constitution November 3, 1946). Art. 9.

as the self-proclaimed Coast Guard. It could be considered to be the use of force against the state that they belong to and unconstitutional use of force.

It would not, however, be considered to be unconstitutional use of force. Under the UNCLOS, a warship whose crew mutinied could commit piracy.⁵⁵ Since duties of a warship and a governmental ship would not be to carry out acts of piracy, ships undertaking acts of piracy might be assimilated as a warship whose crew mutinied. These ships may lose complete immunity, which UNCLOS grants under Art. 95 or 96,⁵⁶ and can be assimilated as a pirate ship under Art. 103. Needless to say, once a ship is reasonably suspected to be a pirate ship, the ship is subject to universal jurisdiction under Art. 105 or right of visit under Art. 110. Therefore, if the behaviour of a ship is reasonably suspected to be an act of piracy, the ship may be considered to be a pirate ship. In addition, a policy was developed that, provided the decision is made through reasonable and objective judgment, the measures taken will be considered to be a legal action even if it turns out that they are *de-facto* governmental agents at a later stage.⁵⁷

5 Future Challenges

5.1 *M/V Guanabara Incident*

Somali pirates attacked an oil tanker, *Guanabara* (57,000 DWT), which was registered in Bahamas approximately 300 miles away from Oman while carrying around a 100,000 tons of crude oil from Ukraine to China on 5 March 2011. Acknowledging the attack, the crewmembers, who were Filipino, Croatian, Montenegrin and Romanian, made a distress call and hid in the citadel of the ship. The Coalition Forces received the alarm and US and Turkish navy ships were dispatched to the scene to rescue *Guanabara*. Although the ship was not flying under the Japanese flag, and no Japanese national was involved, the Japanese Government acknowledged that the operating company of the ship was an affiliated company of a Japanese company and recognised a part of Japanese interest. The Government determined that it would request the Coalition Forces to implement the raid operation, and the *USS Bulkeley* then responded and dispatched its boarding team next day. The pirates laid down their arms and surrendered immediately without exchanging fire.

After thorough consideration of the report from the US, the Japanese Government decided to transfer four alleged pirates to Japan for prosecution. This transfer of the pirates to Japan marked the first case since the Act took effect in July 2009.

⁵⁵ UNCLOS Art. 102.

⁵⁶ See n. 35 above, p. 205.

⁵⁷ See n. 7 above.

The alleged pirates were handed over to JCG, who exercised the arrest warrant on the JMSDF destroyer on the 11th of March. JCG aircraft was used to transfer four pirates on the 13th who were in turn sent to the Tokyo Prosecutor's Office on the same day.

Evidence left in the ship revealed that pirates fired AK-47s into the captain's room and broke into steering room, which suggested that they had attempted to take control of the ship. The prosecutor found that it would amount to an act of piracy under Art. 2-1 of the Act and its attempt. After the pre-trial conference procedure, a criminal court will be opened under the 'lay judge system' where civilian judges together with professional judges find if defendants are guilty and determine the sentence.

5.2 *Lesson Learnt and Future Challenges*

This case was the first case where the Act was successfully applied. Before the adoption of the Act, the Japanese Penal Code would not have been applicable since *M/V Guanabara* was a flagged-out ship and no Japanese citizens were involved. Despite the interest recognised, the Government would not have been able to arrest the pirates and prosecute them in a Japanese court. This case clearly highlighted that to protect a flagged-out ship would be one of the most significant natures of the Act.

On the other hand, some issues arose during the investigation and transfer, which the authorities may need to address in future cases. They are, *inter alia*, international cooperation in an investigation, jurisdictional issues in an investigation, and the procedure to transfer suspects.

5.3 *International Cooperation in Investigation*

It is often said that further cooperation on investigation is necessary to prosecute pirates, since piracy is a transnational crime. For example, JCG officers sought arrest warrants from a Japanese court, which was essential to detain the suspects under Japanese authority. In order to seek an arrest warrant, the officers must provide evidence that supports "sufficient probable cause to suspect"⁵⁸ that they have committed piracy. In order to provide such evidence, the officers needed close cooperation with the US, which was the flag state of the warship that took the raid operation and the Bahamas, which was the flag state of the victim ship.

During the application of the arrest warrants, a concern was raised as to whether evidence collected by a foreign military organisation, which was not a law

⁵⁸ See n. 50 above.

enforcement organisation, could be used as acceptable and sufficient evidence for a Japanese court. It was officers of the United States Navy who collected the source of evidence, such as photos of properties that the pirates possessed and a record of their detention. Japanese officers examined what the US officials gathered and called them into evidence, which would be employed to seek the warrants and prosecute pirates in a Japanese court. In this case, the Japanese officers successfully provided evidence well beyond what was necessary with substantial cooperation from the US, and the warrant was issued. The standard of evidence, however, may differ from state to state. It would be necessary for Japanese officers to examine what is collected and whether it is consistent with the Japanese legal regime.

On the other hand, Japanese officers might provide evidence to a foreign authority in order to prosecute alleged pirates in the state. They ought to understand the law of evidence in the state as well as the standards developed in the international arena, such as “Counter-Piracy Evidence Collection Guidance”⁵⁹ developed by the Contact Group on Piracy off Coast of Somalia Working Group II and the “Code of practice for the investigation of crimes of Piracy and armed robbery against ships”, which the International Maritime Organization developed in order to allow the member states to investigate piracy cases.⁶⁰

Secondly, there were jurisdictional issues in the criminal procedures. Piracy involves a number of countries, such as the flag state of the victim ship and a war ship that intercepts pirate ships, the coastal states, the port states and the nationalities of crewmembers. A state that wishes to prosecute pirates has to respect the jurisdiction of these states, and cooperation and coordination is the key for successful investigation and prosecution. In this case, the Japanese Government had to confirm that the Bahamas would not object to a Japanese investigation on the ship and prosecution in a Japanese court since the ship is registered in the Bahamas. Next, since the first port of call after the pirate attack was Oman, the JCG had to seek permission to conduct the necessary investigation in an Omani port. Subsequently, it had been revealed that it would not be permitted in timely manner. The Government determined that they needed to request that the ship go out to the high seas for investigation, which would not be the preferable option for seafarers who have just suffered an attack on the high seas. In addition, states of the nationalities of the crew may have interests in the case and could have requested extradition.

Thirdly, other jurisdictional issues may arise in regard to the transfer of suspects. For example, the Government needed to consider the jurisdiction of states of departure from which the JCG jet left in order to get to Japan and the states over which it flew for the transfer. A state, which transfers a suspect from another state, may find it necessary to obtain authorisation from these states prior to the transfer. In this context, Japan has developed the Exchange of Note with the Republic of

⁵⁹ Contact Group on Piracy off Coast of Somalia Working Group II has developed “Counter-Piracy Evidence Collection Guidance” on its third session on 26–27 August 2009.

⁶⁰ IMO Resolution A.1025(26). Code of practice for the investigation of crimes of piracy and armed robbery against ships, 18 January 2010.

Djibouti concerning the status of the Self-Defence Forces of Japan including transfer arrangements. This is necessary when using the airport in Djibouti for the transfer. In addition, permission of states whose territory the JCG jet flew over were essential in terms of the transfer by a JCG airplane. Although these procedures are administrative, they could be time consuming. Taking into account the human rights aspect of offenders, transfer time is a substantially restrained factor.⁶¹ It would be advisable to identify to which state, or more precisely, which authority it needs to confirm or seek permission from as well as what further international cooperation is relevant.

6 Conclusion

Having considered the expanding threat of piracy off Somalia, the Japanese Government determined that it would deploy JMSDF to the Gulf of Aden as the MSO under relevant domestic law. It certainly protects ships, however, a number of concerns were revealed since it was not designed for counter piracy operations. Particularly, ships subject to escort and the use of force under the MSO were arguably insufficient to counter piracy operations. For example, the Japanese Penal Code would not always be applicable in cases of Somali piracy since it had not defined acts of piracy and established universal jurisdiction. In this case, Japanese officers could not seize a pirate ship and arrest pirates since it would be impossible to prosecute them in Japan. Second, the use of force was not suitable for counter piracy operations because the legal background was too restricted. As a result, Japanese forces could escort only Japanese ships and ships operated by a Japanese company carrying Japanese interests and could only deter acts of piracy using non-lethal equipment.

In order to address these issues, the Japanese Anti-piracy Act was developed and adopted in June 2009. The Act, *inter alia*, defined acts of piracy in accordance with the relevant provision of UNCLOS and introduces universal jurisdiction over piracy. It further provided the legal basis to deploy JMSDF to the Gulf of Aden to suppress piracy, and authorised the use of force in counter piracy operations in a more practical way. A recent incident, the *M/V Guanabara* case, has proven the effectiveness and appropriateness of the Act since the Japanese Government could accept pirates captured by foreign forces despite much less legal nexus with Japan.

The case, however, revealed some future challenges to implementation of the Act. Because piracy is a transnational crime, international cooperation and coordination is the key for successful prosecution. First, it would be essential for JCG officers to seek an arrest warrant and accept suspects from a foreign force. It may be foreign forces that collect evidence and develop reports of detention, which is

⁶¹ Art. 203 of the Code of Criminal Procedure set out 48 h to transfer suspected perpetrators to the prosecutor.

arguably essential to seek arrest warrants and prosecution. Second, there would be concurrent and complicated jurisdictional issues with the flag state of the victim ship and warships, the port state of call or coastal states after the attack, and the state of nationalities of the crew. In addition, to transfer suspects from abroad may need further consideration. These may be administrative issues, however, time consumption is critical under a modern human rights regime.

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The Law and Economics of Piracy at Sea

Caitlin Stapleton Kaprove

1 The Elements of a Law and Economics Approach

A law and economics approach to combating piracy at sea is one that seeks to minimize total social costs arising both from acts of piracy themselves and from preventive and retributive efforts related to piracy. The goal, in economics terms, is the development of optimal policies to combat illegal behavior—policies that, according to Becker, “are part of an optimal allocation of resources.”¹

According to Becker, the number of offenses of a given crime, such as piracy—or the likelihood that a given act of piracy will occur (O)—is a function of the probability of being discovered and/or convicted (p), the cost/magnitude of the punishment (f), and other variables, such as the income available in legal and other illegal activities and the actor’s willingness to commit an illegal act (u).²

$$O = O(p, f, u)$$

This Article was written in the author’s personal capacity, and any views expressed herein are those of the author alone and do not necessarily reflect the views of Greenberg Traurig, LLP. With great thanks to her husband Jared, whose love, support and patience for pirate puns make all things possible.

¹ Becker (1968), pp. 169–217 at 209.

² Becker (1968), at 177.

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Each of these variables (p , f and u) is in turn affected by other relevant factors. For example, the probability of being discovered and/or convicted (p) is a function of the level of police and/or court activity.³ The magnitude of the punishment⁴ is chiefly a function of the type and severity of the punishment selected,⁵ though to a certain extent the likelihood of detection is more important than severity of punishment.⁶ And many other influences on a decision to commit crime are functions of the would-be criminal's income—or, more specifically, of the difference between the income to be gained from piracy and the income to be gained from less risky, legal activities.⁷

In a law and economics analysis, the ultimate goal is to set these variables in a way that minimizes social loss.⁸ The minimization of social loss is only one of many possible goals. In “Crime and Punishment,” Becker notes a number of alternate goals (vengeance, deterrence, safety, rehabilitation, compensation),⁹ but ultimately makes a convincing case that these goals are captured by, or in any case superseded by, the social loss criterion.

In the above equation (construed generally), social loss (the sum of damages, costs of apprehension and conviction and costs of punishment) can be minimized simultaneously for all three variables “unless one or more of these variables is constrained by outside considerations.”¹⁰ The nature of maritime piracy imposes several such constraints.

The variable f , for example, is constrained by the poverty of most (Somali) pirates. Pirates have few options for legal activities that are as profitable as piracy. As a result, the range of types of punishment that can be effectively used against pirates is narrowed. Fines are less effective when used to punish criminals who lack the means to pay,¹¹ and questions about the propriety or deterrent effect of capital punishment can affect the likelihood of its use. Imprisonment, the only apparent option that remains, can be socially costly,¹² and some countries are reluctant to

³ Becker (1968), at 174.

⁴ Becker (1968), at 179.

⁵ Becker (1968), at 180.

⁶ Becker (1968), at footnote 12, 178 (noting a “presumed greater response to a change in the probability than in the punishment”).

⁷ Becker (1968), at 207–208.

⁸ Becker (1968), at 208.

⁹ Becker (1968), at 208.

¹⁰ Becker (1968), at 207.

¹¹ Shavell (1985), pp. 1232–1263, at 1232–1262 (arguing that Becker's assumption that fines are effective relies upon criminals having a certain amount of money in the first place); Sjögren and Skogh (2004), at 63 (noting that “in the event that there is a risk of insolvency, the fine will inevitably not have enough of a deterrent effect”); Bowles et al. (2005), pp. 275–295, at 275 (“fines may not lead to an optimal deterrence if the wrongdoer is judgment proof”); Coffee (1980), pp. 419–476.

¹² Bowles et al. (2005), pp. 275–295 at 275 (“imposing a prison sanction is costly”); Posner (1980), pp. 400–418.

prosecute pirates because they expect that such prosecutions would, further down the road, result in a flood of asylum applications from pirates and their families.¹³

Similarly, the variable p is constrained by multiple factors. The difficulty and cost of creating and coordinating multi-national forces to prevent, detect and respond to pirate attacks increases the cost of police activity, which in turn affects the ability of the international community to discover and respond to pirate attacks. The difficulty and cost of convicting pirates—whether by creating and maintaining an international tribunal to deal with acts of piracy, by utilizing an existing tribunal or by prosecuting pirates in domestic courts—similarly constrains the ability of the international community and state actors therein to convict pirates. The sheer size of the areas in which pirates operate complicates efforts to discover and prevent pirate attacks, and the difficulty of obtaining and retaining evidence at sea also can affect the likelihood that a captured pirate is successfully convicted.

These constraints affect the calculus of an optimal approach to piracy. While, as noted above, the goal is to develop optimal policies to combat illegal behavior,¹⁴ the constrained nature of the “piracy equation” means that the effort is in fact one of *constrained* optimization—that is, an effort to find best possible solution given the fact that conditions are not themselves optimal.¹⁵

2 Methodology and Limitations

This paper does not attempt to grapple with the mathematics involved in the optimization (or constrained optimization) of the “piracy equation,” nor does it seek to arrive at precise estimates of the various costs and benefits involved in doing so. A truly thorough “quantitative” law and economics-based analysis of maritime piracy would require more voluminous and reliable data on pirate attacks than are presently available, though the appreciable data collection efforts of groups such as the International Maritime Organization and International Maritime Bureau should be acknowledged. In any case, such an analysis is beyond the scope of this paper.

Instead, the goal of this paper is to arrive at a qualitative description of the relevant factors (and constraints) involved in determining the social loss resulting from acts of piracy. Such a description must be the cornerstone of an optimal

¹³ Dutton (2010), p. 197 at 219; Kontorovich (2010), pp. 243–275 at 245.

¹⁴ Becker (1968), at 209.

¹⁵ Baxley and Moorhouse (1984), pp. 404–412 (“Normally the economist is not interested in solving for a constrained optimum; rather his starting assumption is that an optimum is achieved and seeks to base predictions of behavioral responses on the assumption that optimizing will continue. For example, assuming a firm minimizes the cost of producing a given output, one wishes to know how changes in input prices will affect the firm’s behavior. Thus the problem is not ‘find the minimum,’ but ‘assuming the minimum is attained, what consequences can be deduced?’ An interesting result is that the economist is primarily interested in necessary conditions for an optimum and wishes profoundly that sufficient conditions were really necessary”).

(or conditionally optimal) policy for dealing with maritime piracy generally. To that end, this paper treats pirates as rational actors whose decisions are affected by certain identifiable factors, and seeks to view the prevention and suppression of pirate attacks not as an effort to make piracy impossible, but instead as an effort to make piracy considerably less costly.

There are important limitations on the scope of this paper. First, to the extent that localized data on pirate attacks are required, this paper primarily uses data related to maritime piracy off the coast of Somalia for its case study. Pirate attacks off the Somali coast make up more than half of all pirate attacks annually worldwide,¹⁶ and are for that reason considered to be suitable examples of pirate attacks generally. Additionally, data related to Somali piracy are plentiful, owing to an increase both in incidents of Somali piracy and in public interest in recent years. Admittedly, Somali piracy may for various reasons be an imperfect representative of piracy worldwide—and it is anticipated that the application of this paper’s conclusions to piracy in other areas would require some adjustment.

This paper does not address the history of maritime piracy, nor does it deal in any depth with the tactics or methods employed either by historical or contemporary pirates in their attacks. This paper does not seek to address the proper legal classification of maritime pirates in either domestic or international law, nor does it seek to evaluate or suggest improvements to the various domestic or international legal regimes that exist to address maritime piracy. And finally, this paper does not address potential or actual state sponsorship of piracy generally or of individual pirate actors in particular.

This paper also relies upon the assumption that commercial entities (whether they are providers of moveable goods or shipping companies), states (whether they are flag states of commercial vessels or coastal states from which pirate attacks are launched), and pirates themselves are the primary “stakeholders” that affect and are affected by maritime piracy. The considerations of individual victims of piracy (for example, individual crew-members of vessels that have been attacked by pirates), while certainly very important, are not treated in any depth in this paper.

3 Pirates as Rational Actors

Some scholars have referred to maritime pirates as “sea-terrorists.”¹⁷ The analogy is an imperfect one at best. Though there are those who allege connections between pirates and terrorists, “there is scant public information about the practicalities of

¹⁶ ICC International Maritime Bureau, “Piracy and armed robbery against ships: report for the period of 1 January – 30 June 2011” (2011) (hereafter ICC 2011 Q2 Report); ICC International Maritime Bureau, “Piracy and armed robbery against ships: report for the period of 1 January – 31 December 2010” (2010) (hereafter ICC 2010 Annual Report).

¹⁷ Sterio (2009).

how this nefarious [pirate] activity actually works.”¹⁸ U.S. government representatives have found evidence to suggest interactions of a coercive nature between pirates and (alleged terrorist organizations), but have not found an “operational or organizational alignment” between the two.¹⁹

As a general matter, there is agreement that “so far, the distinction between pirate and insurgent has been maintained. . . . Somali pirates remain essentially rational actors operating in pursuit of their own survival and self-interest and not in pursuit of ideologically inspired fundamentalist aims.”²⁰ As Eugene Kontorovich put it, pirates “demand money, not political changes.”²¹ Pirates, in their search for ransoms, have more in common with white-collar criminals than they do with terrorists.

Pirates, like other criminals, are rational actors.²² While there are some differences between pirates operating in different parts of the world, most pirates tend to seek either valuable cargo²³ or ransoms,²⁴ where ransoms can be a function of the value of cargo.²⁵ And in deciding whether or not to commit acts of piracy, prospective pirates (like other actors contemplating property crimes²⁶) presumably balance the benefits of ransoms or cargo against credible threats of prosecution, incarceration or death.

¹⁸ Reyes (2008), at 134; Rosenberg (2009), pp. 43–58 at 48 (“Maritime terrorist attacks or threats—that is, politically or ideologically motivated attacks against ships—have been scarce around the South China Sea”).

¹⁹ W. Wechsler, Principal Deputy Assistant Secretary of State for Political and Military Affairs, Testimony before the United States House Transportation and Infrastructure Subcommittee on Coast Guard and Maritime Transportation, “The U.S. Response to Maritime Piracy,” March 15, 2011; *see also* Vice Admiral W. Gortney, Commander, U.S. Naval Forces Central Command, House Armed Services Committee, March 5, 2009 [“(w)e look very, very carefully for a linkage between piracy and terrorism. . . .and we do not see it”].

²⁰ Reid (2011).

²¹ Kontorovich (2010), at 261.

²² Leeson (2010), pp. 1219–1220. For the more general proposition that criminals are rational actors, *see* Becker (1968); Fiorentini and Peltzman (1995). *See also* Chalk (2009) (stating that “piracy is, above all, an economically driven phenomenon”).

²³ Kahn (1995–1996), pp. 293–331; Rosenberg (2009); Kraska and Wilson (2009).

²⁴ Ploch et al. (2011) (“unlike pirate attacks in Strait of Malacca or Nigeria, where ships are boarded either to take the vessel or its contents, pirates off the Horn of Africa routinely take the target vessel’s crew hostage in return for ransom payments.”) (hereafter CRS 2011).

²⁵ “Ransom payments are the lifeblood of Somali pirates. . . . Somali pirates have yet to display an interest in stealing cargo or reusing pirated ships for other purposes (other than temporarily as mother ships).” Pearson (2009). *See also* Guha and Guha (2011), pp. 147–150 (*citing* Carbin 2009, pp. 51–57).

²⁶ Shepherd (2002), pp. 159–201.

4 A Crime Worth Preventing?

As noted, a law and economics approach to piracy seeks to minimize the social loss resulting from pirate attacks. In order to determine whether and to what extent preventive and retributive measures are necessary, it is important to know just how great the loss from piracy really is—and whether it is worth trying to prevent pirate attacks at all.

Pirate attacks are relatively infrequent; as Peter Leeson put it, “the problem of modern piracy remains small.”²⁷ Fewer than one-third of 1 % of all ships every year are attacked by pirates.²⁸ As compared to the total volume of traffic through each region, the incidences of piracy off the coast of Somalia and in the South China Sea are relatively rare.²⁹ And of the pirate attacks that do occur, most occur on ships that are at anchor in port; only a fraction involve hijackings.

Yet acts of piracy are extraordinarily costly if we view them in terms of the losses they represent for victims of piracy. After all, for such victims—usually corporations or shipping companies—the cost of pirate attacks can add up to much more than the mere cost of a ransom paid. There are many “hidden costs” of pirate attacks, including not only the cost of ransoms,³⁰ but also the (presumably increased) cost of insurance,³¹ the cost of lost/stolen cargo³² and the opportunity cost of being unable to sell that cargo,³³ the cost of re-routing, the cost of purchasing, installing and maintaining deterrent security equipment, the cost of deploying and maintaining naval forces, the cost of piracy prosecutions, the cost of membership in and contribution to piracy-deterrence organizations, the general costs in loss of international trade, the cost of the inflation in the price of food as a result of attacks on food shipments,³⁴ the cost of environmental damage³⁵ and the cost of lives lost in pirate attacks.³⁶ After taking such costs into account, it is hardly

²⁷ Leeson (2009); see also CRS 2011 (“The total economic costs of piracy, though large in an absolute sense, are nevertheless only a small fraction of the total value of worldwide shipborne commerce”).

²⁸ Wallis (2010).

²⁹ See Rosenberg (2009), pp. 43 and 47.

³⁰ See One Earth 2010.

³¹ See One Earth 2010 (“commercial shipping insurance premiums for vessels in the Gulf of Aden increased tenfold in 2008”) [U.N. Sec. Council, Monitoring Group on Somalia, *Report of the Monitoring Group on Somalia Pursuant to Sec. Council Resolution 1811 (2008)*, 266, U.N. Doc. S/2008/769 (December 10, 2008), para. 128].

³² Chalk (2009), at 4.

³³ CRS 2011, citing One Earth 2010 (“As ransom payments have increased. . . so has the length of ransom negotiations, which on average doubled from 2009 to 2010”).

³⁴ See One Earth 2010.

³⁵ Chalk (2009), at 4.

³⁶ Chalk (2009), at 4.

surprising that the total costs of piracy are estimated at anywhere from \$1 to 16 billion/year.³⁷

The importance of developing a policy to minimize piracy-related losses is also clear if the problem of piracy is viewed historically. In the last 10 years, the frequency of pirate attacks has increased exponentially. In the first 6 months of 2011 alone, at least 266 pirate attacks were carried out worldwide—a marked increase from the 196 pirate attacks that took place during the same period in 2010.³⁸ If the frequency of pirate attacks were to continue at that pace, there would be at least 2,000 pirate attacks each year by the year 2020, with a corresponding increase in the total cost of those attacks. The value of developing a strategy to minimize the social losses from piracy is clear.

5 A Common Constraint

Of the many constraints to be considered in optimizing p , f and n , there is at least one factor that affects all three. The wealth level of the average pirate—here, the Somali pirate—has an impact on the likelihood that such a pirate is detected, captured and convinced (p), on the magnitude (or type) of the punishment (f), on the willingness of that pirate to commit an act of piracy (u) and on the comparative income that the pirate might get from alternate (non-piracy) activities (also u).

Maritime piracy is extraordinarily profitable when viewed from the perspective of the individual pirate. By some estimates, revenues from maritime piracy exceed \$250 million annually. The average ransom paid to Somali pirates in 2010 was approximately \$5.4 million³⁹ resulting in an average annual income, per pirate, of as much as \$79,000 per year.⁴⁰ This income is as much as 157 times greater than the income of the average Somali who is not a pirate (\$500).⁴¹ Furthermore, for Somali fishermen whose livelihoods have been endangered in recent years by illegal fishing and dumping of environmental waste, the relative appeal of a predictable income stream and the ability to “patrol” Somali waters may be persuasive reasons to engage in piracy.

³⁷ One Earth 2010 (estimating the annual cost of piracy at between \$7 and 12 billion); O’Connell and Descovich (2010); Wright (2008); CRS 2011, at 13.

³⁸ See ICC 2011 Q2 Report; ICC 2010 Annual Report.

³⁹ Wright (2011) citing One Earth 2010.

⁴⁰ Geopolicity (2011).

⁴¹ Geopolicity (2011).

6 Prioritizing Variables

As a general matter, offenders tend to be more deterred by the probability of discovery, capture and conviction (p) than by the type or magnitude of punishment once convicted (f).⁴² This theoretical finding is supported by the research of Smigel⁴³ and Ehrlich⁴⁴ who, in reviewing FBI/state data on felonies, found that p and f have significant effects on the total number of offenses (O), and that the effect of p in the equation generally exceeds that of f .

These findings suggest that when developing a policy to minimize the social loss from maritime piracy, it is more important to maximize the likelihood that pirates are detected, captured and convicted than it is to determine optimal punishment, because the likelihood of detection, capture and conviction have a greater impact on the commission of crimes in the first place.

7 Optimizing p for Detection, Capture and Conviction

As noted above, perhaps the most important step in minimizing piracy is maximizing the probability that a potential pirate attack is discovered and prevented. In our equation, the first (and most important) challenge is how best to optimize p —the likelihood that a pirate is discovered, captured and convicted.

The likelihood that a pirate is detected is affected by several major constraints, including the geographical area over which pirates operate, the difficulty in identifying pirates at sea and the cost of deploying naval forces to detect pirates. The likelihood that a pirate is captured is similarly constrained by the cost of deployment of naval forces, as well as by jurisdictional difficulties surrounding the capture and detention of pirates.

Additionally, both the likelihood of detection and the likelihood of capture are constrained by the cost and difficulty of implementing on-board security systems. Finally, the likelihood that a pirate is convicted is constrained by the difficulty and cost of prosecution (whether domestic or international), the difficulty and cost of retaining evidence at sea and the above-noted jurisdictional difficulties surrounding the capture and detention of pirates at sea.

At the outset, the size of the geographical area over which pirates operate is considerable.⁴⁵ The oceans make up more than 100 million square miles of the earth's surface, and more than half of that is considered to be the "high seas,"

⁴² Becker (1968), at 178.

⁴³ Smigel A, 1965, Crime and punishment: an economic analysis, Unpublished M.A. thesis, Columbia University, New York.

⁴⁴ Ehrlich I, 1967, The supply of illegitimate activities, Unpublished manuscript, Columbia University, New York.

⁴⁵ CRS 2011, at 18.

beyond the jurisdiction of any one state. The area including the Gulf of Aden, Southern Red Sea, Arabian Sea and Somali basin alone makes up more than 2.5 million square miles. By contrast, many anti-piracy detection systems advertised for use onboard commercial vessels enable their users to reliably detect small vessels only up to 10 nautical miles away.

The cost of on-board security measures is also a significant constraint on the ability to detect, deter and avoid pirates at sea. By some estimates, the total industry-wide cost of on-board deterrence equipment is as high as \$2.5 billion.⁴⁶ And despite efforts to share costs and develop cooperative security arrangements, “regional states and shippers have yet to put aside their individual stakeholder interests and then negotiate and implement an effective regional maritime anti-piracy security system.”⁴⁷

For some shipping companies, the costs of on-board security measures are even greater, as they include the retention of private security firms to detect and deter pirates. In cases where private security firms are used, some shipping companies have changed the states under which their vessels are registered in order to avail themselves of laws and regulations that are more permissive of the use of private security.⁴⁸ Such changes in ship registration are facilitated by the existence of the “flags of convenience” system of ship registration, through which the process of reregistering and reflagging a ship is “extremely easy and convenient.”⁴⁹

Even where vessels are detected, there can be substantial uncertainty as to whether those on-board are in fact pirates.⁵⁰ Pirates “neither fly the Jolly Roger nor wear eye patches.”⁵¹ Complicating matters further, Somali pirates often throw their weapons—or themselves—overboard at the first sign of naval forces.⁵²

The costs of deploying such naval forces, both financially and in terms of lost opportunities, can be an important constraint on both the likelihood of detection and the likelihood of capture. For example, the cost of fuel needed to move naval vessels to, from and within the Gulf of Aden can be very high.⁵³ Additionally, the opportunity costs involved in an inability to redeploy naval forces elsewhere, while difficult to calculate, are great. And the use of naval forces not as independent “first responders” but instead as escorts or convoys can subject private vessels to delays and increase total costs.⁵⁴

⁴⁶ One Earth 2010, at 15.

⁴⁷ Rosenberg (2009).

⁴⁸ Hagen (2010).

⁴⁹ See generally Rosenberg (2009).

⁵⁰ Kontorovich (2010), at 262.

⁵¹ Kontorovich (2010), at 262.

⁵² See generally ICC 2011 Q2 Report; ICC 2010 Annual Report.

⁵³ CRS 2011 [“(T)he incremental financial cost could be larger due to the need to expend additional fuel to transit to and from the Gulf of Aden region”].

⁵⁴ CRS 2011 (“The delays associated with this waiting can impose costs on ship operators that could be greater than the cost of paying an occasional ransom”).

Jurisdictional concerns and concerns related to the retention of adequate evidence⁵⁵ are also important constraints on the likelihood that pirates are captured and convicted. More often than not, naval forces release captured pirates rather than detain them and return them to mainland law enforcement agencies. Indeed, nine out of every ten Somali pirates apprehended by naval patrols are released because no jurisdiction is prepared to prosecute them or because there is insufficient evidence to justify their detention.⁵⁶

To resolve jurisdictional questions, some states look to solutions in international law. International law gives “ample license for pursuing and prosecuting Somali pirates,”⁵⁷ through the legal mechanism of universal jurisdiction. Piracy is the first and most famous of all universal jurisdiction crimes—crimes that may be prosecuted by any state because they are considered to be crimes against all mankind.⁵⁸ The concomitant classification of pirates as “enemies of the human race” is common to multilateral and bilateral treaties and agreements.⁵⁹

States have, on occasion, exercised universal jurisdiction to prosecute pirates. Yet states rarely, if ever, invoke universal jurisdiction to prosecute pirates whose attacks do not affect their own nationals,⁶⁰ and instances of states pursuing pirates across national boundaries are rare.⁶¹ “Nations are willing to accept the burden of

⁵⁵ Dutton (2011) (cited in Hallwood and Micelli 2011, at 10).

⁵⁶ UNSC, *Report of the Special Adviser to the Secretary-General on Legal Issues Related to Piracy off the Coast of Somalia*, S/2011/30, January 25, 2011 (estimating that 90 % of pirates captured by patrols are released and not prosecuted); CRS 2011 (“Nine out of ten Somali pirates apprehended by naval patrols are reportedly released because no jurisdiction is prepared to prosecute them.”); “Pirates jailed in 17 nations as prosecutions rise,” Associated Press, March 15, 2011; Hallwood and Micelli (2011), at 8–9.

⁵⁷ Kontorovich (2009).

⁵⁸ Notably, while piracy is classified as a crime for which universal jurisdiction exists, related crimes committed against ships at sea are not necessarily subject to universal jurisdiction. See Andersen et al. (2009), at 7.

⁵⁹ See Burgess (2008); Cherif Bassiouni (2001), pp. 81 and 108 (“Piracy is deemed the basis of universal criminal jurisdiction.”); *The Lotus Case (France v. Turkey)*, Permanent Court of International Justice (1927) (“Piracy...is...an offence against the law of nations; and as the scene of the pirate’s operations is the high seas, which it is not the right or the duty of any nation to police, he is denied the protection of the flag he may carry, and is treated as an outlaw, as the enemy of mankind—*hostis humani generis*—whom any nation may in the interest of all capture and punish”).

⁶⁰ See Kontorovich and Art (2010).

⁶¹ Rosenberg (2009), at 15.

prosecuting pirates when it involves their direct and immediate interests – but not when it involves universal jurisdiction.”⁶²

There is considerable disagreement as to whether universal jurisdiction for piracy obliges or merely permits states to prosecute acts of piracy.⁶³ Additionally, it is clear thus far that universal jurisdiction for acts of piracy has no inherent deterrent value—only when states act to capture and prosecute pirates that can we expect any deterrence.⁶⁴ Finally, over-investment in universal jurisdiction may result in under-investment in precautions at the national level, because each state will anticipate that international enforcers will contribute the requisite amount of enforcement. Therefore, for any number of reasons, the universal jurisdiction mechanism that originated with piracy is no longer its best solution.⁶⁵

8 Tolerance of Pirates and Payment of Ransoms

To shipping companies for whom it is too costly to capture and convict pirates, the tolerance of pirate attacks and the payment of ransoms may be “affordable costs” of doing business.⁶⁶ In some instances, “shipping firms, and sometimes governments, are prepared to pay these sums since [the sums] are relatively small compared with the value of a ship, [and the lives] of crew members.”⁶⁷

Shipping companies that make the decision to tolerate pirate attacks often do so having considered the comparative costs of on-board and off-board security, the costs of increased insurance premiums, the increased costs of paying crews who are aware that ransom payments will not necessarily buy protection, and the costs of delays or of re-routing vessels.⁶⁸ Additionally, for many shipping companies, the legal issues that are presented by a private shipping company’s armed response to a pirate attack are possibly much more costly than the immediate price of a demanded ransom (and the other costs of damage to the ship incidental to an attack).

Yet in the longer term, as pirates become accustomed to some states’ practice of regularly paying ransoms, they may increase the frequency of their attacks, expecting that a greater percentage of their attacks will turn out to be “successful investments.” How, then, does the calculus change for repeat players? Does the payment of ransoms by shipping companies create “ransom fuelled piracy?”⁶⁹

⁶² Kontorovich (2010), pp. 243–275, at 251.

⁶³ Andersen et al. (2009), at 8.

⁶⁴ Andersen et al. (2009), at 10.

⁶⁵ Goodwin (2006), p. 973; Kontorovich (2004), p. 183.

⁶⁶ Marts (2010).

⁶⁷ See Middleton (2008).

⁶⁸ Marts (2010).

⁶⁹ Marts (2010); United Nations S.C. Res. 1897, para. 2; United Nations S.C. Res. 1846, para. 2; Smallman (2011); Gettleman (2010).

It is true that the value and number of ransom payments to maritime pirates have steadily increased in recent years. Ransoms paid to pirates now average more than US\$5 million,⁷⁰ and an estimated \$830 million was spent on ransoms between 2008 and 2010.⁷¹ The highest ransom yet paid to maritime pirates—US\$9.5 million—was paid in November 2010 for the release of the South Korean oil tanker *Samho Dream*.⁷² Notably, however, when the ransom demanded exceeds the value of the cargo, the shippers typically do not pay the ransom.⁷³

According to the Department of State, “continued payments will only encourage more kidnappings. For this reason, the United States actively encourages other states to adopt our ‘no concessions’ policy and refrain from paying ransoms.”⁷⁴ U.S. Chief of Naval Operations Admiral Gary Roughead agrees, noting that “the ransoms fuel the business (and) the business invests in more capability.”⁷⁵

For both practical and legal reasons, it would be both difficult and unwise to attempt a wholesale ban on the payment of ransoms to pirates.⁷⁶ Yet it is clear that to the extent that increasing ransoms “fuel” piracy, any effective anti-piracy policy must address long-term “ransom inflation.”

9 Choosing Not to Prosecute

In addition to the above-described constraints, there are also “volitional” constraints on a state’s tendency to capture and convict pirates. Put simply, under certain circumstances, it may be less costly for a state to tolerate infrequent pirate attacks (and, when appropriate, pay ransoms) than to pay the costs of prosecution.⁷⁷

⁷⁰ CRS 2011.

⁷¹ One Earth 2010; *see also* “Piracy on an Almost Industrial Scale,” Defence Management (June, 17, 2010).

⁷² “Somali Pirates Get Hefty Ransom,” Al Jazeera (November 10, 2010).

⁷³ CRS 2011.

⁷⁴ U.S. Assistant Secretary of State for Political-Military Affairs Shapiro (2010); *see also* CRS 2011 (“Ransom payments are considered to be problematic because they encourage pirates to continue their attacks with the expectation that insurance and shipping companies will decide that ransoms are cost effective relative to the insured values of personnel and cargo”).

⁷⁵ Gienger (2011).

⁷⁶ Marts (2010).

⁷⁷ CRS 2011 (“Political will may be present in some countries, but many governments lack sufficient laws and judicial capacity to effectively prosecute suspected pirates”); Garamone (2008) (“One of the challenges that . . . you have in piracy clearly is, if you are intervening and you capture pirates, is there a path to prosecute them?”); Kulish (2008) at A8; *see* Kontorovich (2010), pp. 243–275 at 263 [describing three of the “largest hurdles to domestic prosecution of pirates” as “(1) proving ‘pirate’ status, (2) the costs of trial, and (3) the potential embarrassments in detaining suspects”].

This behavior is reasonable when one considers the dramatic difference in prosecution costs between African countries and European ones.⁷⁸

Some states do not have well-established national laws for trying pirates.⁷⁹ Others decline to capture or convict pirates out of a concern for the burden of incarceration costs, the possibility of subsequent asylum claims,⁸⁰ the fear of reprisals from pirates⁸¹ or the loss of residual income gained through piracy.⁸² And for some, as former U.S. Secretary of State Condoleezza Rice described it, the problem is a lack of “political will and capacity.”⁸³ Any policy designed to combat maritime piracy must strive to address these constraints—constraints that can prevent states that are otherwise inclined to capture and convict pirates from doing so.

10 Optimizing f for Cost, Magnitude and Type of Punishment

In our equation, our ability to optimize f is constrained by multiple factors, including the wealth level of pirates themselves, the questionable deterrent effect of the death penalty, social and moral concerns about the use of the death penalty and the cost of imprisonment.

First, as noted above, the relative poverty of most Somali pirates is an important constraint on the types of punishments that are effective against them. Fines and other economic sanctions—the usefulness of which Becker extols—tend to be less useful against actors who are poor or completely insolvent. As a result, the “threat” of a fine, no matter how steep, is unlikely to be effective against pirate actors (particularly where the relative gains to be had from piracy are so very high). Moreover, to the extent that fines can result in a social gain for society, that gain is unrealizable when those who ought to pay the fines cannot do so.

⁷⁸ One Earth 2010 (estimating the costs per pirate prosecution at approximately \$52,000 in the region (in Kenya, the Seychelles or Somaliland), \$246,000 in Europe, and \$336,000 in the United States).

⁷⁹ “Kenya ends co-operation in hosting Somali pirate trials,” BBC News (October 1, 2010).

⁸⁰ CRS 2011 [“(O)ne of the greatest challenges to prosecuting Somali pirates appears to be determining where to incarcerate them”]; Warner (2010).

⁸¹ Kontorovich (2010), pp. 243–275, at 256.

⁸² Noto (2010), p. 87 (“Money is the motivating force behind Somali piracy. Somalia has no functional economy, and ransom payments from hijacked ships inject millions of dollars into the region”).

⁸³ Press Release, Security Council, Security Council Authorizes States to Use Land-Based Operations in Somalia, as Part of Fight Against Piracy off Coast, Unanimously Adopting 1851, U.N. Doc. SC/9541 (December 16, 2008) [hereinafter S.C. Res. 1851 Press Release] (statement of U.S. Secretary of State Condoleezza Rice).

The relative poverty of most Somali pirates also affects the costs imposed upon them by imprisonment. As Becker puts it, the cost of imprisonment is “the discounted sum of the earnings foregone and the value placed on the restrictions in consumption and freedom.”⁸⁴ The total cost of imprisonment is therefore greater for those whose normal earnings outside prison are greater, as well as for those to whom freedom is relatively valuable. For most Somalis, however, normal earnings to be had outside of prisons (excepting possible earnings from acts of piracy) are relatively low, and the value of freedom to an individual may be less if, for example, prison conditions are not completely uncomfortable, basic needs are provided for while in prison, and the possibility exists that the pirate may apply for asylum after serving his sentence.

The social cost of imprisonment is also an important constraint on the type of punishment to be used against pirates (and, by extension, the cost of that punishment). Numerous costs are involved in the imprisonment of criminals, including the costs of constructing and maintaining adequate facilities, of training and paying guards and other personnel, the costs of food and other necessary supplies, and the economic loss of productivity in cases where prisoners are removed from the workforce.

Furthermore, the imprisonment of pirates presents a unique challenge, as it is not necessarily clear in which facilities and at whose expense the pirates would be detained. Any international or multilateral agreement for the detention of pirate convicts carries with it additional “hidden costs”—the cost involved in negotiating such an arrangement, for example, or the costs of new construction of an international or multilateral detention facility.

Finally, two major constraints restrict *f vis-à-vis* the use of the death penalty. First, moral and political controversy surrounds the use of the death penalty. And second, whether the use of the death penalty has any intended deterrent effect remains an open question. To the extent that a policy against maritime piracy requires international cooperation, it is highly unlikely that a consensus as to the propriety of the death penalty could be reached by any group of states. Most countries do not recognize or permit its use; it is for that reason that no international tribunal exists that is empowered to administer the death penalty to convicts.

11 Optimizing u for Willingness to Commit Crime and Comparative Income

In Becker’s original equation, u is an all-encompassing variable representing other variables affecting the number of offenses, including the actor’s willingness to commit crime and the income available through alternate (legal or illegal)

⁸⁴ Becker (1968), at 179.

activities.⁸⁵ Becker suggests that the likelihood of crime being committed responds to changes in these variables, such as a rise in the income available through other activities or an “increase in law-abidingness due, say, to ‘education.’”⁸⁶

As previously stated, the average income available to Somalis is a fraction of the income to be had from engaging in piracy. Any increase in the alternate available income available to Somali pirates (such as an increase in education) would almost certainly require systemic changes to Somalia’s economy and infrastructure.

The idea of systemic change is not new; some scholars have suggested that the best way to address maritime piracy is to cure its “underlying causes”—the instability of national (Somali) government, the weakness of Somalia’s legal system and the vulnerability of its economy.⁸⁷

Yet not all scholars agree. Some have questioned whether Somali piracy is a logical outgrowth of state failure.⁸⁸ Others have suggested that piracy is in fact less frequent during periods of “violent territorial conflict.”⁸⁹ Sarah Percy and Anja Shortland even make the somewhat controversial claim that Somali piracy is likely to increase, rather than decrease, if Somalia’s domestic stability is improved.⁹⁰

Assuming for the moment that systemic changes to Somalia’s economy and government are necessary, the ability to optimize u is affected by at least three key constraints: uncertainty as to how to bring about such systemic changes, the expense of making such changes and the “locality” of any such solution.

12 International Tribunals

Some suggestions for a policy to combat maritime piracy have centered upon the use or creation of an international legal tribunal specifically empowered to consider piracy cases. Some scholars claim that “if an international body like the International Criminal Court were willing to accept jurisdiction, this would radically change the current situation (and if) more pirates are successfully brought to justice, it will not take long for the risks of the enterprise to discourage others.”⁹¹ Others claim that “recognizing piracy as an international crime will . . . give individual

⁸⁵ Becker (1968), at 177.

⁸⁶ Becker (1968), at 177.

⁸⁷ Kaplan (2009); Chalk (2009) at 6.

⁸⁸ de Grot et al. (2011) [citing Coggins B 2010. Global patterns of maritime piracy and non-traditional threat (2000–2009) Unpublished].

⁸⁹ de Grot et al. (2011) [citing Coggins B 2010. Global patterns of maritime piracy and non-traditional threat (2000–2009) Unpublished].

⁹⁰ Percy and Shortland (2010).

⁹¹ See “Capture Pirates, on Land and Sea,” New York Times (April 9, 2009); Dutton (2010); One Earth 2010.

states that don't want to prosecute pirates an alternative."⁹² Yvonne Dutton, for example, argues that "an international criminal court could fill the 'impunity gap' because the costs of prosecution could be shared by the international community as a whole, and the court could be established with the precise legal capacity and expertise that would enable it to efficiently and fairly adjudicate piracy cases."⁹³

Paul Hallwood and Thomas J. Micelli note that Dutton's proposal "has the particular advantage of possibly reducing the free rider problem that leads to the under-funding of the prosecution of pirates,"⁹⁴ though they note that "if the ICC were to take over the prosecution of pirates, its Statute would have to be modified."⁹⁵ Hallwood and Micelli are partially correct, but the modification of the Rome Statute is far from the only problem with the use of the ICC to handle cases of maritime piracy. Moreover, most of the problems with the notion of using the ICC in this way are practical, rather than legal.

As a legal matter, it is not at all clear that states would necessarily be willing to yield to the Court's jurisdiction over piracy cases, nor is it clear that piracy is in fact a "most serious crime of international concern," fit for the court's consideration and for inclusion under the Rome Statute. And as a practical matter, to date, no case at the ICC has resulted in a conviction, and there is some doubt as to whether any convictions are forthcoming. In addition, it is not clear that the ICC has the capacity to handle new pirate cases. Contrary to Dutton's assertion that the ICC is "well equipped, with significant resources and personnel at its disposal, to handle that burden,"⁹⁶ the ICC has limited resources. The ICC's budget has been repeatedly cut in recent years, and the institution is already under significant strain as it attempts to balance the needs of competing, simultaneous trials in one building.

Proposals to create an *ad hoc* tribunal to handle piracy cases⁹⁷ face similar challenges. Beyond the threshold question of whether such an institution is necessary at all,⁹⁸ additional questions arise as to the legal "redundancy" of such a tribunal.⁹⁹ Additionally, the cost necessary to create a new court would be

⁹² See Burgess (2008).

⁹³ Dutton (2010), at 26.

⁹⁴ Hallwood and Micelli (2011), at 16.

⁹⁵ Hallwood and Micelli (2011), at 17.

⁹⁶ Dutton (2010) at 32 [citing the Proposed Programme Budget for 2010 of the International Criminal Court, International Criminal Court, Assembly of States Parties, ICC-ASP 8/10 (July 17, 2009)].

⁹⁷ Report of Jack Lang, UN Special Advisor on Legal Issues Related to Piracy Off the Coast of Somalia, Report, January 2011.

⁹⁸ Koremenos et al. (2001), at 8–9 ("If states want to promote a common interest, what kinds of institutions might they design to aid their efforts? They might first ask whether they need an international institution at all. Perhaps their national capacities are more than adequate, or they are converging on tactic arrangements that require little collaboration. If they could benefit from explicit cooperation, they would ask whether current institutions could be extended to cover the issue, in whole or in part").

⁹⁹ Andersen et al. (2009), at 12.

substantial,¹⁰⁰ and there is no reason to believe that the process of creating such a court would be either quick or easy.¹⁰¹ Put simply, not only is it unclear that either the political will or the legal basis exists to justify the creation of such a new tribunal,¹⁰² it is (more importantly) unclear that the creation of such a tribunal would help decrease the total social loss arising from acts of piracy.

13 Multilateral Naval-Based Solutions

Other suggested and actual anti-piracy policies have centered on the use of multilateral naval forces to combat piracy. The use of such naval “task forces” to patrol waters and prevent or respond to pirate attacks is not new: as early as the first century BC, Roman consul Gnaeus Pompeius Magnus sent a fleet of almost 300 ships to put a stop to pirate attacks that had weakened the Republic’s regional alliances and endangered the supply of grain to Rome.

Similarly, in recent years, states have taken steps toward using national and multilateral naval forces to prevent and respond to acts of piracy. Since 2008, the European Union, NATO and the United States all have formed respective naval task forces designed to deal with piracy off the Horn of Africa, including Operation Atalanta (EU), Operation Ocean Shield (NATO), Operation Allied Protector (NATO), and Combined Task Force 151 (U.S.).

The United Nations has also passed multiple resolutions related to piracy prevention and response,¹⁰³ including one permitting certain states to enter Somali territorial waters and attack pirates on land.¹⁰⁴ There is reason to believe that these steps may have been effective, at least in part: in 2010, the frequency of pirate attacks in the Gulf of Aden fell by more than 50 %.¹⁰⁵

Ultimately, there are several constraints on the effectiveness of such multilateral naval solutions. The costs (both in terms of money and in terms of opportunity) of deploying navies to escort ships or track pirates could be

¹⁰⁰ Andersen et al. (2009), at 11.

¹⁰¹ Lang (2011).

¹⁰² Andersen et al. (2009), at 12.

¹⁰³ United Nations Security Council Resolution (S.C. Res.) 1816; U.N.S.C. Res. 1838; U.N. S.C. Res. 1844; U.N.S.C. Res. 1846; U.N.S.C. Res. 1851; U.N.S.C. Res. 1897; U.N. S.C. Res. 1918.

¹⁰⁴ United Nations Security Council Resolution (S.C. Res.) 1816; U.N.S.C. Res. 1838; U.N. S.C. Res. 1844; U.N.S.C. Res. 1846; U.N.S.C. Res. 1851; U.N.S.C. Res. 1897; U.N. S.C. Res. 1918.

¹⁰⁵ CRS 2011.

considerable,¹⁰⁶ and even with existing multilateral efforts it is “not apparent. . .whether the potentially thorny issue of cost-sharing has even been broached.”¹⁰⁷ As noted above, the cost of fuel needed to transport naval vessels to and from the Gulf of Aden, for example, would be very high,¹⁰⁸ and the cost of deployment necessary to cover an area as large as the Gulf of Aden could be substantial.¹⁰⁹ Any policy to combat maritime piracy, therefore, should take these constraints into account.

14 Characteristics of a Policy Against Maritime Piracy

The creation of an optimal policy to combat piracy at sea would be easy enough in a vacuum. It would be simple, for example, to raise the likelihood of detection, capture and conviction (and to deter almost all acts of piracy) if the social costs of combating piracy weren’t taken into consideration.¹¹⁰ However, these costs and other costs discussed above cannot be ignored—they are immutable constraints on any policy against piracy, and any policy to combat piracy must deal with these constraints directly.

As noted above, the central variable p —the likelihood that a pirate is detected, captured and convicted—is constrained by the geographical area over which pirates operate, the difficulty in identifying pirates at sea, the cost of deploying naval forces to detect pirates, the cost and difficulty of implementing on-board security systems, the jurisdictional and evidentiary difficulties surrounding the capture and detention of pirates, and the difficulty and cost of prosecution (whether domestic or international).

Any attempt to optimize p , therefore, should involve steps to ‘combat’ each of these constraints. For example:

- The ongoing development of existing “best practices” for improving the security of commercial vessels—with an eye to making such practices affordable may reduce the costs of detection.¹¹¹

¹⁰⁶ Torchia (2009) (describing French eight-person military teams used in 2009 to guard fishing boats, costing \$162,000 per week); CRS 2011 (“If Navy ships that are forward deployed to the Indian Ocean/Persian Gulf region were diverted from their current missions in that region to a mission of escorting U.S.-flagged commercial ships in the Gulf of Aden. . .there would be an opportunity cost in terms of those ships not performing their currently assigned missions”).

¹⁰⁷ Chalk (2009), at 5.

¹⁰⁸ CRS 2011 [“(T)he incremental financial cost could be larger due to the need to expend additional fuel to transit to and from the Gulf of Aden region”].

¹⁰⁹ CRS 2011 (“The number of naval ships that would be needed to completely halt piracy in the Gulf of Aden and the waters of Somalia’s eastern coast is probably much larger than the force currently operating there”).

¹¹⁰ Becker (1968), at 180.

¹¹¹ CRS 2011 at 23.

- Similarly, the promotion of insurance policies that reward such “best practices” for on-board security may reduce the costs of detection and enable individual vessels to more readily avoid pirate attacks.
- The implementation of so-called exclusion zones—areas where certain types of ships are presumed to be pirates—may facilitate the identification of pirate vessels, and reduce the costs of detection and capture.¹¹²
- Cooperative efforts to improve coastal monitoring in sensitive areas, to the extent that such efforts are less costly than full naval deployment, may increase the likelihood of detection at comparatively low cost.¹¹³
- The drafting and sharing of model laws that criminalize piracy may reduce the cost of conviction of pirates for states for whom domestic prosecutions are otherwise too costly.¹¹⁴
- So-called shiprider agreements may, in certain circumstances, serve to defray or redistribute the costs of naval deployment that act as a constraint upon detection, capture and conviction.¹¹⁵

15 Conclusion

At its heart, piracy, when viewed from a law and economics perspective, is a problem of costs and constraints. The likelihood that a pirate attack will occur is a function of three key factors—the likelihood that pirates are discovered, captured and convicted, the cost or magnitude of the punishment for piracy and the comparative income to be had from alternate activities—each of which, in turn, is affected by a number of external constraints. It is impossible to minimize the social losses resulting from pirate attacks without identifying these costs and constraints. Only once they have been identified will it be possible to develop an effective anti-piracy policy that minimizes the social costs of piracy.

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¹¹² Andersen et al. (2009), at 16.

¹¹³ Chalk (2009), at 4.

¹¹⁴ Andersen et al. (2009), at 10; Lang (2011) (25 proposals to assist countries and encouragement to those countries to incorporate the crime of piracy into their domestic laws).

¹¹⁵ CRS 2011 (describes a UN Office on Drugs and Crime project facilitating “so-called ‘shiprider’ arrangements in which regional law enforcement personnel seconded to international vessels to perform anti-piracy arrest and investigation functions”).

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An Overview of the Economic Implications of Piracy and Armed Robbery Against Ships in Nigeria

John A. Wajilda

1 Introduction

We have had enough of definitions of piracy and armed robbery against ship from previous speakers. Nevertheless, permit me to say that piracy as defined by the International Maritime Bureau (IMB), is “*an act of boarding or attempting to board any ship with the apparent intent to commit theft or any other crime and with apparent or capability to use force in the furtherance of that act*”¹ while armed robbery against ship as defined by the International Maritime Organisation (IMO), is “*unlawful act of violence or detention or any act of depredation or threat thereof other than piracy, directed against a ship or persons or property onboard such ship.*”²

Simply put piracy and armed robbery against ship involve forceful theft of property aboard a ship. And because force is involved, it could result in injury to victims or even loss of their lives. This chapter highlights some of the economic implications of these forceful acts against ships in Nigeria using data from 2006 to 2010.

Before then, it is worthy to note that Nigeria is located in West Africa and the Gulf of Guinea. It is surrounded by the Republics of Niger in the north, Benin in the west and Cameroun in the east and the Atlantic Ocean in the south. It is 923,768 km² large and has a coastline of about 853 km. Nigeria has a population

¹ Fajriyansah (2005), p. 3;

² Id.

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of over 154.7 million people,³ with a Gross Domestic Product (GDP) and Per Capita Income of \$374,343 million and \$1,092 respectively.⁴

Nigeria has six major ports namely: Apapa Port Complex, Lagos; Tin Can Island Port, Lagos; Delta Port, Warri; Onne Port Complex, Port Harcourt; Rivers Port, Port Harcourt and Calabar Port.

Piratical and armed robbery acts against ships in Nigeria became exacerbated by the activities of Niger-Delta militant groups such as the Emancipation of the Niger-Delta (MEND), the Joint Revolutionary Council (JRC) and the Niger-Delta People's Volunteer Force (NDPVF). The unlawful acts of the militants became graver by 2005.

Although, the Militant Groups claimed to be fighting for a greater share of Nigeria's oil wealth for their people, most of their acts were criminal and for their gang's economic gains only.

The IMB annual report for 2006–2010 indicates that Nigeria had 142 attempted and actual incidents of piratical and armed robbery acts against ships⁵ (more than 28 incidents a year). These unlawful attacks affected all types of vessels including dry cargo vessels, tankers and trawlers.

Some of the negative economic effects of piracy and armed robbery against ships in Nigeria include, imposition of war risk and congestion surcharges by ship owners on the country's seaborne cargo and payment of additional insurance premiums on vessels calling at piracy-prone ports, the burden of which are transferred to Nigerian charterers or cargo interests. Other harmful economic effects are dwindling domestic fish production because of diminishing fish catch, discouragement of investments in trawling and loss of employment and foreign exchange.

It should be clearly noted that the above are just minor reflection of the areas in which piracy and armed robbery against ships has been causing harm to Nigeria's economy. This is because the aim of this paper is to provide a glimpse of the economic harms caused by piratical acts using available information. Hence even the examination of implications of these acts in the areas mentioned above will only be partial. For instance, the payment of higher freight as a result of imposition of war risk and port congestion surcharges will be referring to some ports; container traffic and for the period, 2006–2010 only. Thus this work is limited and can reveal to us only a piece of the iceberg as far as the economic harm caused to Nigeria's economy is concerned.

³ World Bank.

⁴ *Id.*

⁵ ICC-IMB Annual Report, p. 5.

Table 1 Eastern ports' 2006–2010 TEU throughput and war risk surcharge

Year	War risk surcharge/ TEU (US\$)	Eastern ports TEU throughput	Cost implication (US\$)
2006	100	34,903	3,490,300
2007	100	31,251	3,125,100
2008	100	43,967	4,396,700
2009	100	51,931	5,193,100
2010	100	59,698	5,969,800
Total		221,750	22,175,000

Source: Corporate and strategic planning division, NPA, OT Africa lines—surcharges

2 Economic Implications

For a clearer view of the extent of the harmfulness of the above highlighted negative economic effects namely; payment of higher freight in form of war risk and congestion surcharges by consignees, payment of additional insurance premiums on vessels calling at Nigeria's Eastern ports, reduced domestic fish production, discouragement of investment in trawling and loss of employment and foreign exchange, it is necessary to expatiate on them.

2.1 Higher Freight Through War Risk Surcharge

Though there has not been war in Nigeria, but because of the prevalence of piracy and armed robbery attacks against ships in the country, ship operators introduced war risk surcharge on cargoes destined to ports in the Niger Delta. Here, only payments with regards to Eastern ports' container traffic and figures related to 2006–2010 will be examined.

During this period, War risk surcharge of \$100 per twenty equivalent units (TEU) of containers was imposed upon importers,⁶ and though the situation has changed for better, the surcharge is still in force.

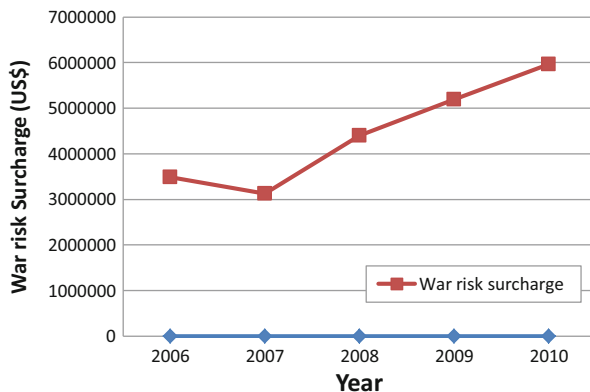
When the \$100 is multiplied by the 221,750 TEUs that were cleared in the Eastern ports of Warri; Onne; Rivers and Calabar between 2006 and 2010 alone,⁷ Nigeria lost over \$22,175,000 (over \$44 million annually) through the payment of war risk freight surcharge.

Table 1 and Fig. 1 below show and depict a graphic picture of the situation.

⁶ OT Africa line, p. 3.

⁷ Id.

Fig. 1 Graph of war risk freight surcharge cost implication, Eastern ports, 2006–2010



2.2 Higher Freight Through Port Congestion Surcharge

It may seem illogical to say that piracy can cause port congestion. This is because in the actual sense, it discourages patronage of ports by both ships and shippers which can lead to low cargo traffic. While this is the case with the Eastern ports of Nigeria which are prone to the unlawful acts, the opposite is the case with the ports in Lagos.

It is not only ship owners that have been reluctant in patronising Nigeria’s Eastern ports in order to avoid attacks on their vessels, but shippers also. This is because armed robbers forcefully steal cargoes aboard vessels and even when stacked on quays.

The result is that most shippers, in the South-South, South-East, North-East and parts of the North-Central regions of Nigeria that are supposed to be served by the Eastern ports have now diverted their imports and exports to Lagos ports. This is notwithstanding the additional overland transport costs and other inconveniences. The attendant outcome is congestion in the Lagos ports which is not necessarily because of economic boom or deficiency in facilities, but diversions from the Eastern ports to that of Lagos. This has brought too much pressure on the highways leading to Lagos making them always to be in bad shape.

Table 2 below reveals how the decline in Calabar and Delta ports’ TEU throughput meant rise in that of Apapa port. Even when there was a 16 % decline in Apapa port’s throughput in 2009, Calabar’s decline was worst (75 %). The rise in Delta port’s throughput in 2008–2010 was because of improvement in the situation. The Late President Yar’adua’s Amnesty for the Militants brought drastic reduction in the latter’s unlawful acts against ships. The improvement in security and safety has encouraged some shippers and other port users to return to those ports.

As a result of the attendant congestion in Apapa Port, Lagos, \$75 per TEU was imposed on shippers as port congestion surcharge. If this amount is multiplied by 1,136,767 TEUs which was the total TEU import traffic of the port in 2006–2010, about \$85,257,525 was lost as congestion surcharge through the port alone.

Table 3 and Fig. 2 below tell the story better.

Table 2 Annual change in Apapa, Calabar and Delta ports' inward TEU throughput, 2006–2010

Year	Apapa port		Calabar port		Delta ports	
	TEUs	Change (%)	TEUs	Change (%)	TEUs	Change (%)
2006	181,450	–	2,039	–	2,985	–
2007	222,459	22.6	1,847	–9.4	1,604	–46.3
2008	270,870	21.8	1,896	2.7	2,747	71.3
2009	227,511	–16	464	–75.5	4,088	48.8
2010	234,477	3.1	282	–39.2	4,146	1.4
Total	1,136,767		6,528		15,570	

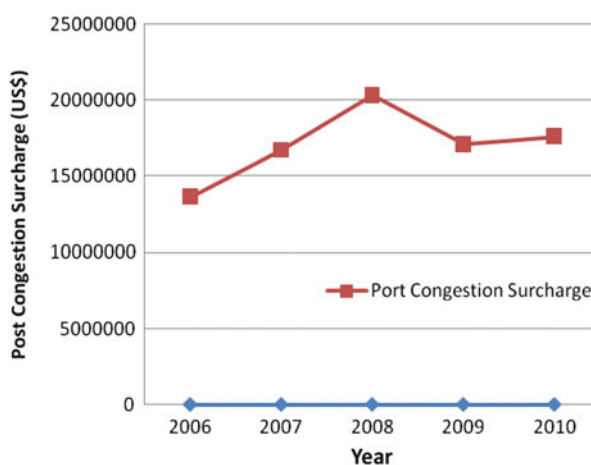
Source: Corporate and strategic planning division, NPA

Table 3 Cost implication of congestion surcharge, Apapa port, 2006–2010

Year	Port congestion surcharge TEUs (US\$) (A)	TEU throughput (B)	Cost implication (US\$) (A × B)
2006	75	181,450	13,608,750
2007	75	222,459	16,684,425
2008	75	270,870	20,315,250
2009	75	227,511	17,063,325
2010	75	234,477	17,585,775
Total		1,136,767	85,257,525

Source: Corporate and strategic planning division, NPA; OT Africa line—surcharges

Fig. 2 Graph of cost implication of congestion surcharge, Apapa port, 2006–2010



2.3 Additional Insurance Premium

As earlier mentioned also, one of the harmful economic effects of piracy and armed robbery against ships in Nigeria, has been the payment of additional insurance premium by charterers and owners whose vessels call at piracy-prone ports.

Table 4 War risk insurance premium cost implication, Eastern ports (dry cargo vessels), 2006–2010

Year	Number of dry cargo vessels (A)	War risk insurance premium (US\$) (B)	Cost implication (US\$) (A × B)
2006	1,292	15,332.47	19,809,551
2007	1,880	15,332.47	28,825,044
2008	1,417	15,332.47	21,726,110
2009	1,264	15,332.47	19,380,242
2010	1,789	15,332.47	27,429,789
Total	8,513	15,332.47	117,170,736

Source: Corporate and strategic planning division, NPA (August 2011); Bwintang Ltd. (September 2011)

It is however, a known fact that vessel owners always have a way of transferring such additional operating costs to shippers.

According to Alhaji Adamu A. Biu, by whose authority his company, Bwintang Ltd provided me with information on additional insurance premiums they have been paying, dry cargo vessels are required to pay from \$1,125 to 52,120.⁸ This gives an average of about \$15,332.47 per 15 vessels they chartered in 2006–2010. He further explained that when such vessels actually get attacked, charterers are demanded to pay twice of these amounts.

In the words of Alhaji Mohammed L. Ibrahim, the General Manager of BUA Ports & Terminals which engages in ship chartering, “*ship owners impose war risk insurance which is about 5% of freight.*”⁹ Based on NPA data, the Eastern ports which are piracy-prone anchored about 7,642 dry cargo ships with a total of 102,152,027 gross registered tonnage (GRT) in 2006–2010.¹⁰ When the average sample additional insurance premium of \$15,332.47 per vessel paid by Bwintang, is multiplied by the 7,642 vessels, one would get **\$117,170,736**.

Table 4 and Fig. 3 below provide a graphic picture of things.

The above payments would not have been necessary if not for the activities of piracy and armed robbery against ships in Nigeria.

2.4 Reduced Domestic Fish Production

Another economic harm that piracy and armed robbery against ships have been causing Nigeria is declining domestic fish production arising from abandonment of fishing by some trawler operators. While some operators resorted to temporary lay-off of their vessels in protest of piratical acts, others sold theirs and exited

⁸ Biu AAA, 21st August, 2011, Personal Communication, Bwintang Nig. Ltd. Port-Harcourt.

⁹ Ibrahim AML, 28th August 2011, Personal Communication, Bua Ports & Terminal, port-Harcourt.

¹⁰ Nigerian Ports Authority Annual Report 2006–2010, Lagos.

Fig. 3 Graph of war risk insurance premium cost implication, Eastern ports (dry cargo vessels), 2006–2010

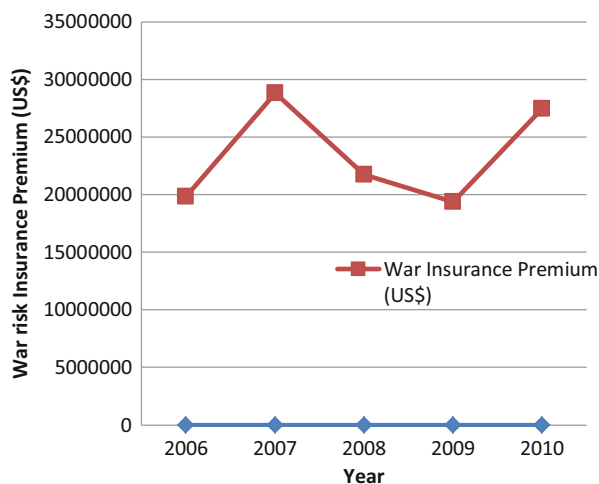


Table 5 Local fish production and import in metric tons, 2006–2010

Year	Importation (metric tons)	Local production (metric tons)
2006	638	625
2007	737	500
2008	750	430
2009	790	400
2010	937	450

Source: NITOA, Lagos (18th August 2011)

trawling business.¹¹ Hence as at 2006, there were 250 registered fishing vessels in Nigeria, but by 2010, the figure had declined to 170.¹² This according to Mrs. Margret Orakwusi, the president of Nigerian Trawler Owners Association (NITOA), was caused by piracy and armed robbery which made the business of trawling too risky and unprofitable.

The attendant result is reduced fish catch and less supply of same. This has worsened Nigeria's dependence on fish imports.

Table 5 and Fig. 4 below depict the picture.

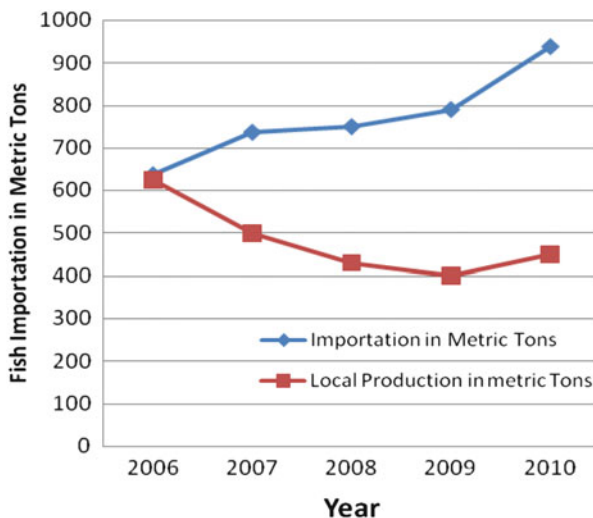
The above table and figure, explain how piracy and armed robbery made some trawler operators to abandon fishing business. As can be observed here, there was reduction in domestic fish production from 625 metric tons in 2006 to 450 tons by 2010 that is about 27 % reduction. This in turn, led to increased fish imports of 638 metric tons in 2006 and 937 tons that is an increase of about 47 % by 2010.¹³

¹¹ Orakwusi M, 18th August 2011, Personal Communication, NITOA, Lagos.

¹² NITOA, Lagos.

¹³ Id, p. 12.

Fig. 4 Graph of local fish production and import, 2006–2010



2.5 Discouragement of Investment in Trawling

Discouragement of investment in trawling has been one of the negative economic effects of piracy and armed robbery against ships in Nigeria.

As highlighted above, there were 250 registered fishing vessels in Nigeria in 2006, but by 2010, the figure declined to only 170, which was a decline of 80 vessels or 32 %. As already explained, this was because many trawler operators found fishing as too risky and no longer lucrative because of losses incurred from piratical acts which compelled them to exit the business.

Hence investment in trawling was directly affected by piracy and armed robbery. Under normal circumstance as the country's population and economy grew, there should have been more investment in trawling because of opportunities being created by more fish demand.

2.6 Loss of Employment

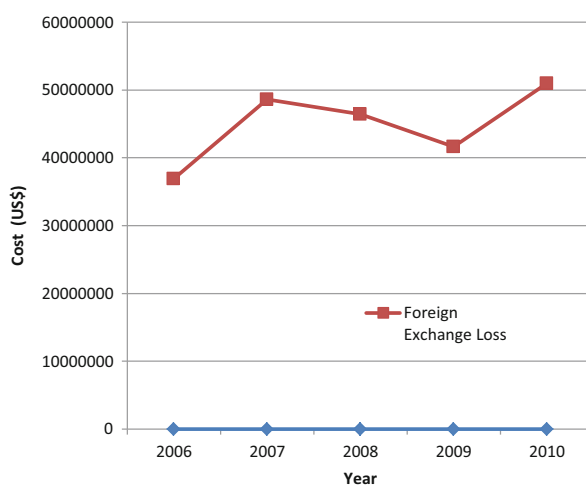
The above scenario causes another harmful effect—loss of employment. The lay-off of about 80 fishing vessels between 2001 and 2010 meant loss of jobs by more than 800 Nigerian seafarers. This is so in view of the fact that ordinary fishing vessels employ an average crew of ten persons per ship. This is because depending on their sizes, such vessels engage a crew of about 9–12 people.¹⁴

¹⁴ Id, p. 12.

Table 6 Analysis of foreign exchange loss

Year	War risk freight surcharge, Eastern ports (US\$)	Port congestion surcharge, Apapa port (US\$)	War risk insurance premium, Eastern port, dry cargo (US\$)	Total (US\$)
2006	3,490,300	13,608,750	19,809,551	36,908,601
2007	3,125,100	16,684,425	28,825,044	48,634,569
2008	4,396,700	20,315,250	21,726,110	46,438,060
2009	5,193,100	17,063,325	19,380,242	41,636,667
2010	5,969,800	17,585,775	27,429,789	50,985,364
Total	22,175,000	85,257,525	117,170,736	224,603,261

Source: Based on analysis of various data earlier discussed

Fig. 5 Graph of foreign exchange loss

2.7 Loss of Foreign Exchange

It is clear that all the additional costs highlighted above arising from piracy and armed robbery against ships in Nigeria are incurred in foreign exchange. It is therefore not illogical to assert that these costs amount to loss of foreign exchange to the country.

The various 2006–2010 data earlier discussed though very limited in scope, reveal to us that about **\$22** and **85** million were lost through the payments of higher freight rates as a result of war risk and port congestion surcharges during that period. Similarly, about **\$117** million was lost during the same period through payments of additional insurance premium by dry cargo vessels that called at the country's Eastern ports giving to a total of about **\$224** million. Though figures on additional fish imports arising from the unlawful acts have not been analysed and added, that also could have meant loss of foreign exchange.

Table 6 and Fig. 5 below give a vivid picture of the situation.

3 Conclusion

The harmful economic effects of piracy and armed robbery against ships in Nigeria as discussed earlier are merely the tip of the iceberg. This is because the areas examined are just few and treated in a limited scope. What has been done in this paper is just to provide a glimpse of the economic harms piracy and armed robbery against ships could cause Nigeria. Though only an insignificant reflection of the true situation, a loss of about \$224,603,261 in just 5 years (\$44,920,652.2 annually) by a country such as Nigeria majority of whose population lives in an object poverty, should not be taken for granted.

It would be most regrettable if the economic losses incurred through surcharges on all import shipments including petroleum products are brought to light. Moreover, one cannot quantify the monetary value of lives that are also occasionally lost in piratical acts in Nigeria. The author has, through this chapter, sought to bring to the attention of government and the general public these negative effects, and to underscore the urgent need for the relevant authorities in Nigeria to take the fight against the menace of piracy and armed robbery in the country's coastal waters very seriously.

Acknowledgements I wish to acknowledge and appreciate my Chief Executive Officer (CEO), Capt. A. A. Biu and the Management of the Nigerian Shippers' Council (NSC), 4 Park Lane, Apapa, Lagos, Nigeria, for sponsoring me to Malmo to make this presentation. Without the sponsorship, I would not have made it. Again I would like to thank Capt. A. A. Biu for sparing time despite his tight schedules not only to vet but to make inputs 19 this paper. Similarly, I want to say thanks to my colleagues: Mr. Tataya Lahupara for gathering and collating the data used; Mrs. Molly Asanga, for typing the script; Mr. Chibueze Amos, for preparing the tables and graphs; Mr. Bukar Papka for verifying figures and Babafemi O. Sunday, for re-typing the footnotes and enlarging the sizes of illustrative figures (maps and graphs) in this paper Without the cooperation of those that volunteered us the information used, it would not have been possible to come up with this write-up. In this regard, I would want to thank Alhaji Adamu A. Biu who gave the instruction to his company, Bwantang Ltd to furnish me with figures on additional insurance premiums they have been paying; Alhaji Mohammed L Ibrahim of BUA Ports & Terminals for giving us information also on insurance premiums and Mrs. Margret Orakwusi, the President of for availing us with facts and explanations of things concerning her association. My thanks also go to Mallam Sani Maida; Idris Tahir and my wife, Saratu Wajilda for their encouragement. These trio ensured that I wrote this paper even when I felt so reluctant.

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China's Efforts to Fight Piracy at Sea

Zhen Lin

1 Introduction

In Chinese history, the practice of piracy and armed robbery at sea came into existence centuries ago. During the past, this practice was closely linked with the maritime commercial activities which were strictly reserved to the central government. Unlike the European countries, private merchants in China were not permitted to be engaged in any form of maritime commerce with foreigners. During the dynasties of Ming and Qing, due to the strict policy prohibiting private maritime commercial activities, the coastal population depending on these activities for their living was deprived of their major income. As a result, the activities of smuggling and piracy multiplied and became a real threat to the central government during this period. Naturally, piracy at sea has always been a serious crime punished severely by every central government in each dynasty.¹

The activities of piracy at sea in the maritime areas along the Chinese coast had reached the peak toward the year of 1550 when the coastal area was haunted by the Japanese pirates (*wokou* in Chinese). This multiplication of such activities was partly the result of the intensification of civil war between the daimyos in Japan and of the policy prohibiting private commercial exchanges with foreigners in China.² Though the Chinese word “*wokou*” means “Japanese pirates”, the “*wokou*” who ravaged the vast coastal area were composed of both Japanese and Chinese. As a lot of local people were involved, so the disaster of *wokou* had lasted for more than 10 years and the pirates along the coast of China had not been eliminated until the year of 1567.³

¹ Zheng (1998), pp. 357–360.

² Id., pp. 178–181.

³ <<http://fr.wikipedia.org/wiki/Wak%C3%B4>>.

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Despite the damage caused by the smuggling and piracy at sea, the role of pirates in Chinese history was not totally negative. First of all, as mentioned above, the activities of smuggling and piracy at sea were closely connected with the maritime commerce with foreign countries. Since private commerce was strictly prohibited, the coastal population depended largely on the smugglers and pirates to sell their products and the markets of inner lands relied on these out-laws for cheaper imported goods. Secondly, the peak of activities of piracy along the Chinese coast coincided with the period of the great geographic discoveries in the West.⁴ When the central government of Chinese empire adopted a decision to withdraw its forces from the oceans and concentrate on its enemies from inner lands, the Chinese pirates explored the oceans and established supply points on islands. Taiwan served, at the time, as an important base for pirates. According to historians, some of the important navigation routes might be discovered by the pirates, for example, the one linking China, Japan and Korea.⁵ Finally, the Chinese pirates sometimes attacked the fleets of the colonial powers in the Southeast Asia. To sum up, in Chinese history, the pirates were not always been viewed negatively. Sometimes, they might be considered as heroes and enjoy a great popularity.⁶

However, piracy at sea has become an international crime under universal jurisdiction. The piracy at sea poses a threat not only to the maritime security but also to the international order of maritime commerce. In most countries if not all, the activities of piracy are subject to severe sanctions.

The definition of piracy at sea is provided in the Art. 101 of the United Nations Convention on the Law of the Sea.

Piracy consists of any of the following acts: (a) any illegal acts of violence or detention, or any act of depredation, committed for private ends by the crew or the passengers of a private ship or a private aircraft, and directed: (i) on the high seas, against another ship or aircraft, or against persons or property on board such ship or aircraft; (ii) against a ship, aircraft, persons or property in a place outside the jurisdiction of any State; (b) any act of voluntary participation in the operation of a ship or of an aircraft with knowledge of facts making it a pirate ship or aircraft. (c) any act of inciting or of intentionally facilitating an act described in subparagraph (a) or (b).⁷

However, this definition is not without defect. First of all, any activity, in order to be qualified as an act of piracy, has to take place on the high sea. All the activities happening in the territorial sea or in the exclusive economic zone cannot be considered as a crime *juris gentium*. Secondly, the convention has restricted the activities of piracy at sea for private ends. As a result, any act for political purposes, such as a terrorist act, will not be considered an act of piracy. Last but not least, the convention defines the piracy at sea as an act committed by the crew and passengers

⁴ Zheng (1998), p. 400.

⁵ Zheng (1998), p. 400.

⁶ Zheng (1998), pp. 370–376.

⁷ Art. 101 of the United Nations Convention on the Law of the Sea.

of a ship or an aircraft against another ship or aircraft. As a result, at least two ships or aircrafts should be involved.

Another definition is provided by the International Maritime Bureau. The International Maritime Bureau (IMB) defines piracy as the act of boarding any vessel with an intent to commit theft or any other crime, and with an intent or capacity to use force in furtherance of that act. This definition is much more inclusive but may be too general.

After having reviewed the piracy in Chinese history and the conception of piracy in international law, I am going to study in detail China's efforts to fight the piracy at sea at national, regional and international level.

2 China's Efforts to Fight Piracy and Armed Robbery at Sea at Domestic Level

China is bordered by three semi-enclosed seas and has a coast line of more than 18,000 km. Illegal Activities which take place in the interior waters, territorial sea or exclusive economic zone will be solely subject to the domestic law of China. This part of the paper is dedicated to the analysis of the domestic legislation of China and its comparison with rules of international law.

Most of the rules concerning the piracy can be found in the Chinese criminal code. Curiously, the term "piracy" does not exist in the domestic law of China. However, those illegal acts taking place in maritime areas under Chinese jurisdiction can be punished under the category of crimes against public security.⁸ In fact, during the judicial procedure, the pirates are usually persecuted for murder, theft, robbery or other crimes numerated under this category. According to the criminal code, "This Law shall be applicable to crimes which are stipulated in international treaties concluded or acceded to by the People's Republic of China and over which the People's Republic of China exercises criminal jurisdiction within the scope of obligations, prescribed in these treaties, it agrees to perform."⁹ This article permits China to establish its jurisdiction over certain international crimes including piracy at sea.

Although the term of piracy can be found nowhere in the domestic law of China, The word of "robbery at sea" might be used to replace "piracy at sea" which figures in international conventions. This will not affect the effective implementation of the domestic law but China has an interest in integrating the term in its legal system in order to coordinate its domestic legislation with the international law. As the combat against piracy at sea is gaining more and more importance at national

⁸ In the chapter of crimes against public security, Art. 116 "sabotage of ships" and Art.117 "the sabotage of sea lanes" are closely related to the crime of piracy and armed robbery at sea. Criminal Code of People's Republic of China, adopted the 1st July 1979, amended the 14th March 1997, <http://news.xinhuanet.com/legal/2003-01/21/content_5679505.htm>.

⁹ Art. 9 of the Criminal Code.

level and international level, the inclusion of the term is not meaningless and might be the first step toward a more effective domestic legislation.

In practice, the implementation of the law and regulations is not totally satisfactory. Two governmental agencies are responsible for the prevention and elimination of piracy and armed robbery at sea. First of all, as piracy is statutory crime in China, the Ministry of Public Security (MSP) has jurisdiction over incidents of piracy which take place in Chinese waters. More precisely, it is the Maritime Security Bureau (MSB) under MPS that is in charge of maritime crimes. The major responsibilities of the MSB include maintaining the maritime order, insuring the legal uses of the sea, preventing piracy at sea, smuggling and other crimes related to maritime activities.¹⁰ The coastal areas are equipped with mobile patrol forces of about 50 patrol boats and more than 2,000 personnel, forming the force of maritime police.¹¹ The other agency responsible is the State Oceanic Administration (SOA) which is in charge of the surveillance of maritime activities. SOA has established the brigade of the China Sea Monitoring. Accordingly, the monitoring team has the function of inspecting China's jurisdictional waters to find out and deal with any violation of Chinese law and regulations.¹² What makes its difference with the MSB is that the SOA does not have the power to put the wrong-doers on trial.

The issue of piracy in China is closely related to the rampant smuggling in the coastal regions as it is a highly profitable business.¹³ In the particular context of China, the combat against smuggling has inevitably an effort on the fight against piracy in the region. After the affair of Petro Ranger in 1998,¹⁴ the central government has decided to launch a large campaign against maritime criminal activities in its jurisdictional waters.

The efforts of China have proven to be quite effective. From 1998, the Chinese police have succeeded in putting on trial suspects responsible for incidents which had the most influence in China. The Chinese tribunals have handed down severe sentences for pirates ranging from long-term imprisonment to death penalty. Compared with legislation of some other countries, the Chinese law is quite harsh and can be really discouraging to the practice of piracy in Chinese jurisdictional waters.¹⁵ What is

¹⁰ Keyuan (2004), p. 335.

¹¹ Shouben (1992), pp. 234–235; see also <<http://baike.baidu.com/view/2395328.htm>>.

¹² <<http://www.soa.gov.cn/hyjw/jjgk/jjdw/2007/03/09/1173404107659881.htm>>.

¹³ Keyuan (2004), p. 336.

¹⁴ The affair of Petro Ranger took place in 1998. The ship was attacked by pirates after its depart from Singapore. The ship Petro Ranger was arrested when discharging its cargo into another ship. The ship was suspected to be a smuggling vessel. The cargo, including diesel and kerosene, was confiscated. But the crew were released due to lack of evidence that they were pirates. The decision of Chinese court has invited sharp criticism from the International Maritime Bureau for this action might encourage the practice of piracy in the region. The Chinese government has gone under a great pressure from the international society after the incident. <<http://www.solomonchen.name/download/04-7/1997-1999.doc>>.

¹⁵ There are altogether five cases that we are going to review:

Case 1. The Tenyu

The Tenyu, flying the flag of Panama was hijacked on 27th September 1998 and all 16 crew members disappeared. The ship reappeared later in Zhangjiagang with a new name. The

achieved by China did not remain unnoticed. In 2003, Captain Pottengal Mukundan, director of International Maritime Bureau, spoke highly of the effort by the central government:

Early this year, Chinese authorities prosecuted pirates who had hijacked the tanker Siam Xanxai. The Chinese courts sentenced the pirates to between 10 and 15 years in prison. . . Chinese authorities should be congratulated for having taken these difficult cases through to prosecution. It is this kind of response which will deter future pirates from this trade.¹⁶

In sharp contrast with the domestic law of China, an Indonesian court sentenced in the same year a group of pirates to only 2 or 3 years in prison for hijacking a ship.¹⁷ The severe sanctions stipulated in Chinese domestic law are effective in discouraging

authorities confirmed that the ship was the missing one. The case was submitted to a Chinese court which decided to return the ship to its real owner. As to the crew on board the hijacked ship, who were found to be Indonesians, the tribunal released them as it didn't consider them to be pirates. The case of Tenyu was the first case where a Chinese judicial organ had intervened and ordered a ship found in Chinese territory to be returned to its original owner.

Case 2. The Cheung Son

The Cheung Son, which belonged to a Hong Kong company, disappeared on 12 November 1998 on South China Sea. The bodies of the crew were found floating in the sea near Guangdong a few days later. The police force of the Guangdong province started investigation and arrested all suspects on 8 August 1999, including 1 Indonesian and 37 Chinese. The pirate killed all crew members, robbed the ship and finally sold it. This was the most bloody incident that happened in maritime area under Chinese jurisdiction. Thirteen of the suspects were sentenced to death and the other had also received severe sanctions.

<<http://news.21cn.com/domestic/gedi/2002-06-24/702987.html>>.

Case 3. The Marine Fortuner

The marine fortuner, flying the flag of Panama, belonged to the Taiwanese company and was hijacked in the Andaman Sea during its journey from China to India on 17 March 1999. In June 1999, the Chinese authorities of Fangchen harbour of the Tonkon Gulf found the ship under the name of Nevo Tierra. All the 14 Burmese suspects were arrested and the ship was returned to its original owner. In February 2000, the court pronounced its verdict: the main suspect was sentenced to death and the others were sentenced to long-term imprisonment. It is noteworthy that the written judgement cites some provisions of international treaties.

<http://www.gmw.cn/01gmr/1999-08/05/GB/gm%5E18139%5E8%5EGM8-0507.htm>.

Case 4. The Siam Xanxai

The tanker, flying the flag of Thailand was hijacked by ten Indonesians after it left Singapore for Thailand on 9 June 1999. The Chinese authorities detained the ship near Shantou in Guangdong province several days later. The ten suspects were arrested and sentenced to more than 15 years in prison. The ship, together with its cargo, was returned to its original owner.

Case 5. The Global Mars

The ship flying the flag of Panama was hijacked by a group of pirates composed of 11 Philippine and 9 Burmese a day after setting sail from Malaysian February 2000. The vessel finally arrived in China under another name. The police force intervened and detained the ship which was later returned to its Japanese owner.

Legal Daily, le 23 September 2000, <http://www.legaldaily.com.cn/gb/content/2000-09/23/content_5644.htm>.

¹⁶ Pirate Attacks Have Tripled in a Decade, IMB report finds, <<http://www.iccwbo.org/policy/ip/iccbig/index.html>>.

¹⁷ Id.

the practice of piracy in Chinese jurisdictional waters. Since the year of 1999, no incident of piracy has taken place in maritime areas under jurisdiction of China.¹⁸

3 Jurisdictional Conflict in the Taiwan Strait

Because of the unique status of the Taiwan Strait, the incidents happening in the strait are not subject to the same law or regulation as those taking place in waters under exclusive jurisdiction of People's Republic of China. I am going to start with the analysis of a famous incident in the 1990s. In the 1990s, the rampant smuggling in the coastal region has become a real threat to the economic order in China.

The ship *Eagle King*, flying the flag of Panama, was found to be involved in the smuggling of cigarettes in the Taiwan Strait. It was caught transferring its cargo to another ship. The ship *Eagle King* was then pursued by the anti-smuggling branch of Xiamen Customs. Incapable to escape, the crew of *Eagle King* turned to the Taiwanese navy for help, pretending to be assaulted by pirates. The pursuit of the force from the Xiamen Customs was interrupted by the Taiwanese Navy. The latter detained the ship *Eagle King* and took it back to Taiwan. There were six customs officials aboard the *Eagle King* and they were taken to Taiwan with the crew of ship. Shortly afterwards, the authorities of the People's Republic of China asked the Taiwanese authorities to return the customs officials, the suspects, the ship together with its cargo. Having investigated the matter, the Taiwanese authorities found out that the *Eagle King* was in fact a smuggling ship and the customs officials took action within their competence. Finally, the Taiwan side agreed only to return the customs officials to the other side of the strait. The cargo was confiscated but the suspects were released. This decision was violently criticised by the other side. According to the spokesman of the Customs of China: "The action taken by the Taiwanese authorities means tolerance to the practice of smuggling and piracy at sea in the Taiwan Strait. . . despite Taiwanese promises to cooperate in order to fight smuggling in the strait area, its behavior invites doubts about its willingness to cooperate."

Frankly speaking, the *Eagle King* incident was not an incident of piracy but the case which raises the problem concerning jurisdictional conflict in the Taiwan Strait. The absence of a mechanism of cooperation is the root of such a problem.

Since the year of 1987, criminals of each side take advantage of the lack of coordination between the two sides across the strait to escape punishment. Some suspects who have been pursued by authorities of one side and have fled to the other side are still at large. In order to solve this problem, the associations of Red Cross of the two sides, authorised by their respective government, signed an agreement

¹⁸ Ke (2007), p. 217.

concerning the return of the stowaways and the charged to the other side. The agreement (Jinmen Agreement) was signed in September 1990. By January 2009, altogether 38,936 people have been returned from one side to the other via the associations of Red Cross. However, the effect of Jinmen Agreement remains limited and its application is restricted to the return of stowaways and suspects. Because of the non governmental nature of the organisations which signed the agreement, the judicial bodies of the two sides across the Taiwan Strait do not have any direct contact with each other. The coordination between the police forces is very difficult to become realised within the scope of Jinmen Agreement due to its non-governmental nature.

Because of the improvement of the across-strait relation, a more comprehensive mechanism of cooperation between Beijing and Taipei is possible. With authorisation of respective judicial organs, the Association for Relations Across Taiwan Straits and Strait Exchange Foundation from each side of the strait signed an agreement on a joint combat against crimes and mutual legal assistance between the two sides across the Taiwan Straits on 26 April 2009.¹⁹ According to the agreement, the two sides agree to cooperate with each other in civil and criminal procedures, including exchange of legal documents, mutual assistance in investigations, mutual recognition of each other's judicial decision and the repatriation of suspects to the other side.²⁰ The crimes subject to conjoint fight between the two sides across the strait include especially serious crimes against public security and economic order. What is of particular interest in this paper is Art. 4(4), which stipulates that the hijacking of ships or aircrafts and terrorist attacks are also subject to the present agreement. Here we see that the governments of the two sides have realised the importance of cooperation in fighting piracy at sea and other crimes. As to the repatriation of suspects to the other side, quite strict conditions have to be met: the request to return suspects can be refused if (1) the person pursued by one side is already persecuted by the other side or (2) the side to which the request is made has a vital interest in the case involving the suspect. What's more, the authorities seeking the repatriation of suspects cannot refer to court a matter that is not included in the request submitted to the authorities of the other side.²¹ The Agreement of 2009 is much more inclusive than Jinmen Agreement and has established a direct link between the judicial organs across the strait.²²

In theory, like the Jinmen Agreement, the new agreement is not an official document due to the non-governmental nature of the two associations which had signed the document. However, since the two associations have received authorisation from their respective judicial bodies, the agreement between the former is also binding to the latter. The Supreme Court of People's Republic of China has promulgated its "Supplementary Opinion on the recognition by people's

¹⁹ <<http://baike.baidu.com/view/2401087.htm>>.

²⁰ Art. 1 of the Agreement, <<http://baike.baidu.com/view/2401087.htm>>.

²¹ Art. 6 of the Agreement.

²² Art. 2 of the Agreement.

courts of Taiwanese courts' civil judicial decisions" on 14 May 2009.²³ There is still a lot to be done concerning the joint efforts of the two sides across the Taiwan Strait. For example, the mutual recognition of judicial verdicts is restricted to civil ones.

4 China's Efforts to Fight Piracy at Sea at Regional Level

The earliest historical records on activities of piracy in the South China Sea dated back to the Han dynasty.²⁴ The first traces of the pirate activities in the Malacca Strait can be found in "*Faxian Chuan*" (The autobiography of Faxian).²⁵ According to historical records, even the mighty fleet of Admiral Zheng He (1405–1433) encountered the dreadful pirates of the South China Sea during the seven famous expeditions.²⁶ During the nineteenth century, with the invasion of colonial powers, the Malays were deprived of their natural resources and the existing local industry was totally destroyed.²⁷ As a result, a lot of Malays, unable to sustain their life with their traditional way of life, had no choice but to become pirates. Among these peoples, Iranuns and Balanginings were the most dreadful robbers at sea.²⁸ These pirates posed a threat to the colonial powers in the region. In 1824, Great Britain and Netherlands signed a treaty to delimitate their respective zone of influence in South-east Asia. The two colonial powers agreed to cooperate in combating together the piracy at sea.²⁹ However, the strengthened grip of the colonial powers had never been able to get rid of the practice of piracy haunting the region.³⁰

During the Second War, Japan invaded the region. The Japanese forces adopted a policy of high-handed oppression regarding the local people and the activities of piracy were largely suppressed.³¹ After the cold war, the incidents of piracy increased rapidly in the South China Sea. According to the IMB statistics since 1995, the incidents taking place in South China Sea make a large portion of incidents happening worldwide. In 2006, a third of the incidents took place in the region (88 out of 240).³² In 2007, the percentage of incidents in South-east Asia out

²³ <http://news.xinhuanet.com/newscenter/2009-05/14/content_11374607.htm>.

²⁴ Ban Gu (32–92), Dilizhi (Géographie) in *Han shu* (l'histoire de Han), text available at <<http://tieba.baidu.com/f?kz=194661103>>.

²⁵ Faxian (334–420), *Faxian chuan* (The autobiography of Faxian), text available at <<http://www.ezeem.com/forum/read.asp?id=1446&no=12711881>>.

²⁶ <<http://baike.baidu.com/view/947746.htm>>.

²⁷ Ke (2007), p. 206.

²⁸ <<http://www.filhstory.com/2009/09/moro-iranun-ilanun-pirate.html>>.

²⁹ <http://en.wikipedia.org/wiki/Anglo-Dutch_Treaty_of_1824>.

³⁰ Ke (2007), p. 208.

³¹ Id.

³² Annex 2, Reports on Acts of Piracy and Armed Robbery Against Ships, Annual Report 2006, International Maritime Organization, MSC.4/Circ.98, text available at <http://www.imo.org/includes/blastDataOnly.asp/data_id%3D18566/98.pdf>.

of the total number was about 28 % (79 out of 282).³³ In 2008, 72 incidents happened in the region. This counts 23.5 % of the total number of 306.³⁴

There are several factors for the rapid increase of incidents of piracy at sea in the region. Firstly, the South China Sea is an extensive area which measures 3.5 million km² and more than 200 islands scattered over this vast area.³⁵ The pirates take advantage of the complex geographic conditions of the South China Sea to hide and shelter themselves and the patrolling of such a vast area is the most difficult. Secondly, as indicated earlier, the practice of piracy has a long history in the region. The local peoples have a long tradition in practicing piracy and armed robbery. There is no clear boundary between fishermen and pirates in these countries where pirate has long been considered as one of the professions. In this particular context, the practice of piracy is not at all looked down upon. After the 1997 financial crisis in Asia, some of the local people whose life had fallen below the poverty line had no choice but to involve themselves in maritime piracy.³⁶ The statistics of IMB correspond to the reality of this period.³⁷ Thirdly, due to the existing territorial conflicts, governments of the States in the region are very sensible to any problem related to the question of sovereignty and jurisdiction.

As to the Malacca Strait, for most of the maritime area falls under the exclusive jurisdiction of coastal States, any exterior intervention can be realised without consent of the coastal countries. Some of the world's busiest sea lanes are concentrated in this region. China has a vital interest in securing these shipping lanes. Most of the oil and gas that China imports have to pass by the Malacca Strait. The disturbance of shipping lane may have a disastrous impact on the Chinese economy. Therefore, China has an interest in getting involved more actively in the combat against piracy and armed robbery at sea in this region of the world.

For this part of the paper, I am going to review the regimes of cooperation in fighting the piracy at sea that China took part in. Then I will discuss what China can possibly do to improve the current situation.

³³ Annex 2, Reports on Acts of Piracy and Armed Robbery Against Ships, Annual Report 2007, International Maritime Organization, 10 April 2008, MSC.4/Circ.115, <http://www.imo.org/includes/blastDataOnly.asp/data_id%3D22585/115.pdf>.

³⁴ Annex 2, Reports on Acts of Piracy and Armed Robbery Against Ships, Annual Report 2008, International Maritime Organization, MSC.4/Circ.133, 19 March, 2009, <http://www.imo.org/includes/blastDataOnly.asp/data_id%3D25550/133.pdf>.

³⁵ <http://en.wikipedia.org/wiki/South_China_Sea>.

³⁶ <<http://www.heritage.org/Research/AsiaandthePacific/BG1379.cfmA>>.

³⁷ Annex 4, Reports on Acts of Piracy and Armed Robbery Against Ships, Annual Report 2008, *op.cit.*

4.1 The Regional Arrangements in Which China Participates

4.1.1 The Declaration on the Conduct of Parties in the South China Sea

China and member States of ASEAN signed the declaration in 2002. State Parties have agreed to cooperate in several fields provided that the sovereign claims of relevant States are not influenced. The fields of cooperation concern questions which have less implication on the issue of sovereignty, including the environmental protection, scientific research, search and rescue and combat against transnational crimes, including but not limited to the drug trafficking, piracy and armed robbery at sea as well as illegal trafficking of arms (emphasis by author).³⁸ However, the declaration is only a political document and it is not binding. According to the Paragraph 6 of the declaration, the consent of relevant countries is necessary before any concrete measures can be taken.³⁹

In 2004, during the ASEAN–China Senior Officials Meeting on the Implementation of the Declaration on the Conduct of Parties in the South China Sea, the two sides adopted Terms of Reference of the ASEAN–China Joint Working Group on the Implementation of the Declaration on the Conduct of Parties in the South China Sea.⁴⁰ The document has established a working group to implement the provisions of the declaration. The working group is responsible for formulating concrete measures regarding the cooperation in fighting jointly the transnational crimes.⁴¹

4.1.2 The Joint Declaration of ASEAN and China on Cooperation in the Field of Non-Traditional Security Issues in 2002 and The Memorandum of Understanding Between the Governments of the Member Countries of ASEAN and the Government of People’s Republic of China on Cooperation in the Field of Non-Traditional Security Issues, 2004

In May 2002, China submitted to the Senior Officials Meeting of the Regional Forum of ASEAN a document showing the Chinese position in regard to the cooperation in the field of non-traditional security issues of the region. The Joint Declaration, adopted in November, identified as its priorities “combating trafficking in illegal drugs, people-smuggling including trafficking in women and children, sea piracy, terrorism, arms-smuggling, money-laundering, international economic crime and

³⁸ Paragraph 6, The Declaration of Parties on the Conduct of Parties in the South China Sea, 16 November 2002, <<http://www.aseansec.org/13163.htm>>.

³⁹ Id.

⁴⁰ <<http://www.aseansec.org/16885.htm>>.

⁴¹ Paragraph 7, the Terms of Reference of the ASEAN–China Joint Working Group on the Implementation of the Declaration on the Conduct of Parties in the South China Sea, *op.cit.*

cyber crimes".⁴² The parties agreed (a) to strengthen information exchange, (b) to strengthen personnel exchange and training and enhance capacity-building, (c) to strengthen practical cooperation on non-traditional security issues, (d) to strengthen joint research on non-traditional security issues, and (e) to explore other areas and modalities of cooperation on the basis of existing bilateral and multilateral arrangements.⁴³

Speaking of the Memorandum of Understanding, there is no major difference between the fields of cooperation envisaged by the MOU and the 2002 declaration.⁴⁴ The bodies responsible for the implementation of the MOU include the ASEAN Secretariat, the corresponding governmental agencies of the member States of ASEAN and the Ministry of Public Security of China.⁴⁵ The relevant governmental agencies should consult each other to determine details regarding the implementation of the MOU.⁴⁶ According to the MOU, the State Parties should meet every year to exchange information on the implementation of the MOU, including what has been done and what is to be done in the future.

4.1.3 The Plan of Action to Implement the Joint Declaration on ASEAN–China Partnership for Peace and Prosperity, 2005

The plan of action is based on the Joint Declaration of the Heads of State Government of ASEAN and People's Republic of China and its major purpose is to improve cooperation between China and ASEAN in all fields, including the issue of piracy at sea from the year of 2005–2010.⁴⁷ The plan of action is also designated to implement the The Joint Declaration of ASEAN and China on Cooperation in the Field of Non-traditional Security Issues in 2002 and The Memorandum of Understanding between the Governments of the Member Countries of ASEAN and the Government of People's Republic of China on Cooperation in the Field of Non-traditional Security Issues in 2004.⁴⁸ According to the plan of action, the existing mechanisms like ASEAN Plus Three Ministerial Meeting on Transnational Crime and the ASEAN

⁴² Joint Declaration of ASEAN and China on Cooperation in the Field of Non-Traditional Security Issues, 6th ASEAN–China Summit, Phnom Penh, 4 November 2002, text available at <<http://www.aseansec.org/13185.htm>>.

⁴³ Art. II (2), Joint Declaration of ASEAN and China on Cooperation in the Field of Non-Traditional Security Issues,

⁴⁴ Art. 2, The Memorandum of Understanding between the Governments of the Member Countries of ASEAN and the Government of People's Republic of China on Cooperation in the Field of Non-traditional Security Issues, Bangkok, 10 January 2004, <<http://www.aseansec.org/15647.htm>>.

⁴⁵ L'Art. 3(1), *Id.* >.

⁴⁶ *Id.*

⁴⁷ The Plan of Action to Implement the Joint Declaration on ASEAN-China Partnership for Peace and Prosperity, text available at <<http://www.aseansec.org/16805.htm>>.

⁴⁸ Art. 1.6.1.

Plus Three Senior Officials Meeting on Transnational Crime can play an important role in cooperation regime.⁴⁹ The plan of action also encourages personnel exchanges, training programmes and seminars to share best practices and experiences on procedures and law enforcement and enhance cooperation in intelligence-sharing, investigation and evidence-collection, arresting and escorting criminal suspects and retrieving stolen goods or money in accordance with the domestic law of the relevant States.⁵⁰ Last but not least, the plan of action identifies the root of the activities of piracy at sea: the poverty and even development of the society. To eradicate all the piracy, the plan of action advocates that States should initiate and support development projects that aim at eradicating poverty and socio-economic disparity and injustices as well as promoting the elevation of standard of living.⁵¹ However, the effect of this article is limited since it is difficult to be put into practice.

4.1.4 Regional Cooperation Agreement on Combating Piracy and Armed Robbery Against Ships in Asia (ReCAAP), and the ReCAAP Information Sharing Centre (ISC)

The Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) is the first regional government-to-government agreement to promote and enhance cooperation against piracy and armed robbery in Asia.⁵² It was based on a Japanese initiative in 2001 and it came into force on 4 September 2006. To date, 17 States have become Contracting Parties to ReCAAP.⁵³

The ReCAAP repeats the definition of piracy at sea of the United Nations Convention on the Law of Sea. The ReCAAP also defines the armed robbery at sea. Unlike the activities of piracy at sea, which are, by definition, actions taking place on high sea and under universal jurisdiction of all States, the armed robbery at sea is by definition a crime happening in maritime areas under jurisdiction of a State Party to the ReCAAP.⁵⁴ Besides the general provisions on the obligation to cooperate, Art. 10 and 11 are of particular interest to this paper. According to the two articles of ReCAAP, a State Party should, on request of another State Party, take appropriate measures, including arrest or seizure, against any person or ship involving piracy or armed robbery at sea.⁵⁵

⁴⁹ Art. 1.6.3.

⁵⁰ Art. 1.6.4 and Art. 1.6.6.

⁵¹ Art. 1.6.9.

⁵² The Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP), 11 November 2004, Tokyo, texts available at <<http://www.recaap.org/about/pdf/ReCAAP%20Agreement.pdf>>.

⁵³ <http://www.recaap.org/AboutReCAAPISC.aspx>.

⁵⁴ L'Art. 1.2., The Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP), see n. 52.

⁵⁵ Art. 10 and Art. 11, id.

The ReCAAP has established the Information Sharing Center (ISC) in Singapore from 29 November 2006.⁵⁶ The ISC facilitates communications and information exchange among participating governments, analyses and proves accurate statistics of the piracy and armed robbery incidents, cooperates with organisations and like-minded parties on joint exercises, information sharing, capacity building programme, or other forms of cooperation.⁵⁷

4.1.5 WPNS (Western Pacific Naval Symposium)

Western Pacific Naval Symposium is the principal forum for multilateral regional cooperation among navies. The forum provides an alternative form of cooperation to the more traditional way of military alliance. The original purpose of the WPNS was to facilitate joint exercises and enhance exchange of information. From 2005 on, the WPNS started to include the combat against the maritime terrorism and piracy at sea in its goals. China is a party to the WPNS and is actively engaged in the work of the symposium. For example, the Chinese navy took part in WPNS Multilateral Sea Exercise in 2007. China sent a vessel constructed by itself, *Fanxiang*, to participate in the anti-terrorist exercises.

Apart from the regional arrangements mentioned above, the Chinese government participates in other regional cooperation regimes concerning the fight against the piracy, armed robbery at sea and other transnational crimes. These regimes include but are not limited to the Counter Terrorism Task Force in the framework of APEC and the ASEAN Regional Forum in the framework of ASEAN. As to the bilateral cooperation, it is believed that the Chinese government has discussed with the Philippines about the possibility of cooperation in the combat against the piracy at sea and drug trafficking. The news report even mentioned the possibility of joint patrol by the two countries.⁵⁸

In the East China Sea, China and Japan signed an agreement to facilitate cooperation between the Ministry of Public Security of the People's Republic of China and the police department of Japan.⁵⁹

To sum up, the existing legal and political instruments mentioned above form the framework for any future cooperation in the region. But the applicability of these arrangements is uncertain. Because of the lack of enforceable concrete measures, the implementation of the instruments mentioned above remains a problem. Without efforts of relevant agencies of States, the promise to cooperate is only empty word.

As to the judicial assistance, the existing mechanism between China and the Southeast Asian countries is not satisfactory. In the case *Petro Ranger* mentioned earlier, the Malay police was unable to ask for the extradition of suspects as there was

⁵⁶ <http://www.recaap.org/index_home.html>.

⁵⁷ <<http://www.recaap.org/AboutReCAAPISC.aspx>>.

⁵⁸ Lianhe Zaobao, Singapore, 15 July 1999.

⁵⁹ Qing (1999).

no such arrangement between China and Malaysia at the moment. China signed its first agreement of extradition with Thailand in 1993. By the year of 2010, China has signed agreements with 33 countries, including Cambodia, Laos, Philippines, South Korea and Thailand.⁶⁰ The Chinese government enacted its law on extradition in 2000, which stipulates that the agreement of extradition is not the precondition for extraditing a suspect to another country.⁶¹

4.2 *What China May Do in the Future*

As indicated above, China has a vital interest in maintaining the maritime security in the region. But China adopts a general “wait and see” policy, that is to say, China prefers to take a step backward and observe the situation instead of involving itself actively. Several factors contribute to China’s adopting such an attitude. First of all, due to the existing territorial conflicts in South China Sea, any form of Chinese intervention could cause a series of radical reactions and may even destabilize the current situation. Therefore, China has to be extremely prudent in action. As to the piracy at sea in Malacca Strait, China has no intention to interfere in the internal affairs of other States. It is impossible for China to take action in jurisdictional waters of other States. However, it does not mean that there is nothing that China can do to enhance cooperation in the region.

To deal with the question, I am going to examine, at first, the behavior of another country, Japan. Japan puts a lot of emphasis on the maritime security and the safety of sea lanes. Japan has taken initiative for several cooperation mechanisms in the region. Two conferences on the piracy and armed robbery at sea had been organised in Tokyo in 2000. Tokyo calls for cooperation and implementation of all possible measures to fight piracy at sea.⁶² The Japan Coast Guard plays an important role in anti-piracy patrolling and exercises.⁶³ The Japanese have come up with the idea “Ocean Peacekeeping”.⁶⁴ However, due to the atrocity committed by the Japanese invading forces during the Second World War in South-east Asian countries, the latter have a lot of doubts about the real intention of Japan. The actions taken by Japan are very often considered as attempts to expand its military influence. During these years, with China’s fast growing maritime forces, the Japanese government feels threatened and searches to possess a normal force. While the direct involvement of Japan is not acceptable for most of Southeast Asian countries and China, the

⁶⁰ <<http://news.sohu.com/20101106/n277187004.shtml>>.

⁶¹ <http://www.npc.gov.cn/wxzl/gongbao/2001-03/05/content_5123887.htm>.

⁶² International Conference of All Maritime Related Concerns, Both Governmental and Private, on Combating Piracy and Armed Robbery against Ships, “Tokyo Appeal”, Tokyo, 28–30 March 2000, p. 3.

⁶³ Rahman (2003), pp. 282–284.

⁶⁴ <<http://www.iiss.org/conferences/the-shangri-la-dialogue/press-coverage/press-coverage-2003/the-straits-times—japans-military/>>.

logistic support might be much more desirable. That is to say, this might also be a right direction for the policy making for the Chinese government.

5 China's Efforts to Fight Piracy at Sea at the International Level

5.1 *China's Contributions to the Work of IMO*

China is a member of International Maritime Organisation (IMO) since 1973. Hong Kong and Macao became associate members in 1967 and 1990 respectively.⁶⁵ Since its admission to the IMO, China has always played an important role in the smooth functioning of the IMO and will probably contribute more in the future to its work. The Organization consists of an Assembly, a Council and five main Committees: the Maritime Safety Committee; the Marine Environment Protection Committee; the Legal Committee; the Technical Co-operation Committee and the Facilitation Committee and a number of Sub-Committees support the work of the main technical committees.⁶⁶ The Council is the Executive Organ of IMO and is elected by the Assembly for 2-year terms beginning after each regular session of the Assembly. The States elected to the Council are divided into four groups. China had been elected to be a member of category B composed 10 States with the largest interest in international seaborne trade from the 9th assembly to the 15th assembly. From then on, China has been elected each time to be member of category A composed of 10 States with the largest interest in providing international shipping services.⁶⁷

China has ratified most of the treaties adopted in the framework of IMO, including the anti-piracy agreements. One of the major purposes of the IMO is to ensure the maritime security. The IMO addressed the issue of piracy for the first time in 1983. By the adoption of *Measures to prevent acts of piracy and armed robbery against ships*.⁶⁸ The IMO sent a fact-finding mission to the People's Republic of China, Philippines and Hong Kong in 1994. The subsequent report showed the interest of these three countries and regions in suppressing piracy at sea.⁶⁹ In 1988, The Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation was adopted in 1988 to complement the United Nations Convention on the Law of the Sea.⁷⁰ Article 3 of the? provides a detailed

⁶⁵ <<http://www.imo.org/>>.

⁶⁶ <<http://www.imo.org/About/Pages/Structure.aspx>>.

⁶⁷ <<http://www.gyyb.gov.cn/article.asp?ID=13064>>.

⁶⁸ Keyuan (2004), p. 331.

⁶⁹ IMO (1994).

⁷⁰ The Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, the text available at <<http://untreaty.un.org/French/Terrorism/Conv8.pdf>>.

description of the crimes subject to the SUA convention.⁷¹ The Convention also sets concrete obligations for State Parties especially in the field of legal assistance.

Each State Party shall take such measures as may be necessary to establish its jurisdiction over the offences set forth in article 3 in cases where the alleged offender is present in its territory and it does not extradite him to any of the States Parties which have established their jurisdiction in accordance with paragraphs 1 and 2 of this article.⁷²

The Protocol to the above-mentioned Convention for the suppression of unlawful acts against the safety of fixed platforms located on the continental shelf was adopted at the time as the SUA convention. According to the certain observers, this protocol may be of particular interest to China as China is witnessing more and more platforms being constructed in its waters or by its oil companies and these platforms can be subject to pirate attacks. China has ratified both agreements and should contribute to the implementation of the SUA convention and the protocol.

5.2 *China's Efforts to Fight Piracy in Somalia*

The piracy off the Somali coast poses a real threat to the international shipping. From the year of 2005, we observed a sharp increase in the number of incidents of piracy taking place off the coast of the Horn of Africa. Somalia possesses a coastline of more than 3,025 km. Some of the world's busiest shipping routes are concentrated in the area and most of the maritime routes between Europe and Far East pass through the Aden Gulf. In 2008, 135 incidents of piracy took place off the Somali coast.⁷³ This number had risen to 214 in the year of 2009. The incidents happening in the region were sharply reduced as a result of the joint efforts of navies from worldwide. But in 2010, more than 49 vessels were seized and 1,016 crew members had been held as hostage by the Somali pirates.⁷⁴

Faced with the situation, the United Nations adopted on 2 June 2008 the Resolution 1816 which gives authorisation to countries to send warships to fight

⁷¹ Art. 3(1) 1) Any person commits an offence if that person unlawfully and intentionally: (a) seizes or exercises control over a ship by force or threat thereof or any other form of intimidation; or (b) performs an act of violence against a person on board a ship if that act is likely to endanger the safe navigation of that ship; or (c) destroys a ship or causes damage to a ship or to its cargo which is likely to endanger the safe navigation of that ship; or (d) places or causes to be placed on a ship, by any means whatsoever, a device or substance which is likely to destroy that ship, or cause damage to that ship or its cargo which endangers or is likely to endanger the safe navigation of that ship; or (e) destroys or seriously damages maritime navigational facilities or seriously interferes with their operation, if any such act is likely to endanger the safe navigation of a ship; or (f) communicates information which he knows to be false, thereby endangering the safe navigation of a ship; or (g) injures or kills any person, in connection with the commission or the attempted commission of any of the offences set forth in subparagraphs (a)–(f).

⁷² Art. 6(4).

⁷³ <http://www.imo.org/TCD/mainframe.asp?topic_id=1178>.

⁷⁴ <http://www.imo.org/OurWork/Security/PiracyArmedRobbery/Monthly%20and%20annual%20piracy%20and%20armed%20robbery%20report/169_Annual2010.pdf>.

pirates in the territorial sea of Somalia provided the Somali government gives its consent.⁷⁵ As to the effect of the resolution, States are divided into several groups. For example, France prefers to enlarge the application to all waters troubled by piracy. By contrast, Southeast Asian countries, like Indonesia and Vietnam, oppose to the France's proposition. Finally, the view of the Indonesia and Vietnam gained the upper hand. The Paragraph 9 "affirms that the authorization provided in this resolution applies only with respect to the situation in Somalia and shall not affect the rights or obligations or responsibilities of member States under international law, including any rights or obligations under the Convention, with respect to any other situation, and underscores in particular that it shall not be considered as establishing customary international law".⁷⁶

The United Nations adopted on 16 December 2008 the Resolution 1851 which calls upon States, regional and international organizations that have the capacity to do so, to take all measures to take part actively in the fight against piracy and armed robbery at sea off the coast of Somalia.⁷⁷ China expressed its willingness to deploy naval vessels to Somalia to participate in joint operations against the Somali pirates.⁷⁸

However, when China decided to deploy its warship in the Aden Gulf, it still surprised many observers both home and aboard. One of the reasons is that the observers do not anticipate any direct involvement from the Chinese government because China has never sent any naval vessel to the South China Sea, the area which is much nearer but of much more importance to China and is also suffering from activities of piracy.⁷⁹ At first sight, the decision by Chinese government to send naval vessels to Somalia seems to be inconsistent with its conservative attitude of deploying forces aboard and its reluctance to be involved in internal affairs of other countries. However, if we read carefully into the speech of Mr La Yifan, Chinese representative at the 5902nd Meeting of the Security Council, we can notice that there is no major change in attitude that Chinese government has always adopted in international affairs.

China had always respected the sovereignty, independence and territorial integrity of countries and supported the national reconciliation process in Somalia, which was trying to achieve peace and stability after 17 years of conflict. . . The issue of piracy was closely related to the rights and obligations in the oceans, and the Council had to act with great prudence. Its actions should facilitate international assistance in combating piracy and avoid negative consequences. Such assistance should be based on the wishes of the Government and applied only to the territorial waters of Somalia, not expanding to other regions. It must comply with the Law of the Sea Convention and must not constitute conflict with existing international legislation. The resolution adopted today responded to

⁷⁵ Resolution 1816, adopted by the Security Council, 2 June 2008, <<http://www.un-somalia.org/docs/Resolution%201816%202.6.08.pdf>>.

⁷⁶ Id.

⁷⁷ <<http://www.unhcr.org/cgi-bin/texis/vtx/refworld/rwmain/opendocpdf.pdf?reldoc=y&docid=4952046b2>>.

⁷⁸ <<http://www.un.org/News/Press/docs/2008/sc9541.doc.htm>>.

⁷⁹ <<http://www.infzm.com/content/20520>>.

those requirements to the greatest extent possible. It was both positive and prudent, and China had voted in favour of the draft.⁸⁰

China sent its fleet composed of three naval vessels to fulfil China's first deep-sea escorting mission against spreading piracy off the coast of Somalia on 26 December 2008. The last time China sent a naval expedition to East Africa was during the Ming Dynasty when emperor's envoy Zheng He led a large armada in the early fifteenth century to the region for goodwill port calls.⁸¹ By the 2 July 2011, the nine convoy fleets had escorted 3,968 vessels through troubled waters and have rescued more than 40 ships from pirate attacks.⁸²

At the strategic level, China has also come up with different ideas to counter the piracy at sea in Somali waters. Shortly after the incident *Dexin hai*, a Chinese vessel hijacked by the Somali pirates near Seychelles, the Chinese Ministry of Defence organised an international conference on November 6 and 7 to coordinate anti-piracy escorts in the Gulf of Aden. Representatives from Russia, Japan, India, the EU Navy, the Multi-national Navy Force, NATO and other countries and organizations which are for the independent or united patrolling missions were present. At the conference, the Chinese government strongly advocated the "zoned escorting cooperation in the Aden Gulf so as to work out the best practice in international cooperation".⁸³ It is normal that the naval vessels escort vessels of their own nationality through the Aden Gulf. However, the approach is not very effective as demonstrated by the *Dexin hai* case. The zoned escorting cooperation advocates that navies convoy all vessels passing through their patrolling zone.

A more recent proposal was formulated earlier in 2011. Li Baodong, China's permanent representative to the United Nations said that the world must have a deeper reflection on its strategy to fight piracy. The Chinese government called for greater "political, economic and judicial" ways to combat the land-based origins of piracy in Somalia.⁸⁴ "China believes it is necessary to formulate and implement a comprehensive strategy for peace and security and development of Somalia."⁸⁵ This proposal is in line with the speech of Chinese representative at the same time of the adoption of Resolution 1816 which identified the issue of piracy as a result of a couple interconnected social reasons. "The multiple problems facing Somalia are interconnected and mutually affecting and therefore require an integrated response."⁸⁶

⁸⁰ <<http://www.un.org/News/Press/docs/2008/sc9344.doc.htm>>.

⁸¹ <http://eng.mod.gov.cn/Opinion/2008-12/27/content_3062987.htm>.

⁸² <news.sina.com.cn/c/2011-07-02/145322745603.shtml>.

⁸³ <<http://www.fmprc.gov.cn/eng/xwfw/s2510/t625146.htm>>.

⁸⁴ Fight Somalia Pirates on Land, China tells UN, 11th March 2011, <http://www.chinadaily.com.cn/china/2011-03/11/content_12158578.htm>.

⁸⁵ *Id.*

⁸⁶ *Id.*

6 Conclusion

To conclude, the Chinese government has a vital interest in fighting piracy as it has the world's largest commercial fleet and it depends to a great degree on shipping for its import of oil and gas. The piracy poses a great threat to Chinese commercial fleet. At the moment of adoption of Resolution 1851, several vessels flying the Chinese flag and 17 Chinese citizens were held as hostage. China's efforts to fight piracy are in the first place for the purpose of defending its own interests. On the other hand, with the rise of China as a major sea power, China should take more responsibility in fighting piracy and maintaining the international maritime order. As a result, China is actively engaged in combat against piracy at sea at various levels.

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Warships Alone Will Not Curb Piracy Off the Somali Coast: Lessons from Puntland, State of Somalia

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1 Introduction

In the last 5 years, piracy off the coast of Somalia has played a huge role in aiding the destabilisation of a country already weary from the civil war and subsequent armed conflicts.¹ Piracy in itself is a crime that has spanned over centuries and it is very much at the forefront of our minds today because of incidents of piracy in the Indian Ocean, the Arabian Sea and the Gulf of Aden. However piracy is one of the older criminal activities, with reports going back as far as the Holy Roman Empire and stretching even further to Ancient Greece.² Piracy experienced something of a “Golden Age” in the seventeenth and eighteenth centuries and it has continued to be an issue in the twentieth century in places such as Indonesia and China, as well as the Caribbean Sea.³ Given the low costs and high rewards habitually associated with piracy, it is difficult to deter prospective perpetrators.⁴

Piracy can be considered a new phenomenon in Somalia since it was virtually non-existent when there was a stable and functioning government.⁵ Therefore the drastic increase which was witnessed from 2005 onwards can be somewhat accredited to the lack of a strong central government, and the inability for its replacement to carry out the necessary policing action. After the fall of the Siyad Barre regime in 1991, Mogadishu was cast into a downward spiral of destruction, along with many other parts of the country. Semi-autonomous political entities were set up along clan lines and geographic locations, whilst the conflict continued

¹ Pham (2010), pp. 325–341.

² De Souza (2002).

³ Staub (2009).

⁴ Sterio (2010), pp. 1449, 1467.

⁵ Baniela (2010), pp. 191–206.

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in Southern and Central Somalia.⁶ The last decade has seen incidents of piracy increase rapidly in Puntland. The high ransom payouts are attractive to young, unemployed Somali males, making it problematic to convince them to find another way of legally sustaining their livelihood. In turn, this has had some knock on effects inland, with piracy highlighting the social ills in Somalia that have been neglected over an extended period of time.

It is well documented that many, ranging from the layman in Somalia to renowned international scholars, are of the opinion that piracy in itself was borne out of a frustration felt by fisherman making a living off the coast of Somalia.⁷ Constant speculation regarding the illegal dumping of toxic waste near Somali shores led to a general feeling of ill will towards states looking to take advantage of the disorder that is the Somali political procedure. The tsunami in the Indian Ocean, which devastated parts of South East and Sub-Continental Asia, played a significant role in adding to the general frustration felt by many living in coastal towns and villages.⁸ Daily reports speculate that barrels of toxic (nuclear and chemical) waste that have washed in to shore led to many deaths aside from introducing other health issues.⁹ There is also the matter of the fishing resources of the ocean, which were depleted by both waste dumping and illegal fishing.¹⁰ The latter was said to be the final straw for many, who were initially fed up due to the waste washing up on their shores, then later only to be denied the right to fish in their own country's waters.¹¹

Countless fishing vessels and trawlers have been hijacked by pirates since 2005 though there is evidence which indicates that the practice of illegal fishing may have been going on for many more years.¹² Fishermen complained about the cutting of their fishing nets, and the hostilities they encountered when faced with foreign fishing vessels at sea illegally going about their business. Some of these hostilities include the dumping of scalding hot water on skiffs used by Somali fishermen in order to deter them from approaching the foreign trawlers.¹³ In many Somali circles, the pirates were initially lauded and very much considered something of a national coast guard, seeing as the actual Somali Coast Guard was dismantled with the fall of the Siyad Barre government.¹⁴ However, the criminal element of piracy in Somalia proved to be instinctive, as fishermen were now starting to realise that one ransom payment would serve as the equivalent to a lifetime of relative prosperity within Somalia. This acted as an incentive for more fishermen, and later regular citizens, to take to arms and abduct ships only to demand a ransom.

⁶ Dagne (2009), p. 95.

⁷ Waldo (2009).

⁸ Gettleman (2008).

⁹ See no. 7.

¹⁰ See no. 7.

¹¹ See no. 7.

¹² Lennox and Defence (2008).

¹³ Murphy (2009).

¹⁴ See no. 1.

This is strengthened by the notion that piracy in its initial stages in Somalia was aimed at deterring foreign trawlers; however this escalated into illicit activity before further spiralling into a viable criminal business for young, unemployed Somali males.¹⁵ There is a great need to not only recognise but also act on the rights of Somalia to its offshore resources, including fisheries, in accordance with both international laws, as well as with the purpose of protecting the Somali natural resources and waters against alleged illegal fishing and dumping, mostly of toxic substances off the coast of Somalia.

The increased military presence in Somali waters has without a doubt acted as a deterrent for pirates; however this is neither an enduring solution, nor is it financially feasible over a prolonged period of time. More efforts are required to help build and cement local institutions that are able to shoulder the sizeable burden that piracy presents. This paper aims to critically analyse whether or not a continued military presence will lead to a coastal area free of pirates. It will also explore what measures can be taken in order to provide realistic and attainable goals in eradicating piracy off the coast of Somalia permanently. Finally, this paper will delve into the effect that piracy has had domestically, leading to ripple effects within the society, affecting areas as wide as politics, economics as well as the society (both coastal and inland).

2 Methodology

The semi-autonomous state of Puntland in Somalia is the hub of the majority of pirate activity, and the research carried out for this paper is based mainly on the interviews of individuals and focus groups from this region, as well as statistical data used to monitor patterns over time. During my time in Garowe, the capital city of Puntland, those interviewed both formally and informally include representatives from the Puntland Government, civil societies, and international and local agencies. Representatives of the Ministries of Justice, Health and Finance were all questioned on how piracy affects their day-to-day work to establish what they will need in order to deal with the issue of piracy internally permanently. During my stay in Galkayo, the southernmost city of Puntland and also considered a safe haven for pirates, I was able to visit hospitals and schools, in order to determine the effect that piracy has had on both the institutions of education in the region, as well as the health consequences that have been borne out of the illegal attack of vessels at sea. I also paid a visit to the local courts, allowing me to gauge the criminal justice system, and its effectiveness in acting as a deterrent for pirates. In Bosaso, the final city of my visit, I was able to meet with local small and medium level businessmen, as well as the port authorities, who provided information relating to the effect that piracy has had on the local economy, as well as the biggest port that Puntland can

¹⁵ Ploch (2010).

boast, the port of Bosaso. The statistics, regarding the types of vessels that have been pirated, the amount of ransom that has been paid, and so forth, have all been gathered using internet resources.

3 Results and Discussion

Table 1 displays a plethora of information, starting with the number and types of vessels that were hijacked successfully by pirates from Somalia. During the period spanning between January 2008 and August 31st 2011 there were 17 bulk carriers (13.3 %), 16 fishing vessels (12.5 %), 34 oil and chemical tankers (26.6 %), 50 cargo ships (39.1 %), 7 private vessels (0.05 %), and 4 tugboats and dhows (0.03 %) that were hijacked, showing the predominance of the cargo ships and tankers relative to the other types of vessel hijacked. The two combined accounted for 66 % of all vessels hijacked, as well as accounting for 80 % of the total declared ransoms over the 4 year period.

Of the hijacked vessels, there were 381 (14.9 %) hostages taken on bulk carriers, 400 (15.6 %) hostages taken on fishing vessels, 753 (29.4 %) hostages taken oil and chemical tankers, 931 (36.4 %) hostages taken on cargo ships, 52 (2.0 %) hostages taken on private vessels and 41 (1.6 %) hostages taken on tugboats and dhows. Unsurprisingly, tankers and cargo ships have provided the most hostages so far. Furthermore, with the additional number of vessels hijacked, greater numbers of hostages were also being abducted. The statistics indicate that there has been an increase of 15 % in the number of hostages taken during 2010 as compared to those seized in 2008, indicating that the pirates have indeed not been deterred, but appear even more willing to carry out bold attacks in order to abduct hostages.

The number of successfully hijacked vessels has stayed relatively constant in the 4 year span presented in Table 1 although contrarily, the ransoms that have been paid have shown markedly increasing trends. The 2011 data shown in the table shows the recorded incidents as of August 31st, with the frequency of hijacked vessels during the first 8 months of this year being comparable to those of prior years.

Table 2 displays the average ransom paid per vessel, with further averages being taken per type of vessel, as well as per year. The data shows that the highest paid ransoms were associated with the release of tankers, followed by cargo ships and bulk carriers, whereas fishing and private vessels had the lowest ransom averages paid relatively. This can be put down to the evolution of the pirates, as they are encouraged to seek out valuable targets that will bring in the highest ransom attainable. Having already witnessed the exorbitant ransoms paid out for oil and chemical tankers in particular, and realising the value of the cargo has allowed the pirates to be more selective when assessing targets. This also reflects on the shipping industry as a whole, seeing as underrepresented tourists and fishermen may have a harder time negotiating their freedom, whereas organising the release of a hijacked oil tanker arguably takes place more speedily. The table also illustrates

Table 1 Successful pirate attacks against vessels between 2008 and 2011

Year	Type of ship	Number of pirated ships	Duration held (days)	Ransom paid (million US dollars)	Vessels with no ransom disclosed	Vessels still in captivity	Hostages taken
2008	Bulk carrier	6	297	12	0	0	131
	Fishing vessel	2	90	1.1	1	0	50
	Tanker (oil/chemical)	10	638	23	5	0	225
	Cargo ship/ freighter	14	542	9.5	6	0	218
	Private vessel	2	22	1	1	0	32
	Tugboat/dhow	3	595	0.7	2	0	25
	Sub-total	37	2,184	47.3	15	0	681
	2009	Bulk carrier	5	307	11.5	0	0
Fishing vessel		5	527	8	1	0	142
Tanker (oil/chemical)		6	413	15.9	2	0	137
Cargo ship/ freighter		16	1,176	19.6	5	0	304
Private vessel		3	52	1.2	0	0	9
Tugboat/dhow		1	118	5.7	0	0	16
Sub-total		36	2,593	61.9	8	0	730
2010		Bulk carrier	1	209	0	1	0
	Fishing vessel	8	1,093	0	3	3	200
	Tanker (oil/chemical)	11	1,791	51.8	3	1	232
	Cargo ship/ freighter	15	1,869	31.8	2	4	326
	Private vessel	0	0	0	0	0	0
	Tugboat/dhow	0	0	0	0	0	0
	Sub-total	35	4,962	83.6	9	8	781
	2011	Bulk carrier	5	308	6.5	0	3
Fishing vessel		1	0	0	0	1	8
Tanker (oil/chemical)		7	148	26	0	3	159
Cargo ship/ freighter		5	197	15.7	0	2	83
Private vessel		2	4	0	0	1	11
Tugboat/dhow		0	0	0	0	0	0
Sub-total		20	657	48.2	0	10	366
Grand total			128	10,396	241	32	18

Source: International Maritime Organisation Annual Reports; European Union Naval Force Somalia: Operation Atalanta and International Chamber of Commerce—International Maritime Bureau

that the average ransoms paid were the highest in 2011, although the piracy incidents were recorded for the first 8 months of the year alone, as compared to the other years, where the full 12 months were accounted for.

Table 2 Average ransom paid per vessel in million US dollars (categorised by type of vessel)

Year	Bulk carrier	Fishing vessel	Tanker	Cargo ship/ freighter	Private vessel	Tugboat/ dhow	Total average
2008	2.0	1.1	4.6	1.2	1.0	0.7	1.8
2009	2.3	1.4	3.9	1.8	0.4	5.7	2.6
2010	N/A	0	7.4	3.5	0	0	2.2
2011	3.3	0	6.5	5.2	0	N/A ^a	3.0
Total average	2.5	0.6	5.6	2.9	0.7	2.1	2.4

Source: International Maritime Organisation Annual Reports; European Union Naval Force Somalia: Operation Atalanta and International Chamber of Commerce—International Maritime Bureau

^aN/A not applicable as none of the specified type of vessel was pirated

Table 3 illustrates the intense engagement of the UN Security Council by issuing eight separate resolutions on the issue of piracy in Somalia in the span of 4 years outlining the salient deliberations made in order to combat this issue through these resolutions. It is clearly stated that states should work together in order to resolve the matter satisfactorily. There is also express mention of allowing the Somali's the rights to their sea borders, as well as providing some sort of financial and logistical assistance to organisations working towards combating piracy. The UN Resolutions are very meticulous in their assessment of the best way to move forward, however it remains to be seen whether all these points will be put into action.

Figure 1 depicts actual and attempted attacks both globally and off the coast of Somali waters. In the year 2003, attacks off the coast of Somalia accounted for 3 % of the total number of attacks worldwide. However, during 2010 and 2011, the pirated vessels in the Gulf of Aden, the Indian Ocean and the Arabian Sea accounted for 45.7 and 64 % respectively of all global acts of piracy that took place during that period. This continuous and drastic increase in incidents is the reason why Somali pirates have come under the spotlight in recent years, causing disruptions to international trade as well as raising the cost of insurance when navigating in and around Somali waters.¹⁶

Figure 2 displays the ransoms that have been paid out to pirates yearly. It is important to observe that the year 2011 has the most number of undisclosed ransoms for hijacked vessels than any of the previous years. One must also take into account the ships that are currently still being held (there are currently 9 vessels and 264 hostages being held).¹⁷ Therefore it can be assumed that the statistics for 2011 will eventually reflect those of its predecessors.

Figure 3 follows on from the previous point, serving to identify how many of the ransoms that have been paid out have actually been disclosed. Seventy-five percent of all the ransoms have been made public; however it is the remaining 25 % which may cause some confusion. There are a plethora of reasons for why a company or

¹⁶ Passman (2009), pp. 59–579.

¹⁷ EU Navfor Somalia: Pirated Vessels updated on August 31st, 2011.

Table 3 The UN Security Council adopted resolutions 1816, 1838, 1846, 1851, 1897, 1918, 1950 and 1976 on the piracy and armed robbery in the territorial waters of Somalia and the high seas off the coast of Somalia

Resolution no.	Mandate
1816 (2008)	Allowed states in cooperating with TFG to enter the territorial waters of Somalia for the purpose of repressing acts of piracy and armed robbery using all the necessary means and this authorization applies only to the situation in Somalia Called on States to cooperate in the investigation and prosecution of persons responsible for acts of piracy and armed robbery off the coast of Somalia
1838 (2008)	Called upon interested states to take part actively in the fight against piracy on the high seas off the coast of Somalia by deploying naval vessels and military aircraft, and through the seizure and disposition of boats, vessels, arms and other related equipment used in the commission of piracy and armed robbery and protect the World Food Programme maritime convoys
1846 (2008)	Welcomed initiatives by a large number of states to counter piracy off the coast of Somalia and for the North Atlantic Treaty Organization (NATO) to launch a naval operation to protect WFP maritime convoys bringing humanitarian assistance to Somalia and to other vulnerable ships for 12 months
1951 (2008)	Calls on member States to assist the TFG by strengthening its operational capacity to bring to justice to those who are using Somali territory to plan, facilitate or undertake criminal acts of piracy and armed robbery at sea
1897 (2009)	Acknowledges Somalia's rights with respect to offshore natural resources, including fisheries, in accordance with international law and strengthen capacity in Somalia, including regional authorities, to bring to justice those who are using Somali territory to plan, facilitate, or undertake criminal acts of piracy and armed robbery at sea Calls on all States, to criminalize piracy under their domestic law and favorably consider the prosecution of suspected, and imprisonment of convicted pirates apprehended off the coast of Somalia, consistent with applicable international human rights law
1950 (2010)	Recognizes that the ongoing instability in Somalia is one of the underlying causes of the problem of piracy and contributes to the problem of piracy and armed robbery at sea off the coast of Somalia, and stresses the need for a comprehensive response to tackle piracy and its underlying causes by the international community Urged all States to take appropriate actions under their existing domestic law to prevent the illicit financing of acts of piracy and the laundering of its proceeds and in their investigation and prosecution
1976 (2011)	Requested relevant partners to assist the TFG and regional authorities in Somalia in establishing a system of governance, rule of law and police control in lawless areas where land-based activities related to piracy are taking place and also requests the TFG and regional authorities in Somalia to increase their own efforts in this regard Requests States and regional organizations to support sustainable economic growth in Somalia thus contributing to a durable eradication of piracy and armed robbery at sea off the coast of Somalia, as well as other illegal activities connected therewith, in particular in priority areas recommended by the Istanbul conference on piracy in Somalia

(continued)

Table 3 (continued)

Resolution no.	Mandate
	Invited States and regional organizations to continue their support and assistance to Somalia in its efforts to develop national fisheries and port activities in line with the Regional Plan of Action, and in this regard emphasizes the importance of the earliest possible delimitation of Somalia’s maritime spaces in accordance with the Convention
	Requested the Secretary-General to report on the protection of Somali natural resources and waters, and on alleged illegal fishing and illegal dumping, including of toxic substances, off the coast of Somalia
	Urged States individually to positively consider investigating allegations of illegal fishing and illegal dumping, including of toxic substances, with a view to prosecuting such offences when committed by persons under their jurisdiction
	Encouraged States and regional organizations cooperating with the TFG to assist Somalia in strengthening its coastguard capacity, in particular by supporting the development of land-based coastal monitoring and increasing their cooperation with the Somali regional authorities in this regard, as appropriate

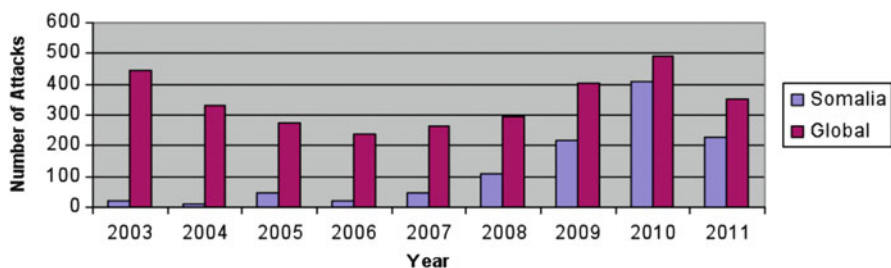


Fig. 1 Attempted and actual attacks (Somalia vs. Global)

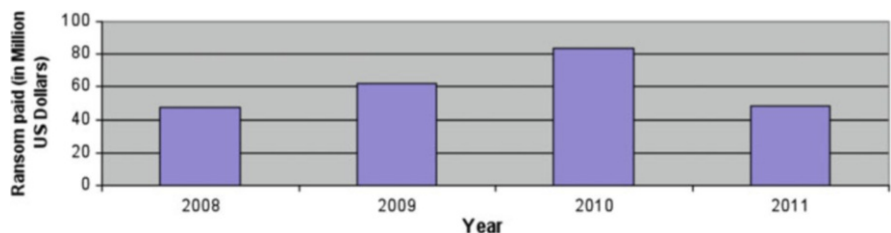


Fig. 2 Ransom paid per year

state would not want to disclose the amount of ransom paid out for the release of their vessel, however, in accordance with statistics, the 25 % amounts to approximately US\$80 million, which is a sizeable amount, and one which cannot be ignored.

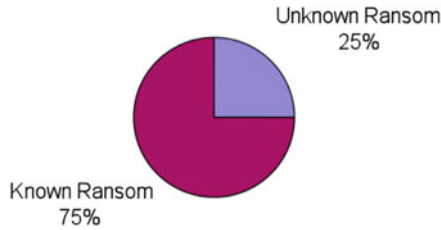


Fig. 3 Known ransoms vs. unknown ransoms

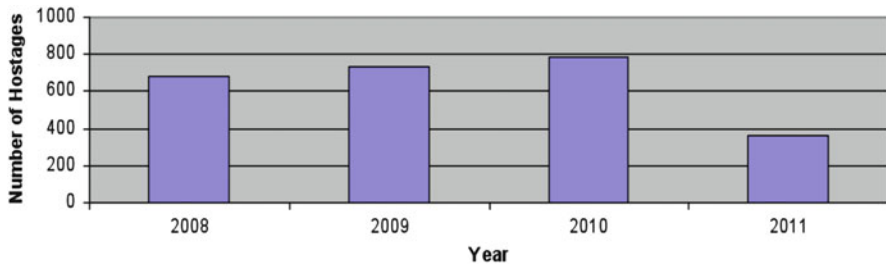


Fig. 4 Hostages abducted by Somali pirates: 2008–2011

Figure 4 illustrates the total number of hostages abducted by the pirates in the years ranging from 2008 to 2011. There is a yearly increase in the number of hostages of 7 %, not including 2011. Although this may seem insignificant, it is vital to take note of the fact that 2011 was also the first year that pirates have murdered their hostages in cold blood. It remains to be seen whether the four Americans taken captive when sailing off the Somali coast resisted the threat that the pirates posed, although regardless of that fact, it is a new chapter in the brutal methods that pirates are willing to resort to if need be.

Figure 5 depicts the increase of the price of oil in the jurisdictions under the Puntland government of Somalia, which reflects on the small and medium business entrepreneurs harshly affected by the insecurity associated with piracy and its risks in Somali waters. In 2003, a barrel of oil cost US\$52 whereas in 2011, the same barrel costs US\$209, reflecting an increase of over 300 % over a span of 8 years.

Figure 6 depicts the HIV/AIDS cases that have come to light in the last 8 years in the city of Galkayo, somewhat of a safe haven for pirate activities. The graph shows a steady increase of 47 % between the years of 2004 and 2007. However, from 2007 until 2011 there has been a drastic increase of 257 %, indicating a striking coincidence between the escalation of piracy cases in the region and amplified social ills that have gone unaddressed and been in place for years. The cause of this rise is due to the increase in numbers of prostitutes as well as the rape cases more than doubling on a yearly basis.¹⁸ In a society where rape is seen as criminal and

¹⁸ Mohammed Dhagacadde, Doctor, Galkayo Medical Centre, 18 June 2011, personal communication.

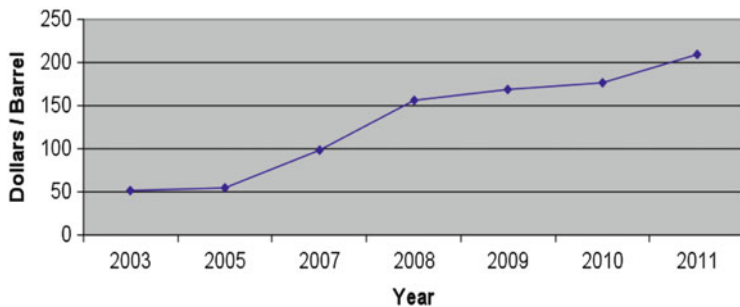


Fig. 5 Price of crude oil. *Source:* Puntland petroleum company

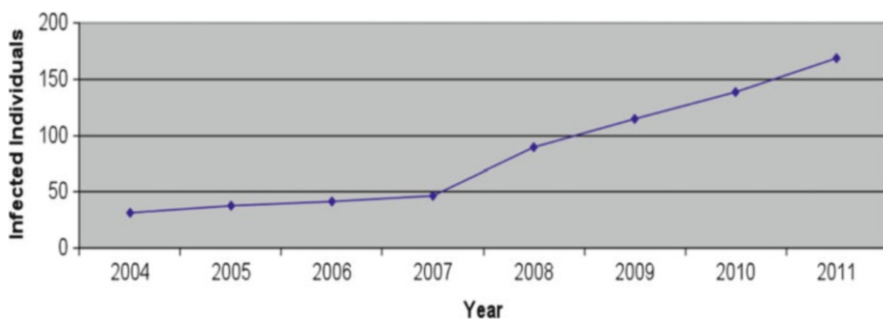


Fig. 6 AIDS cases in Galkayo. *Source:* Galkayo general hospital

infection with HIV/AIDS as morally wrong, it is commonplace for people with the disease to keep it to themselves, in order to avoid stigma. Doctors must then be sure to adhere to this confidentiality for fear of exposing the patient to further victimisation if they don't. It is therefore difficult to conclude how many more individuals who are living in Galkayo may have HIV/AIDS, but simply won't share their dilemma with others.

Figures 7 and 8 depict the increase in prices of staple food items that are vital to the society. The price of a ton of rice has increased by 93 % whereas the prices of sugar and flour have increased by 105 and 80 % respectively during the period between 2005 and 2011. In regards to the cooking oil and powdered milk, prices have increased by 83 and 222 % respectively during the same period. These increases are important to note, because life in general has become more costly in Somalia. The listed staple foods are highly sought after, with many Somali foodstuffs being made using a combination of several of these products. Although food prices have risen globally, neighbouring and nearby countries have encountered steadily rising prices, whereas there have been sharp changes in Somalia,

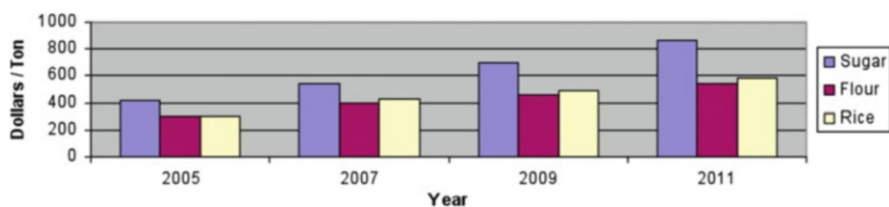


Fig. 7 Prices of sugar, flour and rice in Puntland. *Source:* Tawfeeq imports and exports

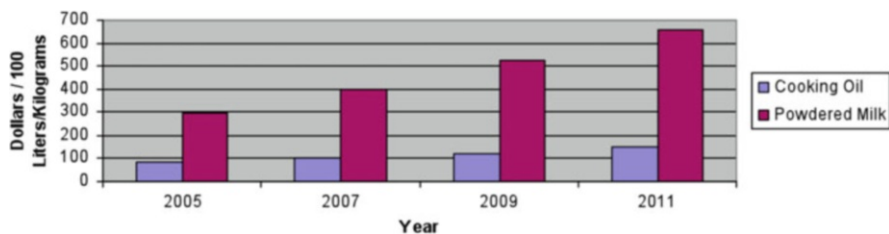


Fig. 8 Price of cooking oil and powdered milk. *Source:* Tawfeeq imports and exports

mainly due to the cost and risk associated with travelling to Somalia in the first place, as is explained below.¹⁹

It has become increasingly clear that much of the revenues that pirates generate from their ransoms are not recycled into the Somali economy.²⁰ The import and export sector of the Somali economy has also been harshly hit by the rise in incidents of piracy. Seeing as exports are the largest income generating sector, it is important that commerce can occur between Somalia and neighbouring countries. Vessels owned by Somali businessmen and entrepreneurs are routinely harassed and suspected of being pirates when travelling to nearby Yemen in order to exchange goods. PUNPETCO, a local business in Bosaso whose role is primarily to supply crude oil within Puntland, bring in their own product when companies they have worked with overseas are unwilling to export to Somalia. This refusal by foreign companies stems largely from the presence of pirates in waters off the Somali coast.²¹ As a result of this refusal, local businessmen must pool their funds together in order to rent a vessel that will bring in necessary products, in this case crude oil, and thereby meet the demands of the population. This is a peculiar situation where local businesses are seen to be taking national imports into their own hands.²² However the renting of the said vessel, as well as the guarantee of its

¹⁹ Mohamud Qoobey, Local Businessman, Towfeeq, 1 July 2011, personal communication.

²⁰ Davey (2010), pp. 1197–2033.

²¹ Mohamed Sheikh Hussein, Local Businessman, Puntland Petroleum Company, 1 July 2011, personal communication.

²² See no. 21.

safe passage to Somalia is not assured. These issues act as deterrents to the locals engaged in business and trade, as well as compromising their security at sea. Somalia's main exports are based on livestock however, and these have been similarly affected, although at a lesser rate than the imports.²³ In terms of the Somali products that are exported, countries on the receiving end of these exports place the onus of the transaction mainly on Somali shoulders, which has the greatest implication on the transporting of the goods by sea.²⁴ As such, the economy of Puntland specifically, and Somalia as a whole has suffered the consequences.

3.1 Effect of Piracy Within Somalia's Borders

Puntland's society has not escaped the harsh realities that piracy brings with it. There are several aspects of Somali society that have been hit the hardest. The first of these is the judicial system. Upon visiting a local court in Galkayo where a pirate was on trial for the murder of another pirate, the proceedings seemed bizarre at best. Although the courts were more than willing to handle the situation, there was a general feeling that this case would not be going any further through the judicial system, rather this was now an issue between the two tribes, namely those of the murderer and the victim. Generally speaking, it is difficult to gauge exactly what role the courts play, seeing as the most high profile cases are usually settled outside of the courtroom. In another instance where the arm of the law proved inadequate, a police officer was called out to attend to an alleged rape. When he arrived at the location, he was engaged in a fire fight with a pirate, who had been preoccupied with the assault of the young woman who had placed the initial call. The pirate was killed by the police officer in the ensuing blaze but in the aftermath of this scenario the family of the dead pirate demanded the payment of blood compensation for their deceased. The matter was never brought to court as the two families tried to settle their differences amongst themselves, and when it became apparent that the police officer could not afford the amount of compensation being demanded, he was promptly executed, in completely legal circumstances.²⁵ Issues that have arisen between rival clans are usually settled amongst themselves in order to ensure that the issue has been completely settled and therefore halting any violence from erupting in the future. The pirates themselves may be perpetrators of murder, but they are also some of the richest people in the society. Therefore their behaviour is classed as being above the law, and many times they are allowed to go about their lives freely. This is of course because they can afford to pay the blood compensation, regardless of the fee demanded, whilst remaining the most dangerous men on the streets, with virtually nothing to lose (the payment of any

²³ See no. 15.

²⁴ See no. 21.

²⁵ Mukhtar Nur Momin, District Attorney, Galkayo Court, 18 June 2011, personal communication.

amount of money is not an issue seeing as they can afford it out of the ransoms they accumulate). This has resulted in the average blood compensation payment more than doubling, particularly when a man with a history of piracy has been named as the killer. This is because the blood compensation (ranging usually from US \$20,000 to 50,000) being demanded has skyrocketed, and is currently valued at more than US\$100,000 (this is however completely dependant on the demands of the family of the deceased).

The education system in Puntland has done remarkably well in the years since the inception of the regional government. Scholarships to foreign countries for students that have excelled in Secondary School are commonplace and the facilities and standard of teaching are satisfactory in most places. The pirates have however had a hand in dismantling this institution as well. There are reports of students as well as teachers who have defected to the pirates when given an opportunity to make some fast money.²⁶ The Secondary School drop out rates have been quite shocking, with 1 in every 15 boys above the age of 16 trying their luck as pirates and almost never coming back to complete their studies.²⁷ There are even reported instances of teachers who have been offered mind-spinning sums for menial work such as translation for the pirates. They are offered short term contracts when a new ship has been brought in, and serve as a communication link between the pirates and the hostages that are held. Although they do come back to teach when their contracts have ended, it is these sorts of teachers who are always willing to be recruited for short periods of time in order to earn sums equivalent to several years of his wages.²⁸ In addition to attracting youth and qualified professionals in the workforce, the pirates have compounded further misery on the Ministry of Education. In the coastal town of Gara'ad, notorious for piracy since 2009, pirates have taken over the only secondary school that was open in the region and turned it into a makeshift base.²⁹ It has been closed for the students since the beginning of the previous academic year (2010–2011) and many of the young students have resorted to joining the pirates, seeing as there is no longer any hope for a future education whilst living in Gara'ad, a demoralising notion for all Somali students living in areas dominated by pirates.³⁰

Piracy in Somalia has also added to the cultural erosion in the country, previously only associated with members of the Somali Diaspora.³¹ Apart from the distortion of the system in place for blood compensation, the pirates have also

²⁶ Ahmed Mohamed Ismail, Regional School Inspector, Ministry of Education, 19 July 2011, personal communication.

²⁷ See no. 26.

²⁸ See no. 26.

²⁹ Khalif Yusuf Dahir, Former Principal, Gara'ad Public Secondary School, 19 July 2011, personal communication.

³⁰ See no. 29.

³¹ Warsan Abdirisag Diriye, Doctor, Galkayo General Hospital, 20 July 2011, personal communication.

fuelled underlying issues in the Somali community. Prostitution and the drinking of alcohol are both illegal and highly looked down upon by the society. However, with their lavish lifestyle and seemingly never ending reserves of finances, pirates have flooded the market with US dollars, a currency that is used almost as much, if not more, than the national currency, Somali Shillings. However most of their money is spent on bringing in prostitutes, through brokers who have connections with people in other parts of Somalia, drugs and alcohol.³² The three above mentioned are highly opposed to the traditional way of life in Somali societies, but are becoming more integrated into communities where pirates hold a majority. The ultimate proof of this came in a case between two pirates, where again, one was accused of having murdered the other, over the lack of payment for a crate of alcohol. This case was never brought in front of a judge, and when the two families sat down together to come to an agreement, the aggrieved family initially felt the most appropriate compensation would be payment in the form of stolen alcohol, which of course the murderer had already disappeared with. This was considered unprecedented in many communities, as blood compensation was always either in the form of actual cash, or livestock (mostly camels). Eventually the issue was settled with the payment of blood compensation, as per usual; however the long lasting effects this will have on the customary legal system is yet to be seen.³³

3.2 Decisive Factors in the Origins of Somali Piracy

It is important to reiterate that historically, Somalia has not had issues with piracy, and seeing as this can be considered a new trend, one must question the changes which have occurred within the Somali society, which are plentiful as well as noteworthy to this research. The fall of the Siyad Barre regime in 1991 left a power vacuum in Somalia, which was followed by the civil war and the complete disintegration of law and order in society.³⁴ Consequently, many of the government institutions in place crumbled, including the Somali National Naval and Armed Forces.³⁵ This led to the following:

- Locals living in coastal villages who relied on the Indian Ocean and the Gulf of Aden for their livelihood were able to fish freely, as far and wide as they could manage on their skiffs.
- There was no longer an armed force which protected Somali sovereignty in terms of the sea borders, making way for foreign vessels to do as they pleased, be

³² Abyan Raage Barta, Doctor, Ministry of Health, 25 May 2011, personal communication.

³³ Iise Mahmud Roble: Manager, TADAMUN Mudug, 18 July 2011, personal communication.

³⁴ See no. 6.

³⁵ Dutton (2010), p. 201.

it dumping of toxic waste or the unrestricted plundering of natural resources belonging to Somali's.

- The lack of surveillance of the open seas meant that criminal minded individuals could prey on innocent foreign vessels passing through the busy channel that is the Gulf of Aden, with an estimated 22,000 vessels using this passageway leading to the Suez Canal on an annual basis.³⁶

Additionally, the main perpetrators of piracy are young Somali males, with ages ranging mostly from 16 to 30.³⁷ A lack of alternative methods for self sustenance has helped to promote piracy as a viable way of making a living. The level of unemployment in Puntland and Southern and Central Somalia is currently at 60 % of the population.³⁸ As a consequence, the idle youth look to other ventures in order to secure funds for themselves and their families. When this is then combined with the cycle of poverty present in all parts of Somalia and the inflated ransoms being paid out to pirates, it is perhaps more apparent why piracy has actually become such a burgeoning venture for interested parties. It is also no secret that obtaining a weapon in Somalia can be done with relative ease, and it is this easy access to arms and ammunition that has increased the risks for seafarers, whether they are private, government or organisation/company owned.

The arrival of foreign navies to the coast of Somalia, despite the agreements made with the Transitional Federal Government in Mogadishu and regional governments elsewhere, will inevitably lead to the mobilisation of local communities against the international efforts, which will only further escalate piracy and enhance the criminal aspect. An example of this would be pirates introducing traditional laws used in many parts of Somalia to govern themselves, and more significantly, to exact revenge on hostages. This can take place where foreign forces have perhaps killed a member of a pirate gang, who then manage to hijack a vessel in the future. According to Somali traditional laws, the family of the murder victim have the right to accept the payment of blood compensation, which in this case would not be forthcoming, or conversely, demand the life of the perpetrator. In such scenarios, it is plausible that the life of a hostage may be deemed adequate and therefore subjected to a greater risk, resulting in a higher loss of human life. When focusing the response to piracy solely on offshore activities, there is an increased risk of collateral damage, where unarmed innocent fishing vessels are attacked after their activities have been deemed to be suspicious.³⁹ Consequently, there are reports that several fishermen are currently missing in the sea, with families having no knowledge of whether their family member's are dead, alive, or captured by foreign forces under the auspices of combating piracy.⁴⁰

³⁶ Kraska and Wilson (2009), pp. 1–5.

³⁷ See no 29.

³⁸ Gilpin and Peace (2009).

³⁹ See no. 21.

⁴⁰ See no. 32.

Piracy in itself has caused immeasurable damage to the world of international trade, making it extremely difficult to manoeuvre ones vessel through the Gulf of Aden and the vast area of water leading into it from the Indian Ocean.⁴¹ The effects are clearly identifiable however, as there is currently a global effort which has been mobilised to combat piracy. The most discernible aspect of this mobilisation has come in the form of military intervention off the coast of Somalia. Although naval forces have gathered from contrasting (and more importantly, not necessarily diplomatically connected) states and organisations to present a unified response, piracy has continued to remain widespread.⁴² This strategy, focused primarily on cordoning off the sea routes and engaging in offshore military activity, can therefore be deemed inefficient. Many attempted attacks may be thwarted by the foreign navies, however the pirates are coming back to prey on vessels with the risk of prosecution being relatively low until recently, and the reward for a successful kidnapping far outweighing the penalty. In order to produce a lasting solution that provides a just outcome for all parties, the underlying causes of piracy must be addressed.

4 Conclusion

The combating of piracy off the coast of Somalia has until now failed to bring about tangible and successful results, and may further complicate the situation in the region if not sufficiently complemented by substantive in-land socio-economic and governance enhancing endeavours.⁴³ These can include access to health, education and safe drinking water, but more significantly, vocational training programmes for the youth are required. Programmes such as these will help the youth generate livelihoods that will deter them from joining piracy ventures which pose enormous risks, whilst enhancing governance by producing a conscious generation that respects law and order. Community based interventions can serve as a part of this procedure, by establishing that the eradication of piracy is a home grown notion with grassroots involvement from the young Somali's who may otherwise be considered potential pirates. By creating these interventions with traditional elders, local leaders and district level executives' participation, there is a chance of producing an original solution with long lasting effects.⁴⁴

The statement made by the United Nations Security Council holds that the ongoing instability in Somalia is one of the underlying causes of the problem of piracy in the first place and most certainly contributes to the armed robbery at sea in Somali waters.⁴⁵ Hence there is a need for a robust action plan, focused on

⁴¹ Bahar (2007), p. 1.

⁴² Zogg (2009).

⁴³ Sauvageot (2009), p. 250.

⁴⁴ Rotberg (2010), p. 26.

⁴⁵ UN Security Resolutions 1816, 1838, 1846, 1851, 1897, 1918, 1950 and 1976.

mainland Somalia, for the elimination of piracy in Somalia. The international community and other interested states should not consider piracy a self contained predicament. Instead it should be considered as one of the major consequences of the revealing and longstanding crisis of the governance in Somalia, for which a comprehensive action plan, shared by national and international partners, needs urgent implementation. Therefore the current peace efforts in Somalia should be seen in that context and further encouraged, as opposed to hindered with a direct approach focused on short term gains.

Acknowledgments I would like to take this opportunity to thank God, first and foremost, as he has always provided me with guidance and the bestowed upon me the ability to work towards this goal under pressure. Secondly, I would like to thank my family, and especially my parents, who have been extremely supportive and even enlightened me with new ideas with their wider frame of reference. Most importantly, I would like to thank Puntland Development Research Center, and the Chairman, Abdurahman Abdulle Osman (Shuke). Without his endless anecdotes and quotes I would never have even started working on this project. I would also like to praise his second in command, Ali Farah Ali, who provided his own insightful comments in order to give me a fuller understanding of what I was getting into. Mukhtar Hersi from the Audio Visual Unit played a tremendous role in moving my research forward. Without his quick thinking and incisive action, little would have been accomplished in a flurry of four days. My individual thanks to go the Security and Rule of Law team; lead research Dahir Mohamed Ismail (Qarowi) and his assistant researcher Hamdi Abdi Elmi who welcomed me into their team and allowed me to make a meaningful contribution to their work. It is impossible to name all the people who allowed me to write this piece, as well as welcome me to Somalia for the first time in over 20 years.

I have already mentioned my parents, but my father, Khalif Bile Mohamad, deserves a special mention. Thank you for providing me with the impetus to progress. Although we didn't always share the same views, I most certainly learnt more from you than I could ever teach anybody. Thank you.

Finally I would like to praise the work of my aunt, Maryan Mohamed Abdalla, may God res her soul. She was instrumental in my gathering of information during my time in Bosaso, and was the perfect example of a woman who commanded respect in what is very much a "man's society." I would like to send my condolences to her family, and all that are grieving with her.

Sincerely,
Ahmed Khalif Bile

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The North American Maritime Security Initiative (NAMSI)

Ricardo Eliseo Valdés Cerda

1 Introduction

The provisions of international instruments call for cooperation among states for their effective implementation. Unfortunately, in most cases it does not occur so until an incident takes place. Following the events of 9/11 and the UN Resolutions related to them, several worldwide security enterprises have taken place. The Security and Prosperity Partnership of North America (SPP) is a trilateral initiative, launched on March 2005, which is intended to increase cooperation and information sharing in an effort to enhance prosperity and security in the United States, Canada, and Mexico. The SPP considers two agendas: the prosperity agenda and the security agenda.

This article reckons the relevance of regional cooperation and focuses in one of the SPP security agenda's goals: "Maritime Security and the importance of securing the Maritime Domain". Following the maritime requirements of the security agenda, the Mexican Navy and the Maritime forces of the US adopted the North American Maritime Security Initiative (NAMSI). It came into being with the signature of a Letter of Intent (LOI) by the Mexican Navy, the United States Coast Guard (USCG) and the United States Northern Command (USNC). The success of this initiative also called the attention of the maritime forces of Canada and the Canada Command became also part of it through the signature of a new LOI which superseded the former.

The LOI establishes the purpose of NAMSI, recognizing the need to strengthen the exchange of information and cooperation in matters of maritime safety and security in order to improve a mutual capability for operational coordination. It also stresses the creation of a permanent working group and includes the concept of "coincidental operations". The realization of coincidental operations provides the

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framework to enforce mutually recognized international instruments regarding the suppression of unlawful acts at sea, such as piracy, terrorism, drug trafficking and related matters. Nonetheless, the existing greatest challenges that currently compromise Mexico's national security are organized crime, weapons proliferation and drug trafficking.

Statistics have shown that 80 % of the illicit traffic that transits or is introduced in Mexico is through maritime means, including handcrafted Self Propelled Semi-Submersibles (SPSS). This paper gives an example of the existing Mexico-US Standard Operating Procedures (SOPs) where the respective assets of both nations come across at sea to deter, detect and defend against these unlawful activities. It also reflects that putting them into practice and effectively implementing them, have led to the seizure of several suspect vessels and significant amount of drugs.

2 Security and Prosperity Partnership of North America (SPP)

After September 11th, the United Nations General Assembly and its Security Council adopted a series of Resolutions calling on States to work together urgently to increase international cooperation and full implementation of relevant international instruments to prevent and suppress the financing and preparation of any acts of terrorism.¹ On March 23, 2005, the presidents of the United States of America and Mexico, together with the Prime Minister of Canada, announced the SPP (USDI 2005a).

The SPP is a government initiative that was endorsed by the leaders of the three countries, but it is not a signed agreement or treaty and, therefore, contains no legally binding commitments or obligations. Nonetheless, it addresses the importance of implementing, in their national legislation, mutually recognized international instruments through regional cooperation.

Even though the SPP builds upon the existing trade and economic relationship of the three countries, it is not a trade agreement and is distinct from the existing North American Free Trade Agreement (NAFTA).² The main objective of the SPP was to create a framework which would further enhance the security of North America while at the same time promote its economic well-being. This effort was built on the excellent, long-standing relationship among the three countries.

¹ Resolution 1368 (2001) Adopted by the Security Council at its 4370th meeting, on 12 September 2001; Resolution 56/1 (2001) Adopted by the General Assembly on 18 September 2001; Resolution 1373 (2001) adopted by the Security Council at its 4385th meeting, on 28 September 2001.

²The North American Free Trade Agreement or NAFTA is an agreement signed by the governments of the United States, Canada, and Mexico. This agreement came into force on January 1, 1994.

The SPP includes security and prosperity programs to keep their borders closed to terrorism yet open to trade. Therefore, it considers two agendas: the prosperity agenda and the security agenda (Solano Armenta 2007). The SPP security agenda included ten goals which needed to be observed by several federal agencies of Mexico, Canada and the US (USDI 2005b). The themes of these goals are:

- Traveller Security;
- Cargo Security;
- Border Facilitation;
- Aviation Security;
- Maritime Security;
- Law Enforcement Cooperation;
- Intelligence Cooperation;
- Bio-protection;
- Protection, Prevention and Response;
- Science and Technology Cooperation.

The Government of Mexico appointed the Navy to collaborate with other national agencies in nine out of the ten goals, being the Mexican leading agency in the fulfillment of goal number five: Maritime Security and the importance of securing the Maritime Domain (USDI 2005c).

3 Maritime Domain Awareness (MDA)

The importance of securing the Maritime Domain was underscored in December 2004 by the US National Security Presidential Directive-41/Homeland Security Presidential Directive-13 (NSPD-41/HSPD-13), underlining its Maritime Security Policy. This policy oversaw, among others, the development of the “National plan to achieve Maritime Domain Awareness for the National Strategy for Maritime Security”, adopted in October 2005.

In accordance with this Plan, the “*Maritime Domain is all areas and things of, on, under, relating to, adjacent to, or bordering on a sea, ocean, or other navigable waterway, including all maritime related activities, infrastructure, people, vessels, cargo and other conveyances*”. It further defines the MDA as “*the effective understanding of anything associated with the maritime domain that could impact the security, safety, economy, or the environment, identifying threats as early and as distant from shore as possible*” (USDI 2005c).

The variety of maritime domain threats include but are not limited to: piracy, terrorism, environmental attack, smuggling and related matters (Geroge 2006). The biggest threats that the North American Region, including Mexico, is currently facing are organized crime, weapons proliferation and drug trafficking. Statistics have shown that 80 % of the illicit traffic that transit or is introduced in Mexico is through maritime means.

Different kind of drugs and psychotropic substances such as cocaine, which mainly comes from South America, and ephedrine, which normally arrives from China, are being moved by ships. Sixty percent of the drug flow is being moved on the pacific coast and 40 % of it along the Gulf of Mexico and the Caribbean Sea. Mexico had been considered only a transit zone (being the US the arrival zone). However, at the present time a great deal of drugs stays in Mexico. A similar situation happens with weapons, which are made in the US and illegally cross the Mexican border (Rosas 2011).

4 NAMSI Letter of Intent (LOI)

Following the requirements of the SPP maritime security goal and the MDA concept, the Mexican Navy and the Maritime forces of the US came into being with the realization of a joint protocol for dealing with vessels suspected of being a threat: “The North American Maritime Security Initiative (NAMSI)”.

This is the actual origin of NAMSI, which was adopted in May 2008 with the signature of a “Letter of Intent (LOI)” by the Secretariat of the Mexican Navy, the Commanders of the USCG and the USNC. A new LOI was signed in August 2011 adding the Commander of the Canada Command. Nothing in this letter is intended to create binding obligations under national or international law (SEMAR–USCG–USNC 2008).

The LOI establishes the purpose of NAMSI, recognizing the need to strengthen the exchange of information and cooperation in matters of maritime safety and security in order to improve a mutual capability for operational coordination. It also stresses the creation of a permanent working group and includes the concept of “coincidental operations”.

Coincidental operations are those that are carried out by the maritime forces of Mexico, Canada and the US, under their own commands, with jointly coordinated planning and execution, in order to enable the effective implementation of mutually recognized international instruments. These instruments, among others, are:

- The United Nations General Assembly and Security Council Resolutions
- The United Nations Convention on the Law of the Sea (UNCLOS’82)
- The United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (Vienna Convention ’88)
- The United Nations Convention against Transnational Organized Crime (UNCTC’00)
- The International Convention for the Safety of Life at Sea (SOLAS’74)
- The International Convention on Maritime Search and Rescue (SAR’79)
- The International Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA’88)
- The Protocol for the Suppression of Unlawful Acts against the Safety of Fixed Platforms Located on the Continental Shelf (Protocol SUA’88)

The LOI also includes the compliance of bilateral maritime agreements. It also demands sharing, putting into practice and implementing Standard Operating Procedures (SOPs) for the prevention and response to incidents or illicit acts that could threaten the maritime safety and security of the US or Mexico. The related SOPs with the maritime forces of Canada are yet to be made.

5 Mexico/US Standard Operating Procedures (SOPs)

Article 8 *bis*/12 of the 2005 Protocol to the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA Convention 2005), encourages the development of SOPs for the conduct of operations with other States Parties (OMI 2005). In accordance with the provisions of this article, NAMSI establishes two sets of SOPs for Mexico and the US: the Operations Center-to-Operations Center Communication (SOP I) and the Right of Visit (SOP II).

5.1 Operations Center-to-Operations Center Communication (SOP I)

The SOP I specifies the competent authorities and Operation Centers, applicability and guiding principles, standard forms and procedures and communications among Operation Centers (SEMAR–USCG–USNC 2008).

5.1.1 Competent Authority and Operation Centers

According to the SOP I, the terms “competent authority” or “competent authorities” mean those institutions of Mexico and the US designated to receive and respond to requests for boarding in accordance with applicable international conventions.

The Operations Centers are responsible for engaging their respective diplomatic and other authorities to ensure that all received requests are processed in accordance with their respective domestic procedures. These Operations Centers are:

- The Mexican Navy in Mexico City;
- The USCG District 11 in Alameda, California (Drug Interdiction in the Pacific Ocean);
- The USCG District 7 in Miami, Florida (Drug Interdiction in the Caribbean Sea & Gulf of Mexico);
- The USCG District 8 in New Orleans, Louisiana (Gulf of Mexico);
- The Joint Interagency Task Force South (JIATF-S) in Key West, Florida (Counterdrug Detection & Monitoring in the Pacific Ocean, Gulf of Mexico, and Caribbean Sea);

- The US Fleet Forces (USFF) in Norfolk Virginia (Atlantic Ocean, Gulf of Mexico, and Caribbean Sea);
- The US Third Fleet in San Diego, California (Pacific Ocean).

5.1.2 Applicability and Guiding Principles

Application

This SOP applies only to suspect vessels (a) located beyond any State's territorial sea, (b) claiming nationality in Mexico or the US. The Participants intend to comply with applicable international law in cases involving vessels of a third State.

The term "suspect vessel" means a vessel used for commercial or private purposes in respect of which there are reasonable grounds to suspect it is engaged in illicit traffic [as defined in article 1(m) of the Vienna Convention 1988], or other illegal activities prohibited by international law.

Confirmation of Vessel Registry

Confirmation of vessel registry, authorization to board suspect vessels, and decisions relating to the disposition of suspect vessels should be requested through diplomatic channels between designated competent authorities. The Participants intend to use this SOP to coordinate operational and tactical actions in furtherance of boardings and other related activities approved by their respective designated competent authorities.

Suspect Vessels Should Be Boarded as Soon as Possible

The Mexican Navy has the primary responsibility for boarding Mexican flagged suspect vessels within the Exclusive Economic Zone (EEZ) of Mexico. If timely boarding by the Mexican Navy is not practicable, then the US may seek authorization through the Mexican Competent Authority for the US Maritime forces to stop such vessels and commence boarding pending arrival on-scene by assets from the Mexican Navy.

The US Maritime forces have the primary responsibility for boarding US flagged suspect vessels within the EEZ of the US. If timely boarding by the US is not practicable, then the Mexican Navy may seek authorization through the US Competent Authority for the Mexican Navy to stop such vessels and commence boarding pending arrival on-scene by assets from the US Maritime forces.

5.1.3 Standard Forms and Procedures

Standard forms for making requests and providing boarding related information regarding suspect vessels are included in this SOP in accordance with article 17 (Illicit traffic by sea) of the Vienna Convention '88. The Participants intend to e-mail or fax these forms between their respective Operations Centers to facilitate and expedite exchange of information and requests. These forms consist of:

- Form 1: Action Request
- Form 2: Acknowledgement of Receipt
- Form 3: Response to Action Request
- Form 4: Results of Boarding & Notice of Request for Disposition
- Form 5: Response to Request for Disposition

Whenever officials of the Requesting Participant encounter a suspect vessel claiming registry or nationality of the Requested Participant they may request, through their respective Competent Authorities, verification of the suspect vessel's registry, and in case it is confirmed, authorization to board and search the vessel. The respective operations centers should use the following procedures:

Action Request. The Requesting Participant's operations center should prepare and fax or e-mail Form 1 asking verification of the vessel's nationality, setting forth the reasonable grounds for suspicion, and requesting authorization to board.

Acknowledgement of Receipt. The Requested Participant's operations center should immediately send Form 2, acknowledging receipt of Form 1. If the Requesting Participant's Operations Center does not receive a Form 2 within 15 min of transmitting Form 1, then it should call the Requested Participant's operations center, orally confirm receipt, and request transmission of a Form 2, or resend Form 1 if it has not been received.

Response to Action Request. The Requested Participant's operations center should process the request of Form 1 and reply using Form 3 within the first 2 h of its reception. It is important to notice that under Article 8 *bis*/5(d) of the SUA Convention 2005, the Requesting Party is granted authorization to board and search the vessel, if there is no response from the Requested Party within 4 h of acknowledgement of receipt of a request to confirm nationality. In this regard the NAMSI requirements are more stringent than the Convention itself.

Results of Boarding & Notice of Request for Disposition. If the Requested Participant confirms nationality and authorizes the boarding, then the Requesting Participant should conduct the boarding in accordance with the authorization granted per form 3, and report the final results to the Requested Participant's operations center using Form 4. While the boarding is ongoing, the Requesting Participant should keep the Requested Participant's operations center updated on the status of the boarding at least every 6 h. Form 4 is also used to request disposition instructions from the Requested Participant's operations center if the Requesting Participant finds evidence of illegal activities.

Response to Request for Disposition. The Requested Participant should complete and transmit Form 5 whenever the Requesting Participant has asked for disposition instructions in Form 4.

If a boarding team from the Requesting Participant completes a hand-off at sea to a boarding team from the Requested Participant, then transmission of Forms 4 and 5 is optional. Consequently, the SOP I also includes a standardized Boarding Hand-Off Checklist. The Participants intend to employ the Boarding Hand-Off Checklist to ensure that all available information known by the first boarding team is conveyed to the second team. This checklist does not require or authorize a joint boarding, however the incoming and outgoing boarding officers may visually inspect together any persons, evidence, or property necessary for a safe, secure and effective hand-off.

5.1.4 Communications

The Partner Nation Network (PNN) is an encrypted internet-based communication system that has been used with great success by the Participants during coincidental operations through a Cooperating Nation Information Exchange System (CNIES). The primary goal of CNIES is to share detection and monitoring to track information with partner nations.

CNIES users are connected to the PNN, which includes an unclassified Common Operating Picture (COP). The COP is disseminated to appropriate users on a 24 hour a day \times 7 day per week basis. The PNN chat program enables users to converse and exchange information in real-time over the PNN internet-based network with immediate translation of typed “chat” text. The Mexican Navy and the US Maritime forces recognize the value of using the PNN as the main interactive communications tool for coordination and collaboration between their respective operations centers during coincidental operations.

5.2 *Right of Visit (SOP II)*

The SOP II specifies its applicability and guiding principles, claims of vessel nationality, simultaneous and subsequent arrival of participants; use of force and dispute resolution (SEMAR–USCG–USNC 2008).

5.2.1 Applicability and Guiding Principles

Right of Visit (ROV) boarding is authorized by Article 110 of the 1982 Law of the Sea Convention. The Mexican Navy and the US Maritime forces concur it is a

priority to board apparently stateless suspect vessels within their Exclusive Economic Zones.

Subject to the guiding principle that suspect vessels should be boarded as soon as possible, the US intends to use the SOP I to expedite referral of suspect vessels in the Mexican EEZ to the Mexican Navy for interdiction. If referral to or timely ROV boarding by the Mexican Navy is not practicable, then the US maritime forces may undertake the boarding in accordance with this SOP. These provisions will apply *mutatis mutandis* when Mexican Navy assets execute ROV boardings to apparently stateless vessels within the EEZ of the US.

An onboard examination limited to ascertaining vessel nationality may continue until there are no longer reasonable grounds for suspecting the vessel's claim of nationality, or until the onboard examination is completed, whichever comes first. The ROV boarding does not include a search for evidence of illegal activity or preservation of evidence unless necessary to prevent the imminent destruction of such evidence.

5.2.2 Claims of Vessel Nationality

If persons on board a suspect vessel boarded claim US or Mexican nationality for the vessel, then the boarding Parties should employ the SOP I to process claim of nationality for the vessel. On scene commanders should not make decisions with respect to determining vessel nationalities, but should in all cases refer such decisions to the respective operational centers identified by the Operations Centers SOP.

If the boarding party that exercises the ROV finds evidence or receives a claim of the US or Mexican vessel nationality, then it should employ the SOP I to process the claims of nationality by the vessel. If the Operations Center processing the claim confirms the vessel's nationality, then that country's boarding team should take charge of the boarding and the other country's assets may assist if requested by the boarding Party. If the boarding party that exercises the ROV finds no evidence or claims of vessel nationality, then that boarding party's country may exercise jurisdiction over the suspect vessel as a vessel without nationality.

5.2.3 Simultaneous and Subsequent Arrival of Participants

If interdiction assets of both Parties simultaneously arrive at the scene with an apparently stateless vessel in the Mexican/US EEZ, then the respective Mexican Navy/US Maritime forces should conduct a ROV boarding accordingly. Available US Maritime Forces assets may assist the Mexican Navy units as may be requested by the Mexican Navy commander on scene and vice versa.

When forces of the boarding participant commence a ROV boarding of an apparently stateless vessel beyond any state's territorial sea, and the forces of the other Party subsequently arrive on scene, the other Party's forces should refrain

from boarding or attempting to board the suspect vessel until the boarding party has determined the suspect vessel's nationality. If the boarding party determines that the suspect vessel is of its own nationality, third-party nationality, or without nationality, then the boarding party should continue the boarding in accordance with its service procedures and keep the other Party's forces well informed.

5.2.4 Use of Force and Dispute Resolution

In all cases the use of force should be the minimum force reasonably necessary and in strict accordance with the applicable laws and policies of the party using such force. The Mexican Government through the Navy issued, on September 30, 2009 an official directive in order to regulate the legitimate use of force for Mexican Navy personnel. It was published in the official gazette on October 15, 2009 and it entered into force the following day (DOF 2009).

According to the SOP II, if the interdiction assets of one Party have used force, including warning shots and/or disabling fire to compel a non-compliant vessel to stop, then that Party should have the lead for ROV boarding operations. Disputes should be resolved by Operations Center officials from both countries exercising tactical control over the respective units involved, not by local or regional commanders. In the event of a serious dispute, on-scene units should freeze the situation until there is a resolution.

6 Results and Prospective

Under the framework of the SPP maritime security agenda, the authorities of Mexico and the US gathered together for the first time in Hawaii, US in January 2007. The purpose of it was to make a joint regional protocol for dealing with vessels suspected of being a threat in jurisdictional waters of both countries. Since then 23 meetings have taken place, which have yielded the realization of six "QUICKDRAW" exercises so far. These exercises were carefully planned and executed by maritime and air assets of the Mexican Navy and the Maritime forces of the US. Part of the planning included a Mexican Mobile Training Team which was in charge of informing and explaining the purpose and application of NAMSI to the main Mexican Regional Commands.

The effectiveness of the cooperation between the maritime forces of Mexico and the US, under the structure of NAMSI, hitherto has led to seize almost 30 tons of cocaine and more than 17 tons of cannabis (marijuana) which were found in the seizure of one Self-Propelled Semi-Submersible (SPSS), five fishing vessels (Polar I, Juan Alejandro, Caracol III, San Pascual and Charamusca) and seven small boats.

The experience gained in putting into practice the SOPs through the "QUICKDRAW" exercises and the real life seizures gave the Mexican Navy and

the US Maritime forces the opportunity to share achievements and lessons learned. The results of NAMSI were so successful that the Canadian Government decided to be part of it. Hence, the Canada Command joined NAMSI and in February 2011 gave place to a document that is known as the “Maritime Operations Interoperability Manual (MOIM)”. This manual is a single source document that provides planning guidance and serves as a model for the development of tactical level plans, which may be the most significant factors contributing to mission success. It is not intended to replace or contradict any existing national guidance or international agreements.

The next meeting is programmed in San Diego, California and will host the highest commands of the maritime forces of Mexico, the US and Canada. Its purpose is to present the success of NAMSI as a regional cooperation agreement in compliance with relevant international instruments such as the SUA Convention and its Protocol of 1988, in eve of accessing the 2005 SUA Protocols. Similarly, another QUICKDRAW exercise will take place, reckoning for the first time the participation of assets from the Canada Command.

7 Conclusion

The result of the 9/11 events called for cooperation among states for the effective implementation of international instruments, as it was stated in several UN recommendations. Therefore, in an effort to increase cooperation to enhance prosperity and security in the North American Region, the Governments of Mexico, the US, and Canada adopted in March 2005 the Security and Prosperity Partnership of North America (SPP). Bearing in mind the requirements of the SPP security agenda, the Maritime forces of Mexico and the US agreed, through the signature of a Letter of Intent (LOI), the North American Maritime Security Initiative (NAMSI).

The NAMSI LOI is not a legally binding instrument. However, it recognizes the need to strengthen the exchange of information and cooperation in matters of maritime safety and security. It also distinguishes the importance of putting into practice Standard Operating Procedures (SOPs) for the realization of coincidental operations in accordance with the provisions of international conventions.

This paper exemplified the experience gained in implementing the existing Mexico/US SOPs and the effective cooperation between the maritime forces of both countries for the suppression of unlawful acts at sea such as piracy, terrorism, drug trafficking and related matters. As a result, it showed significant outcomes in the seizure of vessels carrying drugs, including a Self-Propelled Semi-Submersible (SPSS), five fishing vessels and seven small boats.

Aware of the success of NAMSI the Canada Command became also part of it through the signature of a new LOI. Nonetheless, the development and putting into practice of SOPs with the maritime forces of Canada are still to be considered. It is also necessary to study the convenience of including Latin-American Parties to

expand the cooperation and realization of maritime operations, not only in the North American Region but also in Latin America as a whole.

According to the experience of the Mexican Navy, NAMSI is a clear example that illustrates that the only way to effectively deter, detect and defend against unlawful acts that compromise the maritime security of the region is through mutual assistance. In other words, regional cooperation is the most effective solution to deal with maritime security issues that otherwise would be ineffective if they were addressed unilaterally.

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Economic, Political, and Social Implications of Piracy in the Gulf of Guinea: Nigeria as a Case Study

Yusuf Mohammad Bala

1 Introduction

Piracy, although an age-old phenomenon that has posed challenges for Mariners has until recently been a phenomenon in decline. Although in the twenty-first century, piracy became a major issue in the South China Sea and in the Malacca Straits. But by 2007, the number of pirate attacks in Africa surpassed those in Asian waters, thus the shift of attention to African waters. Maritime pirate attacks in Africa, while concentrated in Nigeria and Somalia, are by no means limited to these countries. Because of the 33 littoral countries in Africa, 24 experienced pirate attacks during 2001–2008.¹ Even though shipping in the GOG is threatened, attacks are not as frequent as those off Somalia. Nevertheless, it still remains and is still seen as a hub of threats to shipping.²

2 Piracy in Gulf of Guinea and Nigeria

The Gulf of Guinea is defined as the 11 coastal countries along the West and Central African sub regions, which is between Ghana and Angola with a coastline of some 5,500 km,³ and it is increasingly been viewed as part of a solution to the ever increasing needs of the world as regards energy, population, food and territory.⁴

¹ Nincic (2009a).

² Vreÿ (2009), pp. 17–30.

³ Gilpin (2009).

⁴ Murphy (2007), pp. 23–35.

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These potentials have seen increased activities in the region which incidentally draws in other competitions (on national boundaries, resources etc.) and crime increasingly entering the fold.⁵ But unlike the Gulf of Aden and the Somali waters, virtually all pirates attack in the GOG occur very close to shore and within the port areas while ships are anchored or berthed. Nevertheless, recent developments have indicated increasing capacity by pirates to operate farther offshore.⁶

While piracy is an issue for the entire GOG and threatens their dependency on the resources and commerce originating from the Gulf,⁷ it is more an issue for Nigeria which experienced its first case with the attack on the Danish cargo ship *MV Lindinga Ivory* in 1979.⁸ As is always expressed in different forums, it's virtually impossible to accurately gauge the amount of pirate activity due to insufficient reporting from the region, and the *Safety4Sea* magazine⁹ did quote a security analyst telling Reuters that, "In Nigeria it is estimated that approximately 60 percent of pirate attacks go unreported." The International Maritime Bureau (IMB) went on to estimate that the majority of incidents of piracy (54 percent) in West Africa between 2001 and 2008 occurred in Nigeria.¹⁰

While the pirate activities in Nigeria has been receiving considerable attention, there has been other positions (though not mainstream) who have consistently argued that Piracy attacks mostly in Nigeria, are usually carried out to fund insurgency not personal gains, thus does not fall within the realm of criminal piracy. Additionally, they argued that unlike Somalia pirates who operate a 'blue ocean' form of piracy, legally recognized as "acts of piracy". The attacks in the Gulf of Guinea and off the coast of Nigeria occur in national or coastal waters, and therefore do not legally qualify as "acts of piracy".¹¹

Regardless of what ever opinion expressed on the issue of piracy in the region and Nigeria specifically, there is absolute agreement on the implications of piracy in the region which can be direct (including murder of crew, ransom payment, sinking of ship, delay penalty, requirement for security etc.) and indirect (including higher insurance premium etc.).¹²

⁵ Africa Research Bulletin, March 2009.

⁶ Nincic (2009a).

⁷ See n. 2 above.

⁸ Pham (2009).

⁹ The Gulf of Guinea is Piracy's Emerging Market, *Safety4Sea*, August 9, 2011, adopted August 18, 2011, available online <http://www.safety4sea.com/page/5792/4/the-gulf-of-guinea-is-piracy%E2%80%99s-emerging-market>.

¹⁰ Security Council Report, Emerging Security Threats in West Africa, Special research report No. 1 (New York: United Nations, 2 May, 2011), pp. 1–16.

¹¹ See n. 9 above.

¹² Scheffler (2010).

3 Economic Implication

Indeed piracy cum maritime insecurity has been a major issue for the countries of the region, especially Nigeria where local people who hide under the cover of violence in the Niger Delta region have perfected the act. Infact the successes made in this regards has brought in sophistication and a growing synergy with crude oil thieves whose stolen product placed in small barges are taken straight into the sea where it is loaded into larger barges (mother ships) in return for money and weapons used to fuel violence.¹³ The maritime landscape in the Gulf of Guinea is more closely integrated with the well-being of littoral states and encompasses much more than threats to shipping.¹⁴

To understand the economic implication of this piracy sponsored insecurity on Nigeria, we shall attempt to use some calculations. Garuba¹⁵ using information from Human Rights Watch, 2003 report stated that the 150,000 barrels/day (the report assumed stolen), when sold at around \$10–15 per barrel (given the level of discount owed to its illegitimate origin) sums \$2–3 million daily and \$750 million to \$1 billion annually. Again using a Royal Dutch Shell study it was stated that “10% of Nigeria’s daily oil output, valued at \$1.5 million, is stolen every day. Over the last fifty years, the value of the oil stolen or wasted has amounted to between \$300 and \$400 billion.”¹⁶ Most recently Freedom Onuoha, a research fellow at the African Centre for Strategic Research and Studies at the National Defence College in Abuja, writing in *African Security Review*, Vol. 17, No. 3, in 2008, cited a “recent study commissioned by Royal Dutch/Shell” as saying that between 100- and 250-million barrels of oil was stolen each year by bunkerers or vandals, putting the cost, at an average US\$60 a barrel, at around US\$15-billion a year. This was, he said, in addition to other costs to the Nigerian State due to oil pipeline sabotage, and other related activities.¹⁷ Incidentally, over the last 50 years, the value of the oil stolen or wasted has amounted to between US\$300 and 400 billion.¹⁸

Additionally, companies that exploit the resources of the region are constantly threatened by pirate attacks on offshore oil infrastructure and the vessels that service this industry.¹⁹ Thereby reducing considerably, the level of interest and investment the region can generate and also increasing cost of business since the

¹³ Garuba (2010).

¹⁴ See n. 2 above.

¹⁵ See n. 13 above.

¹⁶ Nincic (2010).

¹⁷ Tension Builds in the Gulf of Guinea as Competition for Economic Resources Increases, *OIL PRICE.com*, April 2, 2010, adopted September 4, 2011, available online <http://oilprice.com/Geo-Politics/International/Tension-Builds-in-the-Gulf-of-Guinea-as-Competition-for-Economic-Resources-Increases.html>.

¹⁸ Nigerian militants release photos of British hostages, CNN, 12 January 2009, adopted 21 September 2009, available online <http://www.CNN.com>.

¹⁹ Cullen (2008).

companies have to resort to hiring private securities. Events such as the attack by the Movement for the Emancipation of the Niger Delta (MEND) on the Shell Bonga oil platform (June 2008) and by the Bakassi Freedom Fighters on the tug *Bourbon Sagitta* (October 2008) depicts the level of threat posed to offshore oil operations and this will certainly have a direct impact on the land when operations are shut down.²⁰

Even though, an outright boycott of some African ports by shipping lines cannot be ruled out a scenario is already playing out in the Niger Delta where, as a result of insecurity, the costs of development projects are almost double of what obtains for projects of similar quality internationally²¹ or even locally. Additionally, even in places like Nigeria, where Nigerian ports are the destination for the oil trade and avoiding the area is not an option²² the situation still creates grounds for higher insurance rates for Nigeria's shipping agencies, which exports crude oil across the Atlantic to the United States.²³

The impact of piracy is also an issue for other countries of the region. For instance in Ghana it's not only the lucrative offshore oil industry that is threatened, its fishing industry is also at risk and already hiring private security agents to protect it.²⁴

Likewise, a spike in pirate attacks off Benin has also forced dozens of ships to steer clear of the West African state's waters, a trend that is likely to hit the country's port all important tax revenues and hurt economic growth. The country which is an entry port for neighboring land-locked countries such as Niger, Chad and Burkina Faso, collects about 100 billion CFA francs (\$218 million), which is about 40 % of government receipts from port activities each year.²⁵ In the meantime, the London's maritime insurance market has added Benin to its list of high-risk zones for shipping, on a par with the Gulf of Aden, additionally harming an already weak economy that depends heavily on shipping.

The Maritime instability in the region has continuously been raised as a reason many investors and entrepreneurs have shown relatively little interest in the sub-region, including the potentially lucrative fishing and tourism industries.²⁶ This is at a time when the Minister of Agriculture and Rural Development of Nigeria, Dr. Akinwumi Adesina disclosed that Nigeria spent over N100 billion on the importation of frozen fish in 2010. Lamenting the shortfall of fish supply in the country, Adesina said "the estimated annual fish demand in the country was about

²⁰ See n. 2 above.

²¹ Ibrahim (2009), pp. 124–131.

²² Nincic (2009b).

²³ Gulf of Guinea pirates trigger alarm, *Terra Daily* (August 15, 2011), adopted September 2, 2011, available online http://www.terradaily.com/reports/Gulf_of_Guinea_pirates_trigger_alarm_999.html.

²⁴ Cullen (2008).

²⁵ Elijah (2011).

²⁶ Gilpin (2007).

2.66 million as against the annual domestic production of about 0.78 million, giving a demand–supply gap of about 1.8 million metric tons”.²⁷

The impact on private business and commercial interest is also alarming. As it is today, ship owners in an attempting to protect their property and crew from piracy attacks with security equipment and/or guards already spend between \$363 million and \$2.5 billion/year.²⁸

While insurance cost in all insurance category showed big downward movement in terms of costs overall by an average of 4.7 % across all vessel types in 2010.²⁹ The case was not the same for the GOG bound ships or those who do business in the region. They still struggle with increased insurance cost in addition to increased operational cost.

At the individual level too, piracy threatens the vital fishing industry and regional trade. And along with bunkering, reduces oil revenue and therefore potential financial support for the Delta region and its people. This is as a recent study suggests that poaching by vessels from Asia, Europe and other parts of Africa costs the sub-region some \$370 million annually.³⁰

Again, until recently fishing constituted Nigeria’s second-most significant non-hydrocarbon export industry after cocoa. Yet the sector has been devastated by piracy and other violence. The country’s Maritime Security Task Force on Acts of Illegality in Nigerian Waters (IAMSTAF) reported in December 2008 that Nigerian fishing boats suffered no fewer than 293 attacks between 2003 and 2008. Infact at a point it was reported³¹ that some 170 fishing trawlers were idled because their owners were afraid to put out to sea, threatening some 50,000 jobs.

At a micro level, this constrained economic activity limits employment opportunities, as well as the income earning potential of the coastal populations, and these unemployment and low wages exacerbate human security concerns in the sub-region. That is why perhaps it can be said that the most significant losses from piracy is from lost investment.

4 Political Implications

In 2005 an elaborate coup attempts was launched against the governments of Equatorial Guinea and São Tomé and Príncipe in 2003, each involving far flung array of international adventurers in league with internal partners. In 2005, reports

²⁷ Akinsuyi (2011).

²⁸ *The Economic Cost of Piracy*. Oceans Beyond Piracy. Undated adopted September 24, 2011, available online <http://oceansbeyondpiracy.org/cost-of-piracy/economic>.

²⁹ Ship Ops Costs Increase, Insurance Costs Plummet. MarineLink.com. September 30, 2011. <http://www.marinelink.com/news/insurance-increase340686.aspx>.

³⁰ Marine Resources Assessment Group (2005), pp. 1–16.

³¹ Gabriel et al. (2008).

surfaced of further coup plotting against Equatorial Guinea, allegedly using mercenaries recruited from the Niger Delta of Nigeria.³² Situations like this became possible with increase capacity of pirates to attack further ashore which now has a trans border implication with increase not only in the level of insecurity in the region, but also the level of suspicion within States in the region. Incidentally making it more difficult to create a synergy or cooperate on a solution. Especially when viewed within the context that the focal point of growth, wealth and power is situated offshore, which has led to increased maritime boundaries dispute and interstate tensions with tendency to escalate.³³ Additionally, volatile conditions of this nature also create a fertile environment for insurgent-styled activities at sea.³⁴

Just as this situation is unfolding, the President of Benin Republic had to visit his Nigerian counterpart to ensure cooperation in the effort of his country to fight the challenges posed by cross-border banditry, terrorism and piracy especially.³⁵ While in this case the approach is positive, the same situation could breed confrontation.

In Nigeria especially, the situation is more complex and the threat–vulnerability more extended and politicized. The costs of maritime piracy to Nigerian society and the economy have been significant. Take a recent report commissioned by Royal Dutch Shell where it was estimates that 10 % of Nigeria’s daily oil output is stolen. That would be enough to arm a sizeable fighting force for some time. Indeed, today while the rhetoric of the political struggle remains, the true end of these attacks is the enrichment of the pirates who are increasingly becoming more assertive exporting the problems to other parts in the Gulf of Guinea region.

The returns made from this illegal activities including piracy has provided funds to arm fighters who are incidentally used to hijack political power.

5 Social Implications

With the political motives receiving considerable attention, somewhat less attention has been paid to the criminal motives and organizations behind some of the assaults on international shipping.³⁶ The complexity of the business of illegal oil bunkering is also illustrated by its sheer number of players. While Niger Delta youth may handle the local tapping and loading, international syndicates from Eastern Europe, Russia, Australia, Lebanon, the Netherlands and France (including new entrants like Filipinos and Ghanaians) all play roles in financing, transporting, and laundering the money associated from the business.³⁷ While much of this cost is borne by

³² David et al. (2005).

³³ See n. 5 above.

³⁴ See n. 2 above.

³⁵ Archibong (2011).

³⁶ Pham (2011), pp. 29–32.

³⁷ See n. 13 above.

the oil companies and the federal government, the loss in revenue also means less for the social and economic development so necessary for the Delta region.³⁸ This meanwhile is at a time when oil exploitation-related environmental despoliation has destroyed the traditional economies of farming and fishing, with the resultant poverty threatening not only the community security but the coastal waters around the community. This gives rise to further social and political unrest due to limited available opportunities leading to more piracy.³⁹

Likewise, the scourge of illegal and unregulated fishing by foreign fishing fleets constitutes a serious threat to the realization of the benefits derivable from these resources (especially since pirates have made it risky to go to sea). This is in addition to the depletion of fish stocks which has economic and social implications including loss of foreign exchange earnings and the loss of livelihoods of several fishing communities.⁴⁰

As regards piracy, very little has been done in the way of highlighting the humanitarian causes and costs of maritime piracy in this part of the world. Just as humanitarian crises, under certain conditions, can be a breeding ground for maritime piracy and all other kinds of criminal activity, and maritime piracy itself can exacerbate already dire humanitarian conditions. Massive unemployment and the lack of meaningful economic opportunities, especially in the Delta region, have drawn young people into all sorts of maritime criminal activities,⁴¹ including kidnapping for ransom which has become a lucrative business that provides riches and weapons.⁴²

6 Implication to the World Economy and Political Stability

Piracy imposes costs on the global economy, according to international shipping organizations, insurance rates for ships have raised to \$20,000 per voyage in 2009 because of piracy, from an estimated \$500 in 2008—a 40-fold increase. Also, avoidance (the alternate route around the Cape of Good Hope) in the case of Somalia adds roughly 3,500 miles to the journey.⁴³ With the diversion situation playing out, the predicament of shippers will be increased if the pirates in the GOG master the acts like their counterparts in the Gulf of Eden. Indeed, significant numbers of attacks on ships in Nigeria (some of which occurred over 31 miles from shore) represent not only a geographical expansion of threats to maritime

³⁸ See n. 22 above.

³⁹ Uzodike and Isike (2009), pp. 103–116.

⁴⁰ See n. 2 above.

⁴¹ See n. 6 above.

⁴² Purefoy (2009).

⁴³ See n. 3 above.

energy assets, but also perhaps an increasing oceangoing ability on the part of pirates in the area,⁴⁴ with reported attack 65 km offshore.⁴⁵

Considering the fact that they are also learning from other successful models of piracy operation, they soon will achieve the same kind of success as the Somali pirates. Meanwhile, piracy is also a growing concern for Southern Africa. Such trends have global energy supply implications given that 6 million tons of oil are transported around South Africa's western coastline every month as well as regional energy production implications.⁴⁶

These ocean going capabilities again, have increased their chances of further attack and capacity for act of terrorism which can be against major installation, such as an LNG liquefaction plant, supertanker, or oil platform. This could create a spike in oil prices, raise global insurance rates, and damage production for some period. Of course the Gulf of Guinea does not yet have a central node analogous to Saudi Arabia's Al Qaiqa processing center where a single concentrated attack could disrupt millions of barrels of oil per day. Nevertheless, as Nigeria's LNG sector matures in the coming years, large multi-billion dollar facilities will create conspicuous new potential targets.

Additionally, the Gulf of Guinea is strategically located with direct access to U.S. East Coast refineries, thus avoiding more costly and dangerous routes. The region's light, sweet grade crude also articulates closely with U.S. environmental considerations. Interestingly, the Gulf of Guinea producers are also of key importance to Europe and now slowly to Asia, which seeks to balance its own dependence on Middle East crude oil.

As important sources of energy supplies, the Gulf of Guinea stands to benefit or loose. Expanding economics disparities increase the potential for conflict and instability. Thus, as the gap grows between "haves" and "have not" both within and between nations, have-nots are increasingly channeling their frustration into violence, corruption and crime. In the sub-region, kidnappings, piracy and attacks on personnel and facilities have suggested an increased recourse to violence to raise awareness of and to attempt to address economic disparities. At the same time, global dynamics and international interconnectedness among energy markets, social trends and political philosophies have given such actions great impact. The price fluctuations rippling through global energy market after each significant pipeline attack, kidnapping or act of piracy in the Gulf of Guinea have highlighted these tightening connections between global energy security and local conflicts.⁴⁷

⁴⁴ Nincic (2009c).

⁴⁵ Iroegbu (2011).

⁴⁶ See n. 26 above.

⁴⁷ Osaretin (2011), pp. 187–191.

7 Recommendations

It is common knowledge that most port and surveillance infrastructure in the region are in need of repair, upgrading or replacement. As such the countries in the region should carry out a comprehensive evaluation of available resources and their efficacy. This will not only support and encourage cooperation, it will also reduce or eliminate duplication of effort at a regional level.

Additionally, a strategic approach for the Gulf of Guinea requires consistency between domestic and partner-initiated programs, as well as significant regional collaboration given the trans-national character of most threats and vulnerabilities. Thus, an effective strategy must incorporate national, regional and global realities, while the precise configuration would largely be country-specific.⁴⁸ Like the president of Nigeria said to his Beninese counterpart “Criminals don’t respect political boundaries in their nefarious activities, so we will cooperate with one another to find lasting solutions to the problems they (criminals) pose”.⁴⁹

Again, the Common African Defense and Security Policy pay little attention to the maritime dimensions in addressing threats to peace, security and development. The African Standby Force, as an instrument for the implementation of the policy, also does not address maritime forces or the contribution they could make to African security and development. Africa needs to become more maritime conscious and consider maritime matters at a continental and sub-regional level and not only as national issues.⁵⁰

While interstate arrangements still dominate, cooperation with non-state actors are prevalent as well. Public–private partnerships to improve maritime awareness and security show promise, despite being somewhat controversial.⁵¹ It is working for Nigeria and has been expanded to include Benin Republic’s waters after the country seek for assistance.

To address these threats, situational awareness of the maritime domain is of utmost importance as it would provide the knowledge base required to advise regional leaders in taking the right decisions that would enhance maritime security.⁵² And that is why regional organization which usually complicate rather than facilitates multinational cooperation to cover the Gulf of Guinea should cooperate. As it is the member states in the area belong to three different sub regional organizations which are the Economic Community of West African States (ECOWAS), the Economic Community of Central African States (ECCAS/CEEAC), and the Southern African Development Community (SADC). While they each have their own land-based geographic point of focus, they also have wildly differing developed capacities.⁵³

⁴⁸ See n. 26 above.

⁴⁹ See n. 34 above.

⁵⁰ Wambua (2009), p. vii.

⁵¹ See n. 2 above.

⁵² See n. 21 above.

⁵³ Peter Pham (2007).

Another issue is the need to enact legislation if they are absent and enforce the necessary provisions available in the books. This would include in addition to the required sustained political will, the strengthening of relevant institutions and enforcement mechanisms, as well devoting adequate financial and human resources to maritime security.

In the context of Nigeria, abandoned watercrafts and wrecks in the territorial waters are being used by criminals as safe havens and hideouts after executing their criminal activities in the waterways. These wrecks, which stowaways have discovered as potential launching pads are a security challenge confronting the maritime sector. As such they should be cleared out to reduce potential hideouts for criminals especially around Lagos Ports. In addition to removing wrecks there is need to examine and proffer solutions to the feeders of piracy onshore, like increasing port efficiency to reduce the number of ships in the anchorage thus the number of potential targets as well as increasing the policing of the water.

Another emerging, partnership is the cooperation between governments and private enterprise to physically secure the offshore domain. The Military Professional Resources Incorporated (MPRI) involvement in Nigeria and the leaders of Equatorial Guinea turning to MPRI and Israeli security agencies to assist with training are but two examples.⁵⁴

The United States in its dealings with Nigeria and the region in general, should give priority to illicit oil sales, money laundering and arms trafficking centered in the Niger Delta. The U.S. should pursue strengthening a region-wide body that could effectively carry out a cross-regional monitoring and surveillance of maritime traffic.

8 Efforts by the Nigerian Maritime Administration and Safety Agency (NIMASA)

The Maritime Administration realizing its limitations addressing piracy and armed robbery at sea signed a Memorandum of Understanding with the Nigerian Navy. At the moment a detachment of Naval officers are with the Administration under the Maritime Guard Command (MGC) and they are expected to carry out regular security patrols of Nigeria waters aimed at deterring sea criminals and intervening during armed robbery attacks against vessels. This action has incidentally, reduced pirate attacks in Lagos waters with the Administration recording only four reported attacks between March and June, 2011.

With the recent acquisition of the ATR-42 Maritime Patrol Aircraft by the Nigerian Air Force, the Administration has concluded arrangements with the Nigerian Air Force (NAF) to establish a Joint Maritime Air Unit. Just as it is in the concluding stages of establishing a partnership with the Nigerian Marine Police

⁵⁴ See n. 2 above.

to develop a contingency plans that will adequately deal with pirate attacks. This partnership will also facilitate the acquisition of additional patrol boats with a view to enhancing and ensuring the safety of navigation.

In the same vein, the Administration is proposing to facilitate collaboration by all stakeholders in equipping the various security agencies responsible for safeguarding the Nigerian maritime domain. It has as already made plans to reach out to the communities in the coastal areas, the multinational companies (especially the oil companies) and other shipping interests with a view to collaborating in the acquisition of vessels and other requirements to support the efforts of the Maritime Guard Command and the Nigerian Security Authorities.

Already, the Administration has a Maritime Domain Awareness (MDA) Initiative which it tagged “Maritime Electronic Highway”. This will complement the existing MRCC and boost the coverage of the entire Nigerian Maritime Domain. It features comprise of a synergy of Vessel Traffic Services (VTS), Automatic Identification System (AIS), Medium Frequency/High Frequency Radio Communication. This is as it provisionally working in conjunction with the Navy to improve on the Regional Maritime Awareness Capability (RMAC) system prior to the installation of a MEH.

The Administration is also currently working to ensure that all Fishing vessels (frequent victims of Armed Robbery in Nigerian waters) have the capability to contact the MRCC Lagos in case of any safety/security related incidents. Efforts are therefore being made by the Administration to encourage operators of fishing vessels to install GMDSS communication equipment compatible with those in the MRCC.

9 Conclusion

There is growing awareness that the vast resources and potential in the Gulf of Guinea are being undermined by multifaceted domestic, regional and international threats and vulnerabilities. Rather than contributing to stability and economic prosperity for countries in this sub-region, pervasive insecurity in this resource-laden maritime environment has resulted in more than \$2 billion in annual financial losses, significantly constrained investment and economic prospects, growing crime and potentially adverse political consequences.⁵⁵ Nigeria, as Africa’s largest source of oil production, is particularly dependent on secure waters for export and import. As piracy in the region increases, ships are forced to reroute. Trade flows are disrupted, and the added cost is shifted to consumers.⁵⁶ The more reason the region and Nigeria especially cannot loss control to armed gangs; which would lead to escalated attacks on oil production facilities and new capacities to attack

⁵⁵ See n. 26 above.

⁵⁶ See n. 16 above.

installations at sea. This situation can create sufficient danger onshore to shut-in a significant quantity of oil from the market, while potentially disrupting offshore installations.

It may be of interest to note that in discussing piracy especially within the Nigerian context, maritime insecurity has featured prominently. This is because; piracy in Nigeria is directly linked to oil development and the resulting economic, social and environmental conditions in the Niger Delta.⁵⁷ It is against this backdrop it becomes easier to appreciate the implications of piracy. Ibrahim⁵⁸ related that the state of maritime security and piracy are directly related. Thus, when piracy increases it reduces maritime security, while increase in the level of maritime security usually translates to decrease in the level of sea piracy. Good governance is therefore absolutely fundamental to achieving sustainable maritime security and development in Africa.⁵⁹

While the bulk of solutions proposed and actively pursued have remained in the realm of security, the region may consider the entrenchment of good governance. Since security alone, though a more expensive option has limited success and requires long term presence of hardware. Imagine what \$1 million spent today would do for a poor community; same amount spent as ransom would probably buy better arms and ammunition, for a larger pay-off in future.

Even as the situation may need an Africa solution for an African problem, timely and consistent western or international assistance must remain significant⁶⁰ to avoid a situation where the economic and social consequences of the prevailing threats become grave. Since if they are allowed to persist, piracy would flourish and ultimately undermine political stability and economic development of the region.⁶¹

To conclude, it may be noted that successful anti-piracy efforts do exist. The Malacca Straits (which until 2004 was the world's most pirate-prone region) has seen noticeable reduction in attacks through the efforts by the countries in the region.⁶² While this is also possible in the Gulf of Guinea (especially with a coherent, coordinated and comprehensive response by the international community). Maritime piracy cannot adequately be addressed and eradicated unless it is seen as both a *cause* of social and economic hardships and an *effect* of social, political and economic destitution as well.⁶³

⁵⁷ See n. 6 above.

⁵⁸ See n. 21 above.

⁵⁹ Onuoha (2009), pp. 31–44.

⁶⁰ Mugridge (2010).

⁶¹ See n. 21 above.

⁶² Kimani (2009).

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Piracy and Organised Crime at Sea: Following the Money Trail

Marelize Schoeman and Benjamin Häefele

1 Introduction

Piracy has become a lucrative trade and it is estimated that from 1 January 2011 to 31 June 2011 a total of 166 attacks against ships were recorded.¹ Somali pirates are blamed for the majority of attacks against ships. On the 26th of October 2010 two South African's on a yacht were captured by Somali pirates on their voyage from Dar es Salaam to South Africa and even though negotiations are in progress no release date can be confirmed at this stage. The pirates demand \$10 million (R70 million) ransom money.²

The nature of these recorded attacks fit the criteria of for the definition of organised crime in terms of the structured approach and execution thereof. In this regard Ronals Noble attests that “*maritime piracy is really nothing more than transnational organized crime operating on the high seas and benefitting from their profits on land*”.³ The case study of the two South African hostages is used to highlight the similarities between piracy and organised crime as well as follow and explain the money trail associated with kidnapping for ransom.

A qualitative methodology was followed making use of interviews with academic and operational experts in the field of maritime piracy as well as a family member of the South African couple being held hostage by pirates in Somalia. An in-depth document analysis, inclusive of national and international government reports, press articles, academic research and papers was also undertaken.

¹ Mukundan (2011).

² Umar (2011).

³ Noble (2010).

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2 Background to Piracy in Somalia

Maritime piracy in Somalia emerged against the background of civil war and violence, the failure of central governance, poverty, displacement and geographic opportunity. Lack of consensus on power sharing between Mogadishu-based clans in Somalia has prevented the formation of a central government. It is estimated that approximately 75 % of Somalis belong to one of six major clan families: the Darod, Digil, Dir, Hawiye, Isaaq and Rahanwein. In the past the Darod clan has been the most influential politically, but its dominance is now being challenged. Since 1991, 14 governments have tried and failed to govern Somalia, though the last one. The Transitional Federal Government (TFG) remains intact.⁴

The TFG however, has not functioned operationally and cannot provide effective social services or generate revenue through, amongst others, the collection of taxes. In effect, the TFG has never been able to extend its authority beyond the boundaries of Mogadishu the capital of Somalia. The backbone of governance in Somalia is formed by the most influential family clans which have filled the vacuum left by the absence of a central authority. It has led to the proliferation of warlords and armed militias, and the consequent fragmentation of Somalia into a patchwork of rival fiefdoms. The result is that Somalia's coastline has been divided among militia groups and warlords who engage in piracy or provide information, protection and support to criminal gangs involved in piracy. Thus, the failure of governance has resulted in a climate of insecurity in Somalia and created an environment for the formation of a criminal economy driven by profit from organised crime, such as maritime piracy.⁵ Somalia's favourable geographic location, availability of weapons and persons skilled in using them, people with knowledge of the sea and general economic hardship experienced by Somali citizens make maritime piracy a desirable and plausible occupation.⁶

The paradoxical relationship caused by the ongoing humanitarian crisis makes it a breeding ground for maritime piracy, while at the same time exacerbates existing socio-economic conditions.⁷ In the absence of an effective government, the pirates view themselves as national defenders of their resources.⁸

⁴ Moulid (2011).

⁵ Onuoha (2009), pp. 31–41.

⁶ Percy and Shortland (2010), p. 8.

⁷ Nincic (2009), pp. 2–16.

⁸ Ploch et al. (2011).

3 Conceptual Framework

No single definition of maritime piracy is accepted by all states, organisations and scholars. Piracy encompasses both the physical capture of cargo from a vessel, as well as obtaining a ransom in exchange for the vessel, crew and cargo. This article adopts the definition of maritime piracy of the International Maritime Bureau (IMB), namely that it is “*the act of boarding any vessel with the intent to commit theft or other crime and with the capability to use force for furtherance of the act*”.⁹

Piracy for ransom and kidnapping for ransom are considered two categories of maritime piracy and are addressed separately in this article. Piracy for ransom investigates the financial implications of piracy as an economic offence focussing on the generation of income, while kidnapping for ransom focuses on kidnapping as a means of financing terrorism and a means to collect funds and to support operations of terrorist groups.¹⁰ The authors of this article argue that kidnapping for ransom is not only limited to terrorist activities but also used by pirates for financial gain. The case study of the South African couple, the Chandlers from Britain and the two cases where tourists were kidnapped for ransom in Kenya attest of this.¹¹ This article focuses on kidnapping for ransom and uses the case study of the South African couple taken hostage during October 2010, following the negotiations and the money trail.

Although little research has been done on the link between piracy and organised crime it is widely believed to exist. According to The Institute for International Affairs (IAI) of Rome and the International Institute of Humanitarian Law (IIHL) report international role players, including the government of Somalia, now recognise that piracy has become a part of organised crime.¹²

Similar to piracy, organised crime is also difficult to define. Organised crime can be defined as “*a continuing criminal enterprise that rationally works to profit from illicit activities that are often in great public demand. Its continuing existence is maintained through the use of force, threats, monopoly, control, and/or the corruption of public officials.*”¹³ Distinguishing features characteristic to organised crime are the utilisation of violence, corruption, complicity of public officials, ongoing criminal behaviour and variety of crimes and the serious nature of the type of crimes committed. Organised crime groups are motivated by a desire for profit or

⁹ Onuoha (2009), p. 39.

¹⁰ FATF Report (2011).

¹¹ For more information, see British yacht couple kidnapped by Somali pirates are finally released after 388 days of captivity <http://www.dailymail.co.uk/news/article-1329577/Paul-Rachel-Chandler-kidnapped-Somali-pirates-released-388-days.html#ixzz1ZzhcstCx> and Kenya kidnappings: Somali pirates may be seeking easier pickings: Pirates believed to be behind recent spate of tourist abductions <http://www.guardian.co.uk/world/2011/oct/04/somali-pirates-tourist-abductions?newsfeed=true>.

¹² Alessandri (2009).

¹³ Albanese (2011), p. 4.

power.¹⁴ The premeditated nature of the crimes as well as the co-operation and division of labour are highlighted in the German Federal Police's definition of organised crime. In accordance with this definition organised crime structures typically have a commercial-like construction with levels of responsibility and authority. Violence is used as a means of intimidation and the organisation's activities have a direct or indirect influence on politics, media, public administration, justice and the legitimate economy.¹⁵

Organised crime groups are difficult to penetrate and developing an accurate picture of their operations can take years. One of the characteristics of modern organised crime is that it is fluid, flexible and can quickly adapt itself to meet new opportunities, challenges and risks. As a result the modus operandi of perpetrators can change fairly rapidly. Because organised crime groups operate for profit or wealth, they rely on the existence of markets and the principle of supply and demand.¹⁶ In the case of maritime piracy, like organised crime, all the aforementioned characteristics are evident in the modus operandi and motivation for the attacks. The Somali piracy "business" for example, is structured and organised:

- Pirates are well resourced and make use of sophisticated tactics to commit acts of piracy and/or robbery at sea. Similar to organised crime, pirates use force, threats and violence to intimidate and control their victims.
- Different types of crimes, such as hijacking of ships, kidnapping of ships crews, extortion, money laundering and robbery, are used during these acts of piracy.
- Piracy has developed into a *mini-economy/criminal economy* and the profits made from their criminal acts filter down to various sections of the Somali society.¹⁷
- It is an attractive alternative to poverty and offers a respected career option which benefits the community in general.
- Government officials and groups who control the different regions of the country also benefit from the pirates' endeavours. Similar to organised crime their existence is maintained through the direct or indirect influence their activities have on politics, media, public administration, justice and the legitimate economy.¹⁸

¹⁴ Lyman and Potter (2007), pp. 5–6.

¹⁵ Newburn (2009), p. 454.

¹⁶ Albanese (2011), p. 9.

¹⁷ Bridger (2011).

¹⁸ Compare Percy and Shortland (2010), pp. 14–23; Ploch et al. (2011), pp. 6–11; FATF Report (2011), pp. 16–19.

4 Organisational Structure of Maritime Piracy

There appear to be four basic types of organisational structures in maritime piracy. In all the cases, the pirate leader(s) would be well-connected and respected in the community, and thus able to draw upon their personal networks for the creation of opportunities, protection and operational support:

- The first type is a cottage industry structure in which the whole operation is owned by a single funder. The funder may lead the group, and, if the hijacking is successful, take the largest share of the ransom payment.
- The second type is a shareholder or cooperative structure in which individual pirates invest in the operation and share the financial proceeds.
- The third type is the syndicate or committee structure formed by several investors. Syndicates are responsible for the majority of hijackings.¹⁹
- The fourth group are the pirate groups in Somalia (warlords and militia). They consist of youths who come from different parts of the war-torn country and belong to different clans. With a substantial volume of illicit weapons circulating in an environment of worsening poverty, it creates an ideal environment for piracy.²⁰

For the purpose of the article the syndicate or committee structure is further explored. The syndicate model, which mirrors a legitimate business approach, has generated the greatest amount of interest among those following the maritime piracy for ransom including governments, law enforcement agencies and naval officials, the maritime industry, the intelligence community and those who conduct research on the maritime piracy phenomenon.

The committee structure of the syndicate model consists of between 200 and 300 members, depending on the number of stakeholders involved. They arm and equip several pirate groups and draw up contracts for maritime piracy operations and the distribution of ransom payments. Successful syndicates can command as much as a 50 % share of a ransom payment.²¹ Prominent Somali families, businesses, tribes, lawyers, accountants, interpreters, investors and sponsors form part of the committee. The committee also deals with the recruitment of locals to execute the attack/hijacking of a vessel. In this regard it is reported that piracy syndicates will hold recruitment drives to recruit “prospective pirates” before going to sea. These drives are similar to employment recruitment in legitimate companies where preference is given to employees with experience and the necessary skills.²²

¹⁹ Hansen (2009), pp. 35–37.

²⁰ Onuoha (2009), p. 37.

²¹ Hansen (2009), p. 29.

²² Meyer J, Captain, INTERPOL, 6 and 15 September 2011, personal communication.

5 The Case Study of Bruno Pelizzari and Debbie Calitz²³

Bruno Pelizzari (52) a former elevator repair man and Deborah Calitz (49) a massage therapist from Durban, South Africa were living their dream. They sold their possessions and fixed up a catamaran and sailed to Dar es Salaam where Bruno got a job. There the couple met 61 year old Peter Eldridge, who lived on the yacht Choizil. Peter planned to sail home to Richards Bay in South Africa and asked Bruno and Debbie to crew for him as his original crew member was hurt and was unable to make the journey. In exchange Peter would pay for airline tickets to fly them back to Dar es Salaam. Bruno and Debbie were very excited because even though they wanted to visit family in South Africa they did not have the financial means to do so. It also gave Debbie the opportunity to see her grandson for the first time.

They departed from Dar es Salaam on 23 October 2010. Even though they discussed the dangers of piracy attacks they did not seriously consider it a threat because they sailed on a small sailboat and had no personal wealth. The worst threat from pirates they envisage was becoming victims of a robbery at sea.

On 26 October 2010 around midday approximately 100 nautical miles north of the Mozambican boarder, two high speed skiffs approached the yacht. Peter immediately realised what was happening and send out a mayday signal. Typical of the known modus operandi a large number of heavily armed (AK 47'S, RPG rockets and pangas) pirates, in this case 12, boarded the yacht. After taking control they unplugged the radios and set about ransacking the yacht and taking all the valuables they could find. The leader of the pirates demanded US\$100,000 per person in broken English. Even after Peter Eldridge showed the pirates their passports and explained to them that they are South African citizens and do not have money the pirate leader refused to accept Peter's explanation and said "white people mean money". The leader of the pirates then said that they (Peter Eldridge, Bruni Pelizzari and Debbie Calitz should help the pirates to get the money from other passing ships in order to pay their "debt". Some of the pirates left on one of the skiffs and later came back with drums of diesel and supplies (food and water) from a mother ship, possibly the MV Samho Dream, which they loaded on the yacht. They ordered Peter to turn the Choizil and sail northbound towards the Somali coast. He was not allowed to use the main sail but had to use the yacht's small engine. Peter tried to explain to them that the engine was not strong enough to handle such a journey but the pirates did not listen to him.

The crew of the Choizil spend about three to four nights on the yacht when they came across the MT Polar on 30 October 2010. Some of the pirates sped off on one

²³ van der Merwe D, 1 and 15 September 2011, Debbie Calitz's brother and ransom negotiation representative for the Calitz and Pelizzari family, personal communication.

of the skiffs and immediately opened fire when they reached the vessel. It transpired that during that attack 24 crew members of the MT Polar were taken hostage.²⁴

European Union Naval Forces became involved with this case when they saw the Choizil sailing suspiciously close to shore. They report that despite numerous unsuccessful attempts to contact the yacht, including a flypast by the ship's helicopter, no answer was received and the French warship FS Floreal launched a boarding team to investigate further. When the boarding team began approaching, they came under fire from the yacht. Bruno Pelizzari and Debbie Calitz were put on deck facing the boarding party while some of the pirates held guns against their heads. Peter Eldridge was told to contact the FS Floreal and tell them to back away. The boarding party from the FS Floreal backed off to a safe distance, but remained in the vicinity of the pirated yacht, which eventually ran aground on the beach in Southern Somalia on 6 November 2010. According to Peter this happened because the yacht's engine failed.

The pirates dragged Bruno and Debbie from the yacht and used them as human shields to protect themselves from the French helicopter that was flying overhead. Peter refused to leave Choizil and resisted the pirates attempt to forcefully remove him from the boat. According to Peter the pirates left the yacht but the youngest pirate later came back and again tried to get him off the boat, he resisted and the pirate opened fire and shot-up the inside of the boat but did not injure or shoot him. Peter was rescued by the FS Floreal and later on transferred to a Dutch naval vessel that took him to the South African embassy in Kenya. Upon his arrival back in South Africa Peter Eldridge spoke to Bruno and Debbie's family members. The information he gave Dale van der Merwe is subsequently also used for the purposes of this article.

Even though Debbie and Bruno's families were notified of the abduction shortly after Peter Eldridge was rescued Dale van den Merwe, Debbie's brother and Vera Pelizzari, Bruno's sister were only contacted by the pirates approximately 6 weeks (14 December 2010) after Bruno and Debbie's abduction. The initially ransom demand was US\$10 million which was subsequently lowered to US\$5 million, then US\$500,000 and eventually after a television programme was screened on Carte Blanche, a news actuality programme, again increased to US\$4 million.

Throughout the negotiation process with the pirates "proof of life questions", a practice where the families would ask questions of which the answers would only be known by the hostages, was used to establish that the Debbie and Bruno are still alive. On 22 August 2011 Bruno Pelizzari was allowed for the first time to speak to his sister Vera where he confirmed that the pirates will not release them without the payment of the ransom. Subsequently after this call and a frustrating year of negotiations with the pirates the family decided to establish a fund raising organisation to raise funds to pay the hostages.

²⁴ The MV Samho Dream, which has been released on 6 November 2010, was used as the mother ship in the high jacking of the MT Polar and presumably also the Choizil.

6 Following the Money Trail

Information collected in this study confirmed the business orientated nature of piracy.²⁵ Pirate attacks are highly organised with the sole purpose of gaining the biggest monetary benefit from the attack as possible. This is also reflected in the pirates' modus operandi where heavily armed pirates will board a target in order to quickly overpower the crew and take control while displays of violence are used to frighten hostages into submission thus lessening the possibility of damaging the vessel or physically harming the hostages. Vessels and hostages are viewed as commodities that can be exchanged for money. It is common practice for hostages to be sold to other groups who are equipped to deal with, and specialise in hostages for ransom.²⁶ This was also the case with Bruno Pelizzari and Debbie Calitz who were sold to another criminal group in Somalia. It is not clear if this group has any links with the original pirate group that captured them or if it is a separate criminal organisation.

Bruno and Debbie were not injured during their hostage taking and from reports it seems as if they are physically looked after. Dale was concerned about his sister's health because she suffers from asthma and asked the pirate ransom negotiator if they can send medicine to her. He was told that they have doctors who will take care of her. In an interview with Paul and Rachel Chandler, a British couple who were held hostage by Somali pirates, they confirmed that they received adequate food and medical treatment in order to keep them healthy so that the pirates can get the ransom money they are demanding.²⁷ It is also reported that local shops supply the pirates with food for the hostages in exchange for a cut of the ransom money.²⁸ As previously stated, it is not only the pirates that benefit from the ransom money but also the broader business sector in Somalia.

Due to the South African government's policy not to negotiate with pirates the dialogue for the release of Bruno and Debbie has become their relatives' responsibility. They experience this process as being "a frustrating and an emotional rollercoaster ride".²⁹ Negotiations are done telephonically between them and the same ransom negotiator who contacted them initially. The family are instructed to phone the negotiator at a specific time on a mobile phone number. It is also

²⁵ Senior maritime law enforcement officer who requested to remain anonymous, Kenya, personal communication (9 September 2011); Meyer J, Captain, INTERPOL, 6 and 15 September 2011, personal communication; Fouche H, Associate Professor, University of South Africa, 6 September 2011, personal communication; van der Merwe D, 1 and 15 September 2011, Debbie Calitz's brother and ransom negotiation representative for the Calitz and Pelizzari family, personal communication.

²⁶ Id; FATF Report (2011), pp. 22 and 44.

²⁷ Rugman (2011).

²⁸ Senior maritime law enforcement officer who requested to remain anonymous, Kenya, personal communication (9 September 2011).

²⁹ van der Merwe D, 1 and 15 September 2011, Debbie Calitz's brother and ransom negotiation representative for the Calitz and Pelizzari family, personal communication.

speculated that one ransom negotiator represents several hostages and even different hostage syndicates.³⁰ The central focus of the conversation is from the family's side to establish if Bruno and Debbie are still alive while the pirate ransom negotiator will discuss the ransom and enquire when the payment will be made. In terms of the ransom amount the amount dropped from US\$10 million to US \$500,000 only to increase to US\$4 million after the screening of a television programme and a non-disclosed government official communicated with the ransom negotiator for an unconditional non-monetary release.³¹ The contact from the government official could have possibly created the expectation of governmental involvement. In addition, Jacques Meyer believes that ransom amounts are also affected by the media's coverage of specific cases and that ransom amounts will increase if a case receives wide coverage, but may decrease if little attention is paid to a case.³² Pirates also use the media to spread misinformation and false rumours about the wellbeing of hostage in order to place pressure on organisations and family members to pay the requested ransom money.³³

In the case of Bruno Pelizzari and Debbie Calitz limited media coverage has been given to their kidnapping. This could possibly be ascribed to the dominant perception created in the maritime industry and media that only large vessels are hijacked and ransom paid for the release of the vessel and the crew. Less emphasis is placed on cases where smaller vessels, such as fishing boats, or in this case, a privately owned yacht are captured. Consequently, hostages captured from smaller vessels are held captive for longer periods of time.³⁴ This can generally be attributed to two reasons, firstly in contrast to the larger vessels where negotiations for release are conducted with the assistance of insurance companies smaller vessels generally do not have the backing from insurance companies or the financial resources to pay the ransom. Secondly, more emphasis is placed on the capture of large vessels because of their monetary value and less emphasis on the hostages of these large vessels.³⁵ This dehumanises the process to little more than is business transaction between the owners of the hijacked vessel and the pirates. Consequently, the human rights of hostages and the trauma they experience are not recognised. This is even more so in the case of smaller vessels, such as fishing boats and yachts that have limited monetary value and which are not viewed as high profile cases in the eyes of the maritime sector, media and governments alike. In

³⁰ Meyer J, Captain, INTERPOL, 6 and 15 September 2011, personal communication; Senior maritime law enforcement officer who requested to remain anonymous, Kenya, personal communication (9 September 2011).

³¹ van der Merwe D, 1 and 15 September 2011, Debbie Calitz's brother and ransom negotiation representative for the Calitz and Pelizzari family, personal communication.

³² Meyer J, Captain, INTERPOL, 6 and 15 September 2011, personal communication.

³³ Meyer J, Captain, INTERPOL, 6 and 15 September 2011, personal communication; Senior maritime law enforcement officer who requested to remain anonymous, Kenya, personal communication (9 September 2011).

³⁴ FATF Report (2011), p. 16.

³⁵ FATF Report (2011), pp. 10–12.

this regard Dale van der Merwe verbalised that it felt as if Bruno and Debbie are viewed as insignificant in the eyes of the authorities they have dealt with.³⁶ The FATF report confirms this stating that feelings of abandonment cause family members of victims and owners of small vessels captured by pirates to make use of “underground” methods of negotiations and payment of ransom.³⁷

A further aspect that contributes to the frustration the family’s experience is the disjointed nature of communication and co-operation between law enforcement agencies. This resulted in them being given advice from various sectors. They were told not to entertain ransom demands from the pirates but not offered alternative solutions which could ensure the safe return of hostages. At this stage they feel disillusioned and alienated and have decided to try and raise the ransom money in order to try to secure Bruno and Debbie’s release themselves.³⁸ Interviews with experts in maritime piracy confirm that ineffective communication and cooperation on national and international level hampers the effective prevention and reaction to pirate attacks.³⁹ This is also an aspect that makes it difficult to “follow the money trail” which is central to the business of piracy. The FATF reports that the ransom money trail frequently grows cold because no mechanisms exist to identify the source and destination of ransom money once such payments have been made to the pirates.⁴⁰ The people who benefit from the business of piracy are well aware of these and other legislative shortcomings and used it to their advantage.⁴¹

7 Summary of Findings, Challenges and Issues for Consideration

Maritime piracy has come a long way from its historical roots to become the profitable organised businesses it is today. If compared, numerous similarities can be noted between the operational structure, modus operandi and purpose of piracy and organised crime. Similar to organised crime syndicates, piracy is also driven by

³⁶ van der Merwe D, 1 and 15 September 2011, Debbie Calitz’s brother and ransom negotiation representative for the Calitz and Pelizzari family, personal communication.

³⁷ FATF Report (2011), p. 22.

³⁸ van der Merwe D, 1 and 15 September 2011, Debbie Calitz’s brother and ransom negotiation representative for the Calitz and Pelizzari family, personal communication.

³⁹ Senior maritime law enforcement officer who requested to remain anonymous, Kenya, personal communication (9 September 2011); Meyer J, Captain, INTERPOL, 6 and 15 September 2011, personal communication; Fouche H, Associate Professor, University of South Africa, 6 September 2011, personal communication.

⁴⁰ FATF Report (2011), p. 5.

⁴¹ Senior maritime law enforcement officer who requested to remain anonymous, Kenya, personal communication (9 September 2011); Meyer J, Captain, INTERPOL, 6 and 15 September 2011, personal communication; Fouche H, Associate Professor, University of South Africa, 6 September 2011, personal communication.

influential, sophisticated, well-resourced transnational criminal syndicates who in this instance have tapped into the huge economical potential of organised crime at sea. In this regard the complexity of the financial relationship between piracy and organised crime is largely overlooked.

Piracy, especially in Somalia has resulted in the creation of a criminal economy driven by profit from organised crime. The sole purpose of pirate attacks is to gain the biggest monetary benefit from the attack as possible. This is also reflected in the specialisation as can be seen in the piracy structures discussed in the article. The syndicate or committee structure, which mirrors a conventional business model, highlights the similarities between piracy and organised crime. Pirate leaders are well-connected and respected members in Somali that are able to draw upon well established transnational criminal networks for the creation of business opportunities, protection and operational support. It is speculated but has not been verified that there are possible linkages between Somali pirates, the al-Qaida-affiliated al-Shabaab terrorist organisation and other terrorist groups operating in the Horn of Africa and that money gained from piracy is used to finance terrorist activities.⁴² The money trail associated with piracy is difficult to follow because no universally accepted mechanism exists to identify the source and destination of ransom money once such payments has been made to the pirates. Ransom money is mostly paid in cash, thus making it difficult to trace. Role players in the business of piracy are well aware of the legislative loopholes and operational difficulties in the policing of crimes, such as piracy, and make use of these ambiguities to further their cause.⁴³

The human factor behind kidnapping for ransom is frequently not recognised. Pirates view hostages as commodities that can be exchanged for money. In the case of smaller vessels and yachts that do not have the benefit of assistance from insurance companies ransom negotiations generally become the responsibility of relatives. Due to governmental policy not to negotiate with pirates and the low-profile status allotted to hostages of piracy by the maritime sector, media and governments, it was found that these hostages are held captive for longer periods of time than would have been the case if they were held on valuable vessels with important cargo.

Even though piracy at sea may be dominated by a perception that larger vessels are predominantly the targets of pirate attacks it should be recognised that smaller vessels are also under attack and that pirates pursue targets of opportunity. There is a perception amongst pirates that smaller vessels and yachts are owned by wealthy individuals and are therefore lucrative targets. Similar to modern organised crime, piracy has become fluid and flexible and quickly adapts to meet new opportunities,

⁴² FATF Report (2011), p. 9; Senior maritime law enforcement officer who requested to remain anonymous, Kenya, personal communication (9 September 2011); Meyer J, Captain, INTERPOL, 6 and 15 September 2011, personal communication; Fouche H, Associate Professor, University of South Africa, 6 September 2011, personal communication.

⁴³ Bridger (2011).

challenges and risks. This is evident in the adaption to modus operandi where pirates make use of mother ships to expand their area of operation. Furthermore the recent incidents where pirates captured two European tourists from Kenya within a 3 week period,⁴⁴ is another example of how they adapt to changing opportunities and risks. This signalled a change in method of operation that is consistent with attacking targets of opportunity. Target hardening and the fact that organised crime groups rely on the existence of markets and the principle of supply and demand may be partly responsible for this.

The influence media coverage has on the ransom negotiations and payment of ransom is an area that should be explored. Consideration should be given to developing mechanisms to address jurisdictional and other legislative loopholes and to encourage national and transnational cooperation between law enforcement agencies and the sharing of information and intelligence. More research is needed on following the money trail in piracy of smaller vessels as well as the impact on the hostage's relatives as the secondary victims of piracy.

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⁴⁴ See note 11 above.

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How to Thwart Success in Piracy: Core Strategies of Security

Joan P. Mileski, Maximo Q. Mejia, Jr., and Arielle D. Carchidi

1 Introduction

While armed robbery against ships in waters within the jurisdiction of states has been a serious problem these last three decades, the incidence of piracy on the high seas have increased in frequency dramatically over the last 5 years. Areas especially at high risk for piracy and armed robbery against ships include the Strait of Malacca between the Malay Peninsula and Sumatra, the Niger Delta of Nigeria, off the coast of Somalia, and the northeast coast of South America.¹ Due to increased globalization, the world economy depends upon maritime trade. More than 90 % of world trade is maritime based.² Piracy causes costly outcomes for companies such as increased insurance costs, upgraded ship security technology, hiring protective forces, replacing cargo, paying ransoms, rerouting of vessel, lost time from the ship being out of circulation³ and loss of life of seafarers. In attempts to negate the effects of piracy, an alliance of more than two dozen shipping industry organizations, international organizations, naval forces, and law enforcement agencies have developed and published the booklet “Best Management Practices for Protection against Somalia Based Piracy,” now in its fourth edition (BMP4). These best management practices include practical ship protection measures such as enhanced vigilance, access control, high pressure fire hoses, additional lighting, physical barriers such as razor wire around the deck, acoustic alarms to deter

¹ Munns (2004), pp. 10–14; Chalk (2008), pp. 17–19; IMO fights piracy (1993), p. 79.

² Kraska (2010), pp. 109–119.

³ Vreÿ (2010), pp. 121–132.

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hijackings, and armed and unarmed guards.⁴ However, only about 48 % of vessels follow these guidelines.⁵

Because piracy is seen as a business, the goal of the pirates is to maximize the return. This can only be done by targeting vessels which are possible to take, yet still lucrative enough to justify an attempt. The questions are why do pirates decide to target certain vessels and how can shipping companies use this knowledge to thwart a successful attack. The vulnerability of a ship may be determined by the vessel's type, size, speed, freeboard, and voyage.⁶ Also to be considered are the vessel's age, flag, and composition of its crew. If a pattern between the characteristics of vessels which pirates successfully take emerges, a company can create a better shipping strategy when transporting cargo through areas known for piracy.

Thwarting such attacks has been the subject of much discussion by shipping lines and various governmental bodies. Global naval resources are not sufficient to protect and patrol all the high-risk areas. Therefore, shipping companies have been forced to implement strategies on their own to reduce the risk to the crew, the ship and the cargo.

The North Atlantic Treaty Organization (NATO) has evolved over the life of its existence. The "Strategic Concept" is the current framework under which NATO approaches new threats.⁷ In this paper we adopt this framework to address the appropriate strategies companies can use to reduce the risk of a piracy attack and reduce the risk of loss of life, injury and loss of property during such an attack.

We find the use of the NATO framework describes well how to thwart piracy attacks. Defense, deterrence, cooperation and gaining intelligence serve the firm well in reducing its exposure to loss of life, injury, property theft or damage. Maritime firms *can* help themselves reduce piracy loss risk.

2 What Is Piracy on the High Seas?

Previous research shows that the effect of terrorism has had a profound impact on international business. It impacts organizational preparedness, company strategy and performance global supply chain and distribution channels and human resources.⁸ Similarly, piracy has had a profound effect on international trade and equally impacting organizational preparedness, company strategy, etc. Piracy has been a criminal offense in the maritime field under international law as well as

⁴ BMP4 (2011).

⁵ Bateman (2010), pp. 737–751.

⁶ Id.

⁷ "Active Engagement, Modern Defense," NATO Strategic Concept, adopted 2010, available online: <www.nato.int/srategic-concept/index.html>.

⁸ Czinkota et al. (2010), pp. 826–843.

national law for centuries.⁹ The law governing piracy is codified in United Nations Convention on the Law of the Sea (UNCLOS). Further, the Convention of the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA Convention) and the subsequent International Ship and Port Facility Security Code both adopted under the International Maritime Organization's framework have gone a long way to provide the legal tools to deter and punish piracy and other unlawful acts at sea.¹⁰

2.1 What Is an Attack?

Under Article 101 of UNCLOS the following elements must be present for an act to be considered piracy under international law: (1) an illegal act of violence; (2) motivated by private gain; (3) committed by a persons on board a private ship; (4) directed against another vessel, or the persons and property on board, and (5) committed on the high seas or outside the jurisdiction of any state.¹¹ There remain questions as to what constitutes "high seas" and jurisdiction of a state which is evaluated by each case.

Piracy is viewed as a romantic occupation where Johnny Depp hurts no one and gets the girl. However, it is, in fact, a bloody ruthless and violent crime where victims have little means of protection or acute help. Piracy attacks generally include hijacking, armed robbery against the ship, maritime violence including acts which endanger navigational safety, acts of kidnapping and ransom of persons and property aboard ships including the ship itself, and theft or ship's equipment and belongings.¹² Additionally, under the SUA convention, seizure or damage to maritime property, injury, death and related matters are considered piracy offenses.¹³ What they do not include are terrorist acts. Maritime terrorism is distinguished from piracy and armed robbery against ships in terms of motives, the former being politically motivated and the latter motivated purely for private gains.¹⁴ Terrorism is meant to influence the political behavior of adversaries by attacking and threatening targets that possess symbolic rather than material significance.¹⁵

⁹ Murkherjee and Mejia (2005), pp. 33–51. Hereafter cited as "*Contemporary Issues in Maritime Security*".

¹⁰ Mensah (2005), pp. 1–15.

¹¹ Murkherjee and Mejia (2005), pp. 33–51.

¹² Abhyankar (2005), pp. 201–243.

¹³ Mbiah (2005), pp. 163–199.

¹⁴ Murkherjee and Mejia (2005), pp. 33–51.

¹⁵ Crenshaw (1988), p. 1.

Further, the motivation as to ‘private gains’ versus ‘political behavior’ remains unclear as does who defines the motivation—judge, victim or perpetrator.¹⁶ To determine the difference between piracy and terrorism, companies need enhanced analysis of threats and consultation with like-minded companies on the best practices and capabilities to thwart attacks.

The costs of piracy attacks are significant to the ship owners and the shippers. In addition to the costs of loss cargo, ransoms paid and damaged property the cost of delay, insurance and contracting increase. Insurance rates have skyrocketed. Delay due investigation and route changing add fuel and crew costs. Private contracts between shipper and ship owner reflect the shared costs.¹⁷ All of these costs impact freight rates.¹⁸

2.2 The NATO Strategic Concept and Its Application to Piracy

The Strategic Concept for the defense and security of the members of the North Atlantic Treaty Organization is the security strategy for the twenty-first century. At its adoption in November in 2010 in Lisbon, the mission statement became “Active Engagement, Modern Defense.” The best way to manage a conflict or threat is to prevent anything from happening. However, should something occur, NATO contends that it must remain ready to handle any attack or crisis.

Core principles are needed to execute the tasks for the mission of NATO. The core principles include a commitment to similar values, shared purpose and principles including the rule of law. Under the new Lisbon framework, NATO now focuses on essential core tasks of defense against aggression, deterrence to avoid crisis and cooperative security to keep the peace through information sharing.

Defense refers to guarding against assault or injury of a population and property. Deterrence refers to maintaining an appropriate mix of capabilities to discourage, restrain or prevent action. Both defense and deterrence also imply that the appropriate mix of capabilities is maintained and deployable should they be needed. Sufficient resources are needed for deployment and to sustain these capabilities. Furthermore, training and planning are necessary to maintain these capabilities. Capabilities must be maintained against the full range of attacks including physical and technological.

Cooperative security refers to promoting stability and transparency through common values. Sharing information is a key way to encouraging cooperation. A firm’s network ties are an important source of obtaining capabilities through

¹⁶ Murkherjee and Mejia (2005), pp. 33–51.

¹⁷ Todd (2005), pp. 299–317.

¹⁸ Xu (2005), pp. 319–332.

cooperation.¹⁹ The NATO promotes a wide network of relationships with countries and organizations around the globe. Relationships must be based on reciprocity, mutual benefit and mutual respect.

Further, network ties through like-minded organizations affect the efficacy of capability acquisition. Cooperation also implies sharing tactics, resources and processes. Gaining intelligence on what systems and processes work can promote cooperative security. Existing relationship frameworks can enhance capability acquisition. Adopting similar strategies or ‘best practices’ can promote stability and guard against a full range of attacks.

The International Maritime Organization (IMO), a specialized agency of the United Nations, has encouraged co-operative activities, agreements, and arrangements as part of its anti-piracy project begun in 1998.²⁰ UN-NATO Declaration signed in 2008, deepens the cooperation between these two groups. Further, the NATO-Russian relationship specifies counter-piracy as one of its shared goals.

Others have also suggested that to combat the rise in piracy effort must be made to work with international partners.²¹ The emphasis has been placed on country level coordination rather than firm level coordination. However, the maritime industry through the International Maritime Bureau is striving to encourage cooperation to combat piracy through information sharing at the firm level.

We apply the NATO framework to understanding firms’ strategies to thwart pirate attacks. Previous research finds that interstate security alliances affect the environment for international business and therefore, the strategies that firms may adopt.²² However, previous research has not specifically addressed using the framework of NATO’s strategic concept to how firms create their own strategies. Crye in his article, “Shipowners perspective on the ISPS Code,” addresses critical issues to the cruise industry for maritime security following the terrorist incident on the Achille Lauro.²³ The critical issues are (1) access control, (2) measures to prevent such as screening, (3) response capabilities, (4) waterside security, and (5) communication. One may categorize Crye’s critical issues into the NATO framework as follows: Defense strategies include response capabilities; Deterrence strategies include access control, measures to prevent, and waterside security; and Cooperative strategies and gaining intelligence include communication.

2.3 What Is a Successful Thwart of a Pirate Attack?

A successful pirate attack is one that results in gain to the pirates without consequence to them. A success thwart of a pirate attack saves life, injury and property.

¹⁹ Mahmood et al. (2011), pp. 820–848.

²⁰ Mitropoulos (2005), pp. 151–161.

²¹ Krashka and Wilson (2008), pp. 41–52.

²² Li and Vashchilko (2010), pp. 765–782.

²³ Crye (2005), pp. 73–87.

Therefore, a successful outcome from pirate attack would mean no hostage were taken or hurt, no ransom was paid, no property was stolen and/or the pirates were captured.

Defense, deterrence, gaining intelligence and cooperation may induce pirates to create new and innovative ways to attack ships. Managing the continuous vigilance needed puts a strain on resources—both human and financial. Further, we propose that adopting the NATO framework in a firm's maritime piracy strategy will increase the level of thwarting piracy attacks. Therefore, if a firm adopts and implements these strategies, the firm should see less success by the pirates. We propose the following hypotheses:

Hypothesis 1. The use of defense strategies decreases the success of pirate attacks.

Hypothesis 2. The use of deterrence strategies decreases the success of pirate attacks.

Hypothesis 3. The use of gaining intelligence strategies decreases the success of pirate attacks.

Hypothesis 4. The use of cooperation strategies decreases the success of pirate attacks.

Any one or a combination of the strategies should decrease gains by pirates.

2.4 Other Factors Affecting Pirate Attacks

The following factors have been researched as potential determinants of a piracy attacks. Therefore, these same factors may influence whether an attack is successfully thwarted.

2.4.1 Region

Different strategies may work in different regions. The location of the attack has been shown to impact the type of attack.²⁴ For example, attacks in Asia tend to be simple robberies of ship property where as attacks off the East coast of Africa involve holding the crew and ship for ransom. In other parts of the world, cargo is diverting and stolen. Furthermore, politics of the regions are different in impacting enforcement, thus impacting the success of an attack.

²⁴ Abhyankar (2005), pp. 201–243.

2.4.2 Movement/Non Movement of the Ship

Whether a ship is steaming, anchored or berthed may affect the tactics deployed by the pirates. Further, it may affect the tactics, plans, and processes of the ship under attack. Therefore, the movement of the ship may impact the success of a piracy attack.

2.4.3 Type of Ship

The type of ship may affect the tactics and strategies that can be deployed during a pirate attack. Furthermore, some ships are more valuable than others or possess more valuable property. The type of ship may also impact the type of crew available. Therefore, the type of ship may impact the ability of pirates to be successful.

2.4.4 Size of the Ship

The size of the ship may or may affect access to critical areas in the ship. It may also impact the crew and the crew's access to vulnerable parts of the ship. The size of the ship may, therefore, affect the techniques and tactics used by both pirates and crew. This, in turn, may impact the ability of pirates to have a successful attack.

2.4.5 Age of Ship

Since it is difficult to retrofit a ship with new systems and technologies after it is built, the age of ship may impact which anti-piracy technologies and systems are available to a ship. Further, newer systems and technologies have the benefit of more information about incidents in their development. Therefore, it is anticipated that the age of the ship may impact its ability to successfully thwart any attack.

2.4.6 Flag of Ship

The flag of the ship determines the legal and political response for the ship if an incident occurs. Since different countries respond differently militarily and legal to an act of piracy, the flag of the ship may impact which options are available to the ship for defense and deterrence. Therefore, it is anticipated that the flag of the ship may impact its ability to thwart pirates.

2.4.7 Type of Attack

The nature of the attack on a ship may impact the tactics and processes necessary to thwart the attack's outcome. If the pirates fire upon or board the ship, the outcomes may be more serious. Therefore, it is anticipated that the type of attack may impact the ability of the pirates to succeed.

2.4.8 Size of Crew

In the last 25 years, there has been an ever-decreasing number of crew members being employed on merchant ship. With a small number of crew the pirates' task of gaining control of the ship is made much easier.²⁵ Further, being outnumbered or threatened has an impact on the human element of the ship's workings.²⁶ Therefore, the number of crew members may impact ship's crew ability to thwart an attack.

2.4.9 Type of Cargo

The type of cargo may impact the strategies that a ship can use against a pirate attack. For example, the cargo may be used as a weapon itself such as a sealed container or chemical in the ship.²⁷ Therefore the tactics against the pirates may vary based on the cargo, and therefore, may impact the way a pirate attack can be thwarted.

2.4.10 Number of Pirates

If the size of the crew matters in the outcome of a pirate attack so does the number of pirates. The more pirates the more likely they are to outcome the ship and its crew. Furthermore, the tactics and processes available may change due the number of pirates. Therefore, the number of pirates in a specific attack may impact the ability to thwart an attack.

²⁵ Abhyankar (2005), pp. 201–243.

²⁶ Mukherjee and Mustafar (2005), pp. 277–285.

²⁷ Arendt and Engler (2005), pp. 287–298.

3 Methodology

3.1 Data Sources

For this study, all variables are available through archival information. Two sets of archival data are used to operationalize the independent, dependent and control variables. The data sets, in general, are chosen for their standardization of measurement across years and ships providing valid comparability.

3.1.1 The International Maritime Bureau

The International Chamber of Commerce-International Maritime Bureau (IMB) was established in 1981 to act a focal point in the fight against all types of maritime fraud, malpractice and piracy. The United Nations (UN) International Maritime Organization (IMO) in its resolution A 504 (XII) (9) adopted on 20 November 1981, has among other things urged all governments, interests and organization to exchange information and provide appropriate co-operation with the IMB. The IMB also has observer status with both IMO and the International Criminal Police Organization (ICPO-INTERPOL).²⁸

The IMB encourages ships involved in a piracy attack or an attempted attack to report the incident to its Piracy Reporting Centre. A “Piracy & Armed Robbery Attack Report” is available and completed online. The Piracy Centre also maintains a 24-h maritime security hotline where incidents can also be reported. This information is shared publicly via the Centre’s website to assist mariners in detecting piracy threats.

The Piracy Reporting Centre is a non-for-profit organization funded by voluntary contributions from organizations that share the goal of making the seas safer.²⁹ Since the data are self-reported and voluntary some incidents or piracy may not be identified by this source. The problem of underreporting has been noted by Menefee in his paper, “An industry perspective on ISPS Code implementation”.³⁰ However, it is estimated by the deputy director of the IMB, Michael Howlett, that 70 % of all worldwide piracy incidents are reported to the IMB making these data the most comprehensive dataset on maritime piracy attacks available to mariners. The reason an incident may not be reported is that experienced may be smaller than the cost of delaying the ship.³¹ Current data on incidents are available on the Piracy Reporting website. Historical data can be purchased from the Centre for a small fee. For this study we analyze the Centre data from January 1, 2008 to June 30, 2011. This time period is chosen due to the steep increase piracy incidents beginning in 2008.

²⁸ International Maritime Bureau, Piracy Reporting Centre, available online: <<http://www.icc-ccs.org/piracy-reporting-centre>>.

²⁹ Id.

³⁰ Menefee (2005), pp. 245–263.

³¹ Abhyankar (2005), pp. 201–243.

3.1.2 Sea-Web

Sea-web is a commercial database developed and maintained by IHS Fairplay (IHS Global Limited). It is a comprehensive dataset detailing over 179,000 ships of 100 gross tons and above including new buildings and casualties. The dataset also contains 200,000 company records and other information including shipbuilders, fixtures, casualties, port state control, International Safety Management (ISM), ship movements and port information. Data on tonnage, class, inspections, detentions, cargo, capacities, gear and machinery details is also available.³²

“IHS Fairplay manages the IMO (International Maritime Organization) Ship and Company Numbering Schemes, on behalf of the IMO, providing unique identifiers for ships and shipowners. As the originating sole source of assigning and validating these numbers, IHS Fairplay is able to guarantee an unmatched level of comprehensiveness in its datasets. IHS Global Limited states that it accepts no responsibility for and excludes all liability, to the extent permitted by applicable law, in connection with the access and use of its Sea-web website including but not limited to any liability for errors, inaccuracies, omissions or misleading or defamatory statements.”³³

3.2 Independent/Test Variables (IMB)

The independent variables are operationalized from the construct of defense strategies, deterrence strategies, gaining intelligence strategies and cooperative strategies. Defense strategies include any defensive action taken when a piracy attack is imminent such as returning fire, firing warning shots, activating fire hoses, locking crew in quarters and/or bridge or retreating to a safe room, authority intervention, confronting and threatening physically pirates, and enforcing anti-piracy measures. The information is obtained from the IMB dataset. The defense variable (‘defense’) is measured by a dummy variable (1/0) expressing whether a defensive action was taken during an attack.

Deterrence strategies include any deterring action including sounding alarms, whistles or horns, shouting, mustering and/or alerting crew, increasing the watch, directing lights, engaging evasive maneuvers including increasing speed and altering course, detaching ladders, maintaining an anti-piracy watch, using barbed wire and locking entrances. The information is obtained from the IMB dataset. The deterrence variable (‘deterrence’) is measured by a dummy variable (1/0) expressing whether deterrence actions were taken prior to and during an attack.

Cooperation strategy through the use of tactics, processes and resources include alerting port authorities, pilot stations, police, coast guard or navy, company and/or

³² IHS Fairplay, Sea-web, IHS Global Limited, available online: <<http://www.sea-web.com>>.

³³ Id.

local agent about potential or current attack or threat, alerting or warning other ships, sending a mayday or distress signal alert, investigating by authorities, capturing pirates by authorities, rescuing crew and/or taking other action, (implying that the authorities were informed), activating SSAS or firing flares. The cooperation strategy ('cooperation') variable is measured by a dummy variable (1/0) expressing whether cooperation strategy actions were taken during an attack.

Cooperation strategy also implies gaining intelligence. The construct of gaining intelligence is operationalized by measuring whether or not the ship used best practices developed its industry members during an attack. The gaining intelligence strategy ('best') is measured by a dummy variable (1/0) expressing whether a best practices was used during the reported attack. The information on what qualifies as a best practice is obtained via the IMB Piracy Center website.

3.3 Dependent Variables

The dependent variables are operationalized from the construct of a successful thwarting of a pirate attack. Successfully thwarting an attack is measured by five dummy variables (1/0) indicating whether or not the five events occurred during an attack as reported by the ship. The five events include whether hostages were taken ('hostages'), whether property was stolen ('stolen'), whether ransom was paid ('paid'), whether the pirates escaped ('escape') or whether any of these events or combination of these events occurred ('outcome'). The information on the dependent variables is obtained from the IMB dataset.

3.4 Control Variables

The following variables that represent the constructs of other factors affecting pirate attacks are operationalized as control variable variables as follows:

3.4.1 Region

Region is operationalized by nine regional options which represented the place of the attack. The information is obtained from the IMB dataset. Each variable is measured by a dummy variable (1/0) expressing whether the reported attack took place in the region. The regions are Malacca, South East Asia–Non-Malacca, Far East, Indian Subcontinent, Americas, Somalia, Gulf of Aden/Red Sea, Africa/Non Somalia and Other.

3.4.2 Movement/Non Movement of the Ship

Movement/Non movement of the Ship is operationalized by three status options which represent the movement of the ship at the time of the attack. The information is obtained from the IMB dataset. Each variable is measured by a dummy variable (1/0) expressing whether the ship is steaming, anchored, or berthed.

3.4.3 Type of Ship

Type of Ship is operationalized by 19 ship options representing the type of ship that was subject to the attack incident. The information is obtained from the IMB dataset. Each variable is measured by a dummy variable (1/0) expressing the ship type. The ship types include barge, bulk, chemical tanker, container, fishing vessel, general cargo, LNG tanker, LPG tanker, passenger ship, product tanker, refrigerated cargo, research vessel, ro-ro vessel, supply ship, tanker, tug, vehicle, yacht and other.

3.4.4 Size of Ship

Size of ship is operationalized by the ship tonnage of the ship attacked and reported in the IMB dataset. Tonnage is defined in The International Convention on Tonnage Measurement of Ships of 1969.

3.4.5 Age of Ship

Age of ship is operationalized by subtract the year the ship was built reported in the Sea-web dataset from the current year, 2011 for the ship that was attacked.

3.4.6 Flag of Ship

Flag of ship is operationalized by 83 flag options of ships reporting attacks in the study period. The information is obtained from the IMB dataset. Each variable is measured by a dummy variable (1/0) expressing the country of the flag. The country flags include Algeria, Antigua and Barbuda, Argentina, Austria, Bahamas, Bahrain, Bangladesh, Barbados, Belgium, Belize, Bermuda, Brazil, Bulgaria, Canary Islands, Cayman Islands, China, Comoros, Croatia, Cyprus, Denmark, Dominica, Ecuador, Egypt, Ethiopia, France, Germany, Gibraltar, Greece, Honduras, Hong Kong, India, Indonesia, Iran, Isle of Mann, Italy, Jamaica, Japan, Jordan, Kenya, Kirbati, Kuwait, Liberia, Libya, Lithuania, Luxembourg, Malaysia, Malta, Marshall Islands, Mongolia, Mozambique, Netherlands Antilles, Nigeria, North Korea,

Norway, Pakistan, Panama, Philippines, Portugal, Qatar, Russia, Saudi Arabia, Seychelles, Sierra Leone, Singapore, South Africa, South Korea, Spain, St. Kitt/Nevis, St. Vincent and Grenadines, Switzerland, Taiwan, Tanzania, Thailand, Togo, Turkey, Tuvalu, UAE, UK, Ukraine, USA, Vanuatu, Vietnam, and Yemen.

3.4.7 Type of Attack

Type of attack is operationalized by four dummy (1/0) variables expressing whether a pirate attack was attempted, fired upon, boarded or hijacked. The information is obtained from the IMB dataset.

3.4.8 Size of Crew

Size of crew is operationalized by the crew capacity for the ship that was subject to the attack. This information is obtained by matching the IMO ship number report to IMB to the ship information in the Sea-web dataset.

3.4.9 Type of Cargo

Type of cargo is operationalized by 12 cargo options being transported by the ship at the time of the attack reported. The information is obtained from the IMB dataset. Each variable is measured by a dummy variable (1/0) expressing the type of cargo. The type of cargo choices include bale, chemicals, containers, grain, liquid product, LPG, oil, passenger, vehicles, other cargo, multiple cargoes, and no cargo.

3.4.10 Number of Pirate

Number of pirates is operationalized by the number self reported by the ship under attack. The information is obtained from the IMB dataset.

3.5 Data Analysis

All values are expressed as means + or – SEM or percentages. Each of the variables was tested for differences between attacks and attempted attacks with and without a bad outcome by univariate statistical methodology with significance accepted at $p < 0.05$ (chi-square). Data were evaluated using a combination of chi-square analysis and logistic regression analysis. A pooled cross-sectional multivariate logistic regression analysis was used to test the hypotheses that the three strategies of defense, deterrence and cooperative security affect the probability of an

unsuccessful pirate attack. This was performed using the statistical analysis system package (SAS). For this analysis the dependent variable was the outcome of either loss of property or loss of life or injury.

Specifically, the model estimated was:

$$\text{Log}(\pi/1 - \pi) = \log O_i = \alpha + \text{Bi}(\text{Df}) + \text{Bi}(\text{Dt}) + \text{Bi}(\text{COOP}) + C + E$$

where $\log O_i$ is the log odds of a bad piracy attack outcome, $\text{Bi}(\text{Df})$ is the vector of the defense strategies, $\text{Bi}(\text{Dt})$ is the vector of the deterrence strategies, $\text{Bi}(\text{COOP})$ is the vector of the cooperative strategies, C is the control variable and E is the error term. To determine significance of each variable, the chi-square probability (p) value, which within multiple logistic regression corresponds to a standard probability value, was calculated for all variables in an analysis within their assigned category, and significance was accepted at 0.05. This chi-square probability value is reported in the tables for each independent variable in addition to the probability value from standard univariate analysis.

In conjunction with the above models, nested models based on sequential addition of significant variables along each additional time course were determined. This was performed by adding significant independent variables to subsequent models. Further analyses lead to models containing only the significant variables described in the regression equations. When variables were collinear, the strongest reasonable variable was retained. Variables that lost significance in progression equations were eliminated.

4 Results

4.1 Independent Variables

The four independent variables are tested against the five dependent variables each individually with each dependent variable. For the dependent variable, 'outcome,' one independent variable is found significant at the $p < 0.05$ level, 'deterrence.' For the dependent variable, 'hostages,' all four independent variables of 'defense,' 'deterrence,' 'cooperation,' and 'best,' are found significant at the $p < 0.05$ level. For the dependent variable, 'stolen' three variables are found significant at the $p < 0.05$ level. They are 'defense,' 'deterrence,' and 'best.' For the dependent variable, 'paid,' all four independent variables of 'defense,' 'deterrence,' 'cooperation,' and 'best,' are found significant at the $p < 0.05$ level. For the dependent variable, 'escape,' two independent variables of 'deterrence' and 'best' are found significant at the $p < 0.05$ level. Each significant variable is retained in the final model for each dependent variable.

4.2 Control Variables

The nine region variables are tested against the five dependent variables each individually with each dependent variable. No region variables are found significant at the $p < 0.05$ level for the dependent variable, 'outcome.' For the dependent variable, 'hostages,' two variables are found significant at the $p < 0.05$ level in the individual models. They are Far East and Indian Subcontinent. For the dependent variable, 'stolen,' seven variables are found significant at the $p < 0.05$ level in the individual models. They are South East Asia–Non-Malacca, Far East, Indian Subcontinent, Americas, Somalia, Gulf of Aden/Red Sea, and Africa/Non Somalia. For the dependent variable, 'paid,' four variables are found significant at the $p < 0.05$ level in the individual models. They are South East Asia–Non-Malacca, Malacca, Somalia, and Gulf of Aden/Red Sea. For the dependent variable, 'escape,' only one variable is found significant at the $p < 0.05$ level in the individual models. It is Somalia. Each significant variable is retained in the final model for each dependent variable.

The three movement/non movement of the ship variables are tested against the five dependent variables each individually with each dependent variable. No movement variables are found significant at the $p < 0.05$ level for the dependent variable, 'outcome.' For the dependent variables, 'hostages' and 'stolen,' all three variables, anchoring, steaming and berthing are found significant at the $p < 0.05$ level in the individual models. For the dependent variables, 'paid' and 'escape,' two variables are found significant at the $p < 0.05$ in the individual models. There are anchoring and steaming. Each significant variable is retained in the final model for each dependent variable.

The type of ship variables are tested against the five dependent variables each individually with each dependent variable. One type of ship variable, supply ship, is found significant at the $p < 0.05$ for the dependent variable, 'outcome.' For the dependent variable, "hostages," three variables are found significant at the $p < 0.05$ level in the individual models. They are container, fishing vessels and tankers. For the dependent variable, 'stolen,' three variables are found significant at the $p < 0.05$ level in the individual models. They are barge, tug, and bulk. For the dependent variable, 'paid,' four variables are found significant at the $p < 0.05$ level in the individual models. They are container, fishing vessel, general cargo, and tanker. For the dependent variable, 'escape,' four variables are found significant at the $p < 0.05$ level in the individual models. They are fishing vessel, supply ship, general cargo and tanker. Each significant variable is retained in the final model for each dependent variable.

The size of the ship variable is tested against the five dependent variables each individually with each dependent variable. This variable is found significant at the $p < 0.05$ level in individual models for the dependent variables, 'hostages,' 'stolen,' 'paid,' and 'escape.' The size of ship variable is not significant with the dependent variable, 'outcome.' Each significant variable is retained in the final model for each dependent variable.

The age of the ship variable is tested against the five dependent variables each individually with each dependent variable. This variable is found significant at the $p < 0.05$ level in individual models for the dependent variables, 'hostages' and 'paid.' The age of the ship variable is not significant with the dependent variables of 'outcome,' 'stolen,' and 'escape.' Each significant variable is retained in the final model for each dependent variable.

The flag of the ship variable is tested against the five dependent variables each individually with each dependent variable. Two country flags, Germany and Netherlands Antilles, are found significant at the $p < 0.05$ for the dependent variable, 'outcome.' For the dependent variable, 'hostages,' six country flags are found significant at the $p < 0.05$ level in the individual models. They are Indonesia, Liberia, Malaysia, Panama, Thailand and Yemen. For the dependent variable, 'stolen,' six country flags are found significant at the $p < 0.05$ level in the individual models. They are Antigua and Barbuda, Indonesia, Malaysia, Malta, Panama and Singapore. Eight country flags, Egypt, Iran, Kenya, Liberia, Lithuania, Seychelles, St. Vincent and Grenadines, and Togo, are found significant at the $p < 0.05$ for the dependent variable, 'paid.' For the dependent variable, 'escape,' four country flags are found significant at the $p < 0.05$ level in the individual models. They are Liberia, Taiwan, Thailand and Yemen. Each significant variable is retained in the final model for each dependent variable.

The type of attack variable is tested against the five dependent variables each individually with each dependent variable. One type of attack variable, whether the ship was hijacked is found significant at the $p < 0.05$ for the dependent variable, 'outcome.' For the dependent variable, 'hostages,' two types of attack variables are found significant at the $p < 0.05$ level in the individual models. They are whether the ship was hijacked and whether the ship was fired upon. For the dependent variables, 'stolen' and 'paid,' two types of attack variables are found significant at the $p < 0.05$ level in the individual models. They are whether the ship was hijacked and whether the ship was boarded. For the dependent variable, 'escape,' three types of attack variables are found significant at the $p < 0.05$ level in the individual models. They are whether the ship was hijacked, whether the ship was fired upon and whether the ship was boarded. Each significant variable is retained in the final model for each dependent variable.

The size of crew variable is tested against the five dependent variables each individually with each dependent variable. For only one dependent variable, 'stolen,' the size of the crew variable found significant at the $p < 0.05$ level. For all other dependent variables the size of crew variable is not significant. The significant variable is retained in the final model for the 'stolen' dependent variable.

The type of cargo variable is tested against the five dependent variables each individually with each dependent variable. No type of cargo variables are found significant at the $p < 0.05$ level for the dependent variables, 'outcome' or 'escape.' For the dependent variable, 'hostages,' two type of cargo variables are found significant at the $p < 0.05$ level. They are passengers and multiple cargo. For the dependent variable, 'stolen,' five type of cargo variables are found significant at the $p < 0.05$ level. They are containers, bale, chemicals, passengers and multiple

cargo. For the dependent variable, ‘paid,’ one type of cargo variable, no cargo is found significant at the $p < 0.05$ level. Each significant variable is retained in the final model for each dependent variable.

The number of pirates variable is against the five dependent variables each individually with each dependent variable. For two dependent variables, “hostages” and “paid,” the number of pirates variable found significant at the $p < 0.05$ level. For all other dependent variables the number of pirates variable is not significant. The significant variable is retained in the final models for the “hostages” and “paid” dependent variable.

4.3 Final Models

Tables 1, 2, 3, 4, and 5 show the results of the final models by dependent variables. In Table 1 showing the results of the ‘outcome’ dependent variable, the significance of the independent variable, ‘deterrence’ is lost in the final model. The control variables which retain their significance at the $p < 0.01$ level with a negative sign include certain types of ships (supply ships) and certain flags (German and Netherlands Antilles). The control variable which retains its significance at the $p < 0.05$ level with a negative sign is certain types of attack (hijack). The negative sign shows that all reduce the likelihood of a bad outcome.

In Table 2, showing the results of the ‘hostage’ variable, the significance of the independent variables, ‘deterrence,’ ‘best,’ and ‘cooperation’ is lost in the final model. However, the independent variable, ‘defense,’ remains significant at the $p < 0.05$ level with the appropriate negative sign. One control variable, the Panama flag, is significant at the $p < 0.1$ level with a negative sign. Three control variables, Indian Region, movement of the ship (berth) and number of pirates are all significant at the $p < 0.05$ level with Indian region and movement of the ship(berth) having a negative sign. The number of pirates variable has the expected positive sign. Two control variables, Far East Region and type of attack (hijack), are significant at the $p < 0.01$ level both with positive signs.

In Table 3, showing the results of the “stolen” variable, the significance of all the independent variables, ‘deterrence,’ ‘defense,’ and ‘best,’ is lost in the final model. Five control variables, are significant all at the $p < 0.05$ level. Four of the variables have negative signs. They are movement of the ship (anchor), movement of the ship (berth), type of cargo (chemical), type of cargo (multiple cargo) and type of cargo (container). One of the variables has a positive sign, movement of ship (steaming).

In Table 4, showing the results of the ‘paid’ variable, the significance of all the independent variables, ‘deterrence,’ ‘defense,’ ‘cooperation’ and ‘best,’ is lost in the final models. Six control variables are significant all at the $p < 0.1$ level and all with positive signs. They are Somalia Region, Aden Region, Lithuanian Flag, type of attack (hijack), and type of attack (board). In Table 5, showing the results of the ‘escape’ variable, the significance of the two independent variables is lost in the final models. No control variables are significant.

Table 1 Dependent variable-outcome

	Outcome model (deterrence)	Final model
Dependent variable		
Deterrence	1.1664***	0.6242
Defense		
Best		
Cooperation		
Chi-square	6.6612***	28.0624***
Control variables		
Region		
Movement of ship		
Type of ship		
Supply		-2.8083***
Size of ship		
Age of ship		
Flag of ship		
Germany		-2.2962***
Netherland Antilles		-2.695***
Type of attack		
Hijack		-1.2442**
Size of crew		
Type of cargo		
Number of pirates		

*Indicates significant at the 0.1 level; **Indicates significant at the 0.05 level; ***Indicates significant at the 0.01 level

4.4 Findings

The results of the statistical analysis show that in the single variable models when hostages are taken and ransom paid all strategies should be used to thwart a pirate attack because the more the strategy is invoked the more likely the attack is favorably resolved. In the case where property is stolen, the strategies of defense, deterrence and gaining intelligence work best. In the case where the pirates escape, deterrence and gaining intelligence are shown to be counterproductive. This may mean that despite all efforts the pirates circumvent all strategies. Likewise, in the case of a combination of these outcomes, deterrence may be counterproductive in that once aboard ship no deterrence action can assure foiling the pirates.

The control variables show that certain types of ships (supply) are less likely to have a successful pirate attack as are certain flags, Germany, Netherlands Antilles and Panama where as Lithuania’s flag increases success for the pirates. The type of attack, hijack, can be more likely to be favorably resolved unless hostages are taken or ransom is paid. The same is true for a boarding attack. The number of pirates also impact success in that the more pirates the more likely an attack cannot be thwarted. A ship berthed or anchored is also less likely to have a bad outcome as a steaming

Table 2 Dependent variable-hostage

	Hostages model (defense)	Model (deterrence)	Model (cooperation)	Model (best)	Final model
Dependent variable					
Deterrence		-2.4079***			-0.6771
Defense	-1.2897***				-0.9186**
Best				-2.4297***	-0.5937
Cooperation			-0.4606		0.2744
Chi-square	66.2666***	262.8479***	11.5548***	298.55***	160.4889***
Control variables					
Region					
Far east					0.9342***
Indian					-1.1995**
Movement of ship					
Anchored					-0.2046
Berthed					-1.3289**
Steaming					0.2531
Type of ship					
Container					0.182
Fishing					-0.5933
Tanker					0.4551
Size of ship					0.000005
Age of ship					0.0169
Flag of ship					
Indonesia					1.5224
Liberia					-0.1394
Malaysia					-0.201
Panama					-0.7024*
Thailand					-0.412
Yemen					-13.6939
Type of attack					
Hijack					1.8201***
Fired upon					-13.9749
Size of crew					
Type of cargo					
Passenger					-0.5767
Multiple cargo					-0.7921
Number of pirates					0.0586**

*Indicates significant at the 0.1 level; **Indicates significant at the 0.05 level; ***Indicates significant at the 0.01 level

ship. The region also have an impact, Far East, Somalia and Gulf of Aden generally bode badly for the ship where as India bodes badly for the pirates. The type of cargo can hinder success for the pirates including chemicals, multiple cargo and containers.

Table 3 Dependent variable-stolen

	Stolen model (defense)	Model (deterrence)	Model (best)	Final model
Dependent variable				
Deterrence		-1.8252***		-1.3874
Defense	-2.0739***			-0.7698
Best			-2.3186***	0.7747
Cooperation				
Chi-square	251.8513***	263.9101***	382.1882***	161.3472***
Control variables				
Region				
Non-Malacca				2.9706
Far east				0.7071
Indian				5.1081
Americas				2.7713
Somalia				3.6607
Aden				3.9008
Africa				3.0541
Movement of ship				
Anchored				-3.3613**
Berthed				-0.9757**
Steaming				3.3613**
Type of ship				
Tug				12.2441
Bulk				-0.816
Size of ship				0.000042
Age of ship				
Flag of ship				
Antigua				-0.5891
Indonesia				-0.4349
Malaysia				8.3087
Malta				-1.6695
Panama				-1.3342
Singapore				-1.5076
Type of attack				
Hijacked				27.9698
Boarded				19.6419
Size of crew				-0.0662
Type of cargo				
Bale				-3.1345
Chemical				-4.8536**
Passenger				-2.9489
Multiple cargo				-6.1272**
Containers				-2.8357**
Number of pirates				

*Indicates significant at the 0.1 level; **Indicates significant at the 0.05 level; ***Indicates significant at the 0.01 level

Table 4 Dependent variable-paid

	Paid model (defense)	Model (deterrence)	Model (cooperation)	Model (best)	Final model
Dependent variable					
Deterrence		-3.9265***			16.1355
Defense	-1.8279***				-20.3591
Best				-2.5064***	-2.486
Cooperation			-1.3524***		6.023
Chi-square	29.4094***	107.4047***	23.3612***	87.9813***	131.223***
Control variables					
Region					
Non-Malacca					2.0776
Malacca					34.1117
Somalia					25.967*
Aden					21.9094*
Africa					
Movement of ship					
Anchored					-1.9667
Berthed					
Steaming					0.2075
Type of ship					
Container					-6.3964
Fishing					3.8686
General cargo					-0.4729
Tanker					-5.8112
Size of ship					-0.00016
Age of ship					-0.2483
Flag of ship					
Egypt					22.1974
Kenya					13.9374
Liberia					3.7688
Lithuania					29.3435*
St. Vincent					10.8996
Togo					5.5956
Type of attack					
Hijacked					30.7524*
Boarded					24.3752*
Size of crew					
Type of cargo					
No cargo					0.4138
Number of pirates					0.8996*

*Indicates significant at the 0.1 level; **Indicates significant at the 0.05 level; ***Indicates significant at the 0.01 level

Table 5 Dependent variable-escape

	Escape model (deterrence)	Model (best)	Final model
Dependent variable			
Deterrence	2.186***		0.6711
Defense			
Best		1.6541***	0.2461
Cooperation			
Chi-square	50.7451***	38.1076***	10.2371
Control variables			
Region			
Somalia			0.4278
Movement of ship			
Anchored			0.0223
Steaming			-0.187
Type of ship			
Supply			11.3846
Fishing			11.2545
General cargo			-0.5801
Tanker			9.7492
Size of ship			0.000023
Age of ship			
Flag of ship			
Liberia			10.2605
Taiwan			
Thailand			10.7775
Yemen			12.6268
Type of attack			
Hijacked			-0.3666
Fired upon			-0.8125
Boarded			0.5809
Size of crew			
Type of cargo			
Number of pirates			0.1746

*Indicates significant at the 0.1 level; **Indicates significant at the 0.05 level; ***Indicates significant at the 0.01 level

5 Conclusion

The results of this research should help shipping firms decide which strategies they should adopt to thwart success in piracy. Our results support the use of defensive and deterrence measures and support the use of organizational networks to transfer capabilities and knowledge in maritime security. Further, these findings may have marine insurance implications.

Crye notes that all security measures must be consistent, sustainable and flexible and our findings support this statement.³⁴ The measures used must follow the

³⁴ Crye (2005), pp. 73–87.

circumstances. Further research is needed to address new technologies and practices to judge them not only for business efficacy but also for their vulnerability to criminal risk including cyber attacks disrupting supply chain networks.³⁵

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³⁵ Mukundan (2007), pp. 1–12.

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Risk Modelling of Non-Lethal Response to Maritime Piracy and Estimating Its Effect

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1 Introduction

Piracy now affects certain geographical areas around the world, for example South America and the Caribbean, West Africa, East Africa and Indian Ocean and South China Sea. Pirates today operate both in ports and on territorial as well as international waters. Their crimes are distinguished in three types of objectives: the first is robbery ranging from cases of petty theft to armed assault accompanied by threats and violence, forcing the crew to hand over valuables, equipment, or cargo. The second is stealing both the cargo and ship altogether, without keeping her crew. The third is hijacking both the vessel and her crew until a ransom is paid.¹ In 2009, out of the total 406 reported attacks worldwide, more than half (62 %) were attributed to Somali pirates.² Somali piracy around the Horn of Africa area in particular has been conducted predominantly with the third objective in mind, hijacking both ship and crew for ransom, and appears to be growing. The hijacked vessels are sometimes used as mobile bases (“mother ships”) for mounting further attacks on the open sea, far from shore, with the kidnapped crews held onboard as “human shields”. Their mode of operation has escalated dramatically in a few years. Ransom demands have grown from several 1,000 dollars and quick release in a few days to several million dollars today and protracted negotiations for many months. Their attacks are increasingly becoming violent and of greater reach,

¹ Studies and Threat Analysis Section, Policy Analysis and Research Branch, Division for Policy Analysis and Public Affairs, “Maritime Piracy,” in UNODC (2010), pp. 193–200.

² Reports on Piracy and Armed Robbery, available online: <http://www.imo.org/OurWork/Security/PiracyArmedRobbery/Pages/PirateReports.aspx>.

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evading international militaries by operating from mother ships far from their home and targeting vessels irrespective of type and size.³

The ultimate solution of Somali piracy lies on shore of course, with the restoration of law and order along its coasts, denying the pirates safe haven, which unfortunately seems to be very unlikely any time soon. In the mean time, some mitigation for seafarers can be had through self-protective measures, or “target hardening” as the military sometimes has it. Much could be said about the arming of seafarers and the use of private armed guards onboard, both in their favour and against; with arguments similar to that of a civilian’s right to defend his home (ultimately one faces the inevitable further escalation of violence as the pirate mode of operation becomes correspondingly more aggressive). Apart from arming themselves in these ways, however, the commercial shipping industry is being advised to adopt a protective stance through vigilance⁴ on board for early detection of pirates and the implementation of recommended best management practices⁵ whenever transiting in pirate risk areas (whose domain continues to increase as the pirate mode of operation adapts to policing and industry vigilance).⁶ Much is evidently gained from high readiness, drill training, and the use of passive countermeasures.

For greater protection still, some envision the use of sensors and non-lethal effectors in a layered defence system. A layered defence system of sensors and effectors has been investigated within the 7th FP EC Research Project SECTRONIC.⁷ The SECTRONIC system includes observation, communication and protection of critical maritime infrastructures such as passenger and goods transport, energy supply and the ports themselves. Its objective is to develop an integrated system for the ultimate security of maritime infrastructures. Its mission is to establish a security zone around the protected infrastructure (i.e. a vessel), both above water against small boats and underwater against underwater intruders, for 24 h surveillance that warns the vessel’s master, navigating officer, operator and relevant authorities of potential threats, and which is capable of launching defensive response measures. It is likely that some of the components of such a system (observation, tracking, report, display and characterisation of security related

³ See n. 1 above.

⁴ Piracy and Armed Robbery against Ships, Recommendations to Governments for preventing and suppressing piracy and armed robbery against ships, London: International Maritime Organization (IMO) MSC.1/Circ.1333, (26 June 2009). Piracy and Armed Robbery against Ships, Guidance to ship owners and ship operators, shipmasters and crews on preventing and suppressing acts of piracy and armed robbery against ships, London: IMO MSC.1/Circ.1334 (23 June 2009).

⁵ Piracy and Armed Robbery against Ships in waters off the coast of Somalia, Best Management Practices to Deter Piracy off the Coast of Somalia and in the Arabian Sea Area developed by the industry, London: IMO MSC.1/Circ.1337 (4 August 2010). Society of International Gas Tanker and Terminal Operators Ltd (SIGGTO) et al. (2011). Implementation of Best Management Practice Guidance, Resolution MSC.324(89) (adopted on 20 May 2011), London: IMO MSC 89/25/Add.4 Annex 29.

⁶ Matthews (2011).

⁷ <http://www.sectronic.eu/>.

information, response procedures and actions to be undertaken) may 1 day become mandatory requirements, motivated at an international (IMO) level, for instance, through risk-based methodologies like those featuring in a Formal Safety Assessment (FSA).⁸ This paper describes what a risk model for layered defence might look like in the second step of an FSA, and to estimate the risk reduction effect obtained by a layered defence system like SECTRONIC or other system (third step of an FSA). The paper's structure is as follows: first some options for non-lethal response are reviewed, then the classical event tree modelling of a pirate attack is introduced, then the effect of non-lethal response in risk reduction is added, then follows a worked example, discussion of the work, and finally some conclusions.

2 Response Procedures and Non-Lethal Equipment

Foremost in any pirate countermeasures may be the role of deterrence through target shifting.⁹ Where pirates believe they have many targets from which to choose their victim, that is, they may be convinced by an early show of readiness to voluntarily break off an attack in the expectation that easier targets are likely to come along soon enough. Leaders in vigilance therefore have much to gain, while the unprepared stand to suffer. The early show of readiness may include elements of active non-lethal opposition, using barbed wire and water cannon (fire hoses), some of which are now in use, plus ostensibly non-lethal weapons of various kinds, used to a much lesser extent, perhaps experimentally, including¹⁰

- Long-range acoustic devices (suitable for warning only)
- Optical dazzlers (adapted unsuccessfully thus far for maritime use from military vehicle check-points on land operations, with maritime versions currently under development and testing)
- Electric fences
- Small-boat entanglement systems

Ultimately the goal of non-lethal weapons is to favourably influence the behaviour of the attacker without lasting harm. The behaviour change may be voluntary, as in deterrence, or it may be involuntary, through forced incapacitation in some way, of person or equipment. There is inevitably a degree of uncertainty about the effectiveness of the non-lethal technologies for either voluntary or non-voluntary compliance for ship self-protection. On the one hand, the threshold for voluntary behavior change depends in large part on the resolve and stamina of

⁸ Formal Safety Assessment, Consolidated text of the Guidelines for Formal Safety Assessment (FSA) for use in the IMO rule-making process (MSC/Circ.1023-MEPC/Circ.392), London: IMO MSC 83/INF.2.

⁹ Kessel (2010).

¹⁰ Kessel and Strode (2009, 2010) and Kessel and Pastore (2010).

the attacker, which are generally unknown. On the other hand, the resistance against incapacitation depends on the effectiveness of the non-lethal weapon (perhaps reduced in chaotic close engagements), and on the attacker's countermeasures against the weapon. So long as uncertainty remains, the best non-lethal principle of defence may be the use of several measures in a layered approach to escalation of force, aiming first for preferable voluntary compliance or deterrence (dealing easily in this way with "false alarms" in particular), and, failing voluntary compliance, aiming ultimately for incapacitation.

If the response measures are not ad hoc but properly designed, then each layer in the defence navigates a portion of a parameter space somewhere between voluntary compliance and incapacitation as shown schematically (Fig. 1). The vertical axis is the (unknown) determination of the attacker. The horizontal axis is the effect expected from one or more non-lethal weapons in a layered defence. The figure was developed as a conceptual tool to illustrate the complex parameter space through which new response measures using non-lethal devices must navigate in layered defence; the effect of each layer possibly acting by design in a different portion of the parameter space. Thus a low level of early force (warning only) may be sufficient for dealing with non-pirates ("accidental approach") at the lower left of the figure, while at the other extreme, harmful or lethal effects might be delivered, perhaps unintentionally through misuse of non-lethal weapons at close range to very determined attackers at the upper right in the figure. "Aggravated approach" indicates the ineffectual use of a non-lethal weapon against a determined attacker, such as the bombardment of an attacker with intense light or sound, no doubt aggravating an attacker, but without stopping them. It is a portion of the space to be avoided since, once onboard, the attacker may wish to retaliate in response to the discomfort felt. The figure was developed as part of the SECTRONIC project where a context was required to describe the expected outcome from a number of different non-lethal devices for maritime use.¹¹ The figure is included here to indicate the complexity of the parameter space in which response measures generally fall, and should ultimately be intentionally mapped by the designers of non-lethal response measures, in order to provide a conceptual link when going from non-lethal response technologies generally, to a progressive or layered concept for defence, and then to an associated risk model.

3 Risk Modelling of a Piracy Attack Scenario

Typically, a risk assessment is applied to evaluate the (safety) performance of a system, activity or installation. It is performed with the stated objective to determine whether it is necessary to take measures for reducing the risk from possible threats, which solutions can be applied and to support investment allocation

¹¹ Strode and Kessel (2009).

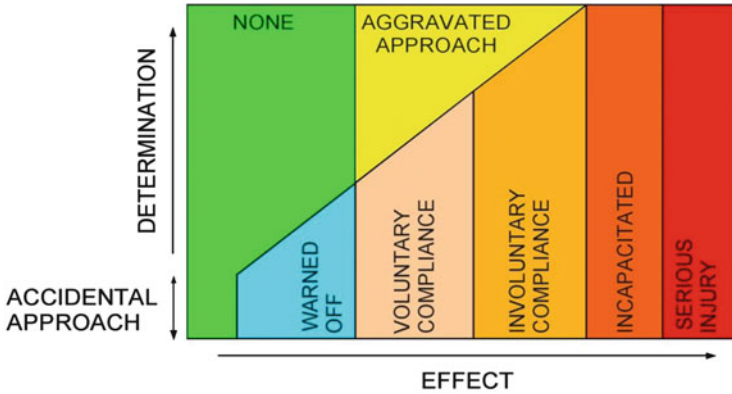


Fig. 1 The parameter space in which non-lethal response measures and layered defence can operate. The determination of the attacker (*vertical axis*) determines the effects that one may see in practice. Their determination is generally unknown, resulting in uncertainty about the effectiveness of non-lethal technologies that do not incapacitate the attacker

decisions.¹² If a risk assessment is conducted in the context of developing or evaluating rules and regulations within the marine industry, the process is addressed as Formal Safety Assessment (FSA)¹³; whereas if it is applied for showing the compliance of individual offshore installations is denoted as Quantitative Risk Assessment (QRA).¹⁴ This paper is aimed at describing the risk assessment performed in order to investigate if the non-lethal response equipment identified previously can be implemented as mandatory requirement and admittedly is the first application of the FSA approach to maritime security. To this end, a detailed investigation of the consequences concerning human life (crew fatalities/injuries) and the progression of a maritime piracy scenario can be modelled by an event tree (risk model), a logic diagram used to analyse the effects of an event and to understand how event outcomes escalate and how safeguards (countermeasures) are deployed to mitigate or prevent these outcomes. The diagram shows the probability of all plausible circumstances linked to those counter-piracy actions (response) required to be taken before and after the initiation of an attack to mitigate or prevent escalation. Figure 2 illustrates an event tree representing all the response possibilities of a vessel being attacked when under-way, consisting of four layers. Data for quantifying the parameters in each of these branches can be obtained by statistics, expert judgement, point estimates or probability distributions, similarly to developing risk models for maritime safety applications.¹⁵ A short explanation for each branch is given below taking into account the response tactics outlined in the previous section.

¹² Det Norske Veritas (DNV) (2002).

¹³ See n. 8 above.

¹⁴ Vinnem (2007).

¹⁵ Psarros (2009), Kristiansen (2005), and Wang and Trbojevic (2007).

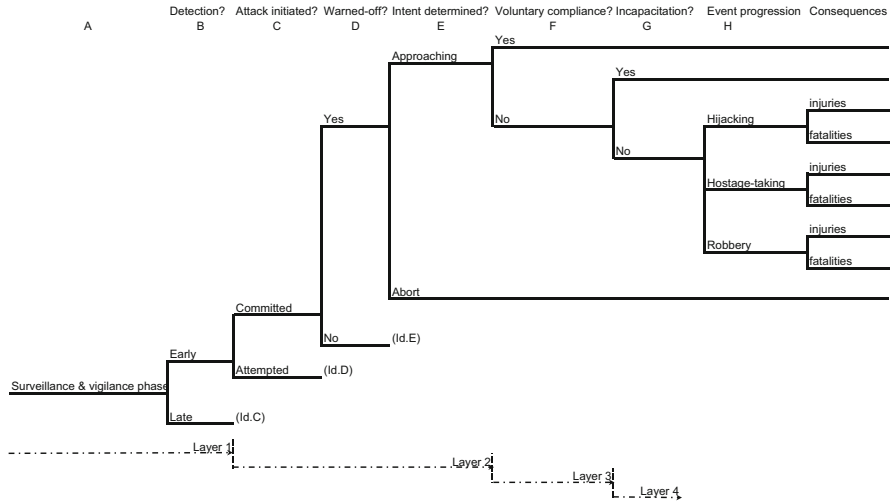


Fig. 2 Event tree developed to estimate the effect of non-lethal response to a maritime piracy attack. The capture “Id.X” represents the identical tree branches from section X and afterwards

The first point of defence (layer 1) is referred to sections A and B (Fig. 2) and is composed by the surveillance, vigilance and detection phases, which if implemented adequately; are regarded as the most effective deterrent. As instructed by the ship security plan,¹⁶ prior to commencing transit of a piracy prone area, it is recommended that preparations are made to support the requirement for increased vigilance by:

- Making arrangements to ensure additional lookouts for each watch. Additional lookouts should be fully briefed.
- Ensuring that there are sufficient binoculars for the enhanced bridge team.
- Considering night vision optics, if available.
- Operating surveillance radar, which is part of the integrated response package.

Maintaining vigilance is essential. Too often the first indication of an attack has been when the attackers appear on the bridge or in the master’s cabin. Advance warning of a possible attack will give the opportunity to sound alarms, alert other ships and the coastal authorities, illuminate the suspect craft, undertake evasive manoeuvring or initiate other response procedures. Signs that the vessel is aware she is being approached can deter attackers. It is particularly important to maintain a radar and visual watch for craft which may be trailing the vessel when underway but which could close in quickly when mounting an attack. Therefore, identifying and characterising possible anomalies or irregularities in the movement of detected and tracked contacts can be advantageous for enhancing the threat awareness of a vessel when underway. Examples of such behaviour may be sudden changes in

¹⁶ See n. 4 and 5 above.

speed and/or course, suspicious stops or deviations in traffic lanes or separation schemes. Also, small craft which appear to be matching the speed of the vessel on a parallel or following course should always be treated with suspicion. In this sense, time and distance are granted firstly in implementing effectively the ship security plan and secondly in alerting relevant authorities. When a suspect craft has been noticed, it is important that an effective all-round watch is maintained for fear the first craft is a decoy with the intention to board the vessel from a second craft while attention is on the first. Further, early detection [i.e. from 5 nautical miles (nm)] of a suspect craft is extremely important and can lead to effective deterrence of the pirates' opportunistic element of surprise. Late detection is associated with the visual horizon, for example distances less than 2–3 nm.¹⁷

The second point of defence (layer 2) is referred to sections C, D and E (Fig. 2) and is composed by the attack initiation, warning phase and determination of the approaching contact intention. The crew is aware that an attack may be in progress and the contact is warned so that its intent becomes obvious. After the warning phase, the contact should be continuously monitored for determining if an attack is imminent and the crew proceeds with the implementation of the security plan. It is noted that only attackers with determined intent to continue their attack are considered, i.e. if innocent contacts are encountered, then they move away immediately. Additionally, in the abort phase, the attackers back-off immediately. The third point of defence (layer 3) is voluntary compliance (section F of Fig. 2), where the intensity of the non-lethal response is increased. The approaching target is considered a genuine threat and the security plan is implemented accordingly, i.e. non-essential crew are mustered at a pre-arranged safe location. In the event that all previous phases have failed to deter the approaching threat, the stipulated procedures in the security plan should be followed.¹⁸ This is the last point of defence (layer 4, section G of Fig. 2) and the appropriate incapacitating device (non-lethal) should be deployed. A similar engagement pattern could be plotted on the parameter space of Fig. 1 with each phase occurring with increased effect—possibly leading to the desired behavioural response.

The possibility of the attack not being prevented is portrayed at section H of Fig. 2, leading to three possible outcomes: (1) hijacking, (2) hostage-taking and (3) robbery. Using the definition of conditional probabilities, the probability of such an outcome can be expressed as:

$$\begin{aligned} & P(E_A \cap E_B \cap \dots \cap E_{H_k}) \\ &= P(E_{H_k} | E_G \cap \dots \cap E_A) \cdot \dots \cdot P(E_C | E_B \cap E_A) \cdot P(E_B | E_A) \cdot P(E_A) \end{aligned} \quad (1)$$

By considering that the events of surveillance and detection $\{A, B\}$, attack by pirates $\{B\}$, initiation of some form of response by the crew $\{D, E, F, G\}$ and the progression $\{H_k\}$ are independent, then the probability for a specific scenario can be calculated. Hence, if $\{E_A, \dots, E_{H_k}\}$ are independent, then:

¹⁷ See n. 4 and 5 above.

¹⁸ See n. 4 and 5 above.

$$P(E_{H\kappa} | E_G \cap \dots \cap E_A) = P(E_{H\kappa}) \tag{2}$$

and

$$P(E_A \cap E_B \cap \dots \cap E_{H\kappa}) = P(E_A) \cdot \dots \cdot P(E_{H\kappa}) = \prod_{j=A}^{H\kappa} P(E_j) \tag{3}$$

It is pointed out that the probabilities $P(E_j)$ in each section of the event tree (Fig. 2) are calculated by analysing the available data (reports on piracy).¹⁹

However, the chain of events described by the event tree (Fig. 2) and characterised by Eq. (3) (prior probability) can happen only when assuming the event that a vessel has been targeted $\{T\}$ occurs (evidence). Therefore, the probability updating of an event of type H_κ after the evidence is accumulated (posterior probability) is denoted:

$$P\left(\bigcap_{j=A}^{H\kappa} E_j | T\right) = \frac{\prod_{j=A}^{H\kappa} P(E_j)}{P(T)} \tag{4}$$

whereas

$$P\left(T | \bigcap_{j=A}^{H\kappa} E_j\right) = 1 \tag{5}$$

Since the probability calculated from Eq. (4) is referred to all the vessels that have been attacked and is obtained from observations (i.e. reports on piracy²⁰), the occurrence of a successful outcome of an attack for a vessel for a year (per ship-year) can be obtained as:

$$\text{freq}_{H\kappa} = \frac{P\left(\bigcap_{j=A}^{H\kappa} E_j | T\right)}{\sum_{i=Y_1}^{Y_n} N_i} \tag{6}$$

with

κ the outcome of an attack ($\kappa = 1$: hijacking, $\kappa = 2$: hostage-taking and $\kappa = 3$: robbery)

¹⁹ See n. 2 above.

²⁰ See n. 2 above.

$P\left(\bigcap_{j=A}^{H_k} E_j | T\right)$ the probability that the outcome of an attack occurs during the period

from year Y_1 until year Y_n assuming the vessel has been targeted and following the chain of events described by the event tree, which is natural to compute or estimate from observations²¹

N_i the number of vessels trading worldwide in the year i

The consequences of a piracy scenario can have a negative impact on human life (fatalities and/or injuries) as well as property (ransom, stolen cash, personal belongings and ship’s equipment, etc.). Since in this paper only the consequences to the life of the vessel’s crew are examined, the associated risk (fatalities and/or injuries) can be determined by²²

- Single statistics representing risk
 - Individual risk (IR)—the risk associated with a piracy attack resulting to an event of type H_k at which the crew member may be expected to experience on-board the vessel in a given exposure period and sailing worldwide):

$$IR_{\text{crew member } H_k} = \text{freq}_{H_k} \cdot P_{\text{casualty } H_k} \cdot T_{\text{crew member}} \tag{7}$$

with

freq_{H_k} frequency of the undesired event H_k (calculated from Equation 6)
 $P_{\text{casualty } H_k}$ resulting casualty probability by an event of type H_k
 $T_{\text{crew member}}$ the crew member’s fractional exposure of risk in that type of event H_k (i.e. annual per person)

- Activity specific period mortality rate in terms of societal risk (Potential Loss of Life—PLL), which is the risk experienced by the whole crew exposed to the undesired event of type H_k . It measures the number of crew casualties caused by piracy which occur while the vessel is attacked:

$$PLL_{H_k} = \frac{C_{H_k}}{\sum_{i=Y_1}^{Y_n} N_i} \tag{8}$$

With

κ the outcome of an attack
 C_{H_k} the numbers of casualties (fatalities and/or injuries) during the piracy attack and as a result of the event type H_k which is assumed to be occurring during the period from year Y_1 until year Y_n
 N_i the number of vessels trading worldwide in the year i

²¹ See n. 2 above.

²² Bedford and Cooke (2004). See n. 8 above.

- Frequency vs. consequence lines (societal risk), known as F–N diagram, which is a continuous graph representing the cumulative distribution of multiple fatality events in a logarithmic scale. Hence, it is a plot of the cumulative frequency F of various scenarios against the number N of casualties associated with the modelled incidents. F is used to denote the sum of the frequencies of all individual events that could lead to N or more casualties. The plot is cumulative in the sense that for each frequency, N is the number of casualties that could be equalled or exceeded.²³

In the first representation of societal risk (PLL), the consequences (casualties) have been averaged excluding the possibility that an event will result in higher or lower numbers of casualties. Though, the assessment of risk depends also on the balance between low frequency/high casualty events on the one hand and high frequency/low casualty events on the other. In this sense, through the F–N diagram is assessed not only the average number of casualties but also the risk of incidents where many people are harmed at once. Thus, the F–N diagram is the graph of the function giving the frequency of events with N or more casualties per year per vessel plotted against the number of casualties N . However, it is emphasised that for achieving a full risk picture it is necessary to look for both individual and societal risk.²⁴

4 Estimating the Effect of Non-Lethal Response

The various elements of the non-lethal response correspond to a potential counter-measure (Risk Control Measure—RCM) reflecting the layered defence approach. Hence, the complete package is comprised of the following characteristics, addressed at the relevant event tree sections (Fig. 2):

- RCM surveillance/detection (B)
- RCM engagement (sub phases corresponding to the behavioural responses shown in Fig. 1)
 - Warning (D)
 - Intent determination (E)
 - Voluntary compliance (F)
 - Incapacitation (G)
- The combined effect of all RCMs contributes in preventing and mitigating escalation of the attack (event progression, H) and is referred to as Risk Control Option (RCO).²⁶

²³ Saw et al. (2009).

²⁴ See n. 23 above.

²⁵ See n. 8 above.

²⁶ See n. 8 above.

The attacker's response, behaviour and intention when encountering each RCM are generally unknown—though his estimated level of determination increases following his lack of compliance at subsequent phases of the engagement. Due to the uncertainty associated with the attacker's state of mind, values (scores) are assigned to the variables describing how a possible attacker could observe the physical protection and the RCM's performance with respect to the point defence provided by the RCM, i.e. surveillance and deterrence, warning, compliance and incapacitation. The scoring is a brainstorming exercise involving a team of professionals with knowledge and experience on a specific subject, since few individuals have expertise on every aspect. Thus, a workshop needs to be organised, which is aimed at shading light into these uncertainties, for instance how effectively an RCM influences the decision of an attacker, by providing scores (numerical) values to the following cognitive variables²⁷:

- It is assumed that the attacker has a perceived observable quality threshold ($\alpha_{RCM(j)}$) of the target's protection state. For example, a low score is assigned if the vessel shows evident lack of protective measures and/or visibly low state of alert.
- It is assumed that the attacker has a perceived accuracy threshold ($\beta_{RCM(j)}$) of the target's protection measure. For example, a low score is assigned if the attacker continues approaching the target.
- It is assumed that the attacker has a perceived reliability threshold ($\gamma_{RCM(j)}$) of the target's protection measure. For example, a low score is assigned if the attacker continues approaching the target.
- It is assumed that the attacker has a perceived tolerance threshold ($\delta_{RCM(j)}$) representing the acceptance of failure. For example, a low score is assigned if the attack is aborted.

with j representing the relevant section of the event tree.

The four cognitive variables attempt to translate how a possible attacker observes, perceives and responds to the physical world when an RCM is encountered, for example the degree to which an RCM endangers the attacker's mission objectives (i.e. successful commitment of the piracy attack). The assigned scores may fall into the ranges below:

Very low	0.0–0.2
Low	0.2–0.4
Moderate	0.4–0.6
High	0.6–0.8
Very high	0.8–1.0

The necessity for assigning scores within the five ranges is explained by the following hypothetical example: $\alpha = 0.7$ (high), it is assumed that the pirates observe a vessel where it is obvious that protective measures are taken (i.e. barbed

²⁷ See n. 9 above. Howard (2005).

wire, additional lookouts); $\beta = 0.2$ (very low), it is assumed that the pirates approach the vessel; $\gamma = 0.3$ (low), the pirates notice an intrusion point at the stern of the vessel and are in close proximity; $\delta = 0.9$ (very high), the pirates start boarding the vessel. Of course, unlimited possibilities can be realised—out of the paper’s scope—aimed at evaluating the cognitive parameters and not understanding fully the pirates’ intention and behaviour.

In order to deal with the inherent uncertainty of the cognitive parameters, the final result is produced by simulation from a user-predefined distribution (i.e. normal), for instance the mean μ and standard deviation σ of the assigned scores from the workshop. In this sense, Monte Carlo simulation is applied, which in its simplest form is a random number generator that is useful for forecasting, estimation and risk analysis. A simulation calculates numerous scenarios of a model (usually described by a formula or function), where values for each parameter in the model are randomly selected, based on the probability of that value occurring for the specific parameter. Then the model’s response is obtained, its value is recorded and numerous scenarios are calculated by repeatedly picking values from the distribution for the uncertain variables and using those values for the model. Each repetition will result in a value for the model response and these responses will be used to construct the probability distribution of the final outcome. The number of iterations in Monte Carlo simulation depends on the required level of accuracy and the available computing power. The larger the number of iterations, the better the result, until the simulation starts to converge and any additional simulation does not affect the final distribution.²⁸

The impact of each RCM can be quantified by combining the four qualitative scores into one metric, described by the equation below, which follows the logic of Eqs. (1)–(3):

$$\Omega_{RCM(j)} = \alpha_{RCM(j)} \cdot \beta_{RCM(j)} \cdot \gamma_{RCM(j)} \cdot \delta_{RCM(j)} \quad (9)$$

with j representing the relevant section of the event tree.

The output of Eq. (9) is used for evaluating the effect of the RCM by reviewing the event tree branches with respect to the point defence provided by the RCM, for example how many attacks could have been avoided (percentage) referring to the deterrence/delay/deny effect. It needs to be stressed again that the purpose of Eq. (9) is not to completely understand the attacker’s response, behaviour and intention, but instead to evaluate the attacker’s “state of mind”.

For the surveillance/detection phase, the impact of the RCM can be quantified by the following equation:

²⁸ Modarres (2006).

$$\Omega_{RCM(j)} = \lambda_{RCM(j)} \cdot \zeta_{RCM(j)} \quad (10)$$

with:

$\lambda_{RCM(j)}$ is the vigilance factor on behalf of the vessel's crew which has been determined from a previous study.²⁹

$\zeta_{RCM(j)}$ is a cognitive parameter related to the crew's confidence in the equipment's performance with respect to threat identification and tracking where its score has been assigned during the brainstorming session.

j representing the relevant section of the event tree.

The RCO effect with respect to the event progression can be estimated in a way similar to modelling the dependencies between the components of a reliability network³⁰:

First option (standard equipment—S): response associated with the surveillance/detection phase only (series system in a sense that if no sufficient time and distance are granted, then the crew have limited space for taking action, where it is likely that the attack may be successful):

$$\Psi_{RCO(H)S} = \Omega_{RCM(B(n))} \cdot (1 - p(\kappa)) \quad (11)$$

Second option (plus the optional equipment—S + O): which is the response associated with the inclusion also of the deterrence/delay/deny equipment (parallel system, with the D and E sections in series):

$$\Psi_{RCO(H(n))S+O} = \left\{ \begin{aligned} &1 - \left(1 - \Omega_{RCM(B(n))}\right) \cdot \left(1 - \Omega_{RCM(D(n))} \cdot \Omega_{RCM(E(n))}\right) \cdot \\ &\cdot \left(1 - \Omega_{RCM(F(n))}\right) \cdot \left(1 - \Omega_{RCM(G(n))}\right) \end{aligned} \right\} \cdot (1 - p(\kappa)) \quad (12)$$

It is noted that the package augmented with all the RCMs offers bigger redundancy, since the deterrence effect of the different engaged measures is applied through the layered defence.

With:

$\Omega_{RCM(j(n))}$ is the RCM impact of the relevant event tree section j with branch n .

$p(\kappa)$ is the attack success probability depending on the vessel type with respect to the outcome κ of an attack and has been defined in a previous study.³¹

²⁹ Psarros et al. (2011), pp. 309–335.

³⁰ Andrews and Moss (2002) and Kumamoto and Henley (1996).

³¹ See n. 29 above.

5 Example Case

The application of the risk model is demonstrated for a specific vessel segment, for example chemical tankers. From year 2000 until year 2009, the reported number of attacks with known vessel details and information about the incident was 282.³² The fleet population (ship-years) is 13,253.³³ The outcome frequencies of an attack, the associated consequences and the risk picture during the 10-year investigation period are given in Table 1, where an equivalency ratio of one fatality to ten injuries has been used.³⁴ The probability of a vessel being targeted $P(T) = 1/102$ can be estimated from shipping movements studies.³⁵

The quantification of the RCO effect is shown in Table 2. In order to deal with the uncertainty of the estimated values, the final result is obtained from a normal distribution. The interpretation of the numbers is that when the standard equipment is installed on a chemical tanker, the outcome of a piracy attack could be reduced from 5 until 9 %. In case that the optional equipment is also installed, the reduction could be from 9 until 15 %. The success probability of an attack for a chemical tanker can be empirically calculated by³⁶:

$$p(\kappa) = \frac{\exp(1.1219 - 0.2441 \cdot \kappa)}{1 + \exp(1.1219 - 0.2441 \cdot \kappa)} \quad (13)$$

The estimated frequencies per event progression after the application of the response package are provided in Table 3 with the IR and PLL for the two options. For a direct comparison, the F–N curve and IR with the established acceptance criteria³⁷ for the investigated vessel type is illustrated in Figs. 3 and 4 respectively, where the risk picture is demonstrated before and after the usage of countermeasures. For a discussion why the same criteria with safety are adopted, reference to previous work should be made.³⁸ It needs to be stressed that the acceptance criteria are the same for all risks (safety and security). In addition, the F–N diagram (Fig. 3) indicates that the security risk is small in terms of fatalities, in comparison to the F–N curves for safety risk where multiple fatality events can occur.³⁹

³² See n. 2 above.

³³ Lemper (2009).

³⁴ Norway (2000).

³⁵ Mandryk (2010) and Bateman et al. (2006).

³⁶ See n. 29 above.

³⁷ See n. 34 above. Skjong et al. (2007).

³⁸ Psarros et al. (2009), pp. 149–163.

³⁹ See n. 34 above.

Table 1 Results from risk model (historical data)

Event progression	Nr of incidents	Outcome frequencies	Consequences		PLL (fat/ship year)	IR (crew = 15)
			Injuries	Fatalities		
Hijacking	16	4.3667E-04	1		7.5455E-05	3.3509E-05
Hostage-taking	34	9.2793E-04	6	2	1.9619E-04	1.0553E-04
Robbery	232	6.3318E-03	12		9.0546E-05	6.0649E-06
Total	282		18	3	3.6218E-04	1.45103E-04

Table 2 Quantification of RCO effect (300,000 repetitions, 99 % confidence interval)

Event progression branch	Event tree section (RCM effect)	Ψ	
		μ	σ
<i>First option</i>			
Hijacking	B _{Early} , D, E, F, G	0.0618	0.0295
Hostage-taking	B _{Early} , D, E, F, G	0.0531	0.0253
Robbery	B _{Early} , D, E, F, G	0.0450	0.0214
Hijacking	B _{Late} , D, E, F, G	0.0887	0.0309
Hostage-taking	B _{Late} , D, E, F, G	0.0761	0.0265
Robbery	B _{Late} , D, E, F, G	0.0645	0.0225
<i>Second option</i>			
Hijacking	B _{Early} , D, E, F, G	0.1290	0.0868
Hostage-taking	B _{Early} , D, E, F, G	0.1108	0.0745
Robbery	B _{Early} , D, E, F, G	0.0939	0.0631
Hijacking	B _{Late} , D, E, F, G	0.1494	0.0839
Hostage-taking	B _{Late} , D, E, F, G	0.1284	0.0721
Robbery	B _{Late} , D, E, F, G	0.1087	0.0611

Table 3 Risk model results by considering the response measures

Event progression	Frequency		PLL	
	First option	Second option	First option	Second option
Hijacking	4.2408E-04	3.4369E-04	7.0792E-05	6.5721E-05
Hostage-taking	9.1380E-04	6.6802E-04	1.8483E-04	1.7095E-04
Robbery	6.3022E-03	4.4976E-03	8.6324E-05	8.1932E-05
Individual risk	First option		Second option	
	1.3117E-04		1.0588E-04	

It is observed from Fig. 3 that the historical piracy societal risk is within the As Low As Reasonably Practicable (ALARP) area. Thus, risk should be reduced to meet economic responsibility and it is to be reduced to a level as low as reasonably practicable by the applied countermeasures. These risk reduction measures should be technically practicable and the associated costs should not be disproportionate to the benefits gained. It is also demonstrated that the provided response by action of

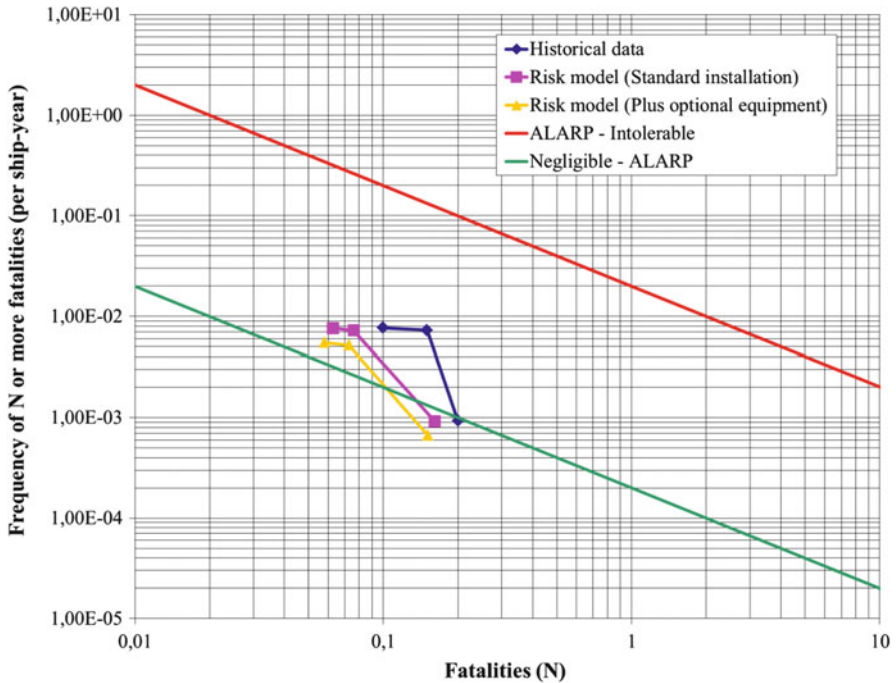


Fig. 3 F–N diagram for chemical tankers together with the established risk acceptance criteria boundary lines. It is noted that the acceptance criteria are for all risks (safety and security) and the security risk is small in terms of fatalities

equipment and/or operators (active) may have different effect depending on the option:

- First option (standard installation)
 In comparison to the historical data, contributes only for consequence reduction (mitigation)
- Second option (plus the optional equipment)

In comparison to the historical data, contributes both for frequency (prevention) and consequence reduction (mitigation), related to the actual definition of “risk control”. If the effect from the second option is compared with the one from the first option, it contributes only for frequency reduction (prevention).

The individual risk for crewmembers on board chemical tankers is shown in Fig. 4 where it is observed that is within the As Low As Reasonably Practicable (ALARP) area. Thus, risk should be reduced to meet economic responsibility and it is to be reduced to a level as low as reasonably practicable by the applied countermeasures. These risk reduction measures should be technically practicable and the associated costs should not be disproportionate to the benefits gained.

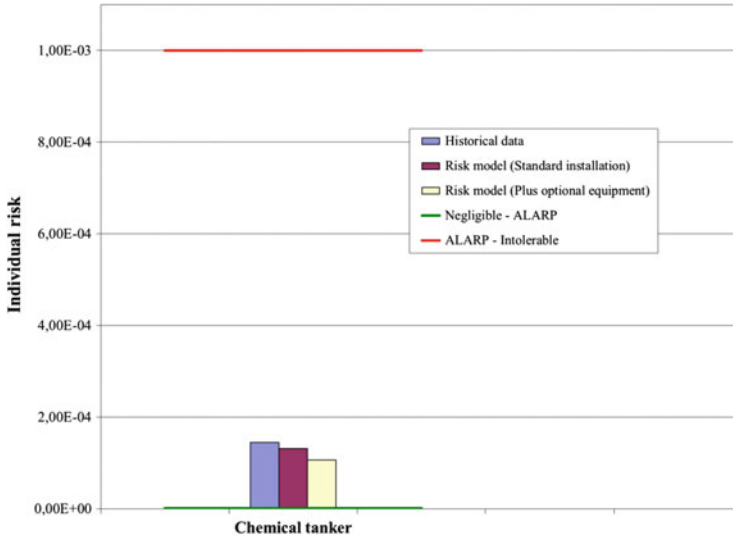


Fig. 4 IR (annual) for crewmembers on-board chemical tankers shown together with the established acceptance criteria. It is noted that the acceptance criteria are for all risks (safety and security)

6 Further Research and Discussion

The probabilities described in Eq. (3) generally have a time component which is captured through the progression of all plausible circumstances represented through the branches of the event tree. To this end, the model can be expanded to include other critical parameters in preventing an attack such as the non-lethal device’s probability of effectiveness, plus the ranges and duration of effect, which are a topic of continued research that includes human factors. Added to this may be the defender’s adaptation through evasive manoeuvres. However, the event tree has been developed and expanded to a sufficient level of detail in order to provide information that is just adequate for decision-making. This is envisaged as a golden rule for any risk assessment, that is to begin the modelling at as a high level as practical and proceed with detailed evaluations in areas where the analysis will be benefited without abusing inappropriately resources. Hence, the current event tree is capable in estimating the risk reduction effect of non-lethal response. The regional occurrence of piracy attacks is characterised by Eq. (6) with the inclusion of Bayesian updating. Although identifying the real exposure is a challenge, i.e. a better insight of the probability of a vessel being targeted could be required; it is believed that the risk picture within the piracy prone areas would still be within the ALARP area. Nevertheless, in the example case an estimate of the probability that the vessel has been targeted by pirates has been provided from the available literature.

With respect to the consequences to human life, only crew injuries and fatalities are considered (physical). Although numbers of hostage crew are available, data on the long-term impact of the experiences of hostages (and indeed their relatives) held in captivity by pirates has not been published (i.e. post-trauma stress disorder). Such an impact on the hostages' psychological health would require judgement by the released crews themselves on their identified preferences over a range of outcomes for determining quality of life weights. In addition, it is extremely complicated to identify an equivalency between physical injuries and traumas in order to add confidence that the risk picture is not underestimated.

7 Concluding Remarks

In this paper, a risk model using the event tree technique has been developed in order to estimate the effect of non-lethal response when a vessel underway is attacked by pirates. The model presents the risk to life of a vessel's crew owing to piracy. It is the kind of analysis that would be required in a Formal Safety Assessment (FSA) if the case for mandatory carriage requirements for additional protective equipment (other than armed guards) is ever to be made. The performance (often misunderstood), logistics, limitations, and costs of non-lethal protective equipment are of course very important. The intent was not to enter into those issues here, but rather to focus on the means by which the equipment might be deployed in order to prevent the escalation of a maritime piracy attack scenario, modelled by a classical event tree. The risk reduction that could be provided by the additional protective equipment concerning the life of the attacked vessel's crew is evaluated for a chemical tanker. As with risk models generally, the results depend in part on the way in which the problem space has been defined. The model is believed to capture the important elements of non-lethal response, though more work is required to include critical parameters such as time and the range of action of specific non-lethal defence technologies.

Acknowledgements The work reported in this paper has been carried out under the SECTRONIC project, 7th FP, CP-GA No. 218245, with partial funding from the European Commission as well as the DNV R&I strategic research programmes. The opinions expressed are those of the authors and should not be construed to represent the views of the SECTRONIC partnership, Det Norske Veritas A/S or NATO Undersea Research Centre.

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Somali Piracy: Understanding the Criminal Business Model

George Kiourktsoglou and Alec D. Coutroubis

1 Introduction

According to Dr Martin Stopford, Chief Analyst at Clarkson Research, ‘Piracy activity off Somalia is a business that grows faster than China’s import of iron ore’ (The Shipping Gazette 2010). In 2010 alone, the Somali brigands attacked 286 vessels, hijacked 67 of them, took 1,130 hostages and earned more than \$238 million (ICC International Maritime Bureau 2010).

Somalia has been East Africa’s ‘*Wild-Wild-West*’ since 1991 when the communist Siad Barre regime was fatefully overthrown by a group of local warlords and their cohorts. Since then the country has sunk into utter lawlessness. The current Transitional Federal Government (TFG) can hardly control the building block it finds shelter within. It is being mercilessly challenged by the sustained attacks of Al-Shabaab (‘the Youth’). The latter is a terrorist organisation which was formed and gained substantial traction after 2004 when the former was created (Bronwyn E. Bruton 2010).

Tens if not hundreds of reports have been written over the last 4–5 years on the phenomenon of Somali Piracy and its potential eradication. They all converge on the belief that the long term answer to the problem lies ashore. The young destitute Somalis who comprise the attack-squads of the piracy syndicates need to be enticed back into a life of gainful employment and opportunities, away from the ‘Hollywood Movie’ type of adventures in the high Seas (Coutroubis and Kiourktsoglou 2010).

This is exactly where the problems begin. Not only is Somalia an utterly destitute country with an average gross national income per capita of \$287 (United Nations Statistics Division 2008) but since its union (and independence) in the early 1960s, it has never had any other sources of national income apart from fishing and

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agriculture. Compounding this situation is the remarkable tally of ransom money paid to the pirates. No wonder then that Somalis prefer the fairly low-risk-high-reward piracy business over the activities of fishing and agriculture. Even more, it is claimed within this paper that the piracy venture has evolved to a point of no return because it has ceased long ago to be just an opportunistic source of alternative income. Somali Piracy has created its own self sustained evolutionary system which cannot be undone merely through the resurrection of mainstream, legitimate business and production.

Hence, it is the view of the authors that the country is hopelessly condemned to business oblivion.

Although the solution to the problem of piracy surely lies ashore, the authors claim that it will not come in the form of alternative, more legitimate sources of income, but rather through the negation of one or more of the determinants that have rendered Somali Piracy sustainable, innovative and eventually successful.

2 Literature Review

2.1 *Michael E. Porter's 'Diamond'*

Michael E. Porter, the C. Roland Christensen Professor of Business Administration at the Harvard Business School and an appointee by former U.S. President Ronald Reagan to the Commission on Industrial Competitiveness, starts his groundbreaking book 'The Competitive Advantage of Nations' (Porter 1990) with a straightforward question:

Why do some nations succeed and others fail in international competition. . . .?

Based on Porter's theory, the four groups of determinants shaping any industry on a national level are:

- Its '*Factor Conditions*' or '*Factors of Production*' which include human resources, knowledge resources, physical resources, capital resources etc.;
- Its '*Demand Conditions*' which refer to its home demand (the buyers' needs), the size and the pattern of the industry's home growth, but also the mechanisms through which the market's preferences resonate in the industry;
- Its '*Relating and Supporting Industries*' which actually support (the disruptive in some cases) innovation and upgrade;
- Last but not least, the '*Firm Strategy, the Structure and the Rivalry*' or alternatively the context of a firm's creation, organization and management along with the nature of the rivalry with its competitors.

These four determinants eventually form a system, the so called '*Diamond*', which becomes the identity of the industry in question. This business '*footprint*' is very dynamic and evolves (or devolves for all it matters) on an unrelenting pace,

eventually leading to the creation of competitive advantage(s) (or alternatively to the gradual decline) of the industry on a national level.

At this point a distinction needs to be made (it will be further elaborated in the paragraph of the study's conclusions) between competitive and comparative advantages. The former are created in due course and are based on an industry's 'Diamond'. The latter are 'naturally endowed' and can be progressively (and in some cases easily) circumvented by competitors on a national or more easily on an international level.

2.2 Michael E. Porter's 'Five Competitive Forces that Shape Strategy'

Harvard Business Review published Porter's first essay on his famous five forces '*How Competitive Forces Shape Strategy*' in 1979. Since then this formidable conceptual tool of strategy and its formation by competition has rightfully become the holly grail of corporate strategists.

Understanding the forces that are active in the competitive arena and their underlying causes reveals the roots of an industry's current profitability but more importantly it provides a framework for anticipating and influencing competition (and profitability) over time. This is a valuable insight and within this paper it will be carefully applied to the phenomenon of Somali Piracy.

At the very heart of the model lies the *rivalry among existing competitors*. It is this rivalry that drives the market players to innovate and upgrade their businesses. In fact the more intense the competition among them, the better it is for the industry's long term prospects. In the end, innovation becomes entrenched and it leads to sustainable competitive advantages which cannot be easily replicated.

2.3 Kathleen M. Eisenhardt's and Donald M. Sull's 'Strategy as Simple Rules'

In unpredictable, complicated national environments, entrepreneurs direly need crystal clear and simple strategies to succeed in their businesses.

Eisenhardt and Sull (2001) devised a theoretical tool which comprises of five groups of straightforward rules. Through the use of their theoretical tool, the authors aspired to guide market players through the wilderness of cut-throat competition. The groups are the following:

- '*How to*' rules to define how to distinctively execute key processes;
- '*Boundary*' rules to help quickly decide which opportunities to pursue;
- '*Priority*' rules to help quickly rank competing opportunities;
- '*Timing*' rules to synchronise with pace of fleeting opportunities;

- ‘Exit’ rules to pull the plug on yesterday’s opportunities.

The number of rules in each group is of fundamental importance because too many rules are paralysing; too few, confusing. In predictable markets, a higher number of rules provides better for increased efficiency whereas in turbulent markets, fewer rules may allow for increased flexibility.

Although it would be rather far-fetched to claim that Somali pirates or any of their associates have developed their practices based on a strategic model, the authors of this paper believe that both the former and the latter have used all along a certain modus operandi which unconsciously replicates large parts of the Eisenhardt and Sull (2001) theoretical tool.

2.4 Stig Jarle Hansen ‘Piracy in the Greater Gulf of Aden/ Myths, Misconception and Remedies’

In 2009, the Norwegian Institute of Urban and Regional research produced one of the most detailed reports on the geography and the nature of Somali Piracy. The report depicts in great detail the local nature of Somali Piracy.

According to the report, piracy in Somalia (Fig. 1) finds shelter in four areas:

- Sanaag (contested by Somaliland and Puntland);
- Nugal (Puntland);
- Bari (Puntland);
- Mudug (Harardhere–Hobyo).

And in four ports:

- Harardhere;
- Hobyo;
- Garad;
- Eyl.

Even more interestingly, the report describes (and partially explains) local rivalries which, within the context of this paper, will be found to be the main determinant(s) behind the disruptively innovative nature of Somali Piracy. It also claims that two of the more peaceful regions in Somalia, Mudug (Harardhere–Hobyo) and Puntland (including the contested Sanaag region), roughly held 90 % of the captured ships. Of these two regions, Puntland dominated and still dominates. Indeed more than 70 % of the recorded attacks during 1995–2000 took place in adjacent waters. Today, 60 % of the ships captured are taken into ports in the Puntland region, the rest going to Mudug (Harardhere–Hobyo).

Before 2004, piracy was mainly a Puntland phenomenon, dominated by the Majerteen clan, the dominant clan of the region, although a few other individuals, often with matrilineal clan ties to Puntland, also participated.

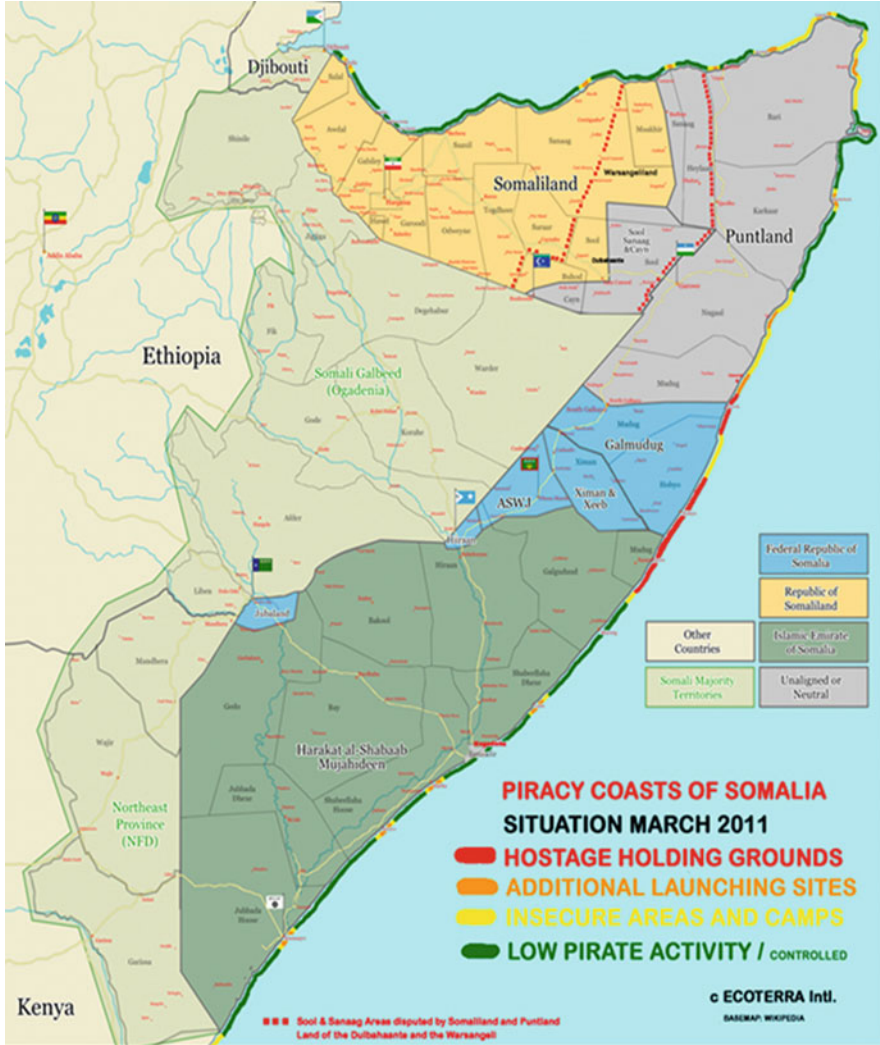


Fig. 1 Somalia. Source: Ecoterra International, available at <http://www.ecoterra.net/index-x.htm>. Accessed 20 April 2011

The Harardhere–Hobyo group was based on a clan alliance, mainly between the Suleiman clan of Mudug and the Majerteen clan of Puntland. Later, members of other clans with a local presence, especially the Saad clan, joined in to enlarge the existing criminal population.

3 The Determinants of Somali Piracy's '*Diamond*'

Porter wonders '*why a nation is the home base of choice for an industry*' (Porter 1990). To answer this question one needs to have a thorough knowledge of the host nation which plays a defining role in the creation of the right environment for an industry to blossom. In the case of Somali Piracy one would easily identify four basic attributes of the country:

- A '*user friendly*' geography (more than 2,896 km of coastline);
- Steady traffic of commercial vessels;
- Lack of a robust central government since 1991;
- Utter lawlessness.

The first two attributes are directly related both to the geography and the topology of the country, thus they cannot be practically altered in any way, unless the country is subdivided. Somalia is a littoral state positioned right in the middle of the path of commercial vessels sailing from East to West (and vice versa) through the Gulf of Aden, a passage that attracts 20 % of the world's commercial shipping (The Economist 2011a, b).

The lack though of a central government and the country's consequent lawlessness are both '*man induced*' traits and they have contributed a great deal to the evolution of the phenomenon. By February 2011, some 780 pirates were being held in 13 countries. Still though, nine out of 10 pirates caught at sea by the international fleets are released almost straight away, because there are very few sovereign states willing to embark on a costly prosecution of foreign nationals (United Nations Security Council 2011). Likewise, the pirates enjoy *de facto* immunity back in Somalia since there is no prosecutorial system in place.

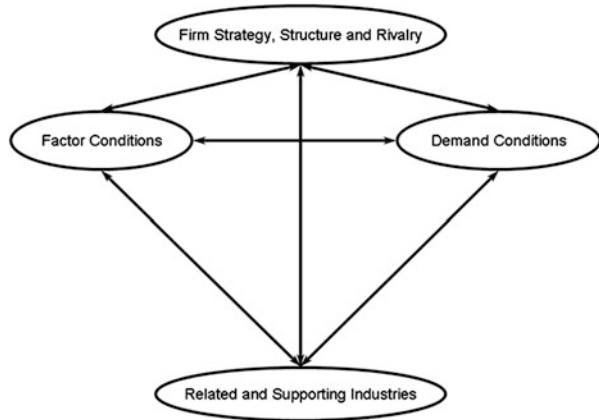
Over the last 3 years, Naval Forces have allowed between 500 and 700 pirates to go, mostly ensuring they have enough fuel and other supplies to get home safely and, on more than one occasion, helping them with engine repairs. Some pirates have been arrested several times (The Economist 2011a, b). What all these cases have in common is the fact that the perpetrators of high seas piracy seek always to get back to Somalia because they find refuge there. They find refuge and shelter from the persecution by the international Naval Forces (in the case of a pirated ship) and/or from legal prosecution (in the case of a botched attempt to pirate a vessel).

Porter also claims that '*nations tend to be competitive in activities that are admired and depended upon. That is where the heroes come from*'.

Although the international community considers the pirates to be criminals of the high seas, many Somalis hold them to be '*activists*' if not avengers of the foreigner trawling fleets which loot the fishing resources of their country (U.S. Department of State 2010). Compounding this view is the fact that Somali Pirates always save a part of the ransom money for the local communities which provide them with shelter (Reuters 2010).

Somali piracy's four groups of determinants, in other words its '*Diamond*' (Fig. 2), includes (according to Porter):

Fig. 2 Porter’s Diamond.
 Source: Michael E. Porter,
 The Competitive Advantage
 of Nations



- Its ‘*Factor Conditions*’ or ‘*Factors of Production*’ which refer to human resources (pirates, investors, facilitators/negotiators of ransoms), knowledge resources (sources of information and intelligence on vessels and trade patterns), physical resources (equipment), capital resources (‘Seed Capital’ for the initial support of a piracy mission) etc.;
- Its ‘*Demand Conditions*’ which are directly related to the local clan system’s need for income and continuity, but also the mechanisms through which the local needs and aims resonate in the Piracy Industry;
- Its ‘*Relating and Supporting Industries*’ which actually nurture (the disruptive in some cases) innovation and upgrade featured by the pirates. The most prominent among these industries is the financial one. It provides the venture(s) with the necessary means for the transfer and legalisation of the crime proceeds;
- Its ‘*Structure and Domestic Rivalry*’ or alternatively the context within which a piracy organisation is created and managed.

3.1 *Factor Conditions or Factors of Production*

3.1.1 **Human Resources (Piracy Kingpins, Investors, Pirates, Facilitators/Negotiators)**

The piracy network in the Indian Ocean comprises operatives based in Somalia, Kenya, the Arab Peninsula and (potentially) in Western Europe (The Standard March 2011; Reuters 2011a, b; Chosun 2011; The East African 2010).

The network includes the piracy kingpins, who are the ‘businessmen’ responsible for the high level strategic planning of the operation(s), the casting of human resources and the necessary funds. In most of the cases they are based both in Somalia (Garad, Hoby, Hardheere) but also in neighbouring Kenya (Reuters 2011a, b; The Standard 2011). By now, they have already adopted a rather flashy

lifestyle, ranging from Italian designer clothes to multiple '4 × 4' cars, real estate properties in Kenya and private yachts. In many cases, they entice young Somalis into the piracy (ad)venture by flaunting their baubles in poor local communities where young men are most vulnerable. These masterminds of piracy operations often act also as '*Venture Capitalists*' providing the 'Seed Capital' for a given project, or alternatively they undertake the responsibility to bring together less seasoned local investors to create pools of funds (Reuters 2009). There are instances though that the necessary capital is provided by the Somali Diaspora. Last but not least, the kingpins are indirectly responsible for the negotiations with the vessel owners and they also manage (on a high level) the money-laundering operations.

The pirate gangs include mainly people with a background in fishing, the code word for 'low-income' (Reuters 2009). Interestingly though, piracy operatives also have backgrounds in the security sector which was in operation up until mid 2008 in Puntland (Hansen 2009). Former members of Puntland's young Police Force and Coast Guard (trained both by Western Private Outfits) joined the nascent fledgling piracy community after the collapse of the local security institutions. Lastly, some pirates have received training in weapons as former members of local militias.

The last category of piracy operatives includes the Facilitators (who in some cases also act as Negotiators for ransoms). These operatives are professionals that get mostly involved in the transfer of funds (in case ransom money is paid) but also in the business of money laundering. The Facilitators are mostly based in Kenya and Dubai and they use the traditional *Hawala alternative remittance system* to circulate (and launder) the proceeds of crime (Interpol General Secretariat 2000).

The common denominator of all Somali Piracy's Human Management & Recruitment is their attraction to 'business' profit. To put it in different words, financially disadvantaged people got together with professionals of sorts to form a criminal network which has progressively become much specialised in what it practices (Reuters 2009). This specialisation, according to Porter, creates the fertile ground for innovation, improvement, upgrade and refinement to bear fruits.

3.1.2 Knowledge Resources (Information and Intelligence)

The knowledge resources used by Somali pirates in their hunt for commercial vessels are a typical example of 'front-loaded' innovation. In fact, they are always a step ahead of their persecutors (Neptune Maritime 2011).

In 2000 the International Maritime Organization (I.M.O.) adopted within the fifth Chapter of the International Convention for the Safety of Life at Sea (S.O.L.A.S. 1974) the stipulation for all 500 (and upwards) gross tonnage Cargo Ships to carry an Automatic Identification System (A.I.S.). The System should provide information on the vessel's position, itinerary, its major technical characteristics etc. The measure became effective on the 31st of December 2004.

In many cases the Somalis simply use this electronic equipment (an Automated Identification System's Receiver along with an onboard PC running a compatible

Navigation Program, or a dedicated Marine Chart Plotter) to acquire valid information on their preys (Coutroubis and Kiourktsoglou 2009).

On top of this, European brokers having access to business-related (insider's) information of shipping firms have been suspected all along of providing shipping routes and other data to Somali pirates in return for handsome commissions (Korea Times 2011).

In the case of the Korean oil tanker M/T Samho Dream, the leader of the pirates frequently exchanged information with brokers via satellite phone as evidenced by the official testimonies of the pirates during their interrogation by the Korean Authorities. *'We've discovered that the pirates worked with the help of brokers of various nationalities. After questioning the pirates who were brought to Korea, we found out that they left Somalia and travelled some 2,000 km to reach the area where they first intercepted and eventually hijacked the Samho Jewellery. They had sailed in a 40–50 ton mother ship on which they carried small boats from a country near Somalia'* (Chosun 2011). The process was aided by various channels including a broker who provided the route of the freighter, the investigators said.

3.1.3 Physical Resources/Equipment (Skiffs, Mother-Ships, Arms)

The Somali Pirates have all along used large skiffs dhows or fishing trawlers to attack commercial ships. Lately though they have upgraded their attack tactics through the use of merchant vessels as 'mother-ships'.

The pirates follow a simple modus operandi. Operating from a 'mother-ship' (usually a captured cargo vessel that can remain at sea for extended periods and sail as far as India's western coast) they are alerted to vulnerable vessels by watchers on the Somali coastline who communicate with them via satellite phones. Having identified their target, a boarding party of young Somalis, armed with AK-47s and rocket launchers and equipped with grappling hooks, approaches the unarmed cargo vessel in a small, fast-moving skiff that is powered by outboard motors (Business Standard 2011).

A typical example of this technique is featured by the MV Izumi which was used as a mother-ship in attacks against the MV Torm Kansas near Pemba Island, off East Africa, and then, on the 6th November 2010, on the EU NAVFOR Spanish warship ESPS Infanta Christina, which was escorting an African Union supply ship Petra 1 (Idarat Maritime 2011).

By the end of 2010 it became obvious that the Somalis had learnt from the failure of the ESPS Infanta Christina to stop the M/V Izumi. They appear to have concluded that whereas Somali-manned fishing trawlers and dhows when used as mother-ships can be easily taken or sunk by international naval forces, the larger ships represent a totally different problem to the navies of the world. This is the book definition of business innovation!

Some additional advantages of the practice must also be acknowledged and appreciated accordingly. A large merchant ship can carry far more attack skiffs and pirates than a dhow, the accommodation is relatively comfortable and the vessel has

a full suite of navigation and radio aids, not to mention effective radar. Other advantages include the fact that a separate team of guards does not have to be recruited to keep an eye on the hostage crew, and the sight of the vessel patrolling the high seas puts additional pressure on an owner reluctant to part with a ransom. There are some cases where a vessel appears to go to sea purely for this reason, as happened with the South Korean VLCC M/V Samho Dream, before its release in November 2010. Objectively though, a VLCC is hardly the ideal mother-ship (Idarat Maritime 2011; Platts (2010)).

Lastly, with regard to the weaponry of choice, Somali Pirates use in most of the cases AK 47s rifles and rocket propelled grenades (RPGs) (International Maritime Bureau 2010). A Russian made AK47 costs anywhere between \$110 and \$131 (ak47world.com 2011) whereas a Russian made RPG-7 full metal and wood rocket launcher's price is around \$320 (Airsoft Net World 2011). The interesting part in the story though is that Somalia has been under a United Nations arms embargo since 1992, a year after President Muhammad Siad Barre's regime was toppled (United Nations Security Council 2007).

3.1.4 Capital Resources ('Seed Capital')

The people who invest in Somali Piracy and provide the 'Seed Capital' for the operations (apart from the kingpins) are locals who make their livings as fishermen or ply their trades in local Somali communities (Reuters 2011a, b). In some cases though, part of the funds is also provided by international investors (Reuters 2009).

The investors currently get 35 % return on their capital invested which is mainly used to fund the purchase of a skiff (at any price between \$1,000 and \$4,000), pay for the wages of the seajackers (a three to four member Piracy Crew costs around \$100 a day), the necessary paraphernalia, as well as the daily provisions of both the pirates and the ransomed crew in case of a successful operation (Hansen 2009).

Interestingly, the pirates have set up, based on reports (Reuters 2009), an ad-hoc makeshift Stock Exchange at the main pirate centre of Haradheere, where criminal syndicates get together to manage their investments. When the stock exchange was first created in mid 2009, it hosted 15 '*maritime companies*' and within 4 months their number rose to 72. Haradheere's capital market is open 24 h a day and serves as a bustling focal point for the town. As well as investors, sobbing wives and mothers often turn up there seeking news of male relatives missing in action.

3.2 Demand Conditions

At first sight, the definition of '*Demand*' in the case of Somali Piracy seems challenging if not impossible. One might plausibly wonder how can there ever be

a ‘*demand for piracy*’ and what is the ‘*Product*’? The answer though lies not with piracy itself but with the ‘*Derived nature of its demand*’.

It is such an irony but the most characteristic case of derived demand, for someone to better understand the concept, is featured by the international shipping market(s).

Stopford (2009) in his book ‘Maritime Economics’ gives a very detailed and well structured explanation of the mechanism at work in the case of international shipping:

Although ships occupy centre stage, the product in demand is not a ship but transport. It is not the Container-Ship that the customer wants; it is the transport of the container.

Likewise in Somalia’s case, the product in demand is not piracy but the chance for a better life or in other words the prospect for a better future which may materialise through the money paid in the form of ransom. In a nation where (as mentioned earlier) the average income per capita is \$287 (United Nations Statistics Division 2008) the need to build and further develop sources of income is self-explanatory and obvious. Even more, the people who ‘buy the piracy product’ since they are utterly destitute, do not hesitate to ‘*sit on the wrong side of the law*’ while pursuing their goals. Tellingly, since the average life expectancy in Somalia is 50 years for women and 47 years for men (United Nations Statistics Division 2008) the locals feel they do not have much to lose. There is this ‘*Do or Die*’ philosophy which in many cases has led young daredevils to commit follies (Reuters 2009).

Focusing further on the demand side of the phenomenon, the customers are not some vague business outfits but the networks of locals that sustain and earn a living (if not a fortune) from the corresponding criminal activities (Bloomberg 2011). These networks include (but are not limited to) the whole spectrum of piracy operatives ranging from the strategists (kingpins) down to the executive arm’s foot soldiers who ply the high seas off East Africa. They also comprise local communities in (at least) Puntland and the outlawed (by the U.S.) terrorist organisation Al Shabaab (Reuters 2009, 2011a, b). It has been reported on many occasions, that some Somali clans take part in the piracy networks, especially in Puntland and in many cases support them directly with provisions for the daily needs of the captured crews and their guardians (Hansen 2009). In return, the pirate gangs reserve 20–30% of their proceeds for the local communities and Al-Shabaab. In the case of the latter, the fee is paid by the brigands to keep the Islamist militia at bay and prevent it from interfering with their land operations. There is a plausible concern that this ransom money indirectly bankrolls Al Qaeda (Business Standard 2011).

Based on Porter’s theory the ‘*Demand Conditions*’ are strongly influenced by the character (Quality) not the size (Quantity) of the domestic market. More specifically it is the nature of domestic customers that has a substantial impact on the Demand side of the equation. This argument fits perfectly the phenomenon of Somali Piracy which was triggered in the first place (and it is still partially sustained) by the confluence of utter poverty and lawlessness. The last two have

reigned in the country for the past 20 years and have reflected all along the grim environment (yet very supportive) which gave birth to the scourge off the Somali basin.

What is more important, the composition of demand is of greater value than its growth. If for any 'good' reason(s) the composition in place during the early '*anticipatory*' stages (when demand is building) remains intact for long enough, then the local market will keep the industry alive and kicking, even if '*Exogenous Factors/Externalities*' attempt to undo the proximate causes that triggered the phenomenon. In other words, were utter destitution and complete lawlessness to be undone in the near future (which is highly improbable if not impossible), based on Porter's theory, Somali Piracy would still persist long after the new status quo gained traction on the ground. This view will be further elaborated in the parts of the study that follow but it gives an early taste of the entrenched (by now) nature of the phenomenon.

Within a (local) market, the preferences and the needs of the customers create (on an aggregate basis and beyond a point of development) a self-sustained mechanism to further expand the '*Business*' by leaving behind national boundaries. This is another argument that holds strikingly true in the case of Somali Piracy. It has been known for some time that the networks which support piracy have been widened beyond the national boundaries and today the spill-over effect is being witnessed in neighbouring Kenya, in Ethiopia (which until 2004 was entangled in a vociferous bloody fight with Somalia's Islamist movement), in some of the Gulf States (specifically Dubai which hosts a vast community of Hawaladars, the so called Hawala agents) and even in the West (Chosun 2011; Korea Times 2011; The Economist 2011a, b).

3.3 *Relating and Supporting Industries*

A third broad determinant of national advantage in an industry is the presence of supplier (or related) industries that are internationally competitive. This fact creates in many different ways downstream (in the production) advantages. An important one is via efficient, early, rapid, and sometimes preferential access to the most cost-effective inputs (Porter 1990).

Even more significant is the advantage that home based suppliers provide in terms of the ongoing coordination. Perhaps the most important though is the process of innovation and upgrading. (Competitive) Advantage emerges from close working relationships between world class suppliers and the industry. Suppliers help firms perceive new methods and opportunities and also to apply new technology (Porter 1990).

If East Africa's Somalia is the so called 'Hive' of Piracy, then its '*Related and Supporting Industries*' are responsible for its '*Business Pollination*', in other words its constant innovation and its ongoing operational upgrading.

The most important supporting industry is the financial one which is based both in neighbouring Kenya and across Aden in the financial hub of Dubai (AFP 2010; The Standard 2011).

According to investigations (Daily Nation 2010), Kenyan law firms, but also security, aviation and shipping firms are conducting business with pirates operating in the Indian Ocean. All the above facilitate the ransom negotiations and payments. A ransom drop by a helicopter, conducted by a private security firm from Mombasa or Djibouti may cost up to \$200,000 (BBC 2009). Somali pirates are being paid millions in ransom every year, and it is thought that some of that amount goes through Kenya. These monies are also used by insurgents such as the Al-Shabab's in Somalia to buy weapons, thereby contributing to the escalating civil unrest in Mogadishu and posing a major threat to international security through terrorism.

Additionally, the US State Department has identified Kenya and the United Arab Emirates (whose federation includes Dubai) as centres being used by pirates to run their illegal operations. Within the 2010 International Narcotics Strategy Report is mentioned that 'reportedly, the UAE is used as a financial centre by pirate networks operating off the coast of Somalia and for corrupt officials in Afghanistan and Pakistan'.

The support from the financial industry comes both in the form of logistical services (during payments of ransom) but also in the form of '*cleaning up dirty money*' or in other words '*money laundering*'. Eventually a large part of this capital finds its way back into the formal economy covered under a veil of legitimacy. Especially in Dubai, the money laundering process is conducted using '*Hawala*', an alternative remittance system (Interpol General Secretariat 2000).

In the case of Somali Piracy, the presence of an internationally successful industry, like Dubai's financial industry, provides opportunities for information flow and technical interchange, much like the case of home-based suppliers. Geographical proximity, cultural similarities (religious faith included) make such interchange easier than in the case with other foreign firms. The existence of a related industry also raises the likelihood that new opportunities will be perceived. Additionally, it conveniently provides a source of new entrants (investors in the case of piracy ventures) who bring a new approach to competition (Porter 1990).

3.4 Structure and Domestic Rivalry

Porter claims that the fourth broad determinant of national (competitive) advantage in an industry is the context in which firms are created, organised and managed, as well as the nature of domestic rivalry.

Industries become celebrated in a nation for reasons that can be deeply rooted in history, geographic location (Somalia's case), social structure and many other things. If prestige (like ostentatious wealth paraded and showed off by piracy kingpins in poor coastal communities) and national priority (eradication of utter poverty) favour an industry, the ripple effect can be enormous. Somalia is indeed

the case of a richly fertile social ground available for long term exploitation. However, the reverse is equally true. If a nation's priorities shift away from success in an industry (which is the case of Somali Piracy) or towards an idiosyncratic conception of economic development (like nation (re)building), the evolution of the phenomenon under scrutiny can be systematically undermined (Porter 1990).

Additionally, the 'value' of national prestige in the stimulation of business growth extends to make a broader point: nations tend to be competitive in activities that cause 'Shock and Awe'. A ransom payment of a few millions can easily make the headlines (or hog the local grapevine) in a poor country like Somalia. It can also create the 'ripple effect' which pumps life into the broader business cycle.

The stock of knowledge and skill in a national industry accumulates as firms imitate each other and as personnel (pirates) move among firms (piracy networks). Nothing stands to be more valid in the case of Somali Piracy.

In terms of competition, the process of domestic rivalry also creates advantages for the entire ecosystem of the industry. These advantages are external to any particular firm (or clan which supports a piracy network) (Porter 1990). Furthermore, geographic concentration of rivals in a single region (like Puntland for instance) reflects and magnifies the benefits of accumulated experience. Domestic rivalry (among clans and/or between Mogadishu's Transitional Federal Government and Al-Shabab (Bronwyn E. Bruton 2010) not only acts as a business booster (in terms of competitiveness) but also helps to avoid some hindrances like the scarcity of trained personnel. With a group of domestic rivals following various competitive strategies and tactics in the high seas, there is an indispensable thrust against stifle innovations, blunt competition (or in the case of foreign Naval Forces, against counter-piracy practices).

Porter claims that domestic rivalry has a direct role in stimulating improvement and innovation. It charges the rivals to reap the benefits of the other three determinants such as the ones stemming from 'sophisticated suppliers'. But these benefits of domestic rivalry are only the most direct and the most obvious ones. It becomes easily understood that the spill-over effect benefits the nation in many other and important ways that are usefully summarised in the following three areas:

- It stimulates new rivals through spin-offs (creation of new gangs of pirates);
- It creates and attracts 'Production Factors' (like new personnel);
- It enhances and upgrades all related and supporting industries and activities (like the one specialized in money laundering).

Last but not least, a vibrant group of domestic rivals (pirates) draws attention to the industry, encourages investments by individuals, suppliers and institutions that improve the national environment and creates diversity and incentives to speed up the rate of innovation (Porter 1990).

Somalia has not been governed for full 20 years. Local animosities and rivalries have festered for so long that they have managed by now to create second order (side) effects. Whereas the lack of political (let alone economic) development has been a direct first-order effect/result of the long entrenched ground reality (read 'instability'), the development of a population of a quasi military trained personnel

(Hansen 2009) over the last two decades has created the necessary critical mass of operatives to sustain piracy in the high seas. This chain reaction took effect on the fertile ground of utter poverty.

This is one of the reasons (the local rivalries and their numerous repercussions) that the authors of this paper have come to believe that even if the ground reality in Somalia were to improve the eradication of the scourge would take years to come.

4 Somali Piracy's 'Diamond' as a Fully Blown and Evolving System

Porter coined the term '*Diamond*' to describe the four determinants as a system and he subsequently supported his view that nations achieve success where they possess advantages in their '*Diamond(s)*'. In the case of piracy, Somalia has unwittingly developed over the last 20 years three '*undeniable advantages*':

- A quasi military trained '*piracy personnel*' (Hansen 2009);
- Political instability along with lawlessness [with the exception of Somaliland in the North (New York Times 2010; CNN 2010)]
- Utter poverty (Coutroubis and Kiourktsoglou 2009).

In the most successful national industries, it is often hard to know where to start when attempting to explain featured advantages: the interplay and self-reinforcement of the determinants are so complex (beyond a point of progress, which is the case in Somalia) as to obscure cause and effect. The national environment becomes a more favourable one for competing over time as the '*Diamond*' restructures itself. The system is incessantly in flux. The national industry (piracy) continually evolves to reflect shifting circumstances (or for all it matters, it may fall into decline).

Some of the determinants of national advantage are specific to a single industry such as the presence of sophisticated Hawaladars (agents of Hawala) (Interpol General Secretariat 2000) next-door in Dubai (The Standard 2011). Other national attributes (Geography and Topology) may be more broadly applicable and may potentially affect the long term success of the industry in question.

In most of the cases, a nation succeeds because it combines some broadly applicable advantages (again, Somalia's Geography and Topology are of essence in this case) with advantages that are specific to a particular industry (like semi-trained, destitute personnel in a country where the rule of law is utterly absent).

4.1 Sustainability of the 'Diamond'

A competitive advantage is sustained because its sources (people who join the pirate-gangs, cash that flows into the piracy coffers through ransom payments) are widened and upgraded. Some determinants (like poor personnel and 'capital reinvested') provide a more sustainable basis for advantage than the rest. The current pool of factors for example, is less important than the presence (or absence in the case of Somalia) of specialised and preeminent institutions like lawlessness and deep political instability. More broadly, conditions that provide dynamic advantages (faster innovation like the tactics of pirate 'mother-ships', pressures for upgrading against the latest anti-piracy technologies etc) are more important than those conferring static advantages (such as geography and topology).

The important role of interaction among the determinants (political instability vis-à-vis poverty, lawlessness vis-à-vis semi trained military armed personnel, money laundering vis-à-vis political instability) means that the likelihood of achieving and sustaining advantage in an industry like Somali piracy depends in part on how effectively the interactions work in the nation. How rapidly and how well do rivals upgrade their money laundering networks? How fast are they realising the gains in sophistication? How many 'new entrant' piracy groups emerge out of the factor-creating Somali population? The effectiveness of these interactions depends on the responsiveness of the individuals and the gangs that form the ecosystem of piracy.

4.2 The Role of Geographic Concentration (Fig. 1)

Porter claims that competitors in many internationally successful industries, and often entire clusters of industries, are located in a single town or region within a nation. In the case of Somali Piracy the region that mainly hosts the crime perpetrators is Puntland and specifically the towns of Garad, Haradhere, Eyl and Hobyo (Hansen 2009). [Mogadishu is primarily used for the settlement of ransom payments (IBNLive.com 2011).]

Geographic concentration of firms in internationally successful industries often occurs because the influence of the individual determinants in the 'Diamond' and their mutual reinforcement are heightened by close physical proximity. In the case of Somali Piracy the first pockets of high seas criminality appeared (despite the fact that Somalia as a nation has no history in piracy (BBC 2011) in Puntland, following bogged international efforts to set up a local coast guard in 2005 and 2006 (Hansen 2009).

A concentration of rivals promotes efficiencies and specialisation. More important however is the influence of geographic concentration on improvement and innovation, the two main drivers of the 'Diamond's' progress. If, for instance, a piracy action group comes up against a new counter-piracy technology in one of its

forays, then both experience and knowledge gained tend to be quickly and more efficiently shared with other piracy gangs back in the host town. In other words, geographical proximity increases the concentration of information and thus the likelihood of its being noticed and acted upon. It also increases the speed of information flow within the industry and the rate at which information diffuses.

Many international bodies like the International Maritime Bureau, NATO, EU NAVFOR etc., have set up internet sites for the timely diffusion of piracy related information, intelligence and best practices. Based on reports (Chosun 2011), Somali Pirates mirror the practice (assumingly in a less structured way) and share knowledge gained in the field of action using technologically advanced equipment (satellite phones, Automated Identification Signal receivers etc.).

All in all, proximity leads to early exposure of imbalances and needs or elevates the separate influences in the '*Diamond*' into a true system.

4.3 *The Loss of National Advantage*

As industries evolve (just like Somali Piracy) the business competitors risk the loss of advantage. Their adaptability is a function of the '*Diamond*'. If there is an improving pool of skilled personnel (like in Eastern Africa), accumulated knowledge, expertise and intense local rivalries combined with global networks, the nation can evolve and adapt to retain its advantages (regrettably in this case for decades). Usually, factor disadvantages can be handled through innovation.

Conversely, advantage in an industry is lost when conditions in the national '*Diamond*' no longer support and stimulate investment and innovation to match the industry's evolving structure (in the case of piracy such a situation could be set off by diverting dedicated human resources, capital and entrepreneurship to a process of national re-unification and/or nation rebuilding).

Porter claims that the most potent reasons of eroding advantage are the following:

- Deterioration of '*Factor Conditions*' (human resources (pirates, investors, facilitators/negotiators of ransoms), knowledge resources (sources of information and intelligence on vessels and trade patterns), physical resources (equipment) and capital resources);
- '*Technological Change*'. The use in counter-piracy operations of newly developed (lethal or non-lethal) weaponry could lead the pirates to operational disadvantages. Alternatively, a potential neutralisation of money laundering networks could create the need for a new supporting industry in financial operations (transfer of ransom payments to pirate gangs and legalization of the generated funds);
- Diminishing '*Domestic Rivalry*'. One of the most common and often the most challenging cause of lost-to-be national advantage is the ebbing of domestic rivalry. In the case of Somalia, a plausible source of tapering domestic rivalry

could be the (process of) reconciliation of competing political forces and the convergence of their efforts on nation (re)building.

The authors of the paper believe that the last of the three causes (i.e. the declining domestic rivalry) is the most promising possibility and it can drive (in the long term) Somali Piracy out of business.

4.4 The Diamond in Perspective

At its core, the system of determinants of national advantage (the '*Diamond*') is a theory of investment and innovation. Somali Pirates have evolved within less than 5 years since 2007, from a ragtag bunch of opportunistic criminals into a cooperative business of sophisticated crime that uses an elaborate network of international contacts to gain access to information, intelligence and seed-capital (Chosun 2011).

Gaining advantage in the first place required a new approach in competing, which in the case of piracy was the perception (and later the exploitation) of certain factor advantages like the 'user friendly' geography, the country's topology, the lack of central government, the entrenched political rivalries, the lawlessness and the poverty.

Sustaining advantage always requires further improvement and innovation, to broaden and upgrade the sources of advantage through improving the (criminal in the case of Somalia) business and its '*production process*'.

The determinants in the '*Diamond*' and the interactions among them create the forces that shape the likelihood, direction, and speed of improvement and innovation by the nation's businesses. For instance, the creation of EUNAVFOR (European Union Naval Force Somalia) back in December 2008 [based on Resolutions 1814 (2008), 1816 (2008), 1838 (2008) and 1846 (2008) and 1918 (2009) of the United Nations Security Council (UNSC)] and the subsequent institution of the International Recommended Transit Corridor (IRTC) along the Gulf of Aden (EUNAVFOR Somalia 2011) exercised some serious pressure on Somali Pirates. The first consequence of this pressure was the so called '*Balloon Effect*', in other words the migration of the action-theatre along with its main role-players from Aden into the Indian Ocean (and lately very close to Hormuz and the Seychelles). However, since the Indian Ocean is less 'user-friendly' in terms of weather conditions compared to Aden, the pirates had to select and deploy more advanced equipment to compensate for the challenging new environment. They managed to successfully address the need for innovation by developing the use of 'mother-ships'. This is a typical example of an adverse environment (both in terms of international law enforcement and physical obstacles like the aggravated weather conditions) that forced (the piracy) business to upgrade, innovate and eventually improve.

The availability and interpretation of information are central to the process of creating and sustaining advantage. The '*Diamond*' captures some of the salient

aspects. National advantage grows out of conditions in a nation that signal, channel, or steer business to perceive fleeting opportunities for improvement and innovation while moving early in the proper directions for progress. The ‘mother-ship’ practice for instance, gave Somali pirates a tactical advantage over Naval Forces involved in counter-piracy operations. None of the international fleet’s vessels (based on their rules of engagement) ever attacks piracy ships, out of fear of retribution against hostages on board (CNN 2011).

All in all, national advantage emerges from pressure, challenge and adversity, rarely from an easy life. The low average life expectancy in Somalia is a proof that the country is a seriously unforgiving environment, which nurtured through its national ‘*Diamond*’ a criminal business that haunts today the entire Indian Ocean.

5 Conclusions

The aim of this paper is to argue that piracy off the coast of East Africa has evolved from an opportunistic venture into a full-blown criminal business. Just like Europe and the US (both well structured, advanced and organised societies with exemplary law enforcement mechanisms) are plagued by the drugs-trade, Somalia (a less advanced, more traditional and clan-based society) suffers under the viral yoke of piracy.

Somalia gave pirates the initial head-start through its nature as a failed state. Its geography (jutting out of Africa into the Indian Ocean, neighbouring simultaneously the Arab Peninsula and the Straits of Hormuz) and its topology (coastline of 2,896 km), along with its utter lawlessness and the lack of a robust central government provided the fledgling venture with a set of ‘*comparative advantages*’ over similar cases (like for instance the piracy in the Malacca Straits).

On a different vein, the ‘*competitive advantages*’ of Somali Piracy were created and sustained through a highly localised process that is still developing. The role of the entire nation seems to be as strong as, or stronger than ever (Porter 1990). Any theory of national advantage in a similar case starts from premises that strongly diverge from any previous work or naturally endowed privileges (like the above ‘*comparative advantages*’).

States like Somalia that cannot control their territories, protect their citizens, enter or execute agreements with outsiders, or administer justice are a common and worsening phenomenon. Robert Gates, America’s defence secretary, says ‘fractured or failing states are the main security challenge of our time’ (Bronwyn E. Bruton 2010).

Ironically, the term ‘failed state’ (Fig. 3) entered the political lexicon with the (ill-fated) American-led venture in Somalia in 1992. With cold-war patrons gone, the theory goes, many poor states were at risk of collapsing into Hobbesian anarchy, with dire results for their own inhabitants and neighbouring lands. Robert Kaplan, an American writer, captured and somewhat exaggerated an important truth by describing the chaos engulfing Liberia and Sierra Leone and warning of the

Anarchy's anatomy
Failed states, 2010

Country (Population, m)	Failed states index, score*	Life expectancy, years	Symptoms
Somalia (9.4)	114.3	51.5	Anarchy, civil war, piracy
Chad (11.5)	113.3	50.0	Desertification, destitution, meddling neighbours
Sudan (43.2)	111.8	59.8	Ethnic, religious strife, illiteracy, tyranny
Zimbabwe (12.6)	110.2	50.4	Economic collapse, kleptocracy, oppression
Congo (67.8)	109.9	48.8	Civil war, massacres, mass rape, looting
Afghanistan (29.1)	109.3	45.5	Civil war, drugs, no infrastructure, terrorism
Iraq (31.5)	107.3	70.2	Ruined infrastructure, sectarian strife, terrorism
Central African Republic (4.5)	106.4	48.6	Desertification, destitution, disease, terrorism
Guinea (10.3)	105.0	60.1	Destitution, drugs, kleptocracy
Pakistan (184.8)	102.5	68.0	Coups, drugs, illiteracy, terrorism
Haiti (10.2)	101.6	62.1	Deforestation, destitution, crime
Côte d'Ivoire (21.6)	101.2	59.6	Incipient civil war, post-election deadlock

*Out of a potential 120, based on 12 indicators

Fig. 3 Failed States. *Source:* The Fund for Peace, Foreign Policy, United Nations, the Economist

‘coming anarchy’ in other parts of the world (The Economist 2011a, b). Recent events in Tunisia, Egypt, Libya and so on, seem to reverberate this tune.

As soon as the term ‘state failure’ was born, political scientists began picking it apart. ‘Failure’ may misleadingly imply that a government is trying to ‘function’ but actually cannot manage. In the case of Somalia, there is merely a de-facto, U.N. supported government that tries (often in vain) to extend its authority beyond the capital Mogadishu. In fact, dysfunctional statehood may suit the powerful. As Ken Menkhaus of Davidson College in North Carolina has written (Berdal and Wennmann 2010), ‘the last thing a kleptocrat needs is good judges, or robust ministries that could be power bases for rival robber barons’ (The Economist 2011a, b).

This approach fits perfectly the case under investigation in the present study. ‘Where governments have become deeply complicit through their impotence in criminal activities, perpetuation of state failure is essential for the criminal enterprise to operate.’ This is where Somali Piracy’s ‘competitive advantages’ come to surface.

Using Porter’s ‘Diamond’ the study tried to approach the scourge from a different angle, clearly business-oriented, and to provide an alternative perspective to the existing ones.

Somali piracy has evolved to the point of self-sustainability. Its ‘Diamond’ has intriguingly merged a set of disparate, mainly local (and international in some cases) stakeholders, like business kingpins, semi trained ex-security personnel, money launderers, politicians and others, into a mosaic powered by diverse drivers like geography, international trade, poverty, lawlessness and lack of central political authority. Its mechanism has by now gone ‘supercritical’, which means that even if some of its initial ‘comparative advantages’ were neutralised, it would still keep on its developing course using its self-developed ‘competitive advantages’.

The main theme of the international discussion around Somali Piracy is that the answer to the puzzle will come 'from ashore' through the development of alternative sources of income for the locals (Hansen 2009; Second Line of Defence 2011). With all due respect to the good-will of the international community, it is the view of the authors that this is a manifestly simplistic argument given that:

- There are no (and neither will be) available sources of legitimate income bar the traditional ones of agriculture, fishing and (to a lesser degree) trade (Coutroubis and Kiourktsoglou 2010);
- Even if there were, the income (per capita) generated by these alternative professional activities would pale compared to the cash generated via piracy ransom payments.

However, based on the debate suggested in this paper, there is one determinant within the '*Diamond*' that could reverse under the right conditions the truly remarkable progress of Somali Piracy. This would be the gradual replacement of local rivalries (among politicians, clans and disparate militias) by a nation-(re)building process. Such a process could divert substantial physical and mental effort from illegitimate activities towards a creative virtuous circle. An approach that focuses on humanitarian aid and development could be far less costly than the current support of the Transitional Federal Government (TFG). More interestingly, a 'Somalia left to itself is in many respects less threatening than a Somalia that is being buffeted by the winds of international ambitions to control the country' (Bronwyn E. Bruton 2010). At the same time a progressive degeneration of local rivalries would steal from Piracy (and its '*Diamond*') its most important determinant(s), the lifeline of indispensable human, financial and technical resources.

Somali Piracy is the product of opportunistic alliances that are simultaneously very fragile and very shifting. They can fall apart very quickly under the right conditions. The international community needs to be looking at how it can foster the conditions that would speed the collapse, particularly of Al-Shabaab, since this organisation is the only one in the Somali mosaic which is backed by an ideology (the creation of a Muslim Caliphate). One of the compelling conclusions of this paper is that it is not worth the effort for the international community to set up (and support) a structured on-shore counter piracy effort (RIA Novosti 2011) since the same goal of crime eradication can be much more efficiently and effectively achieved by the locals.

It has to be a grassroots reconciliation that will take place over many years (this is the main reason the authors believe that the scourge will not disappear overnight). The international community has tried in unison, time and again, to hold reconciliation conferences where the leaders of warring factions were brought together; basically the '*warlord community*' (Bronwyn E. Bruton 2010). It is within this context that Somaliland (the north-western region of Somalia which achieved independence from Britain on June 26 1960) has yet to receive international diplomatic recognition as a state, although it has achieved a level of security and stability unmatched by the rest of Somalia (CNN 2011). International sponsors tried to get Somali factions into a room to make peace, but it always turned into a cake-

cutting exercise. It is doubtful whether the kind of reconciliation that Somalia needs will be ‘imparted’ by the international community. Most probably it’s going to take place over the course of many years and it will be self-induced. Additionally, it will be based on economic necessity (potentially a typical case of ‘*making virtue out of necessity*’) rather than an agreement that is brokered in a conference room.

On the face of it, Somalia’s history shows very clearly that in the absence of international intervention, the country has been quite ‘*inoculated*’ (a word used by intelligence operatives) against al-Qaeda and international terrorist organisations of sorts but not against local rivalries. The gist of this study is that unless these national hostilities get reasonably and effectively addressed by the Somalis themselves the high seas piracy off Eastern Africa will keep on festering for a long time to come

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***MV Renuar*: 133 Days of Fear, Helplessness, and Hopelessness**

Calixto Caniete

In the early hours of 11 December 2010, the *MV Renuar*, a Panamanian-flagged, Liberian-owned bulk carrier of 70,156 deadweight tonnes, was attacked by pirates in the Indian Ocean, approximately 1,050 nautical miles (NM) east of Somalia and 550 nautical miles from the coast of India. The vessel was carrying 46,400 tons of maize in bulk loaded in Vitória, Brazil; it was *en route* to Fujairah in the United Arab Emirates, after calling at Port Louis in Mauritius.

I remember that morning vividly when the duty officer on watch called me at about 08:30 h in the morning and advised that he had sighted a suspicious boat at a range of 15 nautical miles off our starboard bow. Following the route recommended by the UKMTO (UK Maritime Trade Operations),¹ the *Renuar* was heading on a northerly course at a speed of nine knots. Within a few minutes, I observed that the suspicious watercraft was increasing her speed and altering her course towards my position. When the boat was about 12 nm away I decided to alter ship's course by ordering 10° port rudder. After altering course, I also noticed that the suspicious boat increased her speed further from about 10 knots to around 16 knots. I ordered my helmsman to put the rudder hard to port and steer a course of 180, and ordered the engine room to increase the ship's speed to maximum, in the hope of shaking off the suspicious boat.

¹The UK Maritime Trade Operations (UKMTO) office in Dubai acts as the primary point of contact for merchant vessels and liaison with military forces in the region. UKMTO Dubai also administers the Voluntary Reporting Scheme, under which merchant vessels are encouraged to send regular reports, providing their position/course/speed and ETA at their next port whilst transiting the region bound by Suez, 78E and 10S. UKMTO Dubai subsequently tracks vessels and the positional information is passed to CMF and EU headquarters. Emerging and relevant information affecting commercial traffic can then be passed directly to ships, rather than by company offices, improving responsiveness to any incident and saving time. <http://ukmto.org/>, accessed 2 May 2012.

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Prior to transiting the Indian Ocean, I was advised by the ship operator that my ship would be registered with the UKMTO and would thereafter be given a recommended route and other instructions related to the transit. I am not new to this route, as I had sailed the Indian Ocean many times with the same ship and had already been attacked once in Gulf of Aden. It was the last week of November 2010 when I decided to install antipiracy fences or physical barriers (i.e., cyclone wire and barb wire) upon hearing testimony from fellow masters that they had been attacked by pirates near Madagascar. Along with the physical barriers we also rigged fire hoses and positioned dummy watch keepers. On December 3, 2011 while we were in Port Louis for bunkering, our estimated time of departure from that port as well as our estimated time of arrival in the high risk area were sent to both the ship operator and to UKMTO. Shortly thereafter, we received a recommended route from UKMTO to sail along longitude 67.30°E to maximize security. Security drills and briefings were carried out prior to transiting, written instructions for the officer on watch had been displayed in the chart room, an additional watch keeper was posted day and night, all doors were locked, the AIS was switched off as were the navigational lights, all port holes were covered to avoid visibility of lights at night, empty drums were rigged in the poop deck and ship sides that served as improvised tumblehome, emergency contact numbers were posted in the bridge and in the radio room, and daily reports were being sent to UKMTO to help them monitor our position. Unfortunately, in spite of all the preparation and precautionary measures, my fully laden vessel steaming with a freeboard of 5 m at a speed of nine knots was still vulnerable to pirates.

From a distance of five nautical miles I noticed two small targets in the radar coming out from the mother ship, speeding even faster than the suspicious boat. Rapid gunshots were heard coming from two skiffs that were three NM away. I sent a distress signal by activating the ship security alert system (SSAS). I tried calling UKMTO with their given contact numbers but no one was there to answer the phone. I immediately contacted the company security officer at his emergency contact number and asked him to alert and establish contact with UKMTO. They continued to shoot us with their AK-47 automatic rifles, 50-caliber machine guns, and RPG launchers while surveying the ship to look for the best access and boarding point.

The ship operator and UKMTO called alternately every 15–20 min for information and updates. No support came even after several hours had passed since the attack started and the pirates continued to chase us with their guns shooting everywhere all over the ship. I sent some of my crew to hide in the citadel. I used evasive maneuvers to make it difficult for the pirates to board my ship. We recovered an 8-m ladder that the pirates were trying to use to board my ship but which they left hanging in the poop deck as their skiff ran out of fuel. I thought I had succeeded in escaping them but to my surprise and dismay they returned after refueling and continued to chase us. With all the bullets hitting the navigation bridge I could no longer manage to maneuver the ship. I remained on the deck of the bridge until we heard them shooting and shouting outside the bridge at around 14:30.

Since we had confiscated their ladder, what the pirates had apparently done is to fashion a grappling hook that readily caught on to the barbed wire and facilitated their boarding under cover of machine gun fire. Before long, one pirate who claimed to be the commander ordered me to stop the ship, summon all my crew and switch off the ship's communications equipment. The rest of the pirates came onboard after the ship had stopped. It took about 5 days before we reached Garacad anchorage where the other hijacked ships were also being held hostage. Thirty new pirates came onboard while the eight original pirates who captured us left the ship. One of them introduced himself as the negotiator, Mr. Wiseman (not his real name).

The whole crew was restricted to only one side of the bridge and was allowed no freedom except to use the toilet facilities for extremely limited periods. The pirate-guards had their guns pointed at us day and night. We were given rotten rice to eat and yellowish water to drink. They refused to serve us corn from the cargo holds and we had run so low on fresh water that what we were given was coming from the bottom of the tanks. As master, I was punished severely every time the situation got rough—such as when the vessel ran out of food or when they felt that negotiations with the shipowner were not going well. Deprived of our basic human rights, we hoped against hope that someone would come to our aid as we followed the pirates' despicable orders just to survive, grudgingly provided medical care to almost all the pirates onboard, and served the pirates like slaves. The cook and the mess boy were given chance to prepare our food but still remained under guard. With the water supply extremely limited, we were hardly allowed to wash ourselves. Some of us got sick but with the help of prayers we held on to the promises of our faith that our God would never forsake us. We worked hard to consistently boost each other's morale and clung to the hope that in time our release would come.

Sometime in the middle of February 2011, when the ship had run out of fuel, the pirate commander became furious and was totally convinced that I was simply making up stories, that I was in fact only hiding the rest of the fuel. He hit me with the butt of his rifle and announced that I was to be executed. I had ordered my Chief Engineer to run the emergency generator only during the dark hours and when preparing meals for us and for the pirates. The pirates managed to supply us diesel every time we ran out, but the situation simply became worse day by day especially when we finally exhausted our supply of drinking water. They transferred 20 metric tons of heavy oil from the other hijacked vessels so that we could run our evaporators to produce fresh water. In return, fresh water was supplied back to the other ships.

On 20 March 2011 a fuming pirate commander returned to the ship. Frustrated that the shipping company continued to refuse to pay the ransom that they were demanding, he dragged me down to my cabin and told me that I was to be beheaded the following day. He said that they had already informed the shipping company that I had been taken away to the shore and handed over to the families of the pirates whom they claimed drowned during the attack because of the ship's evasive maneuvers. The shipping company promptly resumed negotiations, with the pirates' assurance that I would be returned back to the ship alive.

It was the second week of April when all the pirates who had captured us came back on board. The negotiator Mr. Wiseman had called up a meeting to discuss the shipowner's latest ransom offer, an amount in which they were obviously not satisfied. With what courage remained in me, I tried to convince the pirates to accept what the company was offering. I laid out the following facts: the ship is old, the media has lost interest in our case (even after they sent them our photos, it didn't create a media sensation), the insurance had expired last February 2011, the flag state did not want to communicate with them, and as the cargo had begun to spoil the cargo owner was also not interested. I put it to them that with the Lenten season upon us, the shipowner would be celebrating for more than a week. I told them no one knows if, after resuming offices after the holidays, the shipowners might change their minds and offer less. Since the commander was also having a hard time to provide us with diesel for our daily consumption, they finally agreed and asked the negotiator to accept company's offer.

Ransom delivery was agreed subject to the condition that each member of the crew be given a chance to speak to the company as proof of life. In the early hours of 23 April 2011, I was ordered by the pirate commander to prepare my crew to line up on the main deck. The pirate commander informed me that delivery of the money would take place within 2 hours. A small plane made two passes close to our ship and dropped something on the third. They brought back all my crew to the bridge and restricted them once again to one side. It was nearly noon when we noticed that the pirates had begun changing into their military uniforms and started to leave the ship. After learning that all pirates had left the ship I ordered my Chief Engineer and Electrician to start the emergency generator with the remaining 10 L of diesel in order to make contact with the company to ask for assistance. I was not able to sail that day. We only had 2 metric tons left of the heavy oil and 10 L of the diesel. A small ship was sent by the company to provide us all our needs—fuel, water, food, and clothing. Even security personnel were sent on board. I was able to leave Somalia on the following day, 24 April 2011, immediately after bunkering was completed. We were escorted by NATO warship until south of Socotra. Four security personnel remained onboard until we arrived in Fujairah in the United Arab Emirates.

I came home alive and, in fulfillment of the promise of my faith,² was finally reunited with my family.

²“Never will I leave you; never will I forsake you.” Hebrews, 13:5 (New International Version).

The Human Cost of Somali Piracy

Kaija Hurlburt

1 Analysis of Reporting Methods and Data

1.1 Methodology to Determine Incident Accounts

The International Maritime Bureau (IMB) provided this Oceans Beyond Piracy (OBP) report's foundational 2010 data on attacks by Somali pirates. The IMB receives information directly from ship masters and chief security officers. The IMB's database was cross-checked against the U.S. Office of Naval Intelligence's (ONI) weekly worldwide threats to shipping reports. Aggregate numbers from European Union Naval Force (EU NAVFOR) were used as a final check. These comparisons revealed only minor discrepancies in the reported number of attacks and hijackings. A compilation of IMB and ONI reports yielded an aggregate estimate of 53 vessels hijacked in 2010 by Somali pirates (Fig. 1).

To understand what happens to hostages and hijacked vessels, we searched for detailed data on each ship hijacked in 2010. We obtained information from conventional media sources, such as Reuters and Associated Press, and specialized media including the Maritime Security Review and SomaliaReport. These were press accounts, post-incident interviews provided by crewmembers, or confidential information provided to the authors. In all cases where a vessel is specifically named in this report, the information came from open, public sources (Fig. 2).

Open but unofficial sources provided information on hostage negotiations and final ransom amounts, mothership activities, the use of violence by pirates, and general descriptions of hostages' experiences. Using a combination of these reports and official numbers from the IMB and ONI, we found that 26 % of seafarers attacked by armed pirates were taken hostage. Of these, 59 % faced increased levels

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IMB	49
ONI	45
EU NAVFOR	47
OBP	53

Fig. 1 Number of vessels hijacked in 2010

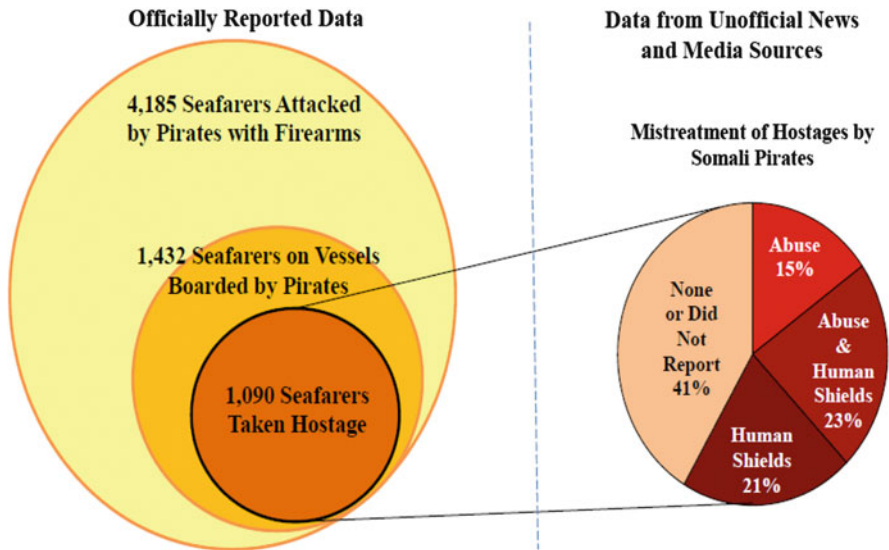


Fig. 2 Seafarers attacked by Somali pirates

of violence, including abuse and forced involvement in mothership operations. The following charts show the number of seafarers involved in attacks:

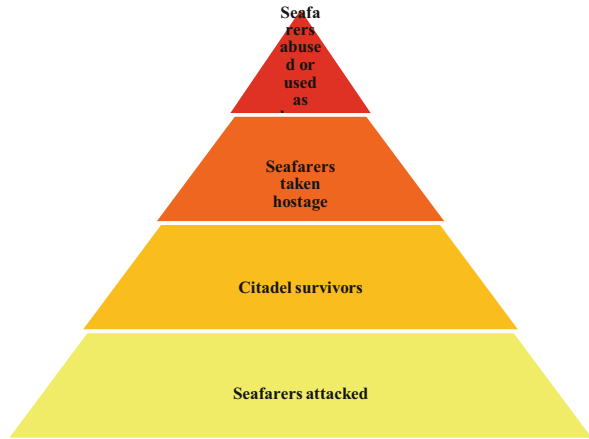
1.2 Categories of Violence Against Seafarers

The IMB’s data provides valuable information used to track the crime of piracy. Its reporting format does not incorporate the activities and crimes that occur after the point of attack or hijack. Therefore, the reporting does not accurately account for the full array of crimes committed by Somali pirates against individuals taken hostage.

The IMB classifies pirate attacks under four categories: Attempted, Fired Upon, Boarded, and Hijacked.¹ To better understand the phenomenon of violent crime at sea, we restructure the current reporting format to focus on attacks with firearms

¹ *Attempted*: vessels approached by a pirate skiff; no shots fired by the pirates. *Fired Upon*: vessels shot at by pirate groups; pirates unable to board vessel. *Boarded*: vessels boarded by pirates, but not hijacked. *Hijacked*: vessels over which pirates successfully gain control; crew is taken hostage.

Fig. 3 Increasing severity of violence



only and include information on the types of violence committed during both the attack and the subsequent period of captivity (Fig. 3). This report divides the forms of trauma that seafarers face into different categories based on the “severity of violence.”

1.3 Statistics on Violent Crime in the Gulf of Aden and Indian Ocean vs. Land-Based Crime

Generally, crime reporting at sea is limited to the reporting of traditional and customary maritime crime. Therefore, most of the incidents fall under the overarching rubric of “piracy”. Details of the crimes are typically limited to the number of casualties that occurred during a piracy attack rather than a breakdown of the separate crimes committed against seafarers. Most piracy attacks are reported by time, place, crew count, and number killed or injured in the attack. This is in contrast to most reporting ashore that emphasizes the different acts of crime that might be committed. For example, where a crime at sea might be reported as a failed pirate attack with three wounded crew, the equivalent crime ashore could be reported as a combination of attempted murder, attempted armed robbery, and aggravated assault.

It should be noted that some states with a nexus, or link, to individual attacks have prosecuted under national legal codes for crimes other than piracy. However, most countries cannot prosecute for crimes other than piracy without a nexus to an individual attack. Therefore a blanket term of “piracy” is used to describe most of these crimes at sea.

To illustrate this point, this report compares specific crimes committed at sea (seafarers attacked, seafarers taken hostage, and seafarers killed) to comparable crimes ashore based on categories accepted by the United Nations Office on Drugs and Crime (major assault, kidnapping, and murder). While this provides a clear

relationship between violence occurring at sea and how the crime would be perceived in most countries, international crime statistics are normally based on less precise categorizations.

1.4 Reliability of Data

The majority of officially-reported information relates to initial attacks and the release of vessels with limited information assessing periods of captivity; that which is publicly available is often controlled by pirates and intended to influence ransom negotiations. Hostage accounts and post-incident reports gathered by flag state officials, ship owners, and law enforcement agencies are not shared publicly. As a result, the reports that reach the public are largely limited to attack and release details. The following diagram outlines the typical flow of information on hijacked vessels (Fig. 4).

Details on the hostage experience are not available at any of the official piracy reporting sources. While a number of organizations interview hostages upon release of a vessel, most officials were unwilling to share post-incident reports with OBP. As a result, there is very little data with which to develop a base level analysis or explore trends over time. Consequently, there is limited understanding of types of abuse and other crimes that may be committed during captivity. This also makes it impossible to determine if mistreatment is random or systematic. Below is a description of the reliability of the data collected for this report:

- (1) *Seafarers attacked*, (2) *Citadel survivors*, and (3) *Seafarers taken hostage*. This information is derived from official databases including the IMB, EU NAVFOR, and ONI. The number of vessels is precisely reported. The number of seafarers is reported in the majority of incidents; when not reported, an average is used for each type of vessel. The primary weakness in this data involves the smaller coastal and fishing vessels, which are not always reported. This information is considered to be reliable.
- (4) *Seafarers abused and/or tortured*. As there is no official reporting on this subject, the attacked vessel reports were compared against press accounts, blogs, confidential sources, etc. Given sensitivity concerns for the victims, structural impediments, and liability concerns, the exact number of incidents cannot be verified and may be at odds with official releases and databases. Firsthand accounts given by crew, press reporting, and general statements made by government and industry spokesmen provide enough empirical evidence that these crimes are actually occurring. Due to the lack of official reporting methods, the specific numbers are considered to be less reliable.
- (5) *Forced collaboration/human shields*. There are various sources in press accounts, official incident reports, and warnings identifying vessels used as motherships and incidents where crewmembers were used as human shields. The initial findings were then matched against military sources and briefings

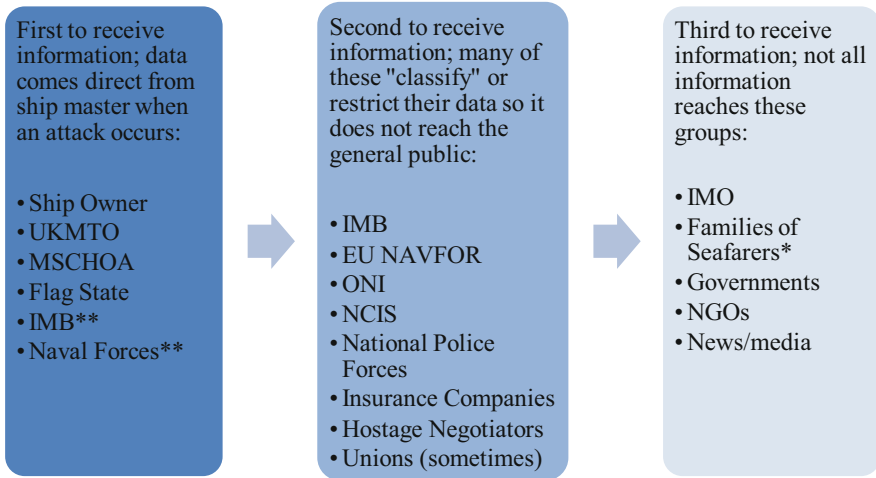


Fig. 4 Flow of officially reported information. *Single asterisk:* While some shipping companies contact families directly, many families receive their information from press reports. *Double asterisk:* IMB and naval forces sometimes receive firsthand accounts through direct contact with the ship (IMB) or direct observation of the attack (naval forces)

provided to public sources for verification. This information is considered to be reliable (Fig. 5).

Underreported and unreported attacks posed another challenge. Discussions with piracy experts revealed that even a compilation of data from the IMB, ONI, and EU NAVFOR was incomplete because many vessels do not report attacks to the authorities as suggested in the shipping industry’s Best Management Practices (BMP). These can include dhows, local fishing vessels, or vessels involved in illegal activities. Some of these are taken by pirates and used to launch future attacks. These vessels are not included in this report.

1.5 Data Related to Somali Casualties

There is no official reporting on the numbers of Somalis killed by navy, coast guard, or armed private security personnel. While this information is typically required of military forces, there is no such required documentation in the waters off Somalia. For example, in a well-reported incident in which the Russian Navy apprehended ten suspected Somali pirates and set them adrift in a raft, there is no accounting for the whereabouts of the pirates.² As such, the minimal information available on Somali casualties is considered to be unreliable.

² BBC News (2010).

Reports emerged through the media and unofficial sources of increasing violence against hostages. Initially, there was strong resistance to stating that any of the hostages were “tortured” by pirates. Officials acknowledged that pirates were undeniably abusing seafarers, but were reluctant to classify this abuse as torture. However, many officials made statements in early 2011 on the use of torture against seafarers by pirates, supporting our use of the term:

- Former Operation Commander of EU NAVFOR, Major General Howes, said there are “regular manifestations of systematic torture.”²
- Andrew J. Shapiro, U.S. Assistant Secretary of State for Political -Military Affairs, said in a speech in March of 2011 that “the attacks are more ruthless, more violent and wider ranging. Hostages have been tortured and used as human shields.”³

In **Appendix I**, we consider several leading definitions of torture and conclude that many of the abuses committed by Somali pirates constitute torture.

Fig. 5 Are seafarers being tortured?

2 Detailed Analysis of the Effects on Crew

Both successful and unsuccessful attacks expose seafarers to dangerous experiences with the potential for long-term physical and psychological trauma. Somali pirates are heavily armed, frequently with automatic weapons and rocket-propelled grenades (RPGs). Pirates attack ships, abuse seafarers, and place hostages in control of heavily armed men, all of which have the potential to cause serious injury or even death to seafarers. Additionally, the long-term psychological impact of these experiences, though subtler and more difficult to detect, is nevertheless severe. This report analyzes five categories of the severity of violence against seafarers (Fig. 6).

2.1 *Seafarers Attacked: 119 Vessels with 2,753 Crewmembers*

The initial violence occurs when pirates fire AK-47s and RPGs at a vessel. While this is the least severe form of violence described in this report, these experiences engender fear and distress in the seafarers. Numerous ships and crews suffered attacks, some multiple times, and pirates may not immediately cease their attack when security guards are present as evidenced in the following excerpt from an incident report detailing an attack on the *MT Al-Nouf*:

Physical Dangers	Psychological Dangers
<ul style="list-style-type: none"> • Weapon fire and explosives from pirates • Abuse or violence if pirates gain access 	<ul style="list-style-type: none"> • Exposure to combat experience of exchanged gunfire • Fear and uncertainty about pirate success in attack • Experience of threat during attack

Fig. 6 Primary dangers for seafarers attacked

The pirate action group (PAG) fired RPG’s and other automatic weapons at the Tanker and attempted to board her... their armed security team was engaged in a firefight that eventually led the PAG to break off their attack... Three crew members were injured by pirate gun fire, one seriously and the vessel sustained damage from the RPG’s and automatic gun fire.³

Although deaths are infrequent, seafarers under attack are exposed to direct weapon fire that is virtually nonexistent outside of active war zones. Studies show that people are distressed when they are a target of rifle fire, which is a much less destructive weapon than an AK-47 or RPG.⁴ There is no current research on the specific effects this has on seafarers, but a prolonged struggle with a hostile enemy force has the potential to cause distress similar to other combat exposure (Fig. 7).

2.2 Citadel Survivors: 19 Vessels with 342 Crewmembers

After first attacking a vessel, pirates attempt to board using grappling hooks and ladders. When successful, the crew faces the risk of a direct encounter with a pirate. BMP recommends vessels include a fortified safe-room (‘citadel’) where the crew can hide and await rescue by naval forces. Citadels, if properly designed, can provide shelter for up to 3 days. While the crew may be safe, this is an extremely stressful and potentially dangerous period of time.

There are many potential scenarios involving citadels. If a naval vessel is nearby and alerted, seafarers may spend a few tense and terrified hours inside, but will ultimately be rescued. If not, pirates will have time to locate and try to break into the citadel, as occurred in the 2011 attack on the *MV Arillah-I*. For 30 h, the crew engaged in a continuous battle with the pirates outside the citadel until UAE Special Forces rescued the ship.⁵ EU NAVFOR emphasized that citadels do not guarantee military response.⁶ They therefore should only be used if naval forces have been contacted and are able to rescue the crew.

³ Sea News (2011).

⁴ Amir et al. (1996), pp. 341–351 and Prigerson et al. (2001), pp. 99–108.

⁵ United Filipino Seafarers (2011).

⁶ EU NAVFOR Somalia (2011).

Physical Dangers	Psychological Dangers
<ul style="list-style-type: none"> • Weapon fire and explosives from pirates • Abuse or violence as retribution if pirates gain entry • Smoke or chemical inhalation 	<ul style="list-style-type: none"> • Prolonged experience of threat during attack • Fear and uncertainty about pirate success in attack

Fig. 7 Primary dangers for citadel survivors

Physical Dangers	Psychological Dangers
<ul style="list-style-type: none"> • Violence from captors • Malnutrition • Lack of access to medicine or health care 	<ul style="list-style-type: none"> • Lack of control over own life • Sense of perpetual, lasting danger • No access to family for prolonged periods of time

Fig. 8 Primary dangers for seafarers taken hostage

It is also very important that citadels are well constructed and able to withstand pirate attacks. If the citadel is not fully fortified, pirates may be able to break in with welding equipment as they did on the *MV Beluga Nomination*.⁷ The awareness that citadels are not 100 % effective can increase the fear and stress experienced by seafarers under pirate attack. Additionally, the expanding region patrolled by pirates increases the time that seafarers may spend in a citadel, as well as the risk that no military help will arrive in time to rescue them (Fig. 8).

2.3 Seafarers Taken Hostage: 53 Vessels with 1,090 Crewmembers

Hostages are held for months without proper nutrition, access to medical care, or interaction with their families. Seafarers taken in 2010 were held hostage for an average of 5 months, and this figure continued to grow in 2011 and 2012. Hostages are kept ignorant of their fate, away from their families, without access to regular medical care, and lacking control over their own lives. The potential for violence from heavily armed pirates is a constant threat (Fig. 9).

There are clear indicators of the toll on hostages. The third officer of the *MV Iceberg 1* is reported to have committed suicide by drowning after 7 months in captivity and other crewmembers report increasing mental distress (the *MV Iceberg 1* was ultimately released after 1,000 days in captivity).⁸

⁷ Gloystein and Saul (2011).

⁸ Mwangura (2011).

Physical Dangers	Psychological Dangers
<ul style="list-style-type: none"> • Violence from captors • Malnutrition • Lack of access to medicine or health care • Torture • Risk of suicide 	<ul style="list-style-type: none"> • Lack of control over own life • Sense of perpetual, lasting danger • No access to family for prolonged periods of time • Death threats or mock executions

Fig. 9 Primary dangers for seafarers abused

2.4 Seafarers Abused: Up to 21 Vessels with 488 Crewmembers

In contrast to the previous perception of pirates as humane captors, there are numerous reports of pirates abusing seafarers. Press reports and other sources indicate that abuse or torture occurred aboard 21 of the 53 hijacked vessels in our database.

2.4.1 Physical Abuse

Physical abuse, as defined in this report, includes: deprivation of food and water, beating (often with the butt of a gun), shooting at hostages with water cannons, locking hostages in the ship’s freezer, tying hostages up on deck exposed to scorching sun, and hanging hostages by their feet submerged in the sea.

There are many reports of hostages experiencing direct, severe abuse. For example, the hostages from the *MV Marida Marguerite* were subjected to beatings, forced time in the ship’s freezer, and hanging from the mast and meat hooks.⁹ There are also reports that hostages have died due to malnutrition and a lack of access to medical care.¹⁰ During captivity, hostages are fed inconsistently and poorly. The captain of the *MV Iceberg 1*, the longest held ship still in captivity, reported that his diet consisted of a single daily meal of boiled rice.¹¹

2.4.2 Psychological Abuse

Psychological abuse, as defined in this report, includes: firing weapons as an intimidation tactic, solitary confinement, calling family members while threatening hostages, parading hostages naked around the vessel, and taking hostages ashore to see their supposed graves.

⁹ Freeman (2011).

¹⁰ Maritime News (2010).

¹¹ Mwangura (2011).

Physical Dangers	Psychological Dangers
<ul style="list-style-type: none"> • Abuse from captors 	<ul style="list-style-type: none"> • Lack of control over own life
<ul style="list-style-type: none"> • Exposed to danger from militaries and other ships 	<ul style="list-style-type: none"> • Sense of perpetual, lasting danger
<ul style="list-style-type: none"> • Similar dangers to hostages 	<ul style="list-style-type: none"> • Death threats or mock execution
	<ul style="list-style-type: none"> • Guilt from participation in piracy

Fig. 10 Primary dangers for seafarers used as human shields

Seafarers also regularly report death threats and mock executions. In some cases, threats or sudden outbreaks of violence occur. One captain reports that the ship's engineer was threatened several times with a gun when pirates accused him of using too much fuel.¹² In other cases, abuse can involve elaborate and convincing mock executions. The captain of a hijacked vessel was forced to endure a drawn-out mock execution that included writing a farewell letter, kneeling in preparation for execution, and months of solitary confinements.¹³ In some cases, the crews are segregated by nationality by the pirates in an apparent attempt to increase factionalism in the crew (Fig. 10).¹⁴

2.5 *Seafarers Used as Human Shields: Up to 23 Vessels and 516 Crewmembers*

Some hostages are forced to continue to operate their ships as the pirates use these vessels to capture others. Even more terrifying, the crewmembers aboard these "motherships" serve as human shields in defense against naval attack.

2.5.1 **Forced Collaboration**

In 2010, pirates began using hijacked vessels as motherships to launch pirate attacks on other vessels. In these situations, pirates force the crew to facilitate the attack. Seafarers forced to participate in pirate attacks may experience guilt for their role in abetting piracy. There is also likelihood of greater violence during attacks because the pirates experience higher stress and are more likely to beat or even shoot the crew.

¹² Asian Correspondent (2011).

¹³ Novinite.com (2010).

¹⁴ VietNam (2011).

2.5.2 Human Shields

Pirates sometimes use captured seafarers as human shields when naval forces approach. This can be as simple as hostages placed visibly on deck in the line of fire to deter naval attacks. The use of hostages as human shields can also be more sinister. Former EU NAVFOR Operation Commander Major General Howes reported that pirates abuse seafarers to pressure navies to retreat: “If warships approached a pirated ship too closely, the pirates would drag hostages on deck and beat them until the warship went away.”¹⁵

2.6 *Post-Traumatic Distress and the Long-Term Impact on Seafarers: No Numbers Available*

Predictors of long-term problems include exposure to direct threats to life or physical safety, experiencing a fear-invoking event, or events that put people under others’ control. This last predictor—the experience of being wholly controlled by someone else—is identified as something that can cause lasting problems.¹⁶ Long-term psychological impacts include substance abuse, depression, and post-traumatic distress.¹⁷

Dr. Michael Garfinkle is conducting a study for the Seamen’s Church Institute (SCI) on the psychological impact of piracy on seafarers.¹⁸ While Dr. Garfinkle’s study is not yet complete, his initial review of interviews with seafarers suggests that many seafarers—both those who have and have not experienced an attack—show increased anxiety about the potential for an attack. Many seafarers report feeling they must return to sea despite their fears, emphasizing that choosing to quit is not an option because their families, and in some cases entire villages, rely on their incomes.¹⁹

¹⁵ Howden (2011).

¹⁶ Mineka and Hendersen (1985), pp. 495–529 and Foa et al. (1992), pp. 218–238.

¹⁷ Rundell et al. (1989), pp. 68–74.

¹⁸ This major study is being conducted by the Seaman’s Church Institute (SCI) in partnership with the Disaster Psychiatry Outreach program at the Mt. Sinai School of Medicine. This project is designed to identify the specific characteristics of piracy experiences that make them particularly stressful, and to track the long-term impact of these experiences on seafarers and their families. The principle investigator of this study, Dr. Michael Garfinkle, reports that the data collection for this study is not yet complete. The report is still in the data-collection phase and will be released at the end of 2011.

¹⁹ Dr. Michael Garfinkle, Associate Clinical Professor of Psychiatry at Mount Sinai Medical Center and Clinical Researcher for the Center for Seafarers’ Rights, pers. comm, 10 May 2011.

2.7 *Seafarers' Families: No Numbers Available*

The impacts of pirate attacks and hostage-taking reach beyond the seafarers who are directly exposed. The seafarers' families are an important group of victims that is often overlooked. Their experiences may not be as obvious as those of seafarers who are captured by pirates, but in many ways the psychological impact of their suffering is just as severe. Seafarers themselves have said that their greatest concern while in captivity is the well-being of their families.²⁰

One of the main sources of trauma for the families is their lack of knowledge about the situation. Reports show that most families are not only terrified for their loved ones, but also in a state of uncertainty with no clear idea of where to find information.²¹ The majority of seafarers come from developing countries where there may be limited access to information outlets such as the internet. Many families receive infrequent and inconsistent correspondence from their loved ones and may not be aware that their family member will be transiting high risk waters. As a result, families are in a constant state of fear and uncertainty—an extremely distressing situation that may cause long-term problems.

There are also reports of Somali pirates explicitly using families as a method of increasing pressure on the shipping companies in negotiations. Families and seafarers have reported that pirates may encourage seafarers to call their families, only to take the phone and threaten the family that their loved one will be killed if the ransom is not quickly paid.²² Seafarers' experiences may also affect their families directly after a release. Post-traumatic distress and long-term problems are characterized by an increase in negative behavior, including increased substance abuse, problems with interpersonal relationships, and spousal abuse/intimate partner violence.²³

3 Crimes Against Seafarers

As illustrated by the data presented in this report, seafarers face a dangerous and violent work environment as they transit areas at high risk from piracy. Although billions of dollars are spent to prevent piracy and protect seafarers, there is still no effective law enforcement to deter violent attacks by Somali pirates.

²⁰ Id.

²¹ Id.

²² Id.

²³ Taft et al. (2011), pp. 195–212.

3.1 Protecting Seafarers Rights to a Safe and Secure Workplace

Piracy directly infringes upon seafarers' rights by bringing risk of attack into their workplace and when taking seafarers hostage. The International Labor Organization (ILO) adopted the Maritime Labour Convention in 2006, which states in Article IV (1): "Every seafarer has the right to a safe and secure workplace that complies with safety standards." Additionally, the International Convention on Civil and Political Rights (ICCPR) outlines seafarers' basic rights of seafarers Article 9(1.) of the ICCPR declares that "everyone has the right to liberty and security of person. No one shall be subjected to arbitrary arrest or detention."

The international community treats piracy as a crime subject to prosecution and incarceration, but has limited capacity for enforcement. The UN Security Council Resolution on piracy 1976 (2011) urges all states to criminalize piracy under domestic law and calls on states to prosecute and imprison pirates under universal jurisdiction. However, there are no adequate laws, prosecution venues, or incarceration facilities to successfully treat piracy as a crime. States have the power to try pirates, but the United Nations Security Council reports that 90 % of pirates captured by international navies are released.²⁴ This is far below the global average: for all types of crime, 33 % of all alleged criminals are prosecuted, and 20 % of all crimes end in conviction.²⁵ Regardless of the number of pirates prosecuted, there is a consensus that more needs to be done to enforce the seafarers' rights.

3.2 Comparison of Crime Rates at Sea with Crime Rates Ashore

Since the international community classifies the violent acts perpetrated against seafarers as criminal acts, they should be compared to other high crime areas to better understand the risks faced by seafarers. For this comparison, it is necessary to match attacks reported under the blanket term of "piracy" to other reportable crimes ashore. Although criminal laws vary between different nations and jurisdictions, we compare major assault to armed attacks at sea, kidnapping to hostage taking, and murder to pirate attacks that resulted in "killed" or "missing" seafarers (Fig. 11).

- On a per capita basis, the major assault rate in the waters off Somalia is the highest in the world.

²⁴ "In Race Between Pirates And International Community, Pirates Clearly Winning, Secretary-General's Top Legal Adviser On Piracy Warns Security Council: SC10164," United Nations Security Council, January 25, 2011, <http://www.un.org/News/Press/docs/2011/sc10164.doc.htm>.

²⁵ Harrendorf et al. (2010), p. 93.

Crime Rates at Sea* in Waters off Somalia (per 100,000)		Highest National Crime Rates of Equivalent Crime Ashore (per 100,000)	
Seafarers Subjected to Armed Attack on Vessels	697.5	Major Assault	576 (South Africa)
Seafarers Taken Hostage	181.7	Kidnapping	~15 (Turkey)
Seafarers Killed	1.3	Murder	~58 (Jamaica)

Fig. 11 Crime rates at sea compared to crime rates ashore. *Single asterisk:* Determination for crime rates at sea: sample base is derived from 2010 numbers. Using an average yearly number of ships transits through the Red Sea and Gulf of Aden (30,000) and assuming an average crew of 20 for each vessel, this calculation yields an affected population of 600,000

- The country with the highest kidnapping rate in the world is 12 times lower than what seafarers face.²⁶
- The murder/missing rate is currently below the world median; however this rate is expected to rise precipitously in 2011.
- The numbers for crimes at sea are likely higher than represented due to the fact that the 600,000 seafarers spend an average of 5–6 days per transit in the affected area, as opposed to the crimes on land, which is based on victims living in the affected area for an entire year.

3.3 Honoring Seafarers’ Right to Information on the Commission of Crimes

Seafarers are entitled to accurate and timely information about dangerous situations so that they can make informed decisions about their own safety. This can also help them to fully understand need to take actions, such as the precautionary measures suggested in BMP, to reduce their likelihood of being taken hostage by pirates. According to a crewmember from the *MV UBT Ocean*, which was held by pirates for four and a half months, during which time crewmembers were reportedly abused and tortured, “All the seafarers must be fully aware of this danger and risk in crossing the Indian Ocean.”²⁷

As discussed above, a significant portion of the information on crime at sea is controlled by private agencies and flag states, which do not have an obligation to report this data to the general public. At the micro-level, each organization may have specific, and usually sound, reasons for keeping this information out of the public domain. In this sense, there is a significant difference between the reporting

²⁶ Harrendorf et al. (2010), p. 32.

²⁷ Win (n.d.).

of crimes within a state with clear laws and guidelines and the reporting of crimes that are committed in international waters where multiple states and citizens are involved.

4 Somali Costs

The impact on Somalia and Somalis is poorly documented or understood. With approximately 2,000 Somalis involved in piracy,²⁸ pirates represent an extremely small fraction (0.02 %) of the Somali population, which is loosely estimated to be around 9 million.²⁹ While there are communities and agencies within Somalia trying to fight piracy, piracy is only one of many wide-ranging challenges. It is therefore unlikely that piracy will be solved without international support.

Furthermore, a number of Somalis remain sympathetic to pirates due to concerns over illegal fishing and dumping by foreign vessels in Somali waters. The first pirates who conducted operations in the Gulf of Aden stated that their intent for capturing foreign vessels was to protect Somali waters from illegal exploitation. It is clear that pirates are motivated by financial incentives, but the original complaint has not been resolved leaving pirates with the ability to justify their crimes as protection of Somali waters. It is important to tackle this issue in coordination with counter-piracy efforts and root out all illegal activities, both those committed by Somali pirates and by foreign nationals.

4.1 Food Price Insecurity and the Impact on Trade

A serious impact of Somali piracy on local populations is reduced food security. SomaliaReport and AllAfrica.com both reported significant increases in the price of basic food commodities and petrol as a direct result of pirate hijackings, though it is difficult to fully disaggregate the impact of piracy from other factors.³⁰ Pirate gangs also target Somali fishermen, stealing their engines and boats, and reportedly driving many fishermen out of the trade.³¹ These impacts undermine the average Somalis' ability to purchase basic food and supplies.

²⁸ "2000 Somali Pirates are Hijacking the World's Economy," Save Our Seafarers, available online: <http://www.saveourseafarers.com/>.

²⁹ Data by Country: Somalia, The World Bank, available online: <http://data.worldbank.org/country/somalia>.

³⁰ Ibrahim (2011).

³¹ Somalia Report (2011).

While these impacts are real, in some cases the economic benefits of piracy may outweigh the costs, at least to targeted communities. For example, as long as the residents of the Somali community of Hobyo continue to earn outrageous profit margins by supplying pirate enterprises, Hobyo is likely to continue to offer sanctuary to the pirate networks, and the anger felt by Mogadishu or inland residents over food inflation is not likely to undermine the pirates' ability to operate.³²

4.2 Piracy's Impact on Somali Society and Culture

Given the vast incentives of increasing ransoms for pirated vessels and hostages, it is probable that the number of Somalis involved in piracy will grow. As of 2010 it may be only 2,000 Somalis involved in piracy, but organized crime, once established, can ruin entire societies. According to a report from Jack Lang, the UN's Special Adviser on Legal Issues related to Piracy off the Coast of Somalia, piracy is already having a destructive effect on Puntland's clan structure.³³ Unfortunately, the dearth of reporting on Somalia makes it difficult to produce concrete evidence of these socio-cultural changes. Criminal activities often bring negative influences to a community (such as increased drug use and prostitution) and there are stories from news outlets of these problems, but there is currently no statistical data available to exclusively link them to piracy.

4.3 Pirates Killed or Missing

Somali pirates are not often included in the public discussion about piracy and its impact. However, when considering the human cost of piracy it is important to acknowledge that many pirates are killed each year. In his report, Jack Lang stated that "200–300 pirates have not returned from their expeditions since the resurgence of the phenomena."³⁴ Media reports indicated that at least 62 pirates were killed at sea in the first 5 months of 2011, which amounts to 7 % of the 2,000 pirates if this figure is annualized. Even this figure is likely an underestimate because it does not take into account the pirates that are lost at sea.

Part of why we do not know how many pirates die is because there is no organization within Somalia tracking the number of Somalis killed from piracy. This information could help deter would-be pirates by making clear that piracy is a dangerous business, and potentially show prospective recruits that the risks are not worthwhile

³² Mojon (2010).

³³ Lang (2011), p. 15.

³⁴ Id., 14.

because only the lowest foot soldiers, who receive the smallest payouts, put themselves at risk. Most piracy financiers, leaders, and ransom negotiators, which a new recruit is unlikely to be, get the lion's share of the proceeds without going to sea.

In addition to the lack of reporting within Somalia, there is no consistent reporting on the pirates killed by naval forces. Pirates may be killed in international military raids to rescue hostages³⁵ or in apparent retaliation for piracy.³⁶ As was previously mentioned, in May of 2010 the Russian navy released ten suspected pirates in the Indian Ocean without navigational equipment; while it is assumed all ten died, there is no way to verify this. In another case, a U.S. naval helicopter opened fire on a pirate skiff as it was attacking a boat, likely killing all pirates onboard, and departed without verifying the condition of the pirates.³⁷ The number of unreported pirates killed is likely to grow as private armed security guards, who are not required to provide incident reports, are more widely used. It is important that information on all people killed or injured as a result of piracy are accounted for in order to maintain consistent principles of law when dealing with both perpetrators and victims of criminal acts.

4.4 Coercion of Somali Youth

There is concern over children being coerced to join pirate gangs. The Indian Navy captured 61 suspected pirates in 2011, 25 of which were suspected to be 15 years of age or less.³⁸ Using children as pirates violates a number of children's rights. The Convention on the Rights of the Child, which came into force in 1990, holds that "States Parties shall take all feasible measures to ensure that persons who have not attained the age of 15 years do not take a direct part in hostilities."³⁹ Using children as pirates also violates the International Covenant on Economic, Social and Cultural Rights Article 10 (3.), which states that "children and young persons should be protected from economic and social exploitation."⁴⁰

³⁵ McCurry (2011).

³⁶ The Jakarta Post (2011).

³⁷ McMichael (2011).

³⁸ Pandit (2011).

³⁹ "The Convention on the Rights of the Child, Article 38 (2)," Office of the United Nations High Commissioner for Human Rights, 2 September 1990, available online: <http://www2.ohchr.org/english/law/crc.htm>.

⁴⁰ "International Covenant on Economic, Social and Cultural Rights," Office of the United Nations High Commissioner for Human Rights, 16 December 1966, available online: <http://www2.ohchr.org/english/law/cescr.htm>.

5 Underreporting the Human Cost

Thousands of people are subjected to gunfire, confinement, beatings, and in some cases torture in the course of doing their jobs. One would expect that these types of crimes would be reported in a systematic and consistent way. This could allow the public to grasp the significance of the crimes. However, the unique challenges of coordinating police activities in international waters, and the multinational nature of crews and the shipping industry, have resulted in inconsistent reporting of these violent crimes.

5.1 *Garnering More International Support Through Transparent Reporting*

A major obstacle that impedes full assessment of the human cost of piracy is the lack of consistent and transparent reporting on crimes that occur in international waters. This is only exacerbated by the treatment of piracy as a single crime that encompasses all acts that occur from hijack until release. This fails to fully account for the array of crimes committed against those individuals unlucky enough to be taken hostage.

The public has so far not been moved by stories of piracy, which are often fraught with comparisons to popular movies and books. As stated in a 2011 article in the *Chicago Sun Times*, “These criminals, far from the dashing figure of Johnny Depp in the ‘Pirates of the Caribbean’ movies, are thugs. In February, pirates murdered four Americans aboard a yacht in the Indian Ocean.”⁴¹ In order to make his point, the author uses the term “thugs” instead of “pirates” and “murdered” instead of “killed”. In another 2011 story for the BBC, reporter Tom Mangold similarly referred to the Somali criminals as “Sea Gangsters” and wrote: “They torture. They kidnap. They brutalize. They murder without pity.”⁴²

It is only through this effective reporting on the actual nature of crimes that it will be possible to garner greater public support to counter piracy. This reporting might consider not using the term “piracy,” which is in many ways outdated, and replace this with descriptions of crimes that will resonate with the public. These terms include assault, murder, kidnapping, physical and psychological abuse, and torture. Unfortunately, the information relating to these specifics is largely kept away from both the media and the public, making it difficult to bring more public pressure to bear on this topic (Fig. 12).

⁴¹ Huntley (2011).

⁴² Mangold (2011).

The seafarers taken hostage in 2010 came from at least 30 countries. The majority of seafarers come from developing countries. Only 6% of the hostages were from developed countries that are members of the Organization for Economic Cooperation and Development (OECD). The nationality of the kidnapped seafarer may directly affect the response from navies in the region and from countries around the world. For example, the U.S. mobilizes military response and numerous media sources report on the attack when U.S. citizens are involved, as when four Americans were killed aboard the *SV Quest*. However, there is less attention or public outcry for the majority of seafarers taken captive by pirates.

**Hostages by Nationality
(based on 1,090 seafarers taken in 2010)**

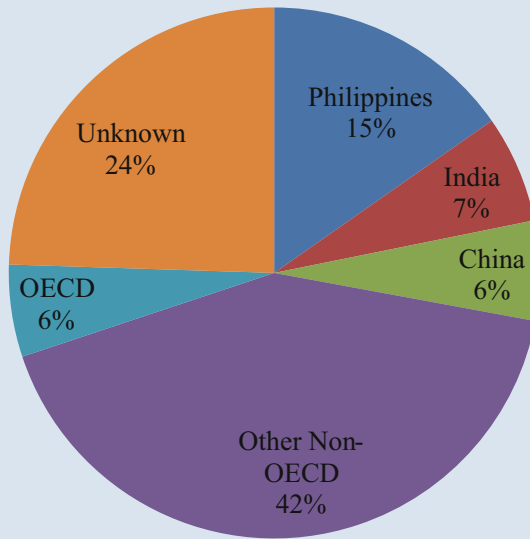


Fig. 12 Nationalities of seafarers

Acknowledgments This paper is a product of the Oceans Beyond Piracy (OBP) project, which is fully funded by One Earth Future Foundation (OEF). A number of experts and key stakeholders gave us crucial advice, guidance, and assistance during the completion of this report. We would like to thank the International Maritime Bureau; the members of the OBP Working Group; Dr. Michael Garfinkle, Associate Clinical Professor of Psychiatry at Mount Sinai Medical Center and Clinical Researcher for the Center for Seafarers’ Rights; Per Gullestrup, CEO and Partner of the Clipper Group; Kimberly Karlshoej, Program Officer for the TK Foundation; and Kerstin Petretto,

Researcher for the German PiraT Project. We would also like to thank Bronwyn Bruton, Anna Bowden, Caroline Chapman, Meadow Didier, Jeff French, Chris Hall, Maurice Janssen, Roberta Spivak, and Tracie Ware for their valuable assistance on this report.

Appendix I: Somali Pirates and Torture

Recent reports show that some Somali pirates are turning to violent methods including dragging hostages behind boats, beatings, forcing hostages into freezers, and clamping plastic ties around hostages' genitals.⁴³ For example, BIMCO, the International Chamber of Shipping, INTERCARGO, INTERTANKO, and the International Transport Workers' Federation publicly declared that:

The international shipping industry is truly disturbed at reports that pirates have been torturing seafarers physically and mentally, often in the most barbaric ways, including hanging them over the ship's side by ropes around their ankles with their heads under water and even subjecting them to the horrendous practice of keelhauling.⁴⁴

While these actions are undeniably abuse, whether it is torture depends on the precise definition of the term.⁴⁵ One of the most prominent definitions of torture comes from the 1984 Convention Against Torture (CAT), an international treaty law, which defines torture as:

any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person for such purposes as obtaining from him or a third person information or a confession, punishing him for an act he or a third person has committed or is suspected of having committed, or intimidating or coercing him or a third person, or for any reason based on discrimination of any kind, when such pain or suffering is inflicted by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity. It does not include pain or suffering arising only from, inherent in or incidental to lawful sanctions.⁴⁶

Under this definition, torture does not require physical abuse. Mental harm alone can be torture. This widens a typical understanding of torture to include intimidation.⁴⁷ However, CAT is designed to protect citizens from states and therefore requires an act to be committed by state actors to be considered torture. Given that Somali pirates are not state actors but are in fact perpetrators of torture, the CAT definition is limited in its scope and ability to protect seafarers from pirates.

⁴³ Howden (2011).

⁴⁴ Shipping Industry Outraged at Execution and Torture of Seafarers by Pirates, *INTERTANKO*, 9 February 2011, available online: <http://www.intertanko.com/templates/Page.aspx?id=49754>.

⁴⁵ Rejali (2007), pp. 36–39.

⁴⁶ “Convention Against Torture, and Other Cruel, Inhuman, or Degrading Treatment or Punishment,” Office of the United Nations High Commission for Human Rights, 10 December 1984, available online: <http://www2.ohchr.org/english/law/cat.htm>.

⁴⁷ Rejali (2007).

The International Criminal Court (ICC) offers a definition that aligns more closely with our common understanding of torture. Although it lists torture as an element of a war crime as well as a crime against humanity, only under the latter crime is it defined. The Rome Statute says torture is:

the intentional infliction of severe pain or suffering, whether physical or mental, upon a person in the custody or under the control of the accused; except that torture shall not include pain or suffering arising only from, inherent in or incidental to, lawful sanctions.⁴⁸

The ICC's definition similarly includes mental harm as torture, though the ICC does not permit intimidation (unless it can be shown to constitute mental harm) to be deemed torture. Unlike with CAT, there is no requirement of a state nexus in the ICC's formulation. Under the ICC's definition, Somali pirates' actions qualify as torture. According to the ICC and even the most restrictive definition from the CAT, the recent repulsive Somali pirate actions *do* constitute torture. Not only are these acts morally reprehensible and illegal under international law, but they also violate the human rights of seafarers.

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⁴⁸ “Article 7 (1)(f), 7 (2)(e),” *Rome Statute of the International Criminal Court*, 1998, available online: http://www.icc-cpi.int/NR/rdonlyres/EA9AEFF7-5752-4F84-BE94-0A655EB30E16/0/Rome_Statute_English.pdf.

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