

**Co-Chairs Summary Report of the  
ASEAN Regional Forum Maritime Security Workshop on  
Marine Environmental Protection Cooperation:  
Preparedness and Response to Pollution Incidents Involving Hazardous and  
Noxious Substances  
Honolulu, Hawaii, United States of America, 4-5 March 2014**

**Executive Summary**

1. The ARF Maritime Security Workshop on Marine Environmental Protection Cooperation: Preparedness and Response to Pollution Incidents Involving Hazardous and Noxious Substances was held in Honolulu, Hawaii, United States of America on 4-5 March 2014 and co-chaired by the United States, Brunei, China and Japan. This workshop set out to promote multilateral cooperation on preparedness and response to pollution incidents involving hazardous and noxious substances through a process of identifying the risk of an incident, highlighting the harmful and multifaceted effects of an incident, sharing past experiences and lessons learned, assessing existing international, regional, and sub-regional cooperative arrangements and protocols, and concluding with a roundtable discussion aimed at identifying an actionable way forward to increase regional cooperation on this issue. A workshop outcome document that captures action items for further incorporation into a statement recommending a way forward to the ARF appears as **ANNEX 1**.

2. A preview of the follow-on ARF workshop on Marine Offshore Oil Spills to be held 26-28 March 2014 in Qingdao, China was presented, with the intent to further the efforts made at this workshop.

**Introduction**

3. Pursuant to the decision of the 20th Ministerial Meeting of the ARF held in Bandar Seri Begawan, Brunei Darussalam on 2 July 2013, the ARF Maritime Security Workshop on Marine Environmental Protection Cooperation: Preparedness and Response to Pollution Incidents Involving Hazardous and Noxious Substances (HNS) was held in Honolulu, Hawaii, United States of America on 4-5 March 2014. The Workshop was co-chaired by Mr. Christian Castro, Director, Multilateral Affairs, Bureau of East Asian and Pacific Affairs, U.S. Department of State, Mr. Hj Ahmad Sulaiman bin Hj Junit, Maritime Security & Environment Protection Department, Brunei Darussalam Ministry of Communications, Mr. Wang Bin, Deputy Director General, North China Sea Branch, China State Oceanic Administration, and Mr. Yoshihiro Katayama, Director, Maritime Security Division, Japan Ministry of Foreign Affairs.

4. ARF participants from Australia, Brunei Darussalam, Canada, China, Indonesia, Japan, the Philippines, Republic of Korea, Singapore, the United States and Viet Nam attended the Workshop. The List of Participants appears as **ANNEX 2**.

5. The agenda of this workshop appears as **ANNEX 3**.

## Opening Remarks

6. Mr. Chris Castro, Co-Chair from the United States opened the workshop by thanking participants for their attendance, Pacific Forum CSIS for its support in hosting the workshop, and co-chairs Brunei, China, and Japan for their outstanding work in making the workshop possible. He also made special mention of Vietnam's role in developing the original concept with the United States nearly two years earlier. Director Castro highlighted the work of the ARF Maritime Security ISM over the past six years to provide ARF participants with the opportunity to work together in order to build confidence on maritime security issues through people-to-people exchanges and transparent discussions. The "all of government approach" that has been called for in the ISM has fostered candid and comprehensive discussions on important maritime security issues, however, Castro urged that we must continue to deepen our relationships and increase information-sharing among our agencies to build confidence, capacity, interoperability and positive cooperation in the region to prevent and respond to crises. He described the marine environment as an aspect of maritime security, as damage to the marine environment can have profound effects on national economies, quality of life, rapidly declining fish stocks, and public health and safety. Castro also linked the security of the region's maritime domain to the security interests of all countries in the Asia-Pacific and beyond, given that over forty percent of the world's seaborne trade flows through Asia, and that the region hosts 13 of the world's largest ports and over 15 million barrels of oil per day transited the Strait of Malacca last year, with most of it continuing onward through the East China Sea to three of the world's largest economies. Within this context, the workshop would focus on regional cooperation in preparedness and response to maritime environmental disasters involving hazardous and noxious substances in marine environments. Castro called on all participants to support in making discussions at the workshop as fruitful as possible. Lastly, he called on the workshop to identify key actionable recommendations to carry forward to the ARF Offshore Oil Spill Workshop to be held in Qingdao and beyond to the ARF Ministerial Meeting for approval so that the ARF can continue to focus on this important aspect of Maritime Security.

7. In his remarks, Japan's Co-Chair Mr. Yoshihiro Katayama noted that this was his first ARF meeting in his new position as Director for Maritime Security Policy at MOFA, and was impressed to see how much ARF had grown since its establishment 20 years ago. He underlined the importance of the ocean as global commons that brings prosperity to the international community as a whole. He also highlighted the importance of international cooperation to address the issue of marine environmental protection, as it directly ties to the security of the region's maritime domain. He praised the United States for its initiative to propose this workshop, and expressed his expectation that sharing experiences and good practices among ARF participants would be enhanced to tackle maritime pollution through this workshop.

8. Mr. Wang Bin, China's Co-Chair, highlighted the importance of the maritime domain to the economy of China and the region, and provided examples of previous marine environmental accidents impacting China. Stating that marine environmental prevention and response are key fields for China, he also emphasized that because of the close boundaries among countries in the region, it is important to carry out regional cooperation.

9. In his remarks, Brunei's Co-Chair Mr. Hj Ahmad Sulaiman bin Hj Junit also echoed his partner co-chairs by highlighting the importance of developing a regional cooperative framework.

### **Keynote Address**

10. U.S. Coast Guard, District 14 Commander Rear Admiral Cari B. Thomas gave the Keynote Address. As the Commander of U.S. Coast Guard District 14, the area of responsibility for her district spans over 12.2 million square miles and includes the Hawaiian Islands, Guam, American Samoa and activities in Saipan, Singapore and Japan -- an area that encompasses a region nearly three times the size of the continental United States. In her address, she provided a case study on the Arctic Council, where its 8 members -- Canada, Denmark, Finland, Iceland, Norway, Russian Federation, Sweden, and the United States -- successfully negotiated search and rescue and oil spill agreements, despite the complexities associated with geography and the need to account for and include an overwhelmingly vast cross-section of government agencies, non-government organizations, environmental interests, industry, etc. She also highlighted the various oil spill conventions in the Caribbean Sea, specifically making note of the cooperation between Cuba and the United States on oil spill preparedness, despite poor geopolitical realities characterized by the lack of diplomatic ties. During a question and answer session following her address, Rear Admiral Thomas, responding to a question on what the ARF could focus on if it were to seek a regional arrangement on oil spill response, she offered several recommendations, including developing a joint contingency plan or a white paper, focusing on taking the technical aspects of this issue and framing the problem and solution in terms understandable to policy makers and the public to facilitate understanding and agreement. She also highlighted the International Oil Spill Conference as a useful venue to address issues. Rear Admiral Thomas' presentation appears as **ANNEX 4**.

### **Session 1: Offshore Oil and Gas Exploration and Exploitation in the Region**

11. Mr. Lee Cordner of the Indo-Pacific Governance Research Centre, School of History and Politics at the University of Adelaide, and currently serving as a visiting International Fellow with the institute for Defense Studies and Analyses in India, provided an overview of offshore oil and gas exploration and exploitation in the region, from a safety and security perspective. Mr. Cordner explained the context under which massive expansion of offshore oil and gas activity that is pushing the limits and capabilities of technology is leading to an increased risk of major offshore incidents in the region, that would lead to serious economic, environmental, food security, human security, and energy security consequences. He identified several hazards, including human/technical/regulatory failures, security incidents, increased maritime user intensity (shipping, fishing, tourism), natural hazards, such as typhoons, earthquakes and tsunamis, and increasing incidents of abandoned or decommissioned installations. Mr. Cordner highlighted a number of issues that have contributed to the hazards, such as a lack of regional cooperative arrangements, a deficiency by many states in the region that have not adopted international

conventions, the crowded waters, especially in the South China Sea, and boundary delimitation and jurisdictional uncertainty. The overarching question that needs to be resolved is which states will take responsibility when major oil spills transcend international boundaries?

12. Mr. Corder commended the ARF for addressing this issue in the current workshop as a positive step forward, but also made the following recommendations for workshop participants to consider: conduct a regional strategic risk context analysis and assessment; share scientific information and utilize applicable articles under the United Nations Law of the Sea Convention (UNCLOS) and other regional agreements as examples for developing cooperation on environmental protection in East Asia; encourage governments in the region to embrace international conventions, protocols, codes and resolutions, develop cooperative arrangements, and take consistent approaches; and encourage regional, government and industry cooperation and partnerships through codes of conduct and best practices. The meeting agreed that future workshops and discussions on this topic in the ARF should include private sector participation; industry is not only concerned about bottom line profits, but are also cognizant about social accountability. Mr. Corder concluded the session by impressing on participants that cooperative action is urgently needed, regional governments are responsible, and ARF could play a leading role in this effort. Mr. Corder's presentation appears as **ANNEX 5**.

## **Session 2: Effects of Pollution Incidents**

13. This session included presentations on the U.S. response to the Deepwater Horizon Gulf of Mexico incident, Marine oil spill monitoring and assessment technology in China, and the current status of HNS incidents and response systems in Japan.

14. Commander (CDR) Arex B. Avanni, Deputy Sector Commander, United States Coast Guard Sector Honolulu, gave a presentation on the U.S. Coast Guard Deepwater Horizon Incident Response Summary. In his previous assignment, he spent 1-1/2 years supporting the response in multiple roles and capacities, including as Operations Section Chief, then as Deputy Incident Response Commander of the Gulf Strike Team. He noted that three years after the explosion that triggered the incident in April 2010, recovery activities are still on-going. The presentation included a timeline of key events, the response organization, and concept of operations to illustrate the complexity and scale of the response. This incident was the largest maritime spill in United States history, effecting 5 U.S. coastal states and resulted in the discharge of over 5 million barrels of oil, requiring more than 48,000 responders, 13.5 million feet of boom, 9,700 vessels at the peak of the response, and 127 aircraft. Although the incident occurred within the United States' exclusive economic zone, there was an international engagement dimension to the response. There were 68 offers of assistance from foreign governments, of which the United States accepted 47 offers for critical resources. CDR Avanni concluded the presentation by highlighting several challenges for consideration in responding to a major event, made even more critical when the contamination spreads into other countries' boundaries: the decision of who is in charge of the situation, maintaining a common operational picture, multilateral communications and coordination, and the

competing demands for limited resources. CDR Avanni's presentation appears as **ANNEX 6**.

15. The Vietnam representative provided an intervention that addressed how marine environmental protection should be addressed in the ARF. He pointed out that the ARF requires political will and must recognize mutual threats for this topic to be successfully addressed. He also noted that the ARF has nuances, mechanisms and processes that take years to be realized. As the ARF advances from the confidence building stage into preventive diplomacy, it should be considered that what we are doing in marine environmental protection is already a preventive diplomacy measure. He also offered that this topic has cross-cutting interests, as it was covered at the Inter-Sessional Meeting on Disaster Relief in 2011.

16. Dr. YU Qingyun, Scientist, North China Sea Branch, China State Oceanic Administration provided a presentation on the Study and Practice of Marine Oil Spill Monitoring and Assessment Technology in China. Dr. YU utilized two case studies of oil spill incidents in the North China Sea to showcase China's marine oil spill monitoring and assessment technologies and procedures. Systems and associated procedures highlighted in this presentation included satellite and aircraft remote sensing, ocean field station automatic observation, water monitoring radars, shipboard ecological monitoring, and integrated buoy technologies. Dr. YU's presentation appears as **ANNEX 7**.

17. Lieutenant Commander (LCDR) Chikara Kurata, Marine Environment Protection and Disaster Prevention Division, Guard and Rescue Department, Japan Coast Guard presented on the Current Status of HNS Incidents, Case Study and Response Systems in Japan. The presentation began with a look at oil spill statistics around the globe over the last 40 years. LCDR Kurata then provided statistics on HNS spills in Japanese waters over the past decade, and highlighted the huge amount of transportation of HNS and Oil in East Asia. After pointing out the various harmful effects of HNS pollution incidents on the environment, health, safety, food security, and the economy, he highlighted the magnitude of the danger caused by fire hazard. LCDR Kurata noted liquid natural gas (LNG) shipping routes in the region, making note that 1,000 tankers navigate the waters in the vicinity of Japan in a given day, though there has never been an LNG explosion or fire in Southeast Asia. LCDR Kurata noted, as an example of treatment for HNS incidents, a case of LPG tanker's explosion that occurred 40 years ago in Tokyo Bay. This case study exemplified the complex nature of an accident requiring a response from multiple agencies. Resulting from this incident were legal reforms and the establishment of mechanisms and capabilities in Japan to facilitate effective responses to similar incidents. LCDR Kurata's presentation appears as **ANNEX 8**.

### **Session 3: Regional Perspectives -- Discussion on Existing Regional Mechanisms/Capabilities and Applicability to Marine Environmental Disaster Preparedness and Response**

18. This session consisted of presentations on the China-ASEAN Maritime Cooperation Fund, Japan's International Cooperation for Preparedness and

Response to Marine Environmental Disasters, and the Global Initiative for Southeast Asia (GI-SEA) to Improve Oil Spill Preparedness and Response Capabilities.

19. Mr. BAO Haibin, Second Secretary, Department of Asian Affairs, China Ministry of Foreign Affairs presented a brief on the China-ASEAN Maritime Cooperation Fund. This presentation provided an overview of China-ASEAN relations, and details on the establishment of the fund, its objectives, and projects to be funded in 2014. Two projects covered by this fund in 2014 will be closely related to marine environmental protection -- the establishment of an operational ocean environment forecasting and disaster reduction system for the Southeast Asian region, and the Sino-Vietnam cooperative study on environmental management of the ocean and islands in the Beibu Gulf. Mr. BAO conveyed that the China-ASEAN Maritime Cooperation Fund can only be used in China and ASEAN countries, but China would also like to work with all other ARF partners to strengthen the regional cooperation on maritime economy, connectivity, scientific research and environmental protection, navigation safety and search and rescue. Mr. BAO's presentation appears as **ANNEX 9**.

20. LCDR Chikara Kurata, Marine Environment Protection and Disaster Prevention Division, Guard and Rescue Department, Japan Coast Guard gave a briefing on Japan's International Cooperation for Preparedness and Response to Oil/HNS Spill Incidents. Various donors from Japan's government agencies and private sector are contributors to Japan's various regional oil/HNS spill preparedness and response programs. As Japan is a major consumer of energy resources, with 90 percent of its crude oil imported from the Middle East and is transported to Japan through Southeast Asian waters, various programs targeting the region have been sponsored or supported by Japan. For instance, Japan invested approximately \$150 million in numerous projects since the 1960s to improve the security and safety of the infrastructure supporting the Strait of Malacca. Japan also led a cooperative project on Oil Spill Preparedness and Response (OSPAR) in Asia, that established stockpiles and funds in several Southeast Asian countries which increased oil spill response capabilities in the region by 25 percent. Although these overseas stockpiles were established in six countries, LCDR Kurata made note that these stockpiles are intended for use by any one in need. This briefing also highlighted Japan's various official developmental assistance (ODA) programs that support oil/HNS spill response and capacity building in the region. Japan has led and participated in various regional workshops and training exercises, and has supported responses to marine oil spills throughout the region and various parts of the world. Most recently, as part of its contingent to support HADR activities following Typhoon Haiyan, Japan provided technical advisors for an oil spill response at sea. LCDR Kurata's presentation appears as **ANNEX 10**.

21. Mr. Hj Ahmad Sulaiman bin Hj Junit, Maritime Security & Environment Protection Department, Brunei Darussalam Ministry of Communications, presented on behalf of Joselito Guevarra of the International Petroleum Industry Environmental Conservation Association (IPIECA) a brief on the Global Initiative for South East Asia (GI SEA). The Global Initiative (GI) is a joint program of IPIECA and the International Maritime Organization (IMO), under which governments and the oil industry work together to assist in building capacities for oil spill preparedness and response. The GI program is traditionally carried out through joint workshops (industry and

government), seminars, training, and exercises (national, sub-regional and regional). There are GI programs in various regions; this brief highlighted the program in Southeast Asia (GI SEA) which is a response to a need for a renewed and sustained effort in enhancing oil spill preparedness in the ASEAN region. The GI Program is a regional model of cooperation under the framework of (OPRC) Convention involving governments and local industry. The mission of GI SEA is to improve the regional capability in Southeast Asia by assisting in the development of national capacities in oil spill preparedness and response through industry and government cooperation. GI SEA focuses on promoting ratification of relevant key international conventions (OPRC, CLC, FUND Conventions), assisting in the development of oil spill contingency plans on regional, national and local levels, strengthening existing regional and sub-regional agreements (ASEAN OSRAP, Brunei Bay Plan, etc) for cooperation, and encouraging adoption of international industry standards and best practices. Members include Chevron, ExxonMobile, Shell, and Pertamina, and funding is provided through the Integrated Technical Co-operation Programme (ITCP) and the International Oil Spill Conference (IOSC). GI SEA is governed by the Executive Steering Committee (ESC), with the IMO and Shell as Co-Chairs and Chevron as Vice Chair. This presentation appears as **ANNEX 11**.

#### **Session 4: Regional Cooperative Arrangements**

22. Mr. CONG Xudong, from the Yantai branch of China Maritime Safety Administration gave a presentation on the trends of marine oil and HNS spill accidents from ships in China and briefed on Chinese national response strategies. Along with the steady progress of the Chinese economy, the shipping industry and waterborne oil transportation have maintained vigorous development, which brings a higher risk of oil and HNS spill accidents. Taking into consideration the ever-increasing traffic density of ships, China MSA is taking active measures, such as establishing VTS systems in waters with heavy traffic, adopting Traffic Separation Scheme and allocating more navigation facilities, to minimize the risk of ship collision accidents. In recent years, the annual total spillage is actually decreasing. China attaches much importance to environmental protection as a basic national policy, and established its national response strategy. The *Marine Environmental Protection Law* and relevant regulations are enacted. Additionally, China is a member State of the OPRC Convention. China is also a member State of the HNS Protocol. Four-tiered oil spill contingency plans have been developed according to relevant regulations under the OPRC Convention and domestic laws. China MSA is revising the *National Contingency Plan for Oil Spill from Vessels at Sea* so that HNS spills would be covered. Furthermore, as one of the four members of NOWPAP, China has considered the necessity to revise the National Contingency Plan and be compatible with *NOWPAP Regional Oil and HNS Spill Contingency Plan*. In the early years, two specialized strike teams, the Yantai Center and Qinhuangdao Center were established, and several national stockpiles were built up in the major ports, along the coast and Yangtze River. To deal with technical issues with HNS transportation by ship, China MSA set up a technical agency – Dalian Dangerous Goods Transportation Research Center. China recognizes international and regional cooperation is playing an increasingly important role in preparedness for major spill accidents in China. His presentation appears as **ANNEX 12**.

23. Mr. WANG Xingxing from the Shanghai Branch of China's State Maritime Safety Administration provided a briefing on behalf of the International Maritime Organization (IMO) on Implementation of the OPRC Convention and the OPRC-HNS Protocol through Regional Agreements. The presentation covered the three pillars of technical cooperation under the legal framework for oil/HNS pollution: Prevention; Preparedness and Response; and Compensation and Liability. Under the Prevention pillar, the International Convention for the Prevention of Pollution from Ships (MARPOL) addresses oil, noxious liquid substances, harmful substances carried by sea, sewage, garbage, and air pollution. 152 countries or 90 percent of IMO states have ratified this convention. The Preparedness and Response pillar is undergirded by: the International Convention on Oil Preparedness, Response and Cooperation (OPRC), adopted in 1990 following the Exxon Valdez disaster, and ratified by 107 contracting states (71 percent of world fleet tonnage), with the Philippines as the most recent accession; and the Protocol on Preparedness, Response and Cooperation to Pollution Incidents by HNS (OPRC-HNS), which was adopted in 2000, in recognition of the increasing threat of pollution incidents involving chemicals, and ratified by 33 contracting parties (48 percent of world fleet tonnage). The objective of this pillar is to provide a framework for the development of national and regional capacity to prepare for and respond to oil/HNS pollution incidents, and a platform to facilitate international cooperation and mutual assistance in preparing for and responding to major oil and HNS pollution incidents. This framework comes with national obligations that include establishing national systems for responding to oil pollution incidents, developing oil pollution emergency plans, reporting of any oil pollution incident to the nearest coastal state or state with jurisdiction, and response capacity – individually or via bilateral/multilateral agreement. Associated international obligations include informing neighbouring states of oil spills which could affect them, providing assistance if requested by another party, and requesting parties agreeing to facilitate the receipt of such assistance in-country. Under the Compensation pillar, the source of funds and tiers of compensation were described. OPRC encourages a regional approach, with practically every region in the world containing a regional agreement, several of which are highly effective and contributing to achieving the objectives of the OPRC convention. The Action Plan for the East Asian Region was approved in 1981 and initially began as sub-regional, involving only five countries of ASEAN with five more welcomed in 1994 (Indonesia, Malaysia, Philippines, Singapore, Thailand, Australia, Cambodia, China, Republic of Korea, and Vietnam). The Action Plan is steered from Bangkok by its coordinating body, COBSEA. There is no regional convention but instead the program promotes compliance with existing environmental treaties and is based on member country goodwill. There are seven areas of focus identified for the East Asia region: 1) develop and maintain a regional metadata base; 2) promote, improve and maintain marine protected areas in the region; 3) implement activities to restore marine habitats; 4) assist with State of Environment reporting for agencies preparing such reports and marine and coastal assessment; 5) implement activities to reduce land-based sources of pollution; 6) encourage monitoring and environmental assessments, including mapping in the region; 7) encourage and implement projects to build capacity in the member countries to counter environmental degradation and to educate members of the community in caring for the marine resources of the region. The presentation concluded with the point that cooperation involving government, industry and other stakeholders requires political will and commitment from all parties, establishment of regional arrangements, the

establishment and implementation of regional, sub-regional and national plans, and commitments to maintain, exercise and update capacity. This presentation appears as **ANNEX 13**.

24. The final presentation of session 4 was provided by Ms. Linda Paul, the Director of Pacific Forum Ocean Law and Policy Institute. She covered the various treaty categories for marine pollution which consists of: general multilateral treaties such as the London Dumping Convention and MARPOL; regional treaties; bilateral treaties; and the Law of the Sea Convention (UNCLOS). This presentation appears as **ANNEX 14**.

### **Session 5: Round Table Discussion – Identifying Gaps in Capabilities, Proposed Solutions, and How to Promote Regional Cooperation**

25. A roundtable discussion, facilitated by Mr. Lee Cordner, sought inputs for action items to be captured in a workshop outcome document, for further incorporation into a recommended action plan for the ARF. The Workshop Outcomes appears as **ANNEX 1**.

26. Based on the discussions at the workshop, Mr. Cordner presented a recommended draft of an ARF Maritime Security Marine Environmental Protection Initiative that outlines objectives, risk factors, and approach. This document appears as **ANNEX 15**.

### **Session 6: Introduction to the Follow-on ARF Marine Offshore Oil Spill Workshop**

27. Ms. XU Heyun, Division Director, Department of International Cooperation, China State Oceanic Administration, provided an introductory overview of the ARF Workshop on Regional Cooperation on Offshore Oil Spills, to be held in Qingdao, China on March 27-28, and co-chaired by China, Brunei, Singapore and the United States. This presentation appears as **ANNEX 16**.

### **Closing Remarks**

28. Brunei's Co-chair, Mr. Hj Ahmad Sulaiman bin Hj Junit, highlighted the workshop's effort to explore responses to incidents involving HNS and their wide-ranging effects on human security and the region. He was glad to be a part of this workshop and looked forward to the next workshop on Regional Cooperation on Offshore Oil Spills in Qingdao.

29. Japan's Co-chair, Mr. Yoshihiro Katayama, was pleased to see the exchange of opinions and shared spirit of cooperation at the workshop. This spirit of cooperation, he offered, needs to be maintained in the framework of ARF. He informed the workshop that Japan is looking forward to working with other ARF members and praised China's initiative to host the next workshop in Qingdao.

30. China's Co-chair, Mr. Wang Bin, extended his gratitude to the United States for hosting the workshop, his congratulations to the workshop participants for a fruitful beginning of a series of discussions in ARF on this topic, and welcomed all participants to attend the next workshop in Qingdao.

31. The United States' Co-Chair, Mr. Chris Castro, thanked his fellow co-chairs and Pacific Forum for concluding a successful workshop, and asked participants to support the next workshop in Qingdao. Mr. Castro acknowledged the work done by Mr. Corder and encouraged the discussion on this topic to continue in the ARF. Lastly, he noted that this workshop was important, not only because of the issues addressed, but also because of its engaging format, which contributed to advancing the ARF toward preventive diplomacy.

###