

REPORT OF THE MOIG REGIONAL WORKSHOP

Oil Spill Preparedness and Response Partners



Hilton Hotel, Nicosia-Cyprus, 10-11 December 2014

Local Partner



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Agenda

Wednesday, December 10th

- 08:30 – 09:15 Registration
09:15 – 09:15 Opening Address

Session 1: Regional Cooperation

- 09:30 – 10:00 Updated on MOIG Activities-Enhancing Member Integration within the MOIG Framework, HoucineMejri, MOIG -Tunisia
- 10:00 – 10:30 Update on The Mediterranean Government Industry Cooperation Action Plan (MGICAP), Gabino Gonzalez, REMPEC-Malta
- 10:30 – 11:00 Risk Assessment for Oil Spills in the Mediterranean, Efstratios Georgoudis DMS- Cyprus
- 11:00 – 11:30 Tea and Coffee Break – Hosted by IEMS Cyprus

Session 2: Planning and Response

- 11:30 –12:00 Cyprus legislative framework for Oil Spill Response, Ioannis Efstratiou DMS-Cyprus
- 12:00 –12:30 Contingency Planning Process as applied in Egypt, Oil Industry Plan development and Government approval, Capt. Richard Byrnes-IEMS-Egypt
- 12:30 – 13:00 SWIRES Emergency Response Services, Steve Pigg SWIRE-ERS, Abu Dhabi
- 13:00 – 14:00 Lunch – Hosted by MOIG

Session 3: Response Equipments and new Technologies

- 14:00 –14:30 Cyprus Oil and Gas Association – Support to members, Andy Varoshotis, COGA-Cyprus
- 14:30 –15:00 Challenges in Oil Spill Recovery Technologies, Henrik Jensen, DESMI Ro-Clean-Denmark
- 15:00 – 15:30 Oil Spill Response Readiness, Geraint Richards, Lamor Middle East Ilc-E.A.U
- 15:30 – 16:00 Ro-Boom Speed Sweep- A New Concept For a High Sea Oil Recovery System Developed for NOFO-the Norwegian Clean Seas Association for Operating Companies, DESMI Ro-Clean-Denmark
- 19:00 Dinner – Hosted by Seaharvest Corporation

Thursday, December 11th

09:15–09:30 Recap on previous day

Session 4: Oil Spill Response Services and Challenges

09:30 – 10:00 Independent Tier 2 Oil Spill Response Centre, Capt. Richard Byrnes, IEMS-Egypt

10:00 – 10:30 Levant Training Centre of Shipcon Limassol Ltd, Rania Christofidou, ShipconLimassol-Cyprus

10:30 – 11:00 Tea and Coffee Break – Hosted by IEMS Cyprus

11: 00– 11:30 Challenges encountered when developing spill response facilities and teams, lessons learned from first-hand experiences, David Cook NRC, UK

11: 30 – 12:00 Tunisian oil spill response exercise, Background and lessons learned, Khaled Tohamy, IMES-Egypt

12:00 – 13:00 Open Floor to share ideas, strategies and recommendations. Followed by MOIG Chairman's Closing Statement, MOIG Members and MOIG Chairman

13:00 – 14:00 Lunch – Hosted by MOIG

19:00 Dinner – Hosted by MOIG

Welcoming Remarks from the Chair

Distinguished participants, Ladies and Gentlemen,

As the Vice Chairman of the MOIG, it gives me great pleasure to welcome all of you and our MOIG Director to this year “MOIG Regional Workshop” on Oil Spill Preparedness and Response Partners. Unfortunately our Chairman could not be present with us today; due to circumstances beyond his control; he sends his greetings to all and hopes that we have an enjoyable and fruitful workshop.

Our workshop was designed to be practical with both presentations and real case examples in order to encourage participation to exchange information. The significance of Oil Spill Preparedness and Response Capability in our region is well supported by several international organizations including REMPEC and the European Union that we have the honor to hear from in this workshop.

We are delighted to have the Department of Merchant Shipping “DMS” which will provide us with the Cyprus legislative framework for Oil Spill Response and I am sure we shall benefit greatly from this presentation.

There are four (4) key areas with defined topics to be presented and discussed by several speakers over the next two days; the key areas for discussion are as follows;

1. Regional Cooperation : REMPEC and EU Project Leader
2. Contingency Planning and Exercises :Cyprus, Egypt and Tunisian Exercise
3. Response Equipment and New Technologies: DESMI-ROCLEAN and LAMOR
4. Oil Response Services and Challenges: IEMS, NRC and SWIRE

Therefore, this workshop will not only provide us essential knowledge but also a great opportunity to share experiences both on the technical and regulatory sides.

We shall have an open floor discussion tomorrow afternoon, where we shall record key points and recommendations to carry forward.

I would like to take this opportunity to express my sincere thanks to the organizers and in particular our local partner Shipcon-Limassol and the Egyptian travel agency FACT without which this event would not be possible, I would also like to thank our honorable speakers and who could forget our MOIG Director; his efforts to coordinate and enhance the MOIG are clearly bearing fruit as witnessed here today.

Finally, this is an opportune time for me to declare the official opening of the “MOIG workshop” I wish all two fruitful days of interesting and beneficial participation and also that you have a pleasant stay in Cyprus.

I warmly welcome you again.

Abdelkrim Lamssafri
MOIG Vice-Chairman

Introduction

The Workshop on Oil Spill Preparedness and Response Partners was held in Nicosia-Cyprus over 10-11 December 2014. The workshop was organized by the Mediterranean Oil Industry Group (MOIG) in cooperation with IEMS and Shipcon Limassol-Cyprus.

Oil and Gas exploration and production activity is gradually increasing throughout the Mediterranean region in addition the region has various new oil terminals which increases shipping and subsea pipeline activity. It is without any doubt that we all have a vested interest in continuing to recognize the menace a major oil spill in the Mediterranean would cause. All MOIG members have a vested interest as potentially all countries could be affected to some degree.

In line with the annual technical session of the MOIG, members from various Mediterranean countries expressed an interest to hold this workshop where various MOIG members and technical partners came together to openly discuss issues related to oil spill preparedness and response.

The MOIG Workshop was held in Cyprus in order to bring together MOIG members, EU project leaders, national authorities, regional and international oil spill responders, manufacturers, research and development institutions and key personnel from the oil and gas sector of Cyprus.

The reason Cyprus was selected for this technical session is that Cyprus has recently began exploration for oil and gas offshore and boasts a new regional hub oil terminal, the country has actively participated in regional forums such as the joint forum between MOIG and REMPEC, MEDEXPOL in 2013.

The MOIG Chairman recognized that there are various levels of experience and expertise within and available to the MOIG membership and would like this workshop to bring that experience and expertise together so we can all individually as MOIG members and collectively as an industry group benefit through participating in this workshop.

The main objectives of the workshop were to:

- a. Enhance communication and expert networking (MOIG Initiative)
- b. Recognize regional efforts and identify further actions
- c. Benefit from Manufacturers and Responders technical expertise
- d. Clarify preparedness and response expectations
- e. Establish key recommendations

Meeting Organization

Speakers

To achieve the objectives outlined above, the agenda was prepared by MOIG. A total twelve (12) speakers from Cyprus government, United Nations organizations, public Institutions, responders, manufactures and private companies contributed to this event providing specific presentations.

The Biographies of speakers are reproduced in **Appendix 1** of the present report.

Participants

A total of thirty-nine (39) participants from twenty-four (24) oil companies, responders, manufactures, specialized agencies and associations, governmental and non-governmental organizations, training centre such as ETAP, REMPEC, SAMIR, IEMS, NRC, DESMI, SHELL, SEREPT, TPS, SNDP, SWIRE, TANKMED, TRAPSA, CYPRUS OIL&GAS ASSOCIATION, LAMOR, NOBLE ENERGY, FAMELINE OIL&GAS, SHIPCON LIMASSOL, LEVANTINE TRAINING CENTER, DEPARTMENT MERCHANT SHIPPING, LEMISSOLER NAVIGATION CO, VTTV, SEAHARVEST and SELLENCO, whose activities are relevant for the objectives of the workshop as well as to the oil industry sector through MOIG participated in the Workshop.

The final list of participants is reproduced in **Appendix 2** of the present report.

Material

The workshop was divided in four (4) sessions: Regional cooperation, planning and response, response equipments and new technologies and oil spill response and challenges.

The list of documents provided to the participants is reproduced in **Appendix 3** of the present report.

Meeting Proceeding

The workshop was held between 10th and 11th December 2014, in the conference room hall B of the Hilton Hotel in Nicosia-Cyprus, where most of the participants were accommodated.

The workshop photos are reproduced in **Appendix 4** of the present report.

The working language of the Meeting was English.

Session 1: Regional Cooperation

Mr Houcine Mejri, Director of MOIG-Tunisia, thanked the MOIG members and guests for their attendance to the Workshop. He delivered a communication entitled “**Update on MOIG Activities-Enhancing Member Integration within the MOIG Framework**”. He started by introducing the MOIG framework, members and technical partners. He then presented the main activities of 2014 such as well as the provisional programme 2015-2016. He underlined that the work programme 2015-2016 was prepared following to member recommendations and composed of three facets: Training, exercises and workshops. He emphasized that a Tier 2 Exercise will be scheduled in the second quarter of 2015 in Skhira Port and will involve three MOIG members TRAPSA, TANKMED and SNDP as well as other companies operating in Skhira port, government representative and local authorities.

Mr Gabino Gonzalez, Programme officer at REMPEC-Malta, presented a communication on “**Update on the Mediterranean Government Industry Cooperation Action Plan (MGICAP)**”. He started by introducing the MGICAP Background and the role of REMPEC in the Mediterranean region. He then presented in detail the MGICAP strategic objectives and highlighted that some activities carried by MOIG in 2014 like the oil spill response exercise held in Tunisia and the mutual assistance agreement signed with a number of MOIG members constitute a response to the MGICAP. He underlined the necessity for MOIG to implement the remaining actions proposed in the MGICAP related to focal points, inventory of Oil Spill Response equipments as well as involvement of government representatives in drills and exercises.

Mr Efstratios Georgoudis, MEDESS-4MS Project Manager at Department Merchant Shipping-Cyprus, delivered a communication on “**A Hollistic Approach on Risk Assessment for Oil Spills in the Mediterranean Region**”. He started by explaining the difference between Risk Assessment and Risk Management in Oil Spill response. He then presented the Mediterranean Decision Support System for Marine Safety Project (MEDESS4MS), the regional service combining the well-established Mediterranean models and data used for the oil spill forecasting such as environmental and socio-economic parameters. He concluded by an example of simulation of spill after 14 hours in the Mediterranean Sea.

The participants and speakers concluded the agenda session 1 with the following remarks:

According to MGICAP, MOIG should designate focal points within each members in the Mediterranean region; The Oil Spill Response equipments of both MOIG members and REMPEC should be aligned to prevent duplication and ease equipment requests;

- REMPEC and MOIG to standardize a template for the equipment inventory;
- MOIG shall to create a dynamic data base containing information about Oil Spill Response equipments of its members;
- MOIG Members conducting OSR exercises shall consider inviting government representatives to coordinate the response with the national competent authorities;
- REMPEC should be informed about such exercises;
- The non-sensitive zones which may be affected by the sensitive zones in case of major Oil Spill in the Mediterranean Sea should be taken into consideration.

Session 2: Planning and Response

Mr Ioannis Efstratiou, Senior Marine Surveyor at Department of Merchant Shipping-Cyprus, presented a communication entitled “**Cyprus Legislative Framework for Oil Spill Response**”. He spoke about the 1st Incident, which occurred in 1981 in ZENOBIA at Larnaca Bay and all equipments put in place to combat the Oil Spill. He then presented in detail the Cyprus legislative framework containing previous conventions signed such as Barcelone and Marpol, the European directives, the hydrocarbons law and the council of minister decision related to Oil Spill. He concluded by the response and combating the Oil Spill as well as the external support such us EMSA antipollution vessel “ALEXANDRIA”, home in the Limassol Port.

Captain Richard Byrnes, Chief Executive Officer at IEMS-Egypt, delivered a communication entitled “**Contingency Planning Process as applied in Egypt, Oil Industry Plan Development and Government Approval**”. He underlined that the Oil Spill Contingency Plan (OSCP) of Egypt has been prepared according to National regulations and international conventions OPRC 90 and MARPOL 73/78 as well as the company requirement. He emphasized that the document has been developed by a working group comprised of representatives of ministries, agencies, IEMS and other actors. He then explained in details the four volumes of the OSCP, who are respectively: the Action Plan-Objectives, Response Hand Book-Resources and options, General Context-risk and mitigation, Additional Information-data directories. He concluded by explaining the appendices which contain the zoning areas, beach survey as well as the strategic plan for each zone including required equipment and logistic issues.

Mr Steve Pigg, Business Development Manager at Swire-Emergency Response Services-E.A.U, presented a communication entitled “**Swire Pacific Offshore-Integrated Response**”. He began by introducing Swire group operations areas and business activities which include property, aviation, beverages, trading industrial, marine services as well as oil and gas. He then presented seven types of vessels available at swire and highlighted the importance of the diversity of these vessels. He provided brief details of the Swire Group services such as Swire Salvage, Swire Sea Bed, Swire Blue Ocean, Altus Logistics, Swire Oil Field Services, Swire Emergency Response Services (SERS), Swire Maritime Training Centre (SMTC). He also explained the content of the agreement signed between Swire and IEMS for the development of Emergency Response Services. He concluded by expressing that Swire Pacific Off-Shore is looking at emergency response as an opportunity to utilize all the skills it has built up over the past 30+ years.

Mr Andy Varoshiotis, President of the Cyprus Oil & Gas Association, delivered a presentation entitled “**The Key Role of Cyprus in the Development of East Mediterranean Gas Resources**”. He introduced the objectives of Cyprus Oil & Gas Association and then presented the companies that have conducted geological studies in blocks 2,3, 9, 10 and 11 like GOGAS ENI and TOTAL confirming huge quantities of Oil and Gas. He described the exploration activities and development of many projects in the off-shore of Cyprus like Block 12, vassilikos master plan, port and terminal proposals, exporting LNG, Compressed Natural Gas, pipelines to Europe and Turkey. He concluded with the legal system and the energy authoritiesstructure of the Republic of Cyprus.

The following remarks and suggestions were highlighted by the participants and speakers:

- There is currently no head authority and mutual cooperation between all Mediterranean marine authorities in Oil Spill Response procedures and measurements, common contingency plans and information exchange;
- To think about making one while international convention and organization for recovering all zones one by one in the Mediterranean Region.

Session 3: Response Equipments and New Technologies

Mr Henrik Jensen, Sales and Project Manager at DESMI-ROCLEAN, delivered a presentation on “**Challenges in Oil Spill recovery technologies**” .He introduced the RO-Boom, its stability, deployment, different conditions and situations of use. He then presented various kinds of skimmers marketed such as Belt Skimmer Svalbard Islands, Archimedes positive-displacement screw pump, ERMINATOR weir & belt SKIMMER, Disc-Brush skimmers (DBD), Tarantula XL Skimmer - Pump Capacity 375 m³/h and Giant Octopus Skimmer.

Mr Geraint Richards, Managing Director at Lamor Middle East llc, presented communication entitled “**Oil Spill Response Readiness**”. He started by explaining the fourth key words in Oil Spill Preparedness and Response: Prevent, Prepare, Respond and Recover. Regarding the prevention, he highlighted that the use of modern, appropriate equipment is a vital element to increase the prevention, the maintenance as wells as operational and maintenance procedures will ensure the safe, correct operation of equipment, therefore enhancing Response Readiness. He underlined that the training of operations personnel is a vital part of preventing spills and it reinforces safety and promotes the safe use of equipments. He concluded by focusing on the three elements: Prevention will lead to a more, effective, proactive approach to Oil Spill Response Preparedness.

Mr Henrik Jensen, Sales and Project Manager at DESMI-Roclean, delivered a presentation on “**Ro-Boom Speed Sweep-The new concept for a high sea oil recovery system**”. He underlined that the Ro-Boom Speed Sweep was developed for NOFO-The Norwegian Clean Seas Association for Operating Companies” within the NOFO Technology and Norwegian Coastal Administration (NCA) launched technology program "Oil Spill Response 2010" together with Framo. He then explained that the basic concept involves the placement of one or more permeable barriers in advance of a conventional boom configured as a sweep. He indicated that AFTI and SLR on behalf of Exxon Production Research (EPR) did the first experimental work at Ohmsett in 1998. He underlined that this work was conducted under the direction of EPR's Dr. Andrie Chen, who was behind the idea. He emphasized that the conclusion was that sweeping without gross loss of oil could be performed at a speed up to three times normal (0.7-1.0 knot). He explained that all basic tests were made over a period of 2½ year from scratch with simple frame and netting to scale one system with rape oil, mounted logs on the permeable barriers in order to verify the phenomenon. He noted that all recoded and verified in CFD Analyze (Computational fluid dynamics)and final test in the

North Sea with the giant RO-Boom 3500 were made. He further indicated that the RO-Vane was developed recently in order to form the speed sweep with one vessel and with the oil skimmer built-in the boom barrier in the bottom of the sweep. He concluded saying that the oil can be contained at 2.5-3 knots speed without losing the oil and it was approved by NOFO.

During the discussions on RO-Boom Speed-Sweep System, a participant raised the following question about the usefulness and suitability for Speed-Sweep System (in the offshore installations and jetties between piers and dolphins or only for open water), it was explained that this system can be used only for open water without obstruction but for jetties and offshore installations, permanent boom between piers which can hold to the jetty and fixed from one side and another with flexible can be used to avoid the crashing of the booms in bad weather conditions.

Session 4: Oil Spill Response Services and Challenges

Captain Richard Byrnes, Chief Executive Officer at IEMS-Egypt, delivered a communication on “**Independent Tier 2 Oil Spill Response Centers-Case History, Integrating with Government Tier 2 Center Creating Public Private Partnership “PPP” Oil Spill Preparedness and Response**”. He started by presenting a case history examples of previous oil spill incidents that occurred in Egypt. He then provided an overview of lessons learned from the Tier 3 exercise held in Egypt in November 2010 as well as the tiered response structure and the position of IEMS as being a provider of Tier 2 services. He then presented the integrated response system in place under which they operate and support is provided to both government and industry and the audit and inspection missions carried out by EEAA, EGPC, EGAS to ensure the compliance of the system with the standards. He also provided brief details of the clients, Sharm Organization, regional and international activities like VTTV tender for OSR, IEMS Cyprus, ETAP, MOIG, SWIRE-ERS and SOUTH AFRICA.

Ms Rania Christofidou, Marine Consultant at Levantine Training Centre-Cyprus, presented a communication entitled “**Levant Training Centre of Shipcon Limassol Ltd**”. She gave an overview of the off-shore accidents occurring in the world. She presented then the key personnel and the main areas of activity of the Levantine Training Centre well as the courses offered on Oil and Gas, Health and Safety, Marine and Civil Protection.

Mr David Cook, Vice President Technical Services NRC International-UK, delivered a communication on “**Developing & Providing Tier 2 Spill Response Services**”. He started by introducing NRC services which include being a global provider of environmental, industrial and emergency solutions. He highlighted the challenges encountered when developing Tier 2 spill response facilities and teams around the globe, discussing the lessons learned from first-hand experiences. He then explained HSE and other types of essential training required to enable development of an effective response organization to satisfy both client and other expectations. He provided brief details of the NRC network of Tier 2 Centers in the Middle East, Mediterranean, Caspian and Black Sea, Kazakhstan, Northern Iraq, Far East and the Caribbean. He concluded with a summary of the main needs for successful development, set-up & managing of an effective Tier 2 response service such as: people and their development, engagement plus empowerment; importance of a gap analysis; design and practicalities of facilities; equipment choice relative to needs; the importance of maintenance, plans and procedures; training, drills and exercises specific to operating areas and responsibilities; adherence to a quality management system leading to continuous improvement from lessons learned.

Mr Khaled Tohamy, Operations Manager at IEMS-Egypt, presented a communication on “**Kerkennah Island Exercise**” held over 02-04 June 2014, in Tunisia. He started by introducing the exercise concept meetings held between IEMS team and MOIG Director in March 2014 at IEMS headquarter in Egypt in order to discuss the possibility to support MOIG members to execute the oil spill exercise. He then presented the background, objective, scenario, available resources at TPS as well as the list of companies that participated to the exercise. He concluded with the lessons learned from notification, operations, safety affairs, containment and recovery that should be duly taken into consideration to improve the performance of emergency response capabilities.

During the following discussion: participants and speakers raised the following remarks and suggestions:

- Following a request for clarification made by a participant concerning the annual budget allocated to exercises, it was explained that the budget depends on the objectives, location of the field and the number of participants and shall be prepared by the MOIG Director. For this exercise, MOIG covered the trip and accommodation

of IEMS representatives as well as other expenses such as dinners, bags, documents etc...

- Discussions on the status of the Oil Spill Response equipments took place, highlighting the need for TPS to implement a planned preventive maintenance programme (PPM).
- As regards to the current location of Oil Spill Response equipments and the supply boat "Sea Tiger" , it was recommended for TPS :
 - a. To install provisionally the Oil Spill Response equipments on the barge located near the platform;
 - b. To make a contact with another supply boat in case of emergencies with an appropriate deck space.

Meeting Conclusions

At the conclusion of the meeting we had in Nicosia-Cyprus over 10-11 December 2014, participants were invited to exchange views, share ideas, strategies and determine key recommendations about the four sessions debated during the workshop.

Mr Abdelkrim Lamssafri concluded the Workshop thanking the participants and facilitators for their contribution, as well as the co-organizers for their involvement and contribution to the preparation of the event.

The Workshop was closed at 13.00 on Thursday, 11 December 2014.

WORKSHOP - Key Recommendations			
Ref No	Recommendation	Action Party	Action Date/Period
1	Both MOIG and REMPEC to continue with the implementation of MEGICAP throughout 2015. MOIG to clarify to members actual status, and maintain status report on MOIG Website.	MOIG Director REMPEC Secretariat	Throughout 2015-16
2	<ul style="list-style-type: none"> MOIG should have focal point within each country of Membership; MOIG should detail the preferred requirement of a Focal point in terms of Company Type, Size, Membership term, Management Committee etc... 	MOIG Management Committee	Q ₁ -2015
3	Details of MOIG Focal points to be regularly updated to REMPEC, for government / Industry interphase.	MOIG Director	Q ₂ - 2015
4	MOIG should formulize with REMPEC the establishment of Equipment Data base of Members. A format should be developed considering MOIG / REMPEC requirement: <ul style="list-style-type: none"> What data needs to be available? What format should it be in, and to what spatial accuracy? How should it be delivered? How it shall be updated? 	MOIG Director REMPEC Secretariat	Q ₁ - Q ₂ 2015
5	MOIG to solicit members and encourage them to notify MOIG of Oil Spill exercises and where practical include government.	MOIG Director	Q ₂ - 2015
6	Oil Spill Training in the region to be identified by MOIG and promulgated to members.	MOIG Director	Q ₁ - 2015

Appendix 1: Biography of Speakers

Mr Houcine Mejri

Mr Houcine is the MOIG Director since September 2013. He has a master Degree in Environment from Science Faculty of Tunis-Tunisia. He started his professional Career in 1995 in ETAP Laboratories as a chemical Engineer in the fluid analysis laboratory. In 2003, he participated in the creation of environment laboratory and was appointed in the same year the head of this laboratory and was charged of water, soil and gas analysis. From 2000 to 2011, he was involved in several multidisciplinary projects as a member and leader of projects related to water and soil treatment, hydrodynamism, laboratory accreditation, formation damage, water flooding and Tunisian water classification. In 2011, he moved to Central Direction Production as a head of Health, Safety and Environment Department and was charged of the HSE dossiers of ETAP and Partners and also the drafting of the ETAP annual report of the follow-up of the environment and social performance. He presented many posters and oral communications related to water and soil treatment, formation damage and water flooding studies in National and International conferences such as Technique Scientific Journeys (JST), Exploration and Production Conference (EPC) of ETAP, Society of Petroleum Engineers (SPE) and the International Conference on environmental Science and Technology (ICEST).

Mr Gabino Gonzalez

Mr Gabino joined REMPEC in June 2006, holds a master Degree in Material Engineering from the European School of Materials, science and Engineering from Nancy, France. After two years as IMO consultant for the RAC/REMPEITC, Netherlands Antilles, where he was implementing the centre technical cooperation programme for the Wider Caribbean countries, he joined the operations Department of oil spill response limited, before taking the role of project manager of the IMO/IPIECA Global Initiative Project for the Western and Central Africa (WACAF) region. As programme officer (OPRC) in REMPEC, his responsibilities included a development of national and sub-regional systems for preparedness and response to accidental marine pollution, providing advice to the coastal states in cases of emergency, planning and organizing training activities, drafting and editing centre documents. He is also in charge of the development of IT tools made available by the Centre.

Mr Efstratios Georgoudis

Mr Efstratios has a PhD in Naval Architecture. He has served as Engineering Consultant for a number of years, prior to joining the Department of Merchant Shipping in 2005 as a Ship Surveyor. He is currently involved in many European research programs such as Life+ 2008, FP7 2010, INTERREG, among others. He is a full member of the Royal Institution of Naval Architects (RINA) and a Chartered Engineer (C.Eng.) and currently serves as the Honorary Secretary and Treasurer of the Cyprus RINA branch. He is a visiting lecturer at Frederick University, Department of Maritime Studies, which is based in Limassol.

Mr Ioannis Efstratiou

Mr Ioannis has an MSc in Chemical Engineering. He is serving the Department of Merchant Shipping (DMS) for more than 21 years, he is currently holding the capacity of Senior Surveyor and he is the head of the Marine Environment Protection Division of DMS, with responsibility on the implementation of MARPOL and any issues related to the protection of the marine environment. He provides his services as expert in MARPOL and IMDG Code for projects of the European MARITIME Safety Agency (EMSA), as well as to REMPEC for SAFEMED Project and to International Maritime Organization (IMO) as expert in IMO Member States Audit. He is currently involved in many European research programs such as Life+ 2008, INTERREG MED.

Mr Andy Varoshiotis

Mr Andy is the President of the Cyprus Oil & Gas Association. He is the chairman of the Harvest Stargate Energy Fund Ltd, and Harvest 4 Energy Ltd, where he is responsible in advising corporations on energy technologies and efficiency, Geo-mechanic systems and processes, renewable energy, electricity storage on batteries and smart grids.

He is a member of the Cyprus Board of Trade, member of the Cyprus Chamber of Commerce and industry tourism board, and an ambassador of tourism with the Cyprus Tourism Organisation. He holds a B.Sc. in economics and finance from Fordham University, an MBA from Fordham University -Columbia Business School, in Investment management, a Post Graduate from Stanford University in Energy Innovation and Emerging Technologies and a number professional qualifications and certifications in Hydraulic Fracturing and production of Natural Gas from Shale.

He is a frequent speaker on geopolitics, energy economics, capital markets and east Mediterranean hydrocarbon developments.

Captain Richard Byrnes

Captain Richard was the previous Chairman of The MOIG representing the Egyptian General Petroleum Corporation “EGPC”. He is a British Ship Captain with a whole host of experience, both onshore in various management roles and offshore with command of sophisticated Drilling Vessels operating globally. Has been previously involved in assisting the change of environmental and safety legislation in the UK covering North Sea production platforms. His involvement was to represent various Oil Majors in the production and delivery of their environmental and safety case. He is well versed in UK and international maritime legislation. In regards to oil spill response he has personally overseen the management of small scale incidents (Tier 1), national incidents (Tier 2/3) and no less than 5 international incidents (Tier 3). In 2011 he was the international director for a Tier 3 oil spill response exercise between Saudi Arabia and Egypt. Over the last 15 years Captain Richard has held various senior Management positions and is the founder and current CEO of IEMS. IEMS owns and operates an independent Tier 2 oil spill response centre in Alexandria Egypt and currently manages the Egyptian national response centre at Sharm El Sheikh.

Mr Steve Pigg

Mr Steve started out as a Non-Destructive Testing Engineer on High Pressure Oil and Gas Pipelines in the UK. His commercial career started in 2004 with DeWalt—moving to the Middle East in 2008 to head up the commercial division of an Oilfield Supply Company. A recent addition to the Swire Team, Steve was tasked with upping the commercial activity of Swire Emergency Response Services and promoting the Marketing of the Division within the other Swire Companies. Steve is honoured to be asked to present today – he will outline the Swire business to those perhaps unaware of the breadth of the services it provides and suggest how these services can be leveraged in Emergency Response situations.

Mr Henrik Jensen

Mr Henrik has a diploma of Marine Engineer and he joined DESMI-Roclean and is currently the Sales and Project Manager. He is a specialist in the use of oil containment booms and skimmers for oil recovery and specialist in the use of oil containment booms and skimmers for oil recovery and water. He is Areas working In Greenland, Scandinavia, Mediterranean countries, in Europe and Brazil.

His main tasks are:

- Sale and promotion of oil spill Combatting equipment
- Training and commissioning of equipment on site
- Off-shore focus and specific project

Mr Geraint Richards

Mr Geraint is responsible for the management of OSR Projects & Operations in the Middle East, North Africa and Indian Subcontinent. As an OSR industry representative he has attended global and regional OSR related conferences, workshops, and OSR exercises in; Oman, Qatar, Abu Dhabi, Algeria, India, Bangladesh, Egypt, Iran, Denmark, Estonia and Finland. His Oil Spill Response experience includes, marine and land based oil spills in the UK, Sultanate of Oman, Saudi Arabia, and the UAE. The most recent occurring in 2013 with the sinking of the vessel NISAR R3 off Muscat, Oman which resulted in the release of 800 tons of bitumen in a highly sensitive area.

Ms Rania Christofidou

Ms Rania is a Marine Consultant and has a B.S in Biology and MSc. In Marine and Environmental Consultancy. She wrote a thesis on Environmental Impacts of offshore platforms in the marine environment and more specifically impacts on fisheries and seabed. She worked in the Hellenic Marine Institute of Research (HCMR) in Crete, in the department of Marine Biotechnology and Aquaculture and she completed Maritime Archaeology course, as well as various courses associated with the oil and gas sector such as 'Legal contracts and International Legal Practice for Oil and Gas' and the 'International Minimum Industry Safety Training' at the Levantine Training Centre in Limassol. She is currently working with Shipcon Limassol Limited and its training arm the Levantine Training Centre, a specialised training provider of accredited courses in Oil & Gas and Health & Safety.

Mr David Cook

Mr David is the Vice President Technical Services NRC International. He has more than 30 years of emergency response experience, mainly related to oil & chemical incidents in numerous locations worldwide, working mostly with multinational workforces often in remote and challenging locations. He began working in emergency response for the regulatory authority, in the United Kingdom, before being employed by a national oil company in the Middle East, where he was tasked with creating and managing an oil spill response organization serving offshore E&P, plus

export needs, then as the emergency response manager for the newly established company owned tanker fleet. Following his time working in the Middle East, he worked for private and publically owned companies, engaged in the design, development, set-up, management and operation of response centers, many being Tier 2 capacity, in Brazil, Nigeria, the United Kingdom, Azerbaijan, Republic of Georgia, Turkey, Kazakhstan Middle East, Egypt, Northern Iraq and the Middle East. During this career in emergency response, he has responded to and or managed numerous incidents of different scale and complexity. These events have included offshore flow line ruptures in the Arabian Gulf, sabotage of oil wells in the Middle East, tank ship grounding, collision and sinking of oil and product carriers in the USA, Europe and the Middle East, pipeline spills in swamp & delta areas of Africa, pipeline rupture in Siberia, explosion and total loss of offshore platform in S. America, pipeline ruptures in proximity to housing communities, plus numerous incidents in remote, challenging and environmentally sensitive areas, in S. America, Europe, the FSU and Africa.

Mr Khaled Tahomy

Mr Khaled is International Environmental & Marine Services (IEMS) "Operations Manager", based in Egypt. He has a B.Sc. in Production Engineering, from Alexandria University, Egypt. He started his professional career 8 years ago in oil spill response and management. He was part of the responders to oil spill incidents as a pollution control Engineer for 3 years in EEAA OSRC in Sharm El-Sheikh, Egypt and was part of the management team for the EEAA & EGPC oil spill response centers for 2 years as Asst. Operations Manager & HSE Supervisor, He was responsible for the issue of annual operational plans and the provision of technical and operational input in the preparation of tenders, quotes, ongoing and planned response operations. During the year 2009 in addition to his basic tasks he was assistant to the Training Manager, developing conducting and delivering training courses for Oil Spill Response. He also has experience in site Risk Assessment, Risk Control, Accident/Incident investigation, Safety meetings. Tool Box talks, Emergency Response Plans. He has joined IEMS (Cairo office) on January 2012 as IEMS QHSSE Supervisor and on March 2014. Khaled was promoted to be IEMS Operations Manager. He has participated in different live oil spill response activities, some of which were of an international scale, where he integrated into the incident response structure, he has a vast experience and has carried this forward throughout the years through participation in national and international exercises with different roles and responsibilities inside Egypt and outside.

Appendix 2: Final List of Participants

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Appendix 3: List of Documents

1. Workshop agenda
2. MOIG workshop flyer
3. MOIG flyer
4. Newsletter issue 13

Appendix 4: Workshop Photos

