

**Oil Spill Preparedness and Response Capability in West, Central and Southern Africa:
Sustaining momentum in a changing world of oil spill risks**

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ABSTRACT 299996:

The Global Initiative for West, Central and Southern Africa (GI WACAF Project) is a partnership between the International Maritime Organization (IMO) and IPIECA - the global oil and gas industry association for environmental and social issues, to enhance the capacity of countries to prepare for and respond to marine oil spills.

The GI WACAF Project was launched in 2006 and is jointly funded by IMO and eight oil company members in order to strengthen national oil spill response capability in 22 countries of West, Central and Southern Africa through the establishment of local partnerships between the oil industries and the national authorities in charge of oil spill preparedness and response at the national level. This paper will describe how the GI WACAF Project cooperates with local stakeholders in order to develop a structure for preparedness and response in the region, and to detail what are the challenges lying ahead in order to make this structure fully operational taking into account the changes in the region in terms of risk profiles, industry representation and national and regional governance.

The analysis of the exercises organised under the umbrella of the GI WACAF Project in Congo, Nigeria (2011), Gabon (2012), Cameroon, and Mauritania (2012) emphasises the needs in terms of international cooperation, integration of response capabilities at the national and regional levels and the development of effective incident management structures. In conclusion, we will present how the GI WACAF Project has evolved in order to maintain its momentum for the continuous development of preparedness and response capabilities in the region.

INTRODUCTION:

The offshore oil and gas industry has a history of exploration in West Africa that stretches back for more than 50 years, with international majors and smaller firms having held, and relinquished, licences all along the coast since the British discovered oil in the Niger Delta in the late 1950s. Nigeria and Angola are the largest oil producers in West Africa; however, exploration and development throughout the region is widely dispersed across the countries of Mauritania, Ghana, Ivory Coast, Benin, Togo, Cameroon, Equatorial Guinea, Gabon and Congo (*Brown, 2010*).

The picture today, is one of substantially expanding oil and gas activity across the region, illustrated by the volume of crude oil exported from West Africa having increased by 46% between 2000 and 2012 (*BP statistical Review*). At the centre of this expansion has been the deepwater sector, which has generated greater levels of productivity from countries such as Angola and Nigeria, and exploitation of new oil fields in countries such as Ghana, which commenced production in 2007. The growing levels of oil and gas activity have coincided with, and contributed to, a large increase in the level of shipping activity in the region. Between 2001 and 2011, shipping activity both loaded and discharged within West Africa has increased by 77% (2013, KPMG Africa Limited).

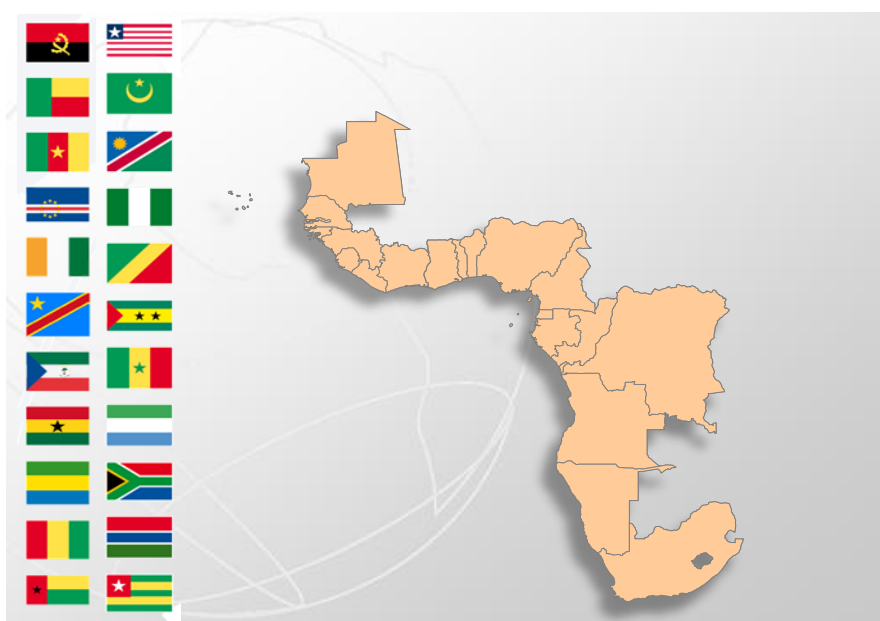
Looking ahead to the next 10 years of oil and gas activity in the region, we can expect levels of production will continue to increase, and that as deep water technologies are developed, there will be a growing trend towards Ultra Deep Water, and Pre Salt exploration (US Energy Information Administration).

The high level of oil exploration, production, and transportation in the region, means that there exists a threat of oil spills occurring. In response to this risk, the Global Initiative for West, Central, and Southern Africa (GI WACAF) was launched in 2006, with the objective of raising standards of oil spill preparedness and response capability across the region.

Since its launch the project has evolved, becoming diverse in its activities and responsive to the needs of each of the twenty two countries in the region as expertise in-country deepens and capabilities strengthen (Figure 1).

The purpose of this paper is to explain how and why the GI WACAF Project has evolved since its launch in 2006, and to outline the programme's future development.

Figure 1: The twenty two Countries of the GI WACAF project



Evolution of the GI WACAF work programme

The GI WACAF programme was launched in Gabon in April 2006 with the broad aim of achieving tangible improvement in oil spill response preparedness and cooperation within the twenty two countries of West, Central, and Southern Africa.

During the launch, a broad picture of the state of preparedness and response capability in the region was created, with the information being provided by relevant government and industry representatives through a gap analysis study. The following six aspects of preparedness were focussed upon: Legislation, Planning, Training, Exercise, Equipment and capacity for implementation (GI WACAF Annual Review, 2006).

The gap analysis results showed low levels of national preparedness and response capability across the region, and based upon these findings, GI WACAF prioritised the following activities as key to ensuring improvements.

1. Gain a clear commitment in each country to:
 - Develop a national structure for oil spill response and preparedness
 - Ratify and implement Conventions including OPRC 90, CLC92 and Fund 92
2. Focus efforts in each country to implement a specific oil spill national action plan.
3. Provide clarity on roles, responsibilities and resources for preparedness and response within each country

As an example of the early GI WACAF work plan, between 2006 and 2009, the project undertook over 25 workshops across 14 different countries in the GI WACAF region, with over 90% of the workshops being undertaken at the national level, focusing predominantly on developing the foundational elements of oil spill response and preparedness (See figure 2).

From 2010, the GI WACAF work programme became more diversified in three important aspects. First, the programme began to focus on testing the National Oil Spill Contingency Plans (NOSCP's) of the respective countries through table top exercises and through the actual deployment of response equipment. Secondly, the programme started to focus on specialised topics (i.e. topics which are sub-categories of the core elements of response and preparedness) such as Sensitivity Mapping and Dispersant Application (See Figure 2). And thirdly, an increasing number of activities were undertaken at the regional and sub-regional level (See Table 1).

In effect, the GI WACAF began to evolve from a foundational work programme primarily on the core elements of response and preparedness at the national level, to a work programme that reinforces these foundational elements but focuses more on regional and sub-regional activities, supporting exercises to test capability, and increasingly varied in specific technical work tailored to support ongoing in-country developments.

Figure 2: Evolution of GI WACAF work programme (Data taken from GI WACAF website, available at: <http://www.giwacaf.org/index.aspx?id=3&langue=1>)

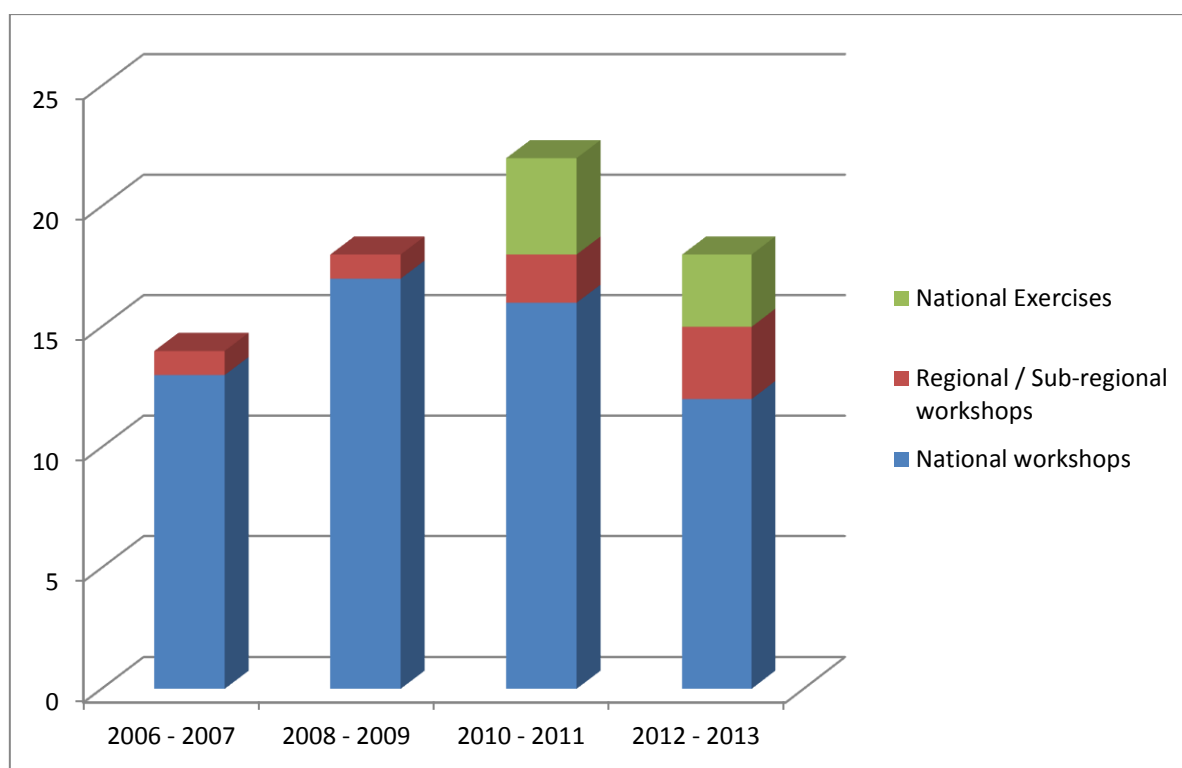


Table 1: GI WACAF activities at the regional and sub-regional level (information taken from the GI WACAF website: <http://www.giwacaf.org/index.aspx?id=3&langue=1>)

Host country	Year	Specialised topic	Scope
Namibia	2013	Regional cooperation	Regional
Namibia	2013	Claims and Liability	Sub-regional
Senegal	2012	Claims and compensation	Sub-regional
Namibia	2012	Effective Exercising and implementation of an Incident Management System	Sub-regional
Nigeria	2011	Regional cooperation	Regional
Ghana	2011	Dispersant application and policy	Regional
Ivory Coast	2010	Regional Cooperation	Regional

The GI WACAF work programme

The GI WACAF work programme is reviewed and confirmed every two years, enhanced in response to requests and recommendations submitted by both member country and member company representatives. It also takes into account the evaluation of changing oil spill risks based upon information provided by Government Focal Points. This way, the evolving GI WACAF work programme across the region addresses members' changing priorities as they continue to improve their oil spill preparedness and response capabilities and address evolving oil spill risks.

For individual countries, their priority activities will reflect their current level of oil spill response capability. For example, a country with a low level of response capability will most likely request GI WACAF support for development of the NOSCP through workshop programmes. For a country with a more developed response capacity, (e.g. with an approved NOSCP and ratified OPRC 90 Convention), the priority activities are likely to focus on exercises to test the NOSCP, and workshops focusing upon specialised topics such as Incident Management System, claims and compensation, and dispersant application.

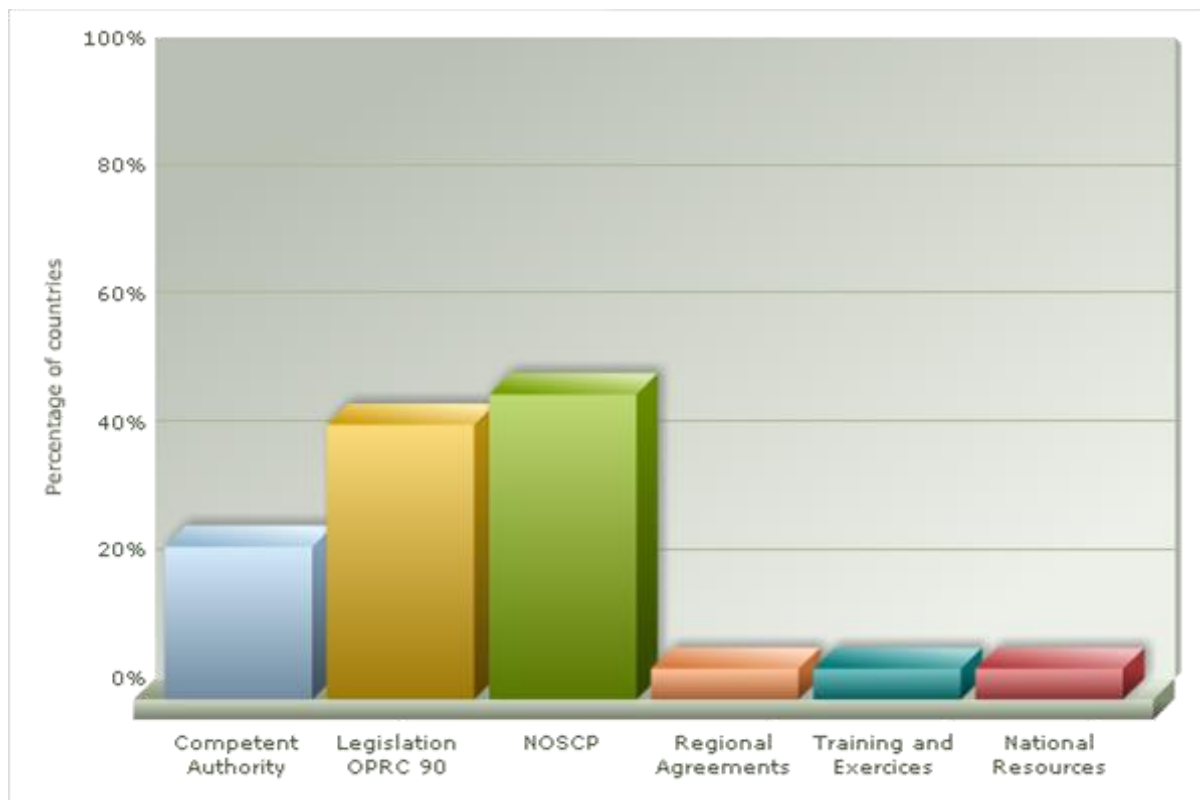
Key performance Indicators

Using data submitted by each country in the WACAF region, it has been possible to gauge the level of national response capability across the region. The data was first collected in 2006 to provide a benchmark, monitored since then and updated most recently in 2012 to confirm progress and improvements.

1. Designation of authority: Has in place a designated national authority to deal with oil spill related issues
2. Legislation: Has ratified the OPRC 90 Convention
3. National Oil Spill Contingency plan: Has an approved NOSCP
4. Regional agreement: Has in place either a regional, sub-regional, or bi-lateral agreement relating to oil spill response cooperation
5. Training and Exercises: Has undertaken a national level oil spill training and exercise event
6. National Resources: Equipment and resources to adequately address oil spill risks in-country

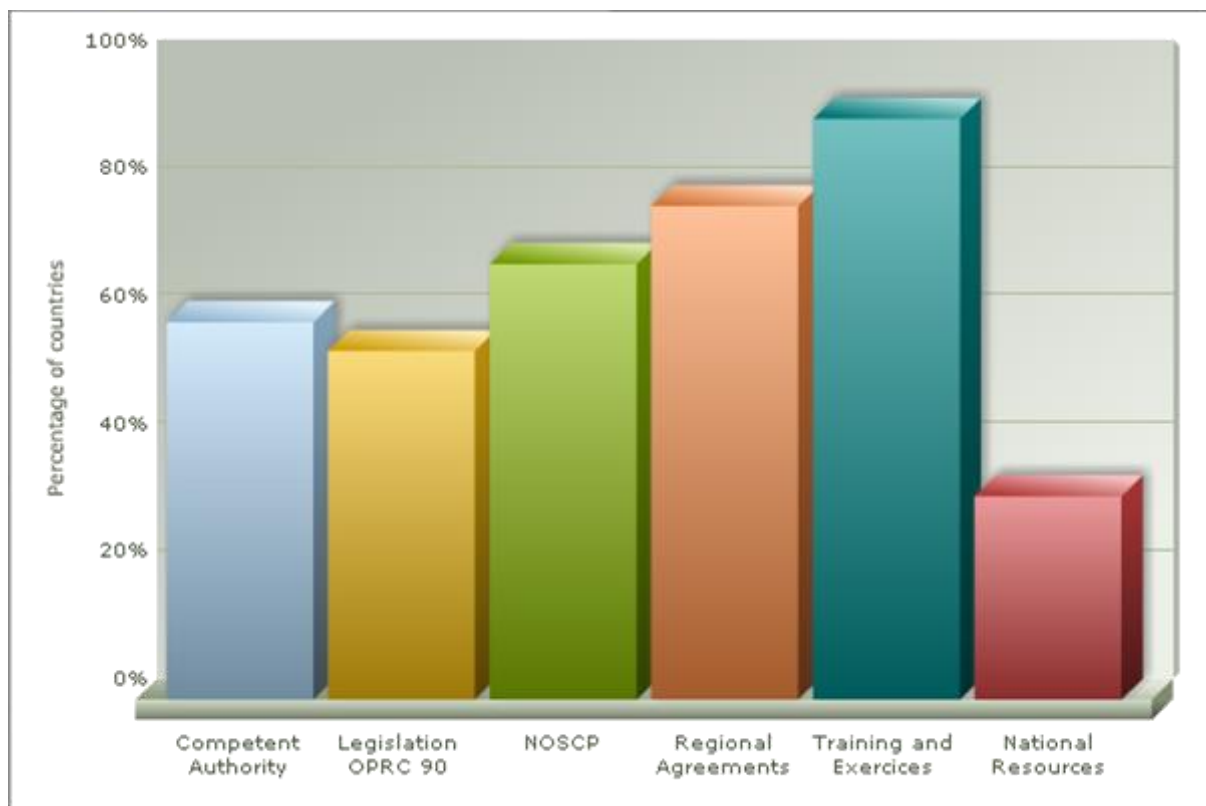
The findings of the 2006 gap analysis are displayed in Figure 3. Looking at the first column, we see that just over 20% of countries in the GI WACAF region had in place at this time a designated national authority to deal with oil spill related issues. Looking at column 2, we see that just over 40% of countries in the region had ratified the OPRC 90 Convention. Columns 3 - 6 show that less than 5% of countries had in place regional agreements, had undertaken training and exercises, or had national stockpiles of equipment.

Figure 3: Key Performance Indicators Results - 2006 (data taken from GI WACAF Country Profiles available on GI WACAF Data Base)



In comparison to 2006, the results from 2012 show a significant increase in the overall level of oil spill response capability across the region (See Figure 4). For example, between 2006 and 2012 there was a dramatic increase in the number of countries that had ratified a regional, sub-regional, or bi-lateral agreement, and there was a similar increase in the number of countries that had undertaken training and exercises relating to oil spills. For the remaining key performance indicators there was a strong improvement, for example, there was a 20% increase in the number of countries which had ratified the OPRC 90 Convention.

Figure 4: Figure 3: Key Performance Indicators Results - 2012 (Data taken from GI WACAF National Profiles, 2012. Available on GI WACAF website: <http://www.giwacaf.org/index.aspx?id=4&langue=1>)



Diversification

Whilst the general trend across the region has been one of advancing oil spill response capability, the rate of oil spill response development has varied between individual countries and latterly there has been diversification in individual country needs for further improvements. For example, from 2010 many countries that had achieved relatively rapid advances began to request GI WACAF support to undertake NOSCP exercises, and in addition, support to develop their sensitivity mapping in particular. This trend towards greater diversification between country response capabilities is highlighted in Figure 5, and also in Figure 6.

Figure 5: Status of NOSCP's in WACAF region – 2013 (Information taken from GI WACAF National Profiles. Available on GI WACAF website: www.giwacaf.org)

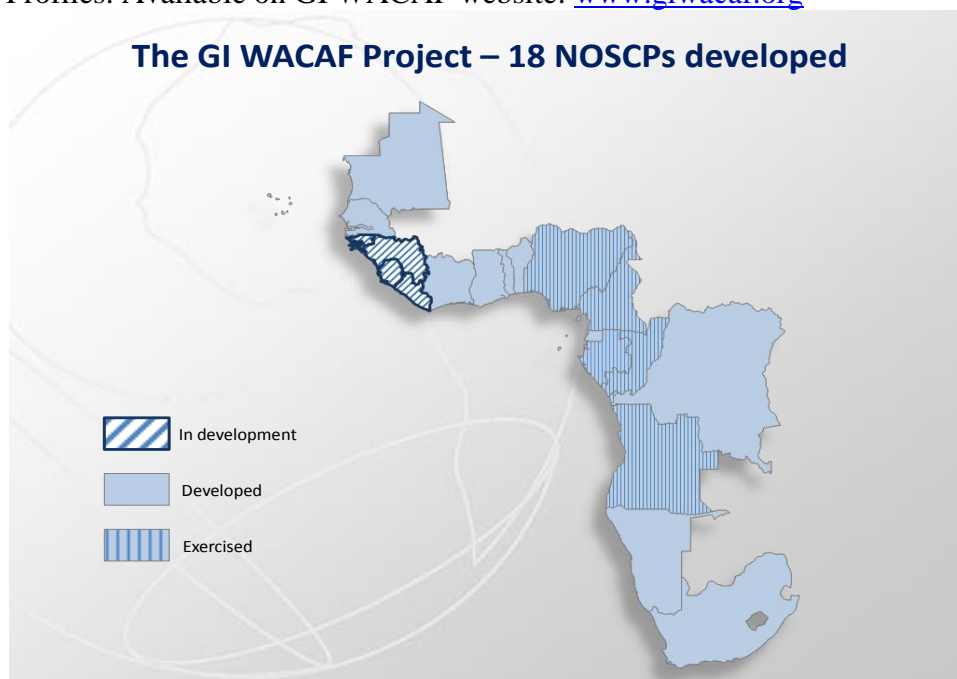


Figure 6: Status of sensitivity mapping developed in WACAF region - 2013 (Information taken from GI WACAF Country profiles)

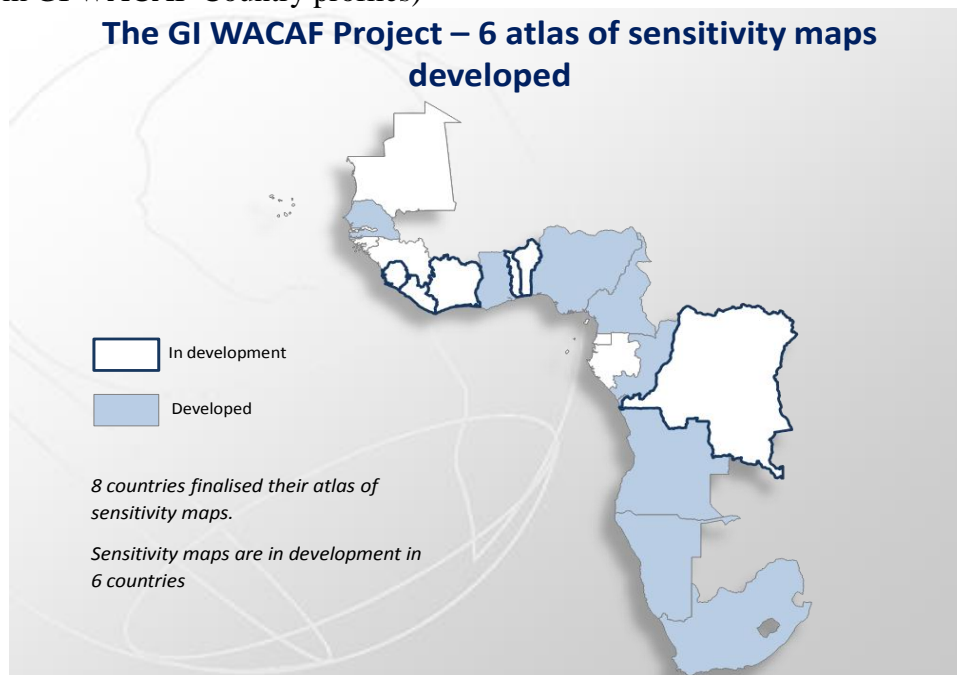


Figure 5 highlights the diverse levels of oil spill response capability that exists across the WACAF region. In the first case there exist countries which have yet to develop their NOSCP, in the next phase there are countries which have in place an agreed NOSCP, and in the next there are countries which have in place an agreed NOSCP and have begun to test and improve that NOSCP. The same kind of diversity is reflected in Figure 6, which shows 3

distinct groups: those that are yet to begin developing sensitivity mapping, those where development of the maps is underway, and those where the mapping process is complete and is being used to enhance response planning and consideration of response capability provisions.

These trends in capability building and the variety of country oil spill development needs, has continually driven a more diverse GI WACAF work programme. GI WACAF activities became more varied in order to continue supporting the core elements of response and preparedness in countries with less advanced capability, whilst providing a different level and detail of support to those countries which had made further advances.

In effect, the GI WACAF work programme has stretched and been developed to support countries ranging across low, intermediate and relatively high levels of oil spill preparedness and response capability.

The future development of GI WACAF

Diversification of GI WACAF activities and support will continue to evolve with the next 2-4 years reflecting particularly an extension in specialised topics at the regional and sub-regional level, and an increase in trans-boundary cooperation with particular emphasis on cross-border exercises.

At the key GI WACAF Regional Conference (Namibia, November 2013), Government and Industry Focal Points outlined their priority goals for the next biennium (2014 – 2015). The recommendations provided by delegates at the conference served as country validation to the foundation and programme activity upon which the GI WACAF Strategic Plan is based.

Delegates agreed that GI WACAF activities for the new biennium should be in three broad categories: 1) National level activities focused upon the core elements of the OPRC 90 Convention, 2) Regional / Sub-regional activities, and 3) Specialist topics.

At the national level, GI WACAF will prioritise the continued support of practical exercises to test the respective NOSCP's, and where needed will continue to support the foundational development of NOSCP's through workshops.

At the regional and sub-regional level, there will be an increased focus upon trans-boundary cooperation between adjoining countries that share common oil spill risks. Particular emphasis will be placed upon trans-boundary exercises. Potential groupings of countries include:

North West	
Côte d'Ivoire*	Mauritania
Guinea	Senegal
Guinea-Bissau	Sierra-Leone
Liberia	The Gambia
Central	
Côte d'Ivoire*	Gabon*
Benin	Ghana
Cameroon	Nigeria

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Equatorial Guinea	Togo
Southern	
Angola	Gabon*
Congo	Namibia
DRC	South Africa

* Border state

For specialised topics, in addition to existing GI WACAF topics (such as sensitivity mapping, dispersant policy, claims and compensation), focus will also be placed upon developing: Incident Management Systems, Effective Exercising, Shoreline Cleanup, and Waste Management (*GI WACAF Conference Report 2013*).

CONCLUSION:

The GI WACAF Project is a long-term, sustained program commitment from the IMO and various IPIECA oil company members, to enhance oil spill preparedness and response in the WACAF region. Since its launch in 2006, countries have made substantial, tangible progress to improve capability. Within this overall, broad regional trend countries have advanced their capability at varied rates creating the need for increasingly diverse level of focus and technical support. In response the GI WACAF work programme has itself become more diversified, to support each country's specific needs most effectively.

The story of GI WACAF is of a programme that has managed to successfully adapt and support the changing needs of its country and oil company members, in a region that has made rapid advancements in oil spill response capability and in which oil spill risks continue to evolve.

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