

# Public-Private Partnerships for Maritime Security Capacity-Building in the Gulf of Guinea

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## Executive Summary

U.S. Africa Command (AFRICOM) Air and Maritime Branch asked CNA to examine a public-private partnership (PPP) as a potential framework for maritime security capacity-building in the Gulf of Guinea. Although there are few existing examples of oil and/or maritime-related PPPs, a maritime security PPP could allow a diverse range of domestic, international, public, and private stakeholders to share the cost and the burden of maritime security. The sponsor requested that CNA focus on Ghana, a relatively new oil producer, as a case study for this project. With a reputation for good governance and strong economic growth, Ghana presents a unique opportunity to examine the applicability of a PPP model that could help the country avoid the “resource curse” that has afflicted other oil-producing nations such as Nigeria.

In order to understand the applicability of a PPP model for maritime security capacity-building, we went through the process of building a PPP for maritime security capacity-building in Ghana. By going through this process, we were able to:

- identify potential benefits and shortcomings of a PPP model for maritime security capacity-building;
- identify the appropriate members or participants in the PPP and what roles and responsibilities they would play;
- consider whether Ghana is an appropriate country for a maritime security PPP and why, and;
- propose a potential role for AFRICOM in this PPP and articulate specific steps AFRICOM could take to set it up.

Our analysis suggests that a PPP could potentially be a promising framework for sharing the burden of costs and responsibilities of maritime security capacity-building in a new oil-producing country such as Ghana. Ghana, in particular, appears to be appropriate for this type of arrangement because it is politically stable with good governance, rule of law, and an economy that is strong by regional

standards. Moreover, the Ghanaian government is supportive of PPPs, as exemplified by the establishment of the Public Investment Division (PID) within the Ministry of Finance and Economic Planning to lead the PPP Program in Ghana.

Nonetheless, there are potential challenges inherent in pursuing a PPP framework for maritime security capacity-building. For example, because of the complexity of PPP contracts and the decisions involved in negotiating their structure and organization, some PPPs can become delayed or fall apart before they reach the contract stage. In addition, because a maritime security PPP in Ghana would be a new construct, many of the stakeholders involved would likely lack the experience and appropriate skills to manage and execute this type of PPP. Finally, PPP stakeholders may have divergent interests with regard to what maritime security entails and what would be required to be successful. For example, the oil companies might be more interested in point defense of maritime energy infrastructure while the Ghanaian Government could be more interested in capacity for maritime security across its entire maritime territory.

There are three partners that would be members of a PPP for maritime security in Ghana: The U.S. government, the Government of Ghana, and the oil companies. Within each partner, there are a range of stakeholders that would participate in the PPP representing one of the three partners. For example, within the U.S. government, there appears to be a role for the Department of Energy, USAID, Department of State, and AFRICOM, in addition to others.

The State Department and AFRICOM would play the most important roles among the U.S. partners. As the principal agent of U.S. foreign policy, the State Department would be the primary U.S. government stakeholder. Leveraging its on-the-ground presence and familiarity with relevant PPP stakeholders in Ghana, the country team at the U.S. Embassy in Accra would play an instrumental role in laying the groundwork for the PPP. Its efforts to reach back to the U.S. government interagency would be supported by the Africa Bureau at the State Department. Given the purpose of the PPP, AFRICOM would also play a key, albeit supporting, role by providing training, funding, and equipment for maritime security capacity-building in Ghana as well as to contributing to a number of the administrative functions required for the PPP to operate. We elaborate on this in the report.

Finally, we propose potential steps that the U.S. Embassy country team could take to pursue a PPP for maritime security capacity-building in Ghana. Based on our analysis of other PPP models, the U.S. interagency process, as well as taking into consideration the Ghanaian Government's interests and equities, these are steps that would need to be taken in the short-term in order to maximize the feasibility of standing up such an organization.

- Because a PPP for maritime security in Ghana would require the participation and resources of multiple U.S. government agencies to be successful, we recommend that the country team at the U.S. Embassy in Accra, supported by the Africa Bureau at the State Department, conduct outreach with other relevant U.S. government stakeholders. This would serve to gauge the interest of the various stakeholders and socialize the potential benefits of such a model.
- Once there is inter-agency buy-in within the U.S. government, the State Department's Africa Bureau could host a conference or a tabletop exercise to draw out and determine the extent of interagency interests and resources to be devoted to such a PPP and identify the appropriate roles and responsibilities of each stakeholder. This could also serve to highlight the potential benefits of this type of PPP in meeting U.S. objectives in Ghana overall. It appears that there are existing pockets of PPP expertise within the U.S. government that should be leveraged at this stage, particularly those in USAID.
- Because this PPP would exist to fill a current gap in maritime security within Ghana's maritime territory, to be successful, it would need the support, buy-in, and eventually even complete ownership of the Ghanaian government in the long-term. It is therefore critical to ensure that the Ghanaians view this PPP as an appropriate construct to meet their needs. We recommend meetings and discussions with key leaders within the Ghanaian Government to gauge Ghana's interest in the PPP as well as assess the Ghanaian Governments likely contributions to such an effort.
- Once it appears that all three partners are prepared to implement this PPP, there should be a planning conference to bring together stakeholders from the U.S. government, Ghanaian

government, and oil sector. This event could be used to begin the process of developing a Plan of Action for operationalizing a maritime security PPP in Ghana. A key step in this process would be to clearly articulate and agree to each partner's roles and responsibilities and the resources each would contribute so that expectations are managed as the process moves forward from the conceptual phase to implementation.

# Background and Analytic Approach

## Background

Approximately 18 percent of the oil imported by the United States comes from West Africa, and this figure is expected to rise to 25 percent by the year 2015.<sup>1</sup> Although most of the oil that the United States imports from the Gulf of Guinea comes from Nigeria, recent discoveries in the region have presented an opportunity for the United States to diversify its supply of energy. As part of an effort to engage with and support African partners to protect their maritime energy infrastructure, U.S. Africa Command (AFRICOM) Air and Maritime Branch asked CNA to examine a public-private partnership (PPP) as a potential framework for maritime security capacity-building in the Gulf of Guinea.

The sponsor requested that CNA focus on Ghana as a case study for this project. With an estimated 700 million barrels of proven oil reserves,<sup>2</sup> Ghana has been pumping oil from its offshore Jubilee field since December 2010. When oil was discovered in Ghana, there were concerns that the country, which has a reputation as a stable democracy and one of world's fastest growing economies,<sup>3</sup> might fall prey to the "resource curse" that had afflicted other oil-producing countries such as Nigeria. Since this time, the Government of Ghana and its in-

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<sup>1</sup> Center for Strategic and International Studies (CSIS), *Promoting Transparency in the African Oil Sector: A Report of the CSIS Task Force on Rising U.S. Energy Stakes in Africa*, March 2004, [http://csis.org/files/media/csis/pubs/0403\\_african\\_oil\\_sector.pdf](http://csis.org/files/media/csis/pubs/0403_african_oil_sector.pdf) (accessed 13 August 2012).

<sup>2</sup> Central Intelligence Agency (CIA), *World Factbook (Ghana)*, <https://www.cia.gov/library/publications/the-world-factbook/geos/gh.html> (accessed 13 August 2012).

<sup>3</sup> World Bank, *Changes in Country Classifications*, <http://data.worldbank.org/news/2010-GNI-income-classifications> (accessed 13 August 2012).

ternational partners have been working to ensure transparency and accountability in the oil industry. Given Ghana's proximity to Nigeria – the scene of rising piracy and armed robbery at sea<sup>4</sup> – there are likewise concerns that Ghana's offshore energy infrastructure<sup>5</sup> could be vulnerable to the transnational maritime security threats in the Gulf of Guinea. As a relatively new oil-producing country, Ghana presents a unique opportunity to examine the applicability of a PPP model that could assist in the development of best practices for cooperation and coordination among the diverse domestic, international, public, and private stakeholders in Ghana's oil sector.

## Analytic Approach

This paper examines the required components of a notional maritime security PPP, assesses the “interests” and “resources” that potential stakeholders might contribute, and posits roles and responsibilities for these stakeholders within the PPP. To these ends, CNA conducted this study in the following sequence:

First, we identified the necessary components for a maritime security PPP. In order to do this, we conducted a literature review using publications from both academic and public policy institutions. As a result of our literature review, we were able to establish an understanding of how PPPs are structured, the sectors in which they are most often utilized, and the peaks and pitfalls of a PPP framework. This gave us a sense of what functions a maritime security PPP would need to have, in addition to highlighting the potential advantages and disadvantages that these types of organizations encounter. Since AFRICOM had asked us to explore the applicability of a maritime security PPP, we also researched oil sector and/or maritime-specific PPPs or organizations that had both public and private sector

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<sup>4</sup> International Chamber of Commerce (ICC)-International Maritime Bureau (IMB), *Piracy increasing in West Africa, latest report shows*, 23 April 2012, <http://www.icc-ccs.org/news/737-piracy-increasing-in-west-africa-latest-report-shows> (accessed 13 August 2012).

<sup>5</sup> For the purposes of this study, we define “maritime energy infrastructure” as including commercial ports and offshore and near-shore oil and gas facilities (including production, refinery, storage, and distribution facilities, and development/exploration zones).

membership but were not explicitly labeled as PPPs. In order to gather more information on these organizations, we interviewed personnel from the International Maritime Organization (IMO), the Global Initiative for West, Central, and Southern Africa (GI WACAF), the International Petroleum Industry Environmental Conservation Association (IPIECA), and the Oil Spill Preparedness Regional Initiative (OSPRI) for the Caspian Sea, Black Sea, and Central Eurasia.

Based on guidance from the sponsor on the types of public and private entities that could potentially contribute to a maritime security PPP, we established that a PPP of this nature would have three partners: in this case, the U.S. government, the Ghanaian government, and at least one oil company that is currently operating in Ghana.<sup>6</sup> Across these partners, we identified a range of potential stakeholders who could represent the interests of the partners and potentially contribute their resources to a maritime security PPP. For the purpose of this study, we determined that “interests” would refer to the reasons why a PPP of this sort might appeal to potential stakeholders, while “resources” would be broadly defined to include a range of contributions – in addition to funding – that potential stakeholders could bring to the table, such as subject matter expertise, access to relevant networks, and manpower.

There are over 30 U.S. government agencies, bureaus, programs, and initiatives operating in Africa.<sup>7</sup> Starting with inputs from the sponsor,

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<sup>6</sup> Approximately a dozen oil companies are active as partners or operators in Ghana’s oil sector. Three of these companies are based in the United States: Kosmos Energy Ghana Limited, Anadarko, and Vanco Ghana Limited. The other companies are Tullow Ghana Limited, Saltpond Offshore Production Company Limited, Vitol Upstream Ghana Limited, Gasop Oil Ghana Limited, Oranto Petroleum Int. Limited, Aker Asa, Afren PLC Ghana Limited, and LukOil Overseas Ghana Limited.

<sup>7</sup> These entities include but are not limited to: the Department of Defense, U.S. Africa Command (AFRICOM), U.S. Naval Forces Africa, Combined Joint Task Force Horn of Africa (CJTF-HOA), U.S. Air Force Africa, U.S. Marine Corps Africa, U.S. Army Africa, Department of State, U.S. Agency for International Development (USAID), Department of Homeland Security, U.S. Coast Guard, Department of Treasury, Department of Energy, Department of Justice, Department of Commerce, Department of Health and Human Services, Department of Labor, Department of Agriculture, Department of the Interior, Department of Transportation,

we identified potential U.S. government stakeholders for a maritime security PPP, but also included bureaucracies with energy- or commerce-related portfolios. Thus, the bureaucracies we included as U.S. government stakeholders for this study were the State Department, Department of Commerce, Department of Energy, Millennium Challenge Corporation, United States Agency for International Development (USAID), U.S. Navy (representing the maritime security interests of the Department of Defense/AFRICOM), and U.S. Coast Guard. Using the websites and strategic guidance documents of these bureaucracies, CNA derived an initial list of stakeholder interests and resources and vetted this list through interviews with U.S. government officials within most of these bureaucracies.<sup>8</sup>

In order to identify potential Ghanaian government stakeholders for a maritime security PPP, we consulted the June 2010 *Security Master Plan for the Oil and Gas Industry in Ghana*,<sup>9</sup> (hereafter referred to as the *Security Master Plan*) which cited several bureaucracies that have a stake in the provision of security for the country's maritime energy infrastructure. These bureaucracies are: the National Security Council Secretariat, Ghana National Petroleum Corporation, Ghana Navy,

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Federal Bureau of Investigation (FBI), Drug Enforcement Agency (DEA), African Development Foundation (ADF), Environmental Protection Agency (EPA), U.S. Forest Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, National Oceanic Atmospheric Administration (NOAA), Office of the United States Trade Representative, U.S. Trade and Development Agency, Export-Import Bank, Overseas Private Investment Corporation (OPIC), Food and Drug Administration (FDA), Federal Aviation Administration (FAA), Peace Corps, President's Emergency Plan for AIDS Relief (PEPFAR), Africa Growth and Opportunity Act (AGOA), President's Malaria Initiative (PMI), and Millennium Challenge Corporation (MCC).

<sup>8</sup> We interviewed personnel from the State Department, the Department of Commerce, the Department of Energy, the Millennium Challenge Corporation, USAID, and OPNAV N52.

<sup>9</sup> The *Security Master Plan for the Oil and Gas Industry in Ghana* (June 2010) is a composite document that details the efforts initiated by Ghana's Ministry of Defence and Ministry of Energy to develop a strategic plan for the oil and gas industry; the roles, responsibilities, and requirements of relevant stakeholders; and provide a framework for safety and security measures.

Ghana Police Service, Ghana Maritime Authority, and Ghana Ports and Harbors Authority. To this list, we added Ghanaian government ministries with security-, energy-, or commerce-related portfolios, such as the Ministry of Defence, Ministry of Energy, Ministry of Finance and Economic Planning, and the Ministry of Trade and Industry. CNA analysts were unable to travel to Ghana to collect data on the interests and resources of potential Ghanaian PPP stakeholders. However, we were able to derive some of this information from the *Security Master Plan*, from the mission statements and visions on the websites of stakeholder organizations,<sup>10</sup> and through a subject matter expert (SME) process.

We posited that oil companies have comparable interests and resources, and thus did not seek to interview all of the oil companies that are currently operating in Ghana. In order to determine the oil companies' potential interests and resources for a maritime security PPP, we developed our own list based on our understanding of the oil sector and vetted this list through an interview with the Director of Corporate Security at Anadarko Petroleum Corporation. Data from this interview were used to account for the interests and resources of American oil companies operating in Ghana.

Applying what we understood about the structure of PPPs, we built a notional PPP designed to protect Ghana's maritime energy infrastructure. In order to do this, we identified five functions required for a maritime security PPP to operate. From these, we derived PPP committees and subcommittees. Our research on PPPs shows that there is no commonly-accepted model for how to structure a PPP – no “off the shelf” organizational construction that we could borrow for this particular PPP. We did learn that many PPPs use committees and subcommittees, or a similar organization, in order to define roles, tasks, and responsibilities. This appeared to be an appropriate model to use to help us think through these issues for this notional PPP.

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<sup>10</sup> For this step, our initial starting point was the Government of Ghana Official Portal: <http://www.ghana.gov.gh/index.php/governance/ministries> (accessed 13 August 2012).

We proposed a Policy Planning committee as an oversight mechanism, and proposed four subordinate subcommittees: Maritime Security, Budgetary, Legal/Regulatory, and Communications/Information Dissemination. We then binned the data we had collected on stakeholder resources to align with these PPP functions, which allowed us to assign notional stakeholder membership on PPP committees and subcommittees. Finally, we articulated recommendations and initial steps for the U.S. government interagency to consider in order to establish a maritime security PPP.

## PPPs 101

There is no precise or widely accepted definition of “public-private partnership.”<sup>11</sup> Broadly defined, a PPP is a contractual relationship involving multiple partners – at least one of which is a public sector partner (at the state, local, or national level) and one of which is a private sector partner (a privately owned business, or consortium of businesses).<sup>12</sup> In addition to these partners, third-party organizations, such as non-governmental organizations (NGOs) and international organizations may also be involved. (Their involvement is quite common for PPPs created in developing countries.) The details – precisely who is involved, what roles they play, and how the PPP is organized – vary, depending on where the PPP exists and what it seeks to accomplish.

Within a PPP, the public sector partner seeks to deliver a commonly agreed upon public good while the private sector partner expects to earn a profit from its involvement and investment. Overall, an important benefit of PPPs is that these partners can pool resources in a way that supports each partner’s comparative advantages, while sharing potential risks, benefits, and responsibilities.<sup>13</sup> Other commonly cited advantages to using a PPP model for public projects include the following:

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<sup>11</sup> Nilufa Akhter Khanom, “Conceptual Issues in Defining Public Private Partnerships (PPPs),” *International Review of Business Research Papers* 6, no. 2 (July 2010): 150–163, <http://www.bizresearchpapers.com/12.%20Nilufa.pdf> (accessed 13 August 2012).

<sup>12</sup> Canadian Council for Public-Private Partnerships, “Definition: Public-Private Partnership (PPP),” <http://searchcio.techtargent.in/definition/Public-private-partnership-PPP> (accessed 13 August 2012).

<sup>13</sup> Eziyi Offia Ibem, “An Assessment of the Role of Government Agencies in Public-Private Partnerships in Housing Delivery in Nigeria, 2010,” *Journal of Construction in Developing Countries* 15, no. 2: 23-48, [http://web.usm.my/jcdc/input/JCDC%20Vol%2015%282%29/JCDC%2015%282%29%20ART%202\\_corrected\\_%2823-48%29\\_21.12.2010.pdf](http://web.usm.my/jcdc/input/JCDC%20Vol%2015%282%29/JCDC%2015%282%29%20ART%202_corrected_%2823-48%29_21.12.2010.pdf) (accessed 13 August 2012).

- The public sector often has constrained budgets; working with the private sector can help address this issue.
- Private sector partners are often more efficient; projects tend to have more timely delivery as a result.
- Private sector entities can contribute innovative, efficient, and cutting-edge approaches not often found in the public sector.<sup>14</sup>
- The private sector can be better positioned to manage risk than the public sector.
- Since risk is transferred to the private sector in a PPP, the private sector has a strong incentive for the PPP to be successful.<sup>15</sup>
- Working with the private sector reduces the cost of public sector administration.
- PPPs can benefit local economic development through the provision of employment and training.<sup>16</sup>
- The private sector is more realistic about project goals, and is better at conducting feasibility analyses.
- The private sector is typically better at managing the long-term maintenance of projects after they are completed.

However, there are also many potential disadvantages to using a PPP model for public projects, such as:

- PPPs may fall apart over differences before they even reach the contract stage.

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<sup>14</sup> Peter Farlam, *Working Together: Assessing Public–Private Partnerships in Africa, February 2005*, South African Institute of International Affairs (Nepad Policy Focus Series), <http://www.oecd.org/investment/investmentfordevelopment/34867724.pdf> (accessed 13 August 2012).

<sup>15</sup> Dieter Katz, *Financing Infrastructure Projects: Public Private Partnerships (PPPs)*, New Zealand Treasury Policy Perspectives Paper 06/02, March 2006, <http://www.treasury.govt.nz/publications/research-policy/ppp/2006/06-02/tpp06-02.pdf> (accessed 13 August 2012).

<sup>16</sup> Esther Cheung and Albert P. C. Chan, “Evaluation Model for Assessing the Suitability of Public-Private Partnership Projects,” *Journal of Management in Engineering* 27, no 2 (April 2011): 80-89.

- PPPs are complicated agreements that may become a burden to those involved; partners spend a great deal of time managing contract transactions.
- PPPs may suffer from long delays due to political debates and other negotiations.<sup>17</sup>
- There may be confusion over government objectives and evaluation criteria for PPP projects.
- PPP partners may lack the experience and appropriate skills to manage and execute PPP projects.

PPP projects tend to focus on construction and management in sectors such as infrastructure, transportation, power, sanitation, telecommunications, health services, ecotourism, and food processing. Few PPPs tend to be established to focus on the oil and/or maritime sector. (A brief overview of some of these PPPs can be found in appendix A.) There are many models of PPPs that dictate how partners finance, construct, own, operate, and maintain the project – in addition to determining whether and when the project is transferred from the private sector partner to the public sector partner.<sup>18</sup>

The success of any PPP is contingent upon the ability of each partner involved to perform its designated functions once it becomes operational.<sup>19</sup> The private sector needs to maintain a good record of service

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<sup>17</sup> Cheung and Chan, “Evaluation Model,” 80-89.

<sup>18</sup> For additional details on these models, consult the Canadian Council for Public-Private Partnerships, “Definition: Public-Private Partnership (PPP),” <http://searchcio.techtarget.in/definition/Public-private-partnership-PPP> (accessed 13 August 2012).

<sup>19</sup> Mark Dutz, Clive Harris, Inderbir Dhingra, and Chris Shugart, *Public-Private Partnership Units*, Public Policy for the Private Sector, Note Number 311, September 2006, [http://rru.worldbank.org/documents/publicpolicyjournal/311Dutz\\_Harris\\_Dhingra\\_Shugart.pdf](http://rru.worldbank.org/documents/publicpolicyjournal/311Dutz_Harris_Dhingra_Shugart.pdf) (accessed 13 August 2012). See also Stephan F. Jooste and W. Richard Scott, October 2009, *Organizations Enabling Public Private Partnerships: an Organization Field Approach*, Collaboratory for Research on Global Projects (CRGP), Working Paper #49, [http://crgp.standord.edu/publications/working\\_papers/Jooste\\_and\\_Scott\\_Organizations\\_enabling\\_PPPs\\_WP0049\\_v2.pdf](http://crgp.standord.edu/publications/working_papers/Jooste_and_Scott_Organizations_enabling_PPPs_WP0049_v2.pdf) (accessed 13 August 2012).

delivery, while the public sector needs to be able to build consensus on the PPP project across the government and the various stakeholders, and must be reasonably skilled in contract management.

Ghana, in particular, has the potential to be a good PPP partner since, in recent years, the government has indicated that it is favorable to PPPs as an economic tool. One of the measures the Government of Ghana took was to implement significant policy reforms to develop the robust administrative infrastructure necessary to attract and support PPPs.<sup>20</sup> The government also articulated a National Policy on Public-Private Partnerships,<sup>21</sup> and created the Public Investment Division (PID) within the Ministry of Finance and Economic Planning to lead the PPP Program in Ghana. The PID is tasked with providing strategic direction and coordination of Ghana's PPPs; establishing an appropriate policy framework to guide public investment decisions; establishing and enforcing the policy, legal, and regulatory frameworks for PPPs in Ghana; and monitoring and evaluating PPP projects.<sup>22</sup>

The characteristics of successful PPPs can generally be binned into the following PPP functions:

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<sup>19</sup> Infrastructure Consortium for Africa, Public-Private Partnerships, <http://www.icafrica.org/en/infrastructure-issues/focal-points/public-private-partnerships-ppps/> (accessed 13 August 2012).

<sup>20</sup> Sadick Mahmud Sam, *Public-Private Partnerships in Ghana – the Case of the Water Sector, Presentation of Country Reports*, [http://www.csstc.org/reports/egm/P4/Presentation\\_Ghana.htm](http://www.csstc.org/reports/egm/P4/Presentation_Ghana.htm) (accessed 13 August 2012).

<sup>21</sup> Government of Ghana Ministry of Finance and Economic Planning, *National Policy on Public-Private Partnerships*, June 2011, [http://www.mofep.gov.gh/sites/default/files/reports/ppp\\_policy.pdf](http://www.mofep.gov.gh/sites/default/files/reports/ppp_policy.pdf) (accessed 13 August 2012).

<sup>22</sup> Government of Ghana Ministry of Finance and Economic Planning, Public Investment Division, <http://www.mofep.gov.gh/divisions/pid> (accessed 13 August 2012).

- **Policy Planning** – a clear, thorough policy framework and the ability to maintain a strong political commitment over the long term<sup>23</sup>
- **Budgetary** – an operating framework within the public sector to properly manage the PPP process, and thorough feasibility studies that address the issues of affordability, value for money, and risk transfer<sup>24</sup>
- **Legal/Regulatory** – a legal system to ensure that contracts are effective and enforceable, and effective monitoring, regulation, and enforcement by public sector<sup>25</sup>
- **Communications/Information Dissemination** – an established mechanism for sharing information among PPP stakeholders.

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<sup>23</sup> Infrastructure Consortium for Africa, Public-Private Partnerships, <http://www.icafrica.org/en/infrastructure-issues/focal-points/public-private-partnerships-ppps/> (accessed 13 August 2012).

<sup>24</sup> Farlam, *Working Together*.

<sup>25</sup> Ibid.

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# A Maritime Security PPP for Ghana

## Ghana's Maritime Environment

For several years, the waters off the coast of West Africa have been second only to the waters off the coast of Somalia in terms of actual and attempted pirate attacks. Given the rise of piracy and armed robbery at sea in other parts of the Gulf of Guinea, there are concerns that Ghana's offshore energy infrastructure could be vulnerable to the transnational maritime security threats in the Gulf of Guinea. However, Ghana's maritime domain is at present a relatively low-threat environment. Regardless, it is important to get a sense of the extant and anticipated energy infrastructure in the maritime domain in order to get a sense of what a maritime security public-private partnership would be protecting in Ghana.

The Jubilee field, shown in the map below, is the only field currently producing oil in Ghana;<sup>26</sup> the next projected fields to come online will be the Tweneboa and Enyenra Fields in the deepwater Tano Block in 2015. This means that for the time being, the PPP would focus on protecting the Jubilee field and the infrastructure associated with it.

In addition to oilfields and oil exploration blocks, Ghana has a Floating Production Storage and Offloading (FPSO) vessel (*Kwame Nkrumah*); an oil refinery at Tema; another planned oil refinery in the Western Region (presumably near Sekondi-Takoradi), specifically to refine Ghana's oil; the West African Gas Pipeline (WAGP), which

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<sup>26</sup> Tullow Oil plc is the operator for the Jubilee oilfield and has a 34.70 percent working interest. Other co-owners in the unit include Anadarko (23.49 percent), Kosmos Energy (23.49 percent), Ghana National Petroleum Corporation (GNPC) (13.75 percent), Sabre Oil and Gas (2.81 percent), and E.O. Group (1.75 percent). See <http://www.anadarko.com/Investor/Pages/NewsReleases/NewsRelease.s.aspx?release-id=1507873> (accessed 13 August 2012) for additional details.

runs from Lagos, Nigeria, to Takoradi, Ghana; the WAGP Extension, which runs from Takoradi to Abidjan, Côte d'Ivoire; a commercial port at Tema; and another commercial port under construction at Sekondi-Takoradi.

Figure 1. Ghana's offshore oil fields



## Anatomy of a Maritime Security PPP

The purpose of this public-private partnership would be to establish a mechanism for the collaboration and cooperation of a diverse range of domestic, international, public, and private stakeholders in Ghana's oil sector to protect the country's maritime energy infrastructure. This maritime security PPP in Ghana would have three partners: the U.S. government, the Ghanaian government, and the oil companies. The following stakeholders may represent the interests of those partners and potentially contribute their resources to a maritime security PPP.

Table 1. Potential PPP partners and stakeholders

<b>Partners</b>	<b>Potential Stakeholders</b>
<b>U.S. Government</b>	Department of Defense/AFRICOM/ U.S. Navy
	U.S. Coast Guard
	State Department
	United States Agency for International Development (USAID)
	Department of Energy
	Department of Commerce
	Millennium Challenge Corporation (MCC)
<b>Ghanaian Government</b>	National Security Council Secretariat
	Ghana National Petroleum Corporation
	Ghana Armed Forces/Ghana Navy
	Ghana Police Service
	Ghana Maritime Authority
	Ghana Ports and Harbors Authority
	Ministry of Defence
	Ministry of Energy
	Ministry of Finance and Economic Planning
	Ministry of Trade and Industry
<b>Oil Companies<sup>27</sup></b>	Anadarko Petroleum Company
	Tullow Ghana Limited
	Vanco Ghana Limited
	Kosmos Energy Ghana Limited
	Saltpond Offshore Production Company Limited
	Vitol Upstream Ghana Limited
	Gasop Oil Ghana Limited
	Oranto Petroleum Int. Limited
	Aker Asa
	Afren PLC Ghana Limited
	Lukoil Overseas Ghana Limited

<sup>27</sup> This list of oil companies is based on the information available on the Ghana Oil and Gas Website: <http://www.ghanaoilandgasonline.com/> (accessed 8 August 2012). During our data collection, we used our interview with Anadarko to account for the interests and resources of American oil companies operating in Ghana. Therefore, the inclusion of other companies on this list should not imply that they are interested in participating in a maritime security PPP.

Each of these stakeholders has “interests,” or reasons associated with participating in a maritime security PPP. These interests are as follows.

Table 2. PPP stakeholders and interests

Stakeholder	Interests
Department of Defense (including AFRICOM and the Navy)	<ul style="list-style-type: none"> <li>• Realize broader stability and security objectives in Africa</li> <li>• Strengthen a mutually beneficial defense relationship with Ghana through additional training/equipping</li> <li>• Build and maintain relationships that will strengthen security of maritime energy infrastructure</li> <li>• Enhance the effectiveness of broader regional maritime safety and security efforts</li> <li>• Find opportunities to strengthen a mutually beneficial defense relationship with Ghana through additional training/equipping</li> </ul>
U.S. Coast Guard	<ul style="list-style-type: none"> <li>• Contribute to homeland security through countering illicit maritime activity abroad</li> <li>• Ensure that countries with ports of departure for vessels destined to the U.S are compliant with the International Ship and Port Facility Security (ISPS) Code</li> </ul>
State Department	<ul style="list-style-type: none"> <li>• Strengthen Seeks to strengthen the United States’ long-standing relationship with Ghana, which is a Partnership for Growth (PfG) country<sup>28</sup></li> <li>• Protect the interests of American companies operating in Ghana</li> <li>• Ensure that businesses interact with the Ghanaian government in a transparent and accountable manner that supports good governance</li> <li>• Support the Ghanaian government in allocation of oil revenues to support broader societal development</li> <li>• Address both economic and security issues in the maritime domain that are linked to regional security</li> </ul>
USAID	<ul style="list-style-type: none"> <li>• Strengthen economic development in Ghana, possibly by influencing the government to reinvest oil revenues in the Ghanaian people</li> <li>• Expand trade</li> </ul>
Department of Energy	<ul style="list-style-type: none"> <li>• Ensure U.S. energy security through oil and gas imports from countries in the region</li> </ul>
Department	<ul style="list-style-type: none"> <li>• Strengthen the bilateral trade relationship, which is already among the</li> </ul>

<sup>28</sup> Ghana is one of four Partnership for Growth (PfG) countries that are focus countries for the U.S. government to concentrate foreign aid and private sector investment. U.S. State Department, Office of the Spokesperson, *Partnership for Growth Fact Sheet*, 29 November 2011, <http://www.state.gov/r/pa/prs/ps/2011/11/177887.htm> (accessed 13 August 2012).

of Commerce	<p>strongest in Africa</p> <ul style="list-style-type: none"> <li>• Assist U.S. companies in selling goods and services overseas</li> <li>• Prevent the disruption of international trade</li> </ul>
Millennium Challenge Corporation (MCC)	<ul style="list-style-type: none"> <li>• Help determine what other potential stakeholders might be interested in order to maximize everyone's investment in the PPP</li> <li>• Expand upon recent MCC activity in the country (\$547M five-year compact due to end this year; subsequent compact will focus on expanding power provision, reliability, and access)</li> <li>• Ensure that offshore oil supplies are secure so they can contribute to Ghana's economic growth and security</li> <li>• Leverage the fact that Ghana is one of four Partnership for Growth (PfG) countries.</li> </ul>
Ghana Ministry of Defence, Armed Forces, Navy, and Police Service <sup>29</sup>	<ul style="list-style-type: none"> <li>• Maintain the armed forces in a high state of preparedness for national and international engagements</li> <li>• Have the capacity to undertake maritime patrols and interdiction to prevent and deter security threats in the maritime domain</li> </ul>
Ghana National Security Council Secretariat	<ul style="list-style-type: none"> <li>• Seeks to collate intelligence reports from both internal and external agencies</li> </ul>
Ghana Maritime Authority <sup>30</sup>	<ul style="list-style-type: none"> <li>• Ensure the provision of safe, secure and efficient shipping operations in the seas and inland waters of the country</li> <li>• Ensure Ghana's ports and the vessels that call at them are compliant with the International Ship and Port Facility Security (ISPS) code</li> </ul>
Ghana Ports and Harbors Authority <sup>31</sup>	<ul style="list-style-type: none"> <li>• Make port management efficient</li> <li>• Regulate the use of ports and port facilities</li> </ul>

<sup>29</sup> According to the *Security Master Plan for the Oil and Gas Industry in Ghana*, Ghana seeks to provide adequate security and safety for petroleum operations, installations and reserves; protect the petroleum industry against acts of terrorism, sabotage, piracy, vandalism, and other illegal activities; prevent and discourage illegal bunkering and stealing of petroleum products; prevent other users of the sea from interfering with petroleum operations; maintain general law and order to enhance operations in the petroleum industry; and render timely response to emergencies.

<sup>30</sup> Ghana Maritime Authority, *Mission & Vision*, <http://www.ghanamaritime.org/en/about-us/overview/mission-vision.php> (accessed 13 August 2012).

	<ul style="list-style-type: none"> <li>• Facilitate trade and transport</li> <li>• Prevent the disruption of services</li> </ul>
Ghana National Petroleum Corporation <sup>32</sup>	<ul style="list-style-type: none"> <li>• Support the sustainable exploration, development, and production of Ghana's petroleum resources</li> <li>• Reduce the country's dependence on crude oil imports</li> </ul>
Ghana Ministry of Energy	<ul style="list-style-type: none"> <li>• Encourage private sector participation in energy infrastructure development</li> <li>• Enable Ghana to become a net exporter of fuel and power</li> <li>• Ensure a reliable supply of energy to the domestic market at minimum cost</li> </ul>
Ministry of Finance and Economic Planning	<ul style="list-style-type: none"> <li>• Ensure the accountability and transparency in the use of public funds</li> <li>• Would likely be involved in the establishment and development of the Petroleum Security Fund<sup>33</sup></li> </ul>
Ministry of Trade and Industry	<ul style="list-style-type: none"> <li>• Prevent the disruption of trade</li> <li>• Establish Ghana as a major financial and commercial center in West Africa as part of the Ghana Trade and Investment Gateway Programme</li> </ul>
Oil companies	<ul style="list-style-type: none"> <li>• Recover initial investments and profit from oil and gas production</li> <li>• Protect investments in people, infrastructure, and other assets</li> <li>• Share the cost of its investments in oil infrastructure security with other stakeholders</li> <li>• Ensure their ability to do business in a given country until the contract is fulfilled</li> <li>• Prevent disruptions to oil production</li> <li>• Transport their goods through the maritime domain</li> <li>• Adhere to international laws, regulations, standards of industry (i.e., environmental regulations, labor laws, good business practices)</li> <li>• Adhere to norms of corporate social responsibility through outreach to the local community</li> </ul>

During the course of our research, we identified four functions that PPPs ordinarily possess (Policy Planning, Budgetary, Le-

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<sup>31</sup> Ghana Ports and Harbors Authority, *About Us*, [http://ghanaports.gov.gh/GPHA/about\\_us.html](http://ghanaports.gov.gh/GPHA/about_us.html) (accessed 13 August 2012).

<sup>32</sup> Ghana National Petroleum Corporation, *About GNPC*, <http://www.gnpcghana.com/aboutus/> (accessed 13 August 2012).

<sup>33</sup> The establishment of the Petroleum Security Fund is mentioned as a possibility in the *Security Master Plan*, but we do not have visibility on whether it has been created.

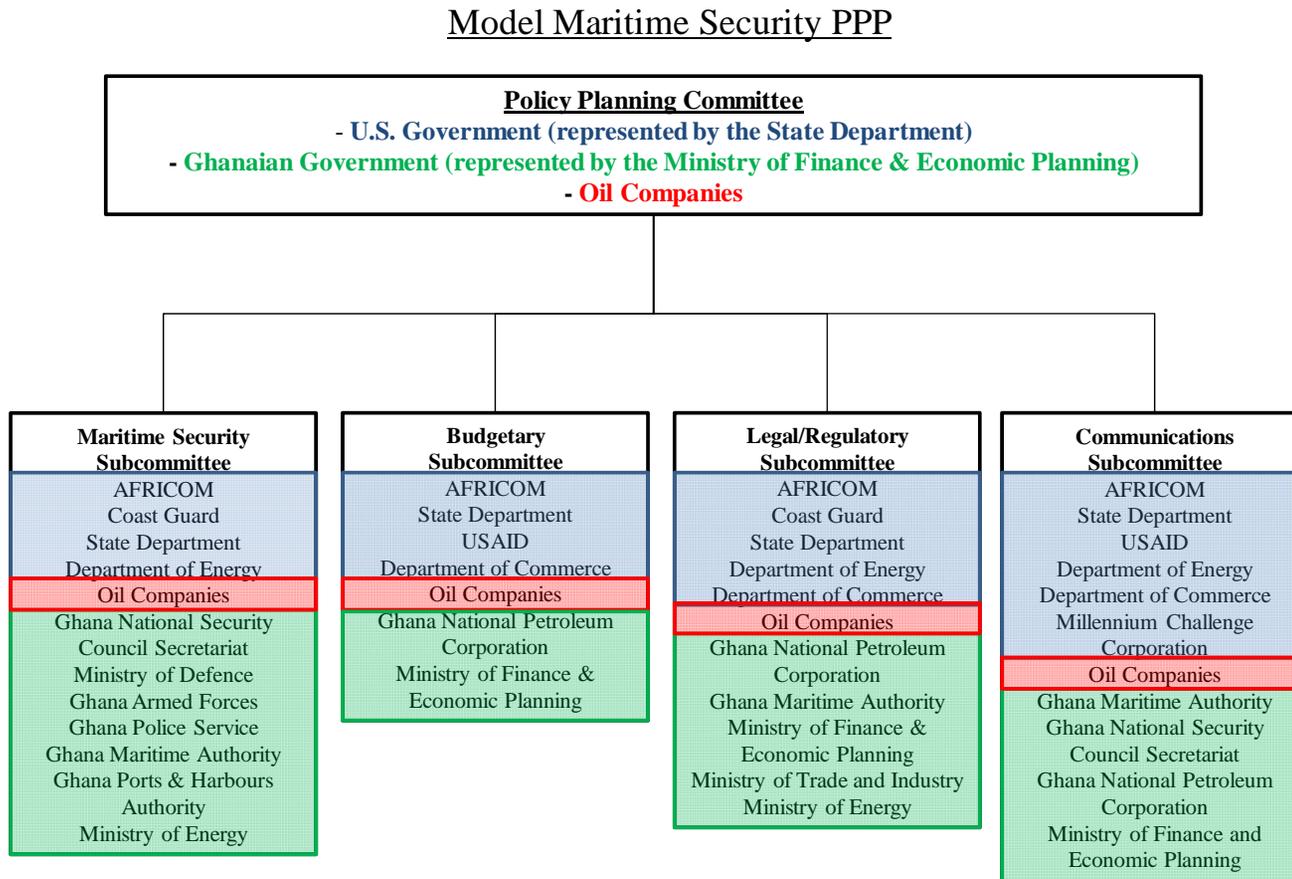
gal/Regulatory, and Communications/ Information Dissemination). Since this PPP would exist to develop a framework to coordinate U.S. government, Ghanaian government, and oil companies' efforts to protect Ghana's maritime energy infrastructure, we included a Maritime Security function to this PPP, for a total of five functions. We then articulated these functions as one oversight committee and four subordinate subcommittees within a notional PPP, and determined what their responsibilities would be:

1. The **Policy Planning Committee** would provide oversight and management of the PPP's policy framework and planning mechanisms, and manage a wide range of stakeholder interests and resources.
2. The **Maritime Security Subcommittee** would be responsible for the PPP's efforts to build the capacity of Ghanaian maritime security forces to protect maritime energy infrastructure. These efforts include assisting in the articulation of appropriate roles and responsibilities of the stakeholder vis-à-vis the maritime security sector, developing a theater security cooperation plan for Ghanaian maritime forces, and contributing manpower, assets, funding, training, and expertise on maritime infrastructure protection.
3. The **Budgetary Subcommittee** would be in charge of the PPP's budget, financial arrangements, and studies that address issues of feasibility and affordability so that the public sector is able to deliver a public good and the private sector is able to make a profit.
4. The **Legal/Regulatory Subcommittee** would have oversight over the PPP's legal and regulatory arrangements, and how these affect interactions between PPP members and the PPP's business practices. This subcommittee would also be in charge of monitoring, regulation, and enforcement. This is a necessary part of a PPP because legal and regulatory issues can determine whether, or the extent to which, the PPP's contracts are effective and enforceable.
5. The **Communications/Information Dissemination Subcommittee** would be responsible for managing efficient communications among various PPP stakeholders from different sectors,

countries, and possibly levels of management. This subcommittee would also provide access to relevant networks in order to facilitate the mission of the PPP.

Each PPP stakeholder has “resources” – such as funding, subject matter expertise, access to relevant networks, and manpower – that it could contribute to the committees and subcommittees of a maritime security PPP. After identifying the range of resources each stakeholder might contribute, we were able to bin this data and assign notional stakeholder membership on PPP committees and subcommittees. (Details on potential resources are based on several stakeholder interviews and can be found in appendix B.) Our results are shown in the following chart.

Figure 2. Model maritime security PPP



## Policy Planning Committee

It is imperative that all partners be represented on this committee as a means by which they can be assured that their interests are being served within the PPP. However, we recommend that for the sake of clarity and cohesion, only one stakeholder represent each partner in this part of the PPP.

For the U.S. government, we propose that the lead be the State Department, as it has a permanent presence in Ghana and has the relevant relationships, access to networks,<sup>34</sup> subject matter expertise on Ghana, and more general policy planning expertise. For the Ghanaian government, we propose that the lead be the Ministry of Finance and Economic Planning, which has the Public Investment Division (PID). The PID would be an appropriate lead for the Ghanaian government because it provides strategic direction and coordination of Ghana's PPPs and provides access to a network of local government bureaucracies.

Oil companies would have to determine which company best represents their collective interests for the policy planning function of the PPP. Across these partners, it would have to be determined who should lead the Policy Planning Committee, which would be the stakeholder that ultimately leads the entire PPP. We propose that at the outset, the oil sector should lead, since the oil companies are absorbing risk and have an interest in ensuring the success of this organization. However, transfer to Ghanaian control should be considered at some point in the future.

## Maritime Security Subcommittee

All stakeholders on this subcommittee can contribute their expertise with regard to maritime infrastructure protection, as well as their familiarity with the threats and vulnerabilities within Ghana's maritime

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<sup>34</sup> In particular, the Secretary of State's Global Partnership Initiative was mentioned as a potential resource and was described as essentially a "rolodex for outreach to the private sector for in-kind contributions." In addition, the State Department may be able to leverage relationships with other interested stakeholders in the Gulf of Guinea, such as individual donor nations or international organizations.

domain. Some of these stakeholders – namely AFRICOM, the Coast Guard, and the Ghanaian security forces – may have pre-existing relationships as a result of past training engagements – either ad hoc, or as part of Africa Partnership Station (APS).

The Navy, in particular, may also have a Naval Attaché in Accra who could be a useful resource for a maritime security PPP. For training purposes, the Coast Guard could leverage their expertise on law enforcement, port security, patrols, interdiction, and other operations in the littorals. In addition, the Coast Guard could leverage the fact that it is the appropriate size to engage with Ghana’s maritime security forces. AFRICOM can contribute security assets and infrastructure (including surveillance technology) and manpower in the form of training teams. Furthermore, AFRICOM has access to Title 10 funding to support the training of maritime professionals (through the Naval Academy, Naval War College, Naval Postgraduate School, and Coast Guard Academy), and the acquisition and maintenance of maritime assets.

The oil companies also have access to funding to cover the manpower costs of Ghanaian maritime forces, as well as potentially cover the cost of leasing maritime assets for infrastructure protection.<sup>35</sup> For the State Department, this funding might come in the form of Title 22 Train and Equip funding, such as Peacekeeping Operations (PKO),

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<sup>35</sup> During a phone interview with Anadarko in March 2012, we were told that U.S. oil companies “cannot directly train or arm or dramatically influence the way a foreign military operates,” due to the Foreign Corrupt Practices Act. Instead, oil companies are able to lease host nation military forces, which may consist of paying for manpower or leasing boats as a means of transport for the security forces to execute their duties. Oil companies can also work with the Defense Attaché at the U.S. Embassy in Accra to recommend training to close the gap between current and required capabilities. However, it would ultimately fall to the operator for the Jubilee oilfield (Tullow, based in the UK) to ensure that the oil companies’ relationships with Ghana’s security forces adhere to appropriate rules of engagement and international best practices. Anadarko and the other U.S. co-owners would only be able to monitor and report on interactions with host nation security forces; they would lack the power to make decisions that might avoid violating the Foreign Corrupt Practices Act.

International Military Education and Training (IMET), and Foreign Military Financing (FMF).

## **Budgetary Subcommittee**

All stakeholders on this subcommittee could contribute their organizations' budgetary expertise to assist in the management of the PPP's finances in addition to their knowledge of how to be effective at conducting business in Ghana. Specifically, AFRICOM, the State Department, and the oil companies might also be able to contribute funding to cover the PPP's operating costs. Specifically, Ghana's Ministry of Finance and Economic Planning might also be able to contribute to the PPP's operating costs through the Petroleum Security Fund (referenced in the *Security Master Plan*) – if it is operational. Furthermore, with the Public Investment Division (PID), Ghana's Ministry of Finance and Economic Planning also possesses the government's in-house expertise on PPPs, which presents a useful connection between the objectives articulated in the *Security Master Plan* and the plausible requirements of a maritime security PPP.

## **Legal/Regulatory Subcommittee**

The Coast Guard can contribute training on maritime interdiction and legal frameworks through the African Maritime Law Enforcement Program (AMLEP). In addition, the Coast Guard has an International Port Security Program Liaison Officer (IPSLO) based in Rotterdam that covers the Europe/Mid-East/Africa Region. The Coast Guard could also work with the Ghana Maritime Authority to ensure ISPS compliance. Both the State Department and the Department of Energy could contribute their expertise on broader U.S. energy interests and the legal and regulatory frameworks of energy-related U.S. policy in Ghana. The State Department also has funding for International Narcotics Control and Law Enforcement (INCLE) to focus on the land-based aspects of maritime security, such as legal reform and working with local law enforcement in any investigations or prosecutions. The Department of Commerce could leverage the on-the-ground presence of a commercial service officer in the U.S. Embassy in Ghana who can act as a liaison between the U.S. government, the U.S. private sector, and the Ghanaian government. The Ghana National Petroleum Corporation, Ghana Ministry of Energy, Ghana Ministry of Finance and Economic Planning, and Ghana Min-

istry of Trade and Industry, and the oil companies could contribute their expertise in matters of local/international legal parameters and standard operating procedures.

### **Communications/ Information Dissemination Subcommittee**

All stakeholders on this subcommittee have access to networks and subject matter expertise (in the form of human resources) that would facilitate the mission of the PPP. AFRICOM would be able to leverage its relationship with relevant members of the Ghanaian security forces. The Millennium Challenge Corporation (MCC) is a key player in Ghana, and could open up additional networks. MCC could also leverage access to the World Bank's Public-Private Infrastructure Advisory Facility (PPIAF), which played a role in advising Ghana's Ministry of Finance and Economic Planning on establishing the Public Investment Division. The State Department, USAID, the Department of Energy, and the Department of Commerce would be able to leverage existing contacts within the Ghanaian government, with the oil companies operating in Ghana, with other private sector entities, and with the NGOs that work on maritime issues in Ghana. The oil companies would be able to access and have membership in international organizations such as the International Petroleum Industry Environmental Conservation Association (IPIECA).

Some of these stakeholders might also be in a good position to facilitate communication and coordination within the PPP. The State Department would be able to leverage a permanent presence in Ghana through the U.S. Embassy in Accra and, potentially, the subject matter expertise on the inner workings of the Ghanaian government that might come from continual exposure to Ghana. Likewise, USAID has both a bilateral and a regional mission in Ghana. As a result of the Partnership for Growth initiative, the bilateral mission is overtaken; therefore, USAID's West Africa Regional Mission might be more capable of facilitating the PPP's communications mechanisms.<sup>36</sup> The oil companies also could set up communications networks and manage information flows.

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<sup>36</sup> Interview with USAID, Washington, D.C., February 2012.

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# Conclusions and Recommendations

## Research Findings

Having gone through the process of building a notional PPP, it appears that a public-private partnership is a potentially promising framework for sharing the responsibilities of maritime security capacity-building in a new oil-producing country among multiple partners, all of whom serve to benefit. Ghana, in particular, is a stable country with a relatively good economy, rule of law, and the government has stated that it support PPPs as a model in Ghana. Regardless, of the benefits and potential challenges of setting up this type of PPP, there are few existing models of oil and/or maritime sector PPPs, which makes this type of investment relatively risky. In fact, most PPPs target the delivery of a tangible good such as power plants or highways, which potentially makes it easier to articulate metrics of the PPP's success.

Although a PPP could be a good model to pursue in Ghana, AFRICOM should be aware that the establishment of a PPP has an inherently long time horizon with many steps that need to be taken and many decisions that need to be made. Some of these steps include securing stakeholder participation, negotiating a PPP contract, negotiating leadership of the entire PPP and its subordinate subcommittees, determining the level of stakeholder representation in PPP (ministerial or action officer), assessing how resources should be allocated (how much, for how long, for what purpose), and how the PPP's decision-making and communication mechanisms might operate.

As a result of the complexity of PPP contracts and the decisions that go into negotiating their structure and organization, some PPPs can become delayed or fall apart before they even reach the contract stage. Another potential complication for PPPs is that stakeholders may have divergent interests. For example, some stakeholders may want the PPP to focus on point defense of maritime energy infrastructure, while others may want it to focus on providing security

across Ghana's entire maritime domain. Furthermore, stakeholders may have divergent interests with regard to what maritime security entails, and what would be required to be successful. Another challenge may be that Ghana might prioritize land-based security threats and have little incentive to budget for or focus on maritime security – especially if the oil companies are willing to fund oil platform security themselves.

The maritime security PPP we have proposed has a wide range of stakeholders, many of which might lack the experience and appropriate skills to manage and execute PPP. To mitigate this challenge, it is important to seek out and leverage existing expertise on PPPs early on. Within this particular PPP, that expertise would be resident in USAID, MCC, and Ghana's Public Investment Division.

Within the maritime security PPP we have proposed, AFRICOM and the State Department would be the most critical U.S. partners. While the State Department, as the principal agent of U.S. foreign policy, would be the lead U.S. government stakeholder and have a seat on every subcommittee, AFRICOM would have a role as provider of training, funding, and equipment, and would also have a seat on every subcommittee in order to ensure that the focus of these subcommittees support the PPP's maritime security objective. Since the oil companies may end up providing much of the funding to cover the PPP's operating expenses, they should also play a leading role in all functions of the PPP. Furthermore, given the oil industry's interest in protecting its investments in Ghana's oil sector and sharing the burden of maritime security, the oil industry has a vested interest in ensuring that the PPP is successful.

Perhaps most importantly, the Ghanaian government would play a critical role in the PPP – especially as the primary providers of maritime security. Since the purpose of the PPP would be to protect Ghana's oil, it would be essential to have Ghanaian buy-in and participation in every function of the PPP. Given the oil companies' interest in sharing the burden of maritime security and the need for Ghanaian buy-in, there might be a potential benefit for the oil companies to lead the PPP Policy Planning Committee at the outset to get it off the ground, and then eventually transfer primary control to Ghana, since the PPP would likely be based there.

## Recommendations

Because of the inherently interagency nature of this PPP, the country team at the U.S. Embassy in Accra should take the lead in laying the groundwork for a maritime security public-private partnership. Not only would the country team be able to leverage its on-the-ground presence and familiarity with relevant PPP stakeholders in Ghana, but it would also be able to reach back to the Africa Bureau at the State Department to facilitate the socialization of the PPP concept within the U.S. government interagency. Since this type of PPP is a novel concept and would require interagency buy-in and participation, it may be necessary to have senior leadership, such as the U.S. Ambassador and possibly the USAID Mission Director make the pitch to the senior leadership of other U.S. government stakeholders. Next, the country team, in cooperation with the Africa Bureau, should organize a U.S. government interagency tabletop exercise. Such an event would allow potential participants to draw out, discuss, and determine the extent of interagency interests and resources to be devoted to such a PPP and identify the appropriate roles and responsibilities of each stakeholder. This could also serve to highlight the potential benefits of this type of PPP in meeting U.S. objectives in Ghana overall.

The country team and the Africa Bureau should also reach out to the oil sector to ascertain which companies might be interested in participating in the PPP and what their potential contributions could be. Starting with the Public Investment Division in Ghana's Ministry of Finance and Economic Planning, the country team should start to socialize the concept of a maritime security public-private partnership in Ghana. Finally, there should be a planning conference to bring together the various potential public and private stakeholders to develop a Plan of Action for operationalizing a maritime security PPP. It is worth noting that, although the Ghanaian government is familiar with PPPs, a maritime security PPP is a new concept. As a result, there may be some challenges securing their buy-in, or allaying possible suspicions towards the way that oil companies have done business in places like Nigeria.

The mechanics of establishing a maritime security PPP are complicated and are likely to take several years. Therefore, we recommend that AFRICOM should develop an understanding of the status of var-

ious initiatives mentioned in the *Security Master Plan* (such as the Petroleum Security Fund), and the status of implementation of the country's National Policy on Public-Private Partnerships. We also recommend that AFRICOM focus on conducting a needs assessment of the Ghanaian Navy so that it would have the requisite maritime security capabilities to protect the country's maritime energy infrastructure by the time the PPP would be operational. In the country's *Security Master Plan*, stakeholders in the energy sector have articulated specific requirements for the Ghanaian Navy:

“Ghana lacks the capacity to meet the challenges posed by the safety and security threats and challenges of the oil find. The existing ships are old and cannot undertake sustained patrols without breaking down. Maintenance facilities are seriously degraded and the Naval Dockyard is in a state of disrepair. Therefore, there is the need to institute immediate and short term measures to revamp the navy to enable it to attain the operational state of readiness required to fulfill its role in an efficient and effective manner.”

In this document, Ghana has also stated an interest in developing a Special Forces unit within the navy to specialize in addressing threats such as terrorism and sabotage to the offshore industry, and acquire high speed Special Patrol Boats and coastal surveillance systems. Furthermore, as a joint combatant command, AFRICOM should explore ways in which it could build the capacity of Ghana's security forces to conduct joint maritime security operations, leveraging Ghana's interest in developing its capacity to conduct aerial surveillance and amphibious operations, as stated in the *Security Master Plan*.

# Appendix A

## Oil/Maritime Public-Private Partnerships

The following initiatives are examples of successful PPPs or communication and coordination mechanisms that exist between public and private sectors on maritime security. When focused on capacity building, PPPs provide national security benefits to domestic and foreign interests. When applied to protecting energy infrastructure in the maritime domain, a PPP can provide efficiencies for the deployment of naval assets required to keep vessels and key infrastructure secure.

### **Triton International Ltd training of the Somaliland Coastguard**<sup>37</sup>

Triton International Ltd is a private company with headquarters in London. In Somaliland, Triton helps the Coastguard develop and implement training and operations plans. It is considered a capacity-building program that provides broad spectrum maritime capabilities to the Coastguard.<sup>38 39</sup>

Triton executes a 12-week basic training course for the Somaliland Coastguard. The Coastguard has developed a positive reputation for both intercepting maritime threats, primarily piracy, and creating a more secure littoral and port environment.<sup>40</sup> This particular public-

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<sup>37</sup> Triton International LTD.

<http://www.tritoninternational ltd.com/about/triton.html>

<sup>38</sup> Jones, Simon, "Skulls and Crossroads," *Maritime Security Review*, November 18, 2010. Accessed February 13, 2012.

<http://www.marsecreview.com/2010/11/1060/#comment-321>

<sup>39</sup> Jenzen-Jones, N.R. "An Industry-Based Approach to Maritime Security in West Africa", January 13, 2012. Accessed February 13, 2012.

<http://securityscholar.wordpress.com/2012/01/13/an-industry-based-approach-to-maritime-security-in-west-africa/>

<sup>40</sup> In addition to deterring piracy, the program is accredited with securing Berbera as a safe port for the delivery and distribution of food aid destined for the region (Jenzen-Jones, 2012).

private partnership is considered high return for minimal investment: In 2010, the Triton-trained Coastguard captured, prosecuted, and jailed more than 120 pirates.<sup>41</sup>

The Triton model is considered an initial and expandable platform that may be useful to nations in the Gulf of Guinea encountering maritime threats. Through capacity-building, the model gains access to littoral and coastal areas where foreign defense can be limited and stove-piped. It is considered “eminently” compatible with existing naval assets within West Africa and with strategic interest in West Africa, such as the United States’ Africa Partnership Station and private sector security contractors that deploy armed guards on merchant vessels.<sup>42</sup>

### **Global Maritime Information Sharing Symposium (GMISS)<sup>43</sup>**

GMISS is an annual event hosted by the National Maritime Domain Awareness Coordination Office (NMCO).<sup>44</sup> Sponsors for the last known symposium are the National Maritime Intelligence Center (NMIC), the Department of Justice Community Oriented Policing Services (COPS) Program, the U.S. Coast Guard, the U.S. Navy, the U.S. Northern Command, and the U.S. Maritime Administration (MARAD). The objective of the symposium is to provide an annual forum in which to improve industry-government maritime information sharing. GMISS uses ongoing working groups, comprised of multiple stakeholders from private and public sectors alike, to influence maritime information sharing policies. It also helps bring industry voice to bodies that coordinate national-level maritime security policy.

GMISS was created in 2009 to enhance communication between the United States Government and maritime industry stakeholders (in-

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<sup>41</sup> Jenzen-Jones, N.R., 2012.  
<http://securityscholar.wordpress.com/2012/01/13/an-industry-based-approach-to-maritime-security-in-west-africa/>

<sup>42</sup> Jenzen-Jones, N.R. 2012.

<sup>43</sup> <http://www.gmsa.gov/gmiss/index.php>

<sup>44</sup> <http://www.gmsa.gov/>

cluding the private sector, non-governmental organizations, and government agencies).<sup>45</sup>

### **Maritime Information Sharing Taskforce (MIST)<sup>46, 47</sup>**

MIST is a pilot process for incorporating local, practitioner-level input into the sharing of maritime threat information. It functions as a communication mechanism and active partnership between the government and the maritime industry. The initiative was established by the Naval Postgraduate School (NPS) to “create a process for international, bi-lateral sharing of maritime threat information between private sector shipping and government agencies.”<sup>48</sup> MIST attempts to address the concerns of private industry and provide value to both private and government sectors.

MIST coordinates local and regional (e.g., port level) workshops and exercises with stakeholders from the public and private sectors. For example, a workshop held in August of 2008 at the ports of Long Beach and Los Angeles included representatives from NPS, MARAD, NORTHCOM, the Pacific Maritime Association, and port authority personnel.<sup>49</sup> The taskforce meets with members of the military services and local port personnel for feedback on specific policies and technologies to identify operational-level goals, gaps, barriers and risks to information sharing. The taskforce connects commercial shippers and port operators to representatives of the Navy, Coast

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<sup>45</sup> Charting the Course for Maritime Domain Awareness (MDA): Partnering with Industry”. Symposium proceedings from the Global Maritime Information Sharing Symposium (GMISS), September 14-16, 2010 (Baltimore, Maryland).

<sup>46</sup> Salem, Anita, Wendy Walsh and Owen Doherty, “Industry and Public Sector Cooperation for Information Sharing: Ports of Long Beach & Los Angeles.” MIST: Maritime Information Sharing Taskforce, September 2008. Accessed February 13, 2012.  
[http://www.nps.edu/Research/mdsr/Docs/Industry\\_and\\_Public\\_Sector\\_Cooperation\\_for\\_Information\\_Sharing\\_LA-LB.pdf](http://www.nps.edu/Research/mdsr/Docs/Industry_and_Public_Sector_Cooperation_for_Information_Sharing_LA-LB.pdf)

<sup>47</sup> MIST and GMISS collaborate to provide a unified government voice for industry, but at different levels. MIST functions at local and regional levels, while GMISS works at national and international levels.

<sup>48</sup> Salem, Walsh and Doherty, 2008, p. 3.

<sup>49</sup> Salem, Walsh and Doherty, 2008.

Guard, Department of Homeland Security and federal, state and local governments.<sup>50</sup>

## **UAE UN Fund for PPP on Counter-piracy**<sup>51</sup>

In 2010, the United Nations established the Trust Fund to Support Initiatives of States Countering Piracy off the Coast of Somalia. The fund is managed by the United Nations Office on Drugs and Crime through the Contact Group on Piracy off the Coast of Somalia (CGPCS). CGPCS is a voluntary, ad hoc international forum comprised of 51 countries and seven international organizations (the African Union, the League of Arab States, the European Union, INTERPOL, International Maritime Organization, NATO, and UN Secretariat), and two major maritime industry groups that participate as Observers (BIMCO and INTERTANKO).<sup>52</sup>

The fund is primarily used to defray the costs of prosecuting suspected pirates. At present, the fund is only available to UN organizations. Projects that receive funding are those that work to strengthen the criminal justice system and law enforcement of piracy in regional states and Somalia.<sup>53</sup> The Trust Fund has provided \$4.2 million in support to criminal justice projects in Somalia, Kenya, and the Seychelles. Specific examples of projects funded include a recently completed prison complex in Somaliland, training and equipping coast

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<sup>50</sup> Honegger, Barbara, "NPS Initiative Creates Public-Private Partnership for Enhanced Maritime Awareness". Naval Postgraduate School, December 31, 2009. Accessed February 13, 2012.

<http://www.nps.edu/About/News/NPS-Initiative-Creates-Public-Private-Partnership-for-Enhanced-Maritime-Awareness-.html>

<sup>51</sup> United Nations Office on Drugs and Crime (UNODC), Eastern Africa. "Trust Fund to Support the Initiatives of States to Counter Piracy off the Coast of Somalia."

<http://www.unodc.org/easternafrika/en/piracy/trust-fund.html>

<sup>52</sup> Ibid (UNODC, Eastern Africa. "Trust Fund to Support the Initiatives of States to Counter Piracy off the Coast of Somalia."

<http://www.unodc.org/easternafrika/en/piracy/trust-fund.html>

<sup>53</sup> Ibid (UNODC, Eastern Africa. "Trust Fund to Support the Initiatives of States to Counter Piracy off the Coast of Somalia."

<http://www.unodc.org/easternafrika/en/piracy/trust-fund.html> )

guard personnel, and an educational series developed to train new legal personnel in the region.<sup>54</sup>

## **Global Critical Energy Infrastructure Protection (GCIEP) Strategy**

Following the 2006 terrorist attacks against an oil processing facility in Saudi Arabia, the United States Department of State created GCIEP.<sup>55</sup> GCIEP is an initiative to ensure U.S. energy supply in global facilities that supply >1 million barrels per day (BPD). GCIEP works with the governments of selected countries to improve physical security at energy facilities to prevent terrorist attacks and the economic consequences of terrorist attacks against a major oil installation.<sup>56</sup>

The strategy works through an inter-agency team comprised of a variety of departments and agencies, including the National Security Council, Department of Defense, Department of Homeland Security, and Department of Energy. Within the strategy, Sandia National Laboratories was designated the lead laboratory for physical protection.<sup>57</sup> The GCIEP team identifies facilities that are most critical to the U.S. economy using a variety of criteria. The GCIEP uses bilateral and multilateral partnerships to facilitate information exchange and technology transfer to improve the security at identified sites. The United States provides assistance in the form of best practices, expertise, and data sharing with private and public partners. For example, Saudi Arabia, Qatar, the United Arab Emirates, and Kuwait are cooperating with the GCIEP strategy, as evidenced by their efforts to upgrade facilities and increase their security forces.<sup>58</sup>

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<sup>54</sup> Hopkins, Donna, "United Arab Emirates: Forging a Common Approach to Maritime Piracy", May 4, 2011. Accessed February 13, 2012. [http://blogs.state.gov/index.php/site/entry/counter\\_piracy\\_uae](http://blogs.state.gov/index.php/site/entry/counter_piracy_uae)

<sup>55</sup> Jane's Intelligence Digest, "US Attempts to Secure Gulf Energy Supplies," January 28, 2008.

<sup>56</sup> Ibid (Jane's Intelligence Digest, "US Attempts to Secure Gulf Energy Supplies," January 28, 2008)

<sup>57</sup> Sandia National Laboratories, Energy, Climate, & Infrastructure Security. "Global Critical Energy Infrastructure Protection (GCEIP)". Accessed February 13, 2012. [http://energy.sandia.gov/?page\\_id=2687](http://energy.sandia.gov/?page_id=2687)

<sup>58</sup> Jane's Intelligence Digest, "US Attempts to Secure Gulf Energy Supplies," January 28, 2008.

## **IPIECA (International Petroleum Industry Environmental Conservation Association)**

IPIECA is the global oil and gas industry association for environmental and social issues. This association was launched in 1974 following the establishment of the UN Environment Program. IPIECA is the principal channel of communication between the oil and gas industry and UN agencies and conventions. IPIECA's members are responsible for over half of the world's oil production. The association is governed by a General Committee with representatives of all member companies, and a smaller Executive Committee. A secretariat supports working groups, currently including biodiversity, climate change, health, oil spill preparedness, operations and fuels, reporting, social responsibility, and water. One working group dedicated to public-private partnerships for oil spill preparedness in Africa is described below.

## **The Global Initiative for West, Central, and Southern Africa (GI WACAF)**

GI WACAF is a joint partnership between the public International Maritime Organization and eight private oil company members of IPIECA.<sup>59</sup> The objective of the initiative is to strengthen national oil spill response capability in 21 African countries, support legislation, help countries form a contingency plan, clarify roles and responsibilities for oil spill response between stakeholders, facilitate exchange and assistance, ensure the implementation of training and exercises in each country, and support countries in their development of a national response system.<sup>60</sup>

GI WACAF utilizes existing industry expertise and resources to organize workshops, training, seminars, and deployment exercises with national authorities to ensure that all participating countries have effective oil spill preparedness and response systems in place at the national level. GI WACAF has a steering committee that meets annu-

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<sup>59</sup> The Global Initiative for West, Central and Southern Africa.  
<http://www.giwacaf.org/>

<sup>60</sup> Ibid (GIWACAF)

ally, the chair of which rotates every two years between industry and IMO representatives.

GI WACAF serves a facilitator role between “focal points” in the field – typically, the government agency in charge of oil spill preparedness and response in a particular country and industry representatives. GI WACAF also helps provide guidance and expertise to the agency’s headquarters for oil spill preparedness and response, once it is established in country. However, GI WACAF does not provide employment opportunities in country.<sup>61</sup>

### **The International Maritime Organization (IMO) - Maritime Organization of West and Central Africa (MOWCA) Partnership**

In 2008, the IMO signed a Memorandum of Understanding (MOU) with 15 of 20 Coastal Member States of the Maritime Organization of West and Central Africa (MOWCA) to establish a sub-regional integrated coast guard network in West and Central African countries. The goal of the partnership is to “promote regional maritime cooperation and a stable maritime environment, contribute to the peace, good order, and continuing prosperity of the West and Central Africa.”<sup>62</sup>

To accomplish its objectives and fulfill the obligations outlined in the 2008 MOU, the IMO Maritime Security Division has been supporting partner nations in the development of a business plan to perform a variety of maritime security functions within the nations’ exclusive economic zones (EEZ). These functions are referred to as “coast guard functions” because they tend to be carried out by civilians rather than military personnel, and are considered complementary to those performed by the region’s navies. The objective of the partnership is to help the partner nation, which has limited State personnel and resources, effectively safeguard its vast EEZ in tandem with other

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<sup>61</sup> Phone interview with Project Manager of GI WACAF, February 2012.

<sup>62</sup> Maritime Organization of West and Central Africa (MOWCA), “Memorandum of Understanding on the Establishment of a Sub-Regional Integrated Coast Guard Network in West and Central Africa,” July 2008.

nations in the region.<sup>63</sup> The partnership also helps ensure that the region maintains its rights and meets obligations conferred to them through international conventions and agreements, and national law at sea.

Coast guard functions range from country to country. They can include fishing patrol, security around critical energy infrastructure and equipment, and suppression of piracy and drug trafficking. The role of the IMO is to help each government create a maritime business plan in order to prioritize and accomplish the coast guard functions. In addition, it may help they provide equipment. In some instances, naval personnel require additional training to perform the coastguard functions, and the IMO leverages its affiliations with regional training institutes to help civilian personnel acquire training to best operate in the maritime domain.

The sub-regional coast guard network is being effectively implemented in Ghana. Ghana does not have a Coast Guard, and with Ghana's expanding oil economy, it requires effective coast guard capabilities to secure its maritime domain. The partnership thus addresses the interests of the oil producers and transporters, known as the Oil Companies International Marine Forum (OCIMF), particularly with regard to offshore platforms and the threat of piracy and unlawful acts at sea in neighboring coastal countries.<sup>64</sup> The IMO considers its efforts sustainable in Ghana because Ghana is stable, its Navy is under civilian control, and Ghana is economically viable.<sup>65</sup>

From December 13-17, 2010 the Ghana Maritime Authority hosted a meeting that was jointly organized by the IMO and MOWCA, to further progress the implementation of integrated coast guard function

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<sup>63</sup> Trelawny, Chris, "The Naval Contribution to Sustainable Development in West and Central Africa", *International Maritime Organization (IMO) News* No.4, 2007.

<sup>64</sup> IMO, "Report of Assembly" 27[1], November 2011, accessed March 7, 2012, <http://www.ocimf.com/IOPC/IMO>.

<sup>65</sup> Interview, Chris Trelawny, March 2, 2012.

network.<sup>66</sup> To facilitate Ghana's ability to operate and protect its assets in the maritime domain, the IMO has assisted the Government of Ghana with the creation of the Maritime Rescue Coordination Center. In this partnership, the State provides the resources, the Port Authority provides the building, and the IMO supplies the equipment. Training for personnel is provided by the Regional Maritime University in Accra, which is affiliated with the IMO. Eventually, the center will evolve into an Information Fusion Center where it will coordinate with other West African coastal nations.

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<sup>66</sup> IMO Report, "IMO/MOWCA Meeting to Progress the Implementation of an Integrated Coast Guard Function Network for West and Central African Countries," Accra, Ghana, December 13-17, 2010.

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# Appendix B

## PPP functions and stakeholder resources

Relevant Stakeholders	Types of Resources	PPP Functions
State Department	Access to Networks	Policy/Planning
	Policy planning expertise	
Ghana Ministry of Finance and Economic Planning	Access to Networks	
	Policy planning expertise	
Oil Companies	Access to Networks	
	Policy planning expertise	
Department of Defense (AFRICOM and U.S. Navy)	Funding (Title 10)	Maritime Security
	Maritime security assets/infrastructure	
	Access to networks (Mil-to-Mil relationships)	
	Maritime infrastructure protection expertise	
	Manpower	
	Access to PME institutions	
Coast Guard	Maritime infrastructure protection expertise	
	Maritime security assets/infrastructure	
	Access to networks (Mil-to-Mil relationships)	
	Access to PME institutions	
State Department	Funding (Title 22)	
Oil Companies	Funding	
	Maritime infrastructure protection expertise	
Department of Energy	Maritime infrastructure protection expertise	
Ghana National Security Council Secretariat	Maritime infrastructure protection expertise	

Ghana Ministry of Defence	Maritime infrastructure protection expertise	
Ghana Armed Forces (including Ghana Navy)	Maritime infrastructure protection expertise	
Ghana Police Service	Manpower	
Ghana Maritime Authority	Maritime infrastructure protection expertise	
Ghana Ports and Harbours Authority	Maritime infrastructure protection expertise	
Ministry of Energy	Maritime infrastructure protection expertise	
Department of Defense (AFRICOM and U.S. Navy)	Funding	Budgetary
	Budgetary expertise	
State Department	Funding	
	Budgetary expertise	
USAID	Budgetary expertise	
Department of Commerce	Budgetary expertise	
Oil Companies	Funding	
	Budgetary expertise	
Ghana National Petroleum Corporation	Budgetary expertise	
Ghana Ministry of Finance and Economic Planning	Funding	
	Budgetary expertise	
Department of Defense (AFRICOM and U.S. Navy)	Legal/regulatory expertise	
Coast Guard	Legal/regulatory expertise (maritime interdiction)	
State Department	Legal/regulatory expertise	
	Funding (INCLE)	
Department of Energy	Legal/regulatory expertise	
Department of Commerce	Legal/regulatory expertise	
Oil Companies	Legal/regulatory expertise	
Ghana National Petroleum Corporation	Legal/regulatory expertise	

Ghana Ministry of Finance and Economic Planning	Legal/regulatory expertise	Communications/Information Dissemination
Ghana Ministry of Trade and Industry	Legal/regulatory expertise	
Ghana Ministry of Energy	Legal/regulatory expertise	
Ghana Maritime Authority	Legal/regulatory expertise	
Department of Defense (AFRICOM and U.S. Navy)	Access to networks	
	Subject matter expertise	
State Department	Access to networks	
	Subject matter expertise	
USAID	Access to networks	
	Subject matter expertise	
Department of Energy	Access to networks	
	Subject matter expertise	
Department of Commerce	Access to networks	
	Subject matter expertise	
Millennium Challenge Corporation	Access to networks	
	Subject matter expertise	
Oil Companies	Access to networks	
	Subject matter expertise	
Ghana Maritime Authority	Access to networks	
	Subject matter expertise	
Ghana National Security Secretariat	Access to networks	
	Subject matter expertise	
Ghana National Petroleum Corporation	Access to networks	
	Subject matter expertise	
Ghana Ministry of Finance and Economic Planning	Access to networks	
	Subject matter expertise	

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