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Department of Defense Strategic Evaluation  
U.S. Maritime Security Cooperation in the Gulf of Guinea (2007-2018)

The Department of Defense (DoD) sponsors strategic evaluations of security cooperation (SC) programs and activities pursuant to 10 U.S.C. Section 383 and DoD Instruction 5132.14, “Assessment, Monitoring, and Evaluation Policy for the Security Cooperation Enterprise.” The Office of the Deputy Assistant Secretary of Defense for Security Cooperation (ODASD(SC)) and the Defense Security Cooperation Agency (DSCA) initiated regional strategic evaluations to measure strategic effects and implications of maritime security (MARSEC) initiatives by the DoD SC Enterprise.

DoD commissioned the Center for Naval Analyses (CNA), an independent Federally Funded Research and Development Center, to conduct this strategic evaluation of DoD MARSEC efforts in the Gulf of Guinea (GoG). The evaluation, “Strategic Evaluation of U.S. Maritime Security Cooperation in the Gulf of Guinea (2007-2018),” included maritime SC activities conducted from 2007 to 2018. This summary, developed by ODASD(SC), provides unclassified primary findings, conclusions, and recommendations derived from CNA’s evaluation report.

The evaluation was designed to answer two questions:

1. Has the United States achieved, or is the United States on track to achieve, its maritime-related strategic objectives in the GoG at the country and regional levels?
2. How, if at all, has U.S. maritime SC from 2007 through 2018 contributed to meeting these objectives?

**Methodology:** DoD selected five case study countries (Benin, Cameroon, Ghana, Nigeria and Senegal) to ensure the evaluation included regional SC partner nations (PNs) representing varying degrees of maritime capacity and capability. Categories of SC activities examined at both the country and regional level included transfer of equipment and materiel, exchanges, operational support, military-to-military contacts as well as institutional capacity building programs including education, training, and Regional Center engagement.

CNA performed the evaluation using a mixed-methods comparative case study approach consisting of stakeholder interviews, comprehensive process analyses, and strategic outcome reviews. Prior to reforms set forth by the 2017 National Defense Authorization Act, the Department did not have a comprehensive program of assessment, monitoring, and evaluation to measure SC’s contributions to strategic objectives; thus, CNA reconstructed initiative design frameworks and MARSEC-related objectives for this evaluation. These will inform the Department’s assessments and initiative designs for regional and MARSEC-related SC initiatives in the future.

For each case study country and the region as a whole, CNA established a baseline assessment in the 2006 timeframe, followed by a desk review on maritime SC activities in the region. CNA then developed causal linkages through the development of logic frameworks and theories of change, as well as a series of indicators to measure progress toward U.S. maritime security objectives in the region. After fieldwork in each of the case study countries, CNA analyzed its data to produce findings, conclusions, and recommendations.

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**CNA derived three strategic objectives** of U.S. maritime SC from various sources for the 2007-2018 evaluation period: 1) decrease ungoverned maritime space; 2) support regional stability; and 3) strengthen relationships with regional partners. This evaluation analyzed progress toward these three strategic objectives.

**Baseline Regional Context (2006-2007):** CNA identified that the GoG region during the start of the evaluation period faced multiple maritime insecurity challenges such as piracy; illegal, unreported, and unregulated (IUU) fishing; transatlantic drug-and human-trafficking; and coastal infrastructure attacks. Partners also faced economic development challenges tied to these threats as maritime resources such as the fishing industry remained critical to economic and human security. Primary GoG partner MARSEC activities in this timeframe included riverine patrols and offshore interdiction of illegal fishing and human trafficking. CNA identified that GoG PNs did not have robust strategies or plans for MARSEC and had limited capabilities for sharing information on maritime issues amongst neighboring countries. In 2007, the Department of Defense established United States Africa Command and initiated a regional maritime SC program, the Africa Partnership Station, to enhance African PNs' self-sustaining MARSEC capabilities, among other DoD efforts such as multinational exercises and regional and bilateral SC activities.

**Key Findings:** After collecting data on maritime SC outputs and outcomes tied to the identified strategic objectives, CNA used empirical evidence to analyze the difference between intended outcomes to actual outcomes of SC programming for each case study country and the regional-level case study. CNA's observed actual outcomes for each case study are identified and thematically organized as follows:

- Observing and monitoring maritime territory:
  - In Benin, while Maritime Operations Center (MOC) equipment and vessels contributed to increased maritime monitoring, vessels were at times not operational.
  - U.S. support to MOCs in Ghana contributed to Ghana's ability to observe and identify maritime threats, although remaining capability gaps include fully working radio communications and data storage.
  - The Nigerian Navy consistently increased the number and capabilities of their MOCs, and U.S.-provided training supported the effectiveness of these MOCs. Equipment and vessels received over the evaluation period contributed to an increased ability to monitor the maritime space.
- Operational response capabilities:
  - Benin's at-sea operations improved, conducting some interdiction operations where none were occurring in 2007.
  - While Ghana made consistent progress in its ability to observe the maritime space, equipment sustainment challenges hinder its ability to react to maritime threats.
  - Equipment or vessels received by Nigeria and Cameroon function but the supporting infrastructure such as fuel for vessels, electricity for MOCs, and internet service for MDA equipment, which had not been formally provided by the United States as part of equipment packages, does not.

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- National-level interest and resourcing for MARSEC:
  - The U.S. Africa Partnership Station contributed to Ghana's increased interest in issues of regional maritime SC.
  - The Senegalese Navy at the end of the evaluation period was highly attuned to MARSEC issues in its immediate neighborhood and able to articulate maritime gaps that went beyond immediate materiel needs, highlighting a long-term vision for MARSEC. These goals included improving Maritime Domain Awareness (MDA), coordinating command and control functions to communicate to units at sea, and preparing officers to control crises at sea.
  - For Nigeria and Cameroon, despite the recognized importance of MARSEC, national resources were largely apportioned to ground forces due to ongoing insurgencies.
- Effects of long-term professional education programs:
  - The Senegalese Navy's operational capabilities included the ability to conduct regular patrols, pursue targets, and conduct interdiction operations, supported by long-term professional education programs that Senegalese officers participate in with the United States.
  - U.S. training exchanges contributed to Nigerian Navy response capabilities and interoperability, as demonstrated through Operation Prosperity.
- General maintenance and sustainment support:
  - Benin Naval personnel attempted repairs but continue to rely on the United States to replace equipment.
  - In Nigeria, there had been a strong reliance on the United States to provide parts and maintenance services.
  - Cameroon continued to face challenges with maintenance and spare parts for its vessels, affecting operational readiness of its fleet.
- Maritime SC effects on bilateral relations:
  - U.S. bilateral engagements with Benin had a positive impact on the overarching relationship and particularly with the Naval and maritime forces.
  - Professional development programs where Ghanaian military and Naval personnel study in the United States reinforced strong relations with Ghana.
  - The Nigerian Navy considers the United States its preferred security partner, largely as a result of consistent engagement on SC efforts.
- Regional information sharing and coordination:
  - Benin demonstrated improvement in its ability to monitor its maritime territory using U.S.-provided MOC equipment, and could share information with MOCs in neighboring countries to an extent not possible in 2007.
  - Ghana's internal and external interoperability increased considerably since 2006 due to communication with partner MOCs and the internal establishment of a National Integrated Maritime Strategy during the evaluation period, supported by U.S. programming.
  - Cameroon at the end of the evaluation period supported hosting and taking a leadership role in the Yaoundé Code of Conduct (YCC) infrastructure established and supported by U.S. efforts, including hosting the Zone Interregional Coordination Center in Yaoundé.

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- Regional collaboration in conducting operations:
  - Benin and Nigeria demonstrated limited interoperability capabilities through Operation Prosperity. Benin operates with its neighbors in the form of ship-riders, although operational interoperability was not yet standard practice at the end of the evaluation period.
  - As PNs were increasingly able to conduct maritime operations at the national level, the PNs used these capabilities to conduct coordinated operations with neighboring forces, although not at a level required to eliminate ungoverned spaces.
- Multilateral approach to MARSEC:
  - Support to the YCC: U.S. maritime SC efforts contributed to the development of the YCC, signed in 2013. PNs implemented several planned actions from the accord.
  - Obangame Express: GoG PNs worked together to an extent not previously realized as a result of the annual regional maritime exercise, which includes broad regional participation and continues to be hosted by rotating partners. While the exercise began as a U.S.-led effort, it is embraced by a range of partners that value working together on MARSEC issues.
  - Africa Partnership Station: Early in the evaluation period this program contributed to regional cooperation, bringing multiple PNs on board a U.S. platform to train and receive education together. This built relationships and trust across and among PNs, and developed interest in MARSEC issues.

**Conclusions:** After analyzing linkages prescribed in their theory of change and associated indicators and data, CNA developed the following conclusions against each strategic objective:

*Decreasing ungoverned maritime space:* CNA examined several factors to measure progress toward this objective to include whether PNs acquired and maintained vessels and MDA equipment, whether PNs can observe and understand the maritime space, and whether PNs can effectively react to maritime incidents.

- The types of platforms and assets PNs received from the United States were appropriate for MARSEC operations, including patrols and law enforcement operations, but over the evaluation period they were often not fully operational.
  - Vessels in port were not deployed due to lack of spare parts, limited knowledge to conduct repairs, and the absence of long-term maintenance programs.
  - MDA equipment at times faced technical problems that resulted in periodic breaks in surveillance.
  - PNs were reliant on the United States to address maintenance and repair issues, most notably for replenishing spare parts, requiring continued bilateral support.
- PNs' MDA capabilities substantially increased from 2007-2018 after acquiring and using MDA equipment, primarily from land-based MOCs, giving GoG nations the ability to see, identify, and regionally share information about activities in their maritime territories.
- Surveillance coverage at some PN MOCs was interrupted periodically due to external factors such as breaks in electricity, internet service, and equipment failures.

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- PN reporting of piracy and other maritime crimes increased. As of 2018, criminal actors were operating in a space where they were more likely to be identified and perhaps pursued by maritime forces than was the case in 2006.
- Despite advances in MDA capabilities resulting in increased observation and reporting in the maritime space, PNs were not capable of responding to incidents at sea to an extent that would effectively reduce ungoverned spaces due to the following:
  - PNs faced challenges in analyzing data gathered in MOCs. While PNs were capable of observing and monitoring their maritime territory, they had limited capability to analyze data to an extent that would support an operational response.
  - Non-operational vessels limited response capabilities.
  - PNs lacked sufficient expertise to patrol far off their coast, lack training proficiency for certain types of operations, and were unable to secure maritime borders.

*Support to regional stability:* CNA identified instances of information sharing, coordination, and interoperability taking place with neighbors that contribute to regional stability.

- At the national level, MARSEC was increasingly integrated into PNs' national security approaches at the end of the evaluation period. Multiple countries developed national maritime strategies for the first time, suggesting that countries were increasingly aware of the need to address real and potentially destabilizing maritime concerns.
- PNs were willing participants in regional exercises and operations. The number of countries that participated in a U.S.-sponsored exercise, Obangame Express, grew by about a factor of four between 2010 and 2018.
- PNs increasingly recognized the economic ties to maritime security concerns, such as resources affected by IUU fishing. For example, PN efforts to combat IUU fishing and protect maritime resources substantially increased over the course of the evaluation period.
- U.S. efforts helped individual countries support and contribute resources to regional MARSEC efforts, primarily via the YCC.
- PN willingness to communicate about shared maritime issues on a navy-to-navy level with regional partners facilitated by U.S. MARSEC initiatives, contributed to regional stability, especially where otherwise limited bilateral communication existed on national security issues.
- Regional interoperability increased, as several instances were observed where neighboring countries jointly respond to incidents at sea and conducted ongoing joint operations across maritime boundaries.
- Despite increased recognition in the region of the maritime territory as critical for economic and national security, PNs still prioritize other security issues as more important and urgent than those in the maritime domain. For example, some governments directed national resources toward transnational terrorist threats rather than those in the maritime domain.

*Strengthening of relationships with regional partners:* To measure progress toward this objective, CNA examined whether partners viewed the United States as a preferred security partner and the extent of partnership on strategic defense issues.

- The United States developed strong navy-to-navy partnerships over the course of the evaluation period. However, MARSEC-related SC effects on overall government-to-

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government relationships between the United States and its GoG partners could not be determined.

- The United States is generally the preferred regional security partner for shared maritime interests. In several cases the military-to-military relationship remained strong despite other challenges.
- MARSEC assistance contributed to the strengthening of relationships with PNs through the following key features:
  - The positive impact of education and training, notably professional and graduate school exchanges, were essential in shaping the foundation of bilateral military-to-military relationships across the region.
  - The quality of U.S.-provided equipment and training as compared to other actors.
  - Recurring engagement over the evaluation period, demonstrated U.S. commitment to shared security interests and fostered goodwill with PNs.

**Post-Evaluation Context (2018):** Based on these findings and conclusions, CNA identified several effects on the operational environment at the end of the evaluation period. In the maritime domain GoG partners still faced substantial threats and challenges to their security (e.g., piracy; armed robbery at sea; and IUU fishing) and ungoverned spaces remained a challenge. CNA identified an increased PN capability to observe, understand, and collaborate in the maritime domain over the evaluation period, while GoG partners had limited response capabilities in part due to PN training and sustainment challenges. Some partners were better strategically aligned to maritime security challenges through the development of national maritime strategies, including the acknowledgement of economic security ties to maritime instability. Although illicit activities and instability persisted, criminal actors were more likely to be identified, and perhaps pursued by maritime forces than was the case in 2006.

**Recommendations:** CNA crafted strategic-level recommendations that are intended to inform future DoD decision making about maritime SC:

- Continue support to regional exercises and professional education and training programs in the GoG to strengthen bilateral and regional partnerships, enhance interoperability, and support regional stability. DoD should continue to conduct maritime SC beyond materiel needs, supporting African partners in setting a regional vision for MARSEC. Significantly reducing MARSEC efforts would risk the US's partner-of-choice status and reverse progress on MARSEC in the region.
- Facilitate regional coordination, where possible, on MARSEC issues among PNs as a catalyst for GoG collaboration on other national security issues.
- Continue MARSEC activities to help reduce ungoverned maritime territory, especially those that address challenges beyond basic materiel needs and gaps including MDA capabilities and MOCs. U.S. maritime SC activities led to PNs' improved awareness of their maritime territory and increased capabilities to respond to incidents at sea.
- Increase bilateral and multilateral training efforts for African partners to be able to interpret and understand the data from their MOCs.
- Design and prioritize MARSEC initiatives in the GoG based on alignment with strategic objectives established by the National Defense Strategy, including strengthening alliances

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and partnerships so that the United States remains the preferred security partner in the region. Significantly reducing MARSEC efforts would risk the US's partner-of-choice status and reverse progress on MARSEC in the region.

- Plan MARSEC initiatives with the assumption that PN maintenance of MDA equipment and materiel requires elevated training or sustainment support. There should be no expectation that vessels will be maintained without such support.

**Evaluation Results:** In accordance with Department of Defense Instruction 5132.14, "Assessment, Monitoring, and Evaluation Policy for the Security Cooperation Enterprise," the Department is applying recommendations and lessons learned from this evaluation to make adjustments to policy, programs, and resource allocation decisions, including the following:

- *Implementing Recommendations:* The Department developed an internal action plan in coordination with primary stakeholder organizations to implement recommendations of this evaluation. The design as well as review of ongoing SC efforts in the region is informed by findings and recommendations of this report, including updates of SC planning and programming. For example, identified maintenance challenges in the report served as useful references to inform and encourage right-sizing PN maintenance and sustainment support for SC programming in the region since its completion. Additionally, the return on investment determined by this evaluation informed SC resourcing considerations for MARSEC-related efforts in the region.
- *Contributions to the SC Performance Management Framework:* DoD disseminated the evaluation report's findings across the Department to support learning from DoD maritime SC in the Gulf of Guinea. CNA's initiative design documents, to include theories of change, logic frameworks, objective trees, and indicators for case studies will serve as tools for the planning and design of future maritime SC activities. Content of the evaluation will be entered into Socium as the Department continues to build its capacity to measure progress made toward intended results at the strategic level. Additionally, findings related to training and sustainment gaps from the evaluation are incorporated into the design and implementation of ongoing monitoring activities in the region to validate future planning requirements connected to country-specific MDA and MARSEC objectives.