

A True Roadmap for Response Preparedness Capacity Building in Developing States

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ABSTRACT

Throughout much of the developing world, capacity building efforts are often delivered without implementing guidelines, whereby receiving states accept offers and/or expend their own funds for training, technical assistance and resource procurements without sound long-term plans of how to effectively capitalize on the efforts and truly build sustainable response preparedness capacity. The scope of various international, governmental and nongovernmental programs available to countries in need is potentially vast, but all too often contractors, offering organizations, or multiple agencies within the same offering organization or nation, provide capacity building that is not always linked to each other or designed to optimally build upon each

other in a successive manner that moves the sovereign recipient towards a more robust response preparedness posture. This paper illustrates how a simple application of program evaluation and strategic planning, used along with very basic drills and exercises and the ARPEL RETOS™ tool assessments, can help developing states set true paths towards building better oil spill response preparedness structures in drastically resource constrained, multi-agency environments. This paper discusses how RETOS™ was used to assess oil spill response preparedness throughout the Wider Caribbean Region and presents the audience with a new outlook for conducting capacity building efforts in developing states.

INTRODUCTION

For over 21 years RAC/REMPEITC-Caribe has worked with many partners throughout the Wider Caribbean Region (WCR) to assist States in the Region in preventing and responding to pollution in the marine environment through: the development and assessment of national and multilateral contingency plans; the organization, coordination and facilitation of training courses and workshops; and the provision of technical support, consultancy, information and public awareness. Since 2005 alone, RAC/REMPEITC-Caribe has organized or attended over 250 workshops or meetings. Since its inception, RAC/REMPEITC-Caribe has also maintained a close partnership with ARPEL and OSRL (and its predecessors). Together these organizations have conducted training courses, developed guidance, and conducted workshops throughout the WCR in efforts to build the preparedness response capacity of the Region's developing States.

An International Maritime Organization (IMO) Regional Workshop on Oil Spill Contingency Planning was held at the LJM Maritime Academy, on Maritime Cay in Nassau, Bahamas from 13 to 16 December 2016. The workshop was organized in accordance with

RAC/REMPEITC-Caribe's proposal to IMO's Technical Co-operation Committee for the Center's activities of the 2015-2017 bienniums. Funding was provided under the Integrated Technical Co-operation Program of IMO. The workshop was intended for senior managers and contingency planners from national authorities throughout the WCR responsible for oil spill preparedness, response and cooperation. In addition to the host country, The Bahamas, the participating countries sponsored by RAC/REMPEITC-Caribe to attend the workshop included: Antigua, Barbados, Belize, Costa Rica, Grenada, Guatemala, Jamaica, St. Lucia, Trinidad and Tobago, and Panama. The objective of the four-day workshop was to provide training on oil spill preparedness and contingency planning, as well as developing hands-on working knowledge of the use, and advantages of, the ARPEL Manual and Readiness Evaluation Tool for Oil Spills (RETOS™) developed by the Regional Association of Oil, Gas and Biofuels Sector Companies in Latin America and the Caribbean (ARPEL), in analyzing and identifying gaps in national oil spill preparedness and response programs (Taylor et al., 2014). The intent was to have participants acquire and improve their knowledge related oil spill preparedness and response, while actually reviewing and assessing their respective government's national oil spill contingency preparedness and response programs through the use of the RETOS™ tool and simple table top exercises. Program evaluation and strategic planning methods were added to the workshop agenda to help ensure the outcomes of the workshop would lead to effective capacity building in the participant States following the workshop. The four specific goals of the workshop were to:

- 1) Improve understanding of the oil spill contingency planning process;
- 2) Develop familiarization with, and provide tools for, implementing national oil spill preparedness and response drills and exercise programs;

- 3) Assess national oil spill preparedness and response programs, national response systems, and national contingency plans of the WCR using simple table top exercises;
- 4) Assess national oil spill preparedness and response programs, national response systems, and national contingency plans of the WCR using RETOS™; and
- 5) Depart the workshop with the outline of a strategic plan framework that can be directly used as an improvement plan for building capacity and making needed changes to national oil spill preparedness and response programs, national response systems, and national contingency plans.

The workshop products included the following for each participant State's national oil spill preparedness and response program:

1. A comprehensive list of stakeholders both internal and external to their program's strategic planning process;
2. A master list of concerns and issues, along with a collective list of recommendations for improvements created from the RETOS™ assessments, table top exercises, and facilitated program improvement discussions conducted during the workshop;
3. Identification of potential oil spill response resource and capability strengths and weaknesses, as well as programmatic opportunities and threats; and
4. An initial draft strategic plan, including an initial work list of recommended steps to be completed following the workshop,

METHODS

Day One and part of Day Two of the workshop involved presentations on steps taken to develop national contingency plans, including: Defining the Scope of a Contingency Plan;

Conducting Risk Assessments; Developing Strategies; Structures and Layout of Contingency Plans; Equipment and Resource Procurements; Training and Exercises; and Updating the Plan.

The ARPEL's RETOS™ tool and Manual V 2.0 was also introduced on Day One and a live example of using RETOS™ for the scope of a national oil spill response program was provided.

On Day Two of the workshop, participants were divided into four sub-groups based on geographic location in the WCR (Table 1). For the first half of the day, participants of sub-groups A1 and A2 worked with response experts from RAC/REMPEITC-Caribe, U.S. Coast Guard, and OSRL in developing table top exercises to be delivered to their counterpart groups (i.e. Subgroup A1 developed TTX#A2 for Subgroup A2 to conduct), while the participants in B1 and B2 worked with the three RETOS experts in conducting national preparedness and response program evaluations using the RETOS™ tool. In the afternoon, the four groups switched rooms and roles to do the tasks that the others were working on in the morning. The foundation for the TTX scenarios were pre-designated and provided by RAC/REMPEITC-Caribe based on suspected, and/or plausible, existing regional concerns and issues.

| Table 1: Sub-group Participants and Respective Table Top Exercise (TTX) Scenarios. | | |
|---|--|---|
| Sub-Groups | Sates | Table Top Exercise Scenario |
| A1 | Antigua & Barbuda, Barbados, Saint Lucia | Sunken tank ship off the west coast of Barbados continuously emitting oil |
| A2 | Grenada, Trinidad and Tobago | Offshore platform blowout off of Trinidad and Tobago |
| B1 | The Bahamas (four participants) | Complete loss from an oil storage facility following a hurricane in the Bahamas |
| B2 | Belize, Costa Rica, Guatemala, Jamaica, and Panama | A ship collision and subsequent oil spill off the west coast of Jamaica |

Each day following the workshop events, the participants were given program assessment and strategic planning process assignments in a successive manner to help: (a) assess the adequacy of their national contingency plans and identify what was missing; (b) identify programmatic stakeholders and mandates; (c) identify key concerns, issues and recommendations for their respective preparedness and response programs; and (d) conduct a Strength, Weakness, Opportunity and Threat (SWOT) analysis.

In the morning of Day Three, subgroups B1 and B2 took turns delivering and evaluating the TTXs they had developed for their counterparts. The RAC/REMPEITC-Caribe, U.S. Coast Guard, and OSRL experts facilitated the overall TTX process, group discussions, and development of concerns, issues, and recommendations that stemmed from each exercise. While B1 and B2 were conducting and evaluating their table top exercises, A1 and A2 were finishing their program assessments with the RETOSTM experts. Each participant State produced the two RETOSTM reports for their national program: (a) global performance assessment (GPA) report and (b) the global improvement program (GIP) report. Following the RETOSTM assessment, the group reviewed the missing and partially complete critical criteria for each national program and identified common gaps between countries. In the afternoon, the four groups switched rooms and roles once again to do the tasks that the others were working on in the morning sessions.

On Day Four, the final day of the workshop, all participants delivered a ten minute presentation on the major concerns, issues, and recommendations they identified and felt were most important to them as results of the TTXs and RETOSTM assessment (Table 2). Following the participant briefs, the RETOSTM experts delivered a detailed brief of their findings and the Global Improvement Plan recommendations for the WCR. To conclude the workshop, RAC/REMPEITC-Caribe facilitated a round table discussion on the development of program

improvement plans to be added as the final piece of the strategic planning frameworks, as well as mutually agreed upon overall workshop recommendations.

RESULTS/DISCUSSION

The four table top exercises produced an extensive list of concerns, issues and recommendations to be considered at national and regional levels (Table 2).

Table 2. Master List of Concerns, Issues and Recommendations Generated from the Four TTXs.

- Sensitive areas maps are largely lacking from many national plans
- Baseline ESI maps, coast zone assessments, and baseline assessment of coral reefs need to be conducted on all islands
- Vague in-situ burning & dispersants policies in many plans with no defined pre-approved zones
- Language needs to be added to plans on dispersant zones, approval cases, etc.
- Plans need to be developed for temporary oil storage and waste disposal
- RAC/REMPEITC-Caribe spill forms should be added to each national plan
- Actual accessibility and availability of equipment in the WCR is largely unknown
- Need to conduct an assessment throughout Caribbean to identify what is actually available and what gaps actually do exist
- There is a need for better enforcement and penalty laws (fines) for spillers
- There is a need for regional notification drills
- Without agreements between plans, it becomes a political/diplomatic process for communicating across national boundaries
- There is no equipment available to detect, assess, or monitor oil at nighttime.
- There is weak or no offshore response planning throughout the WCR .
- There are few, if any on water assets outside Panama
- There needs to be linkages between the regional plans, or all plans should be combined into one plan (Central American OPRC Plan, and the Caribbean Island OPRC Plan)
- Two important WCR nations are not signatory to either regional plans
- The Central American plan is only in English
- For the WCR, there is only 500 cubic meters of dispersants in Brazil, possibly some small private quantities in Belize, and the rest is in Ft Lauderdale with OSRL
- Possible need for liability convention capacity building to assist ratification amongst States
- Orinoco River, that spills out to the Atlantic, alternates from south to north flows, when flowing north it would carry oil up through the islands. (every 6 months)
- States could possibly use OPRC 1 training for senior management
- Seasonal Sargassum problems bring piles of seaweed up through the islands - if a spill

- occurred during one of these events, it would be a huge waste management problem
- Coordination among agencies is one of the biggest concerns for some States – ICS/IMS training may be useful or States may consider contracted IMTs to come in and assist.
 - Caribbean Disaster Emergency Management Agency (CDEMA) can do international assistance sourcing, but it has not been tested on oil spill response in years

A summary of the compiled RETOS™ assessment results for participating Wider Caribbean Region nations shows areas of relative strength (Response Coordination, Health & Safety) and areas for improvement (Logistics, Training and Exercises, Sustainability) (Figure 1; Table 3). Individually, the participating nations revealed a range of oil spill program maturity, indicated from the RETOS™ assessment scores (Level A) ranging from 20% to 89% completion.

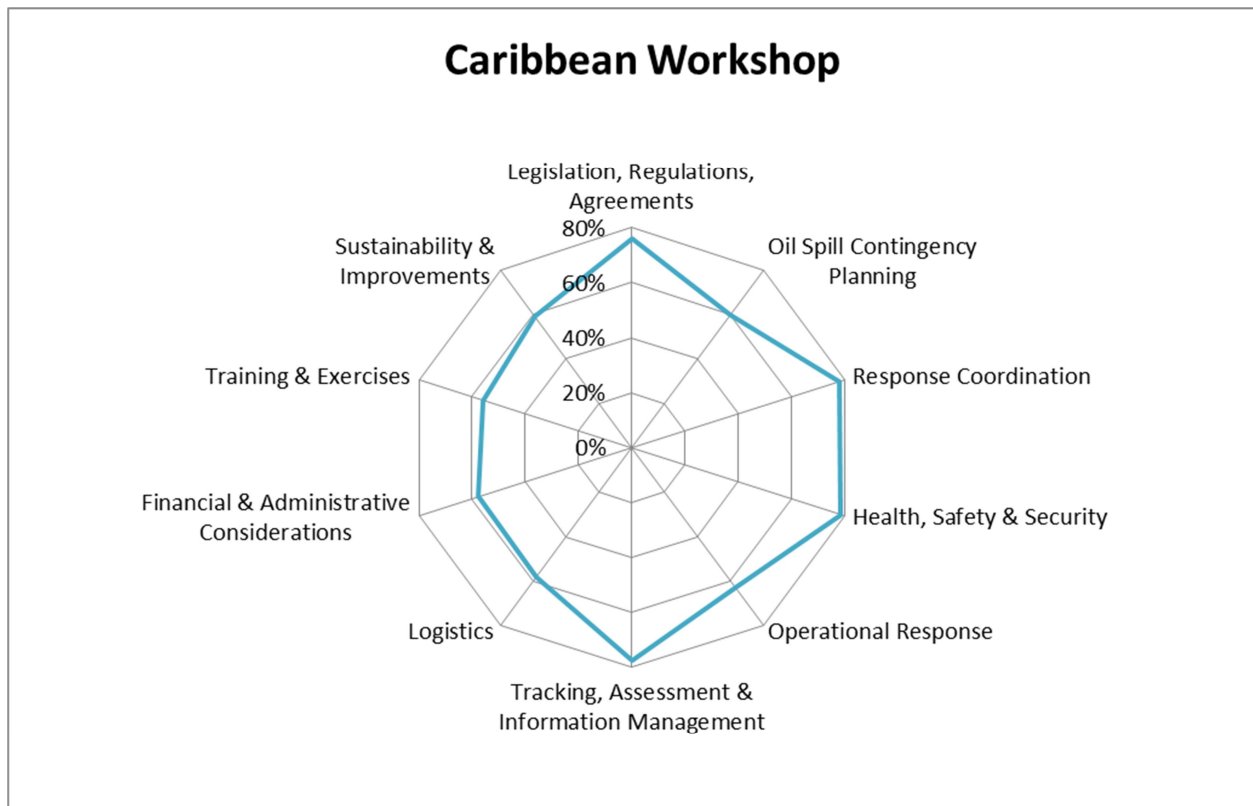


Figure 1 Overall assessment of oil spill response preparedness for participating WCR nations

Table 3 Compiled RETOS™ results for participating WCR nations

| Category | Average | Median | Max | Min |
|---|------------|------------|------|-----|
| Legislation, Regulations, Agreements | 76% | 75% | 88% | 50% |
| Oil Spill Contingency Planning | 60% | 68% | 88% | 9% |
| Response Coordination | 78% | 95% | 100% | 30% |
| Health, Safety & Security | 79% | 100% | 100% | 0% |
| Operational Response | 63% | 56% | 94% | 25% |
| Tracking, Assessment & Information Management | 77% | 83% | 100% | 33% |
| Logistics | 58% | 67% | 100% | 0% |
| Financial & Administrative Considerations | 58% | 67% | 100% | 17% |
| Training & Exercises | 56% | 44% | 100% | 0% |
| Sustainability & Improvements | 59% | 58% | 100% | 8% |
| Total | 65% | 73% | | |

Following national program assessment, the mostly common missing or partial complete critical criteria from the RETOS evaluation were:

- Risk Assessment for OSR Planning
- Health & Safety Protocols or Standards (Responders & Public)
- Exercises (w/ training) – Tier 2 deployments & tabletop
- Contact lists (completed & up to date)
- Oil spill emergency funds
- Spill mitigation measures
- Legal - oil spill sampling and responders' liability during cooperative schemes

CONCLUSIONS

Strategic Planning is a key component of Results Based Management (RBM) and is used as a tool to help organizations manage their programs while focusing efforts on results. An effective strategic plan is an informational tool to guide collaborative initiatives amongst

stakeholders to provide benchmarks against which to develop performance indicators, monitor progress and evaluate measures. Program evaluation is a necessary and integral part of strategic planning. As demonstrated in this workshop, conducting RETOS™ assessments in conjunction with simple table top exercises provides a very effective means for evaluating national oil spill preparedness and response programs. The programmatic concerns and issues generated through both processes both complimented and validated each other's findings in this workshop for the evaluation of eleven WCR national oils spill preparedness and response programs. Through the use of realistic and highly plausible scenarios, the TTXs set the stage, and participants' thinking about the need for a review of existing processes and capabilities for addressing oil pollution preparedness and response challenges. The impact of the words: "If this were to happen right now, what would you or your organization do?" is strong, and assisted the participants in developing relevant concerns and issues that they should consider in an open ended highly qualitative manner.

The complimentary RETOS™ assessments, however, focused sharply the participant's attention to the fixed components and elements that make up a complete Response Planning and Readiness Assessment System (RP&RA), as identified by the 2008 IOSC Specialty Workshop Subcommittee. With the use of a "detailed compilation of over 500 aspects that contribute to a thorough and sound oil spill response program," the RETOS™ assessments provided a validating, and more quantitative, component to the program evaluations.

Bringing the results together, and compiling a complete list of: internal and external stakeholders; programmatic concerns and issues; status of mandates; capability and resource strengths and weaknesses; and opportunities and threats to each program, each participant

departed the workshop with drafted strategic framework components to implement true results based improvement plans when they return to their respective States.

RECOMMENDATIONS

The following recommendations were generated by the workshop participants during facilitated discussions on the final day of the workshop:

1. Integration of regional plans – *Central American OPRC Plan and The Caribbean Islands OPRC Plan*
 - a. Look at regional platforms that exist and evaluate how can the plans be linked/merged under one framework, and include the legal provisions and obligations of one plan carrying to the next by all signatories.
 - b. Explore how CARICOM and CDEMA can be used to facilitate the legal framework.
2. Have all regional and national oil spill contingency plans translated and available in all working languages within the WCR.
 - a. Connect availability of information between COCATRAM and RAC/REMPEITC-Caribe (Plans, ESI maps, etc.)
3. Support more regional exercises (i.e. Notifications, regional communications)
 - a. Recommend that WCR Tier 3 TTXs be conducted every two years
4. Explore the use of the Dewetra (UNDP) – database/common operating picture of hazards (CIMH)
5. Create a web-based CARIBPOLREP accessed through the RAC/REMPEITC-Caribe website.

6. RAC/REMPEITC should brief the recommendations/workshop results at the Senior Maritime Officials meeting in February 2017 and:
 - a. Provide an overview of RETOS™
 - b. Recommend that RETOS™ be presented as a potential standard for assessment in the region (industry, maritime terminals, area, national plans) - hierarchy of plans
 - c. Recommend that RETOS™ assessment be conducted for other countries in the Caribbean region (not present at workshop)
7. Integrate offshore oil and gas into the WCR plans and/or enhance offshore oil and gas in plans where already existing.

The following recommended next steps for the WCR spill preparedness program were generated by the ARPEL and RETOS™ subject matter experts following the workshop:

1. National level for participating countries;
 - a. Final verification of RETOS™ results & reports;
 - b. Completed GIP with assignments, timelines and required resources for top priorities;
 - c. GIP endorsement by top officials
2. Assessment of remaining WCR national programs
 - a. RETOS analysis, results & reports for remaining countries;
 - b. Completed GIP with assignments, timelines and required resources for top priorities; and
 - c. GIP endorsement by top officials
3. Future RETOS™ use in the WCR should include:

- a. Benchmarking - Led by RAC/REMPEITC-Caribe and use results for prioritizing funding and differentiating regional and specific action plans aiming at cost/effectiveness.
- b. Cooperation - Exchange of information and best practices – Consider systematizing through regional database whereby regional leaders can assist those nations in need
- c. Regional/Multilateral/Bilateral Initiatives - Use results for prioritizing RAC/REMPEITC-Caribe funding and plans – areas of common and challenging concerns for participating States will likely benefit from a regional initiative to address technically challenging aspects of spill preparedness

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