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Holistic Engagement Activities Ranking Tool (HEART)

Multi-criteria decision tool to assist in planning and tracking steady state security assistance and engagement activities



Understanding the
Human Side of the
Environment

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Introduction

More than ever, United States Government (USG) activities are planned and implemented in an atmosphere of shrinking budgets, high expectations and intense scrutiny at home, plus non-conventional enemies and complex operating environments abroad. In the security realm, there is little debate that the demand for cost-effective, high-impact, and transparent use of government resources requires the Department of Defense (DoD), Department of State (DoS), and other government entities that operate overseas to work together or in complementary ways. Still, departments and their components have their own expanding missions, dwindling resources and programs to administer, making achieving unity of effort difficult. At present, there is no readily accessible process or framework that can incorporate and integrate the range of USG security-related activities abroad and that DoD planners and non-DoD practitioners might use to build common operating pictures - either within their own departments or in coordination with other departments working related activities. This deficiency increases the likelihood that what might be cost-saving efficiencies or wasteful redundancies in US security assistance and engagement programs will go unnoticed by planners and decision makers. Recognizing that US Africa Command (AFRICOM) engagement strategists and planners are in particular need of a systematic process for aligning resources and activities to strategies in the most effective and efficient ways possible, the Command J5 requested that the Strategic Multi-Layer Assessment (SMA) team, *“develop an evaluative tool to aid in prioritization and metric development for command engagement strategies.”*

Aligning resources to strategy has become an imperative for AFRICOM J5, and other command staffs. However, without a framework and standard measurement schema it is difficult, if not impossible to calculate the relative value of different engagement activities, as well as the trade-offs involved in changing priorities and activities. To address this need, NSI developed the **Holistic Engagement Activities Ranking Tool (HEART)**, an evaluative tool, to provide planners with an accessible means of analyzing and optimizing AFRICOM engagement resources to national and Command objectives while retaining the flexibility to monitor and adjust to rapid changes in political-military environments and/or the priorities (e.g., cost, impact, contribution to mission success, risk to personnel) of greatest concern to the Command.

Holistic Engagement Activities Ranking Tool (HEART)

HEART is a series of open-ended and multiple-choice questions that planners can use to guide assessments and produce program comparisons and rankings among prospective engagements on three interrelated dimensions: cost, interaction and alignment, and feasibility and outcomes. It can be used to institute a systematic, transparent and repeatable process that clarifies strategic priorities, and brings together input from across the USG and international partners. It is designed to fulfill a simple objective: ensure that AFRICOM's investments in steady state engagement programs are as efficient as possible. The foundational concept is “investment efficiency” which, in the context of AFRICOM engagements we define in two ways. First, efficient engagement investments produce positive returns on that investment

(ROI).¹ The HEART takes satisfaction of AFRICOM missions as the currency of return and includes various sources of cost including financial, risk to people and the possibility of unintended political, economic and social blowback from an activity. Second, efficient engagement investments take advantage of the opportunities for efficiencies that might be gained by joining or aligning with on-going USG or foreign actor programs on the one hand, and avoid the wasted cost of activities that are redundant or conflict with on-going USG or host nation investments. Thus, HEART reflects three investment principles redefined in the context of AFRICOM steady state engagement planning:

Seek-out force multipliers. Consciously seek out economies of scale and opportunities for AFRICOM to form, or participate in, joint ventures with the host nation, USG agencies, allies or international organizations whose goals and activities align with AFRICOM objectives.

Avoid Investments on the country level that have marginal or no return on the strategic level.

Carefully assess and articulate the value of each engagement proposal in terms of its contribution to the Country Cooperation Plans as well as the AFRICOM Theater Campaign Plan. This will help J5 prioritize activities across the continent and serve as a check on the country teams' natural tendency (and organizational incentives) to "get things done" in their countries.

Avoid Force Division. Carefully assess, and avoid where possible, investing in engagement programs and activities that work at cross-purposes, mitigate or dilute advancement toward country and command objectives, as well as the objectives of other USG agencies operating in the area. This information is very often apparent at the levels of secondary and nth order effects of activities.

In addition to the concept of investment efficiency, HEART is based in a multi-criteria decision methodology that is used to develop, compare and evaluate sets of non-homogeneous factors, (e.g., amphibious training in Nigeria versus medical care for children in Kenya) fairly and systematically.

The conceptual schematic of the HEART is shown in Figure 1. The full **Holistic Engagement Activities Ranking Tool** consists of 82 questions (items) that guide users in gathering the information and data necessary to compare and rate proposed engagement activities along user-selected criteria. Details for each, including the item code, input type (e.g., free-text, Likert scale options, etc.), description and likely sources of that information, are provided in Appendix A. HEART also contains 12 "pre-packaged" summary measures, or standard comparison metrics comprised of aggregates of these items. These are shown in Appendix B.

¹ As used in finance, ROI is measured as a ratio of the total cost of an investment and the net return (i.e., benefit gained minus the cost of the investment) that investment, such that $ROI = \text{Net Return} / \text{Cost}$.

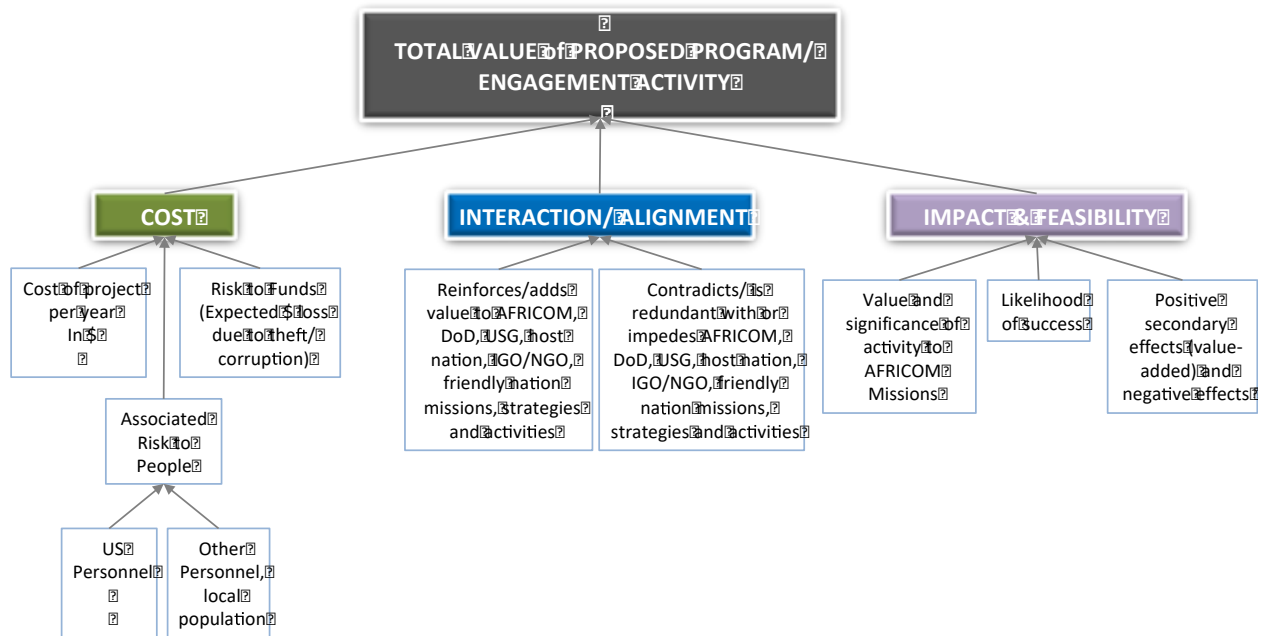


Figure 1. HEART Conceptual Schematic

The majority of items in the HEART fall into one of three categories: cost, interaction and alignment, or impact and feasibility.²

Cost. As mentioned in the introduction, concern with the funds allocated to engagement activities across the AFRICOM AOR is a necessity in the current environment of fiscal restraint and cut-backs. Clearly how much is spent is a major component of the cost of an engagement. However, the cost of an activity in terms of the risk to US and other persons should not be overlooked or undervalued. There is little that can sour US relations with a host population, or US domestic support for AFRICOM activities, as rapidly as injury or loss of life associated with an engagement. The full HEART contains 17 items to guide planners and analysts in determining the absolute cost of an engagement activity in three ways: 1) the dollar cost of an engagement is measured in allotted funds; 2) the estimated vulnerability of the loss of those funds (e.g., from corruption; mismanagement; inadequate infrastructure, etc.); and, 3) the possibility of harm to US, host nation, allies and NGO persons associated from political and criminal violence as well as hazardous conditions (e.g., disease prevalence, equipment safety).

Interaction & Alignment with Other Efforts. How a proposed engagement activity interacts with other efforts underway or planned in a country is a critical piece of knowledge. It can suggest to country teams where there may be opportunities to enhance the effect of each engagement dollar spent for example, by coordinating with DoD, DOS, USAID, etc. programs and activities that would reinforce the success or message of an AFRICOM program. Similarly, when AFRICOM engagement programs are conducted *in equal partnership* or as *“joint ventures”*

² These items are labeled CR, INT and FO respectively in the corresponding HEART Excel spreadsheet and in the tables provided in this document.

with host nation or international programs that have complementary objectives, a second value is added to the cost savings: an opportunity for trust-building and improved relations with these actors. Furthermore, awareness of the strategies, goals and programs of other USG organizations or nations working in an area of interest can help planners avoid wasting funds on engagements that are redundant with, conflict with or override the success of other programs. Specifically, there are 19 items in the HEART that guide users in identifying the degree to which prospective engagements might be reinforcing, redundant, or counter-productive relative to host nation, AFRICOM, USG entities, inter-governmental and non-governmental organizations (IGO/NGO) and friendly nation programs.³

Impact & Feasibility. This category includes three important sub-components: engagement feasibility, value to AFRICOM and US security missions, and expected primary and secondary effects. Feasibility, the likelihood that an engagement activity or program will be implemented with the expected result, oftentimes seems to be an under-appreciated decision metric. This may be the result of a planning process that requires minimal assessment of the factors that might impact successful implementation other than those associated with its delivery or kick-off. There may be a tendency to assume that the success of an activity is equivalent to its delivery rather than achieving its intended end-result. This assumption of course allows planners and others to ignore the risk factors that may account for the full or partial failure of an engagement activity *even if it is successfully delivered*.⁴ The result in terms of investment efficiency is an underestimation of the risk that investments in pre-funding analysis of engagement activities underestimate risk and may not be optimized to satisfy Country Level Objectives (CLOs) and ultimately AFRICOM military objectives. Feasibility is measured by 14 items in HEART, including identification of a reliable partner or recipient, availability of funding, in-country logistics such as required personnel, transportation, and information on the legal authorities required for an activity, as well as the possibility of Leahy violations. Rather than nominal (yes-no) answers, HEART allows users to rate the feasibility of successfully implementing (in other words, achieving the first order effect) a prospective engagement on an ordinal scale including a response option for “unknown” – a flag that the basic elements of feasibility risk have not yet been determined.

Value to Mission. As outlined above, value to AFRICOM missions is the currency with which HEART evaluates the efficiency of investments in different engagement activities. HEART contains seven items that prompt users to indicate the primary and secondary AFRICOM

³ The difficulty of finding this information from afar should not be underestimated. Unfortunately, there is as yet no central database that contains information on engagement programs and activities conducted by the whole of the US Government. There are however certain databases and updated web sources for finding information on EU and other state and internationally funded efforts. Nigeria data has been extracted from a number of these and appear as examples in worksheets in the HEART Excel file.

⁴ The analogous assumption, namely that 100% completion and success of engagement activities (e.g., Country Cooperation Plan milestones) equates to 100% satisfaction of the CLO from which it was derived, and in turn 100% satisfaction of the IMO from which the CLO was derived. While this may be the case in very brief or simple plans, it is not likely to be the case relative to most of AFRICOM's country engagement plans and strategy.

objectives⁵ or missions a prospective engagement would impact, as well as the degree of its contribution toward 100% achievement of those objectives.⁶ The purpose of asking whether an activity might have secondary impacts on other Command objectives is to help identify efficiencies of effort within AFRICOM planned engagements. The assumption is that all else being equal, the proposed engagement activity that would have the highest impact on the greatest number of AFRICOM missions represents the more efficient investment.

Primary and Added Effects. Intended and unintended secondary effects of efforts in support of AFRICOM and country-level objectives can serve as “force multipliers”, reinforcing the messages and purposes of AFRICOM and other USG efforts. Unintended consequences are also those that can most easily derail an otherwise successfully implemented engagement, typically by impacting US security interests that are a couple of steps removed from the actual engagement activity. For example, while an engagement to provide tractors to assist a village in constructing security barriers may successfully achieve its intended aim, when those tractors ignite local animosities that make an area less secure, the value of the investment is diminished. Seven items in HEART prompt users to consider potential positive (value-added) and negative (value-diminishing), intended and unintended effects of any engagement on political stability and governing legitimacy of the host government; local and regional economic conditions, and social stability or conflict.

The HEART includes two other types of items. There are 15 “Engagement Descriptives” which are discrete items such as project name, duration, etc. that provide basic identifying information about an engagement activity. In addition, HEART contains 12 summary measures that index, recode and aggregate user input on project interactions, cost and feasibility, mission value and outcomes. These measures are typically what would be used for comparing engagement options. However, comparison and prioritization criteria can be fully tailored by the user depending on the political-military environment and/or Command priorities.

At present the HEART tool exists as an MS Excel spreadsheet to facilitate the process of importing it into USG systems including the Integrated AFRICOM Theater Sync System (IATSS) currently under construction by AFRICOM J5.

⁵ Because of classification issues, HEART value to mission items currently include response options that refer to “AFRICOM Missions” collected from open-source material, rather than to Intermediate Military Objectives.

⁶ HEART users are asked to rate the impact of an engagement on an ordinal scale from ranging from achieving the identified mission completely so that no further activity was required to the engagement representing only a nominal contribution toward the objective. It should be noted that it is very unlikely that any single engagement would contribute significantly to a Command level objective and so scores would tend to be quite low. The value of the measure is its use both as a differentiator between engagements and as a source of data for monitoring activities in the aggregate, for example, regarding the balance of activities to priority missions.

Using HEART

Optimum use of the HEART requires that engagement options are clearly articulated and aligned with a Country Cooperation Plan objective. However a subset of HEART items⁷ can be used by J5 to assess how Country Level Objectives interact across the entire AOR. The CLO subset includes Descriptive, Interaction and Feasibility, Value and Outcome items. Cost and Summary measures are not supported at this level.

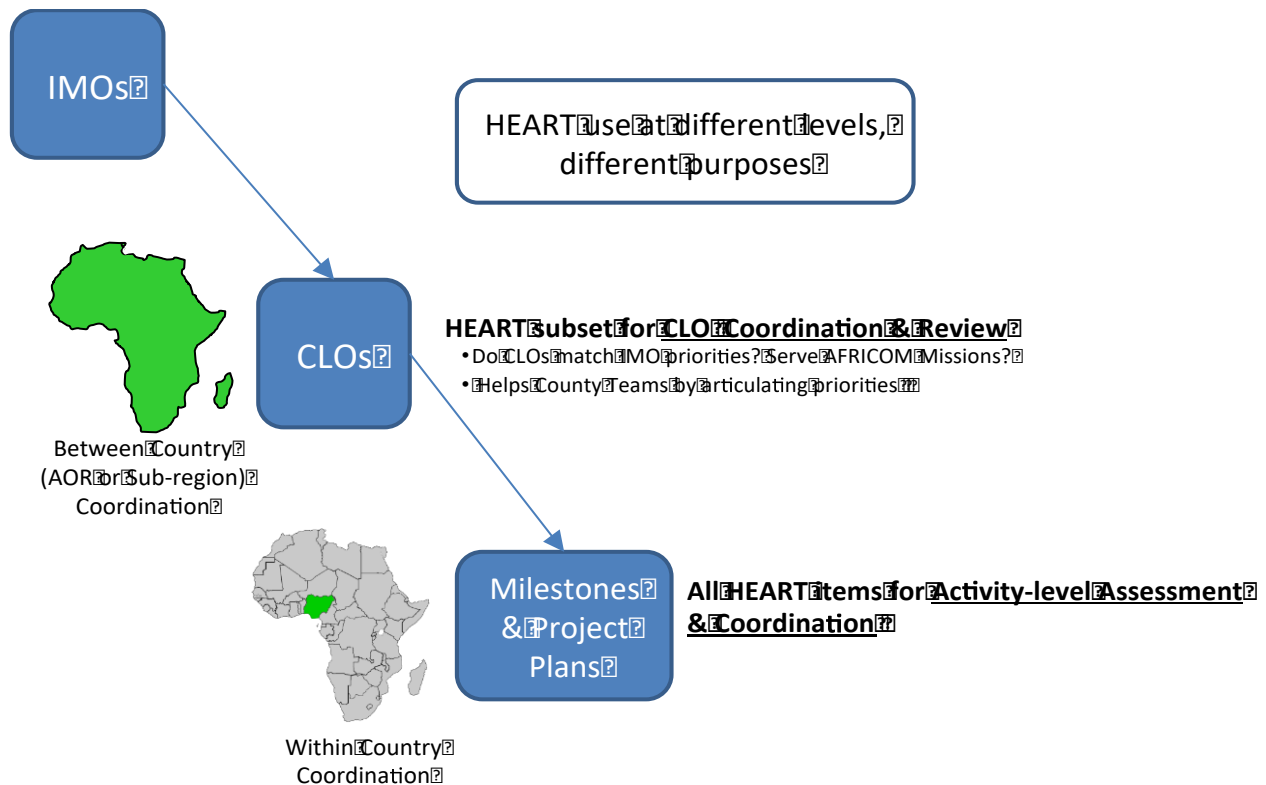


Figure 2. HEART Use at Different Levels

HEART for Country Level Objectives

CLO-level assessment is conducted relative to the degree to which a CLO aligns with AFRICOM missions and addresses threats. It also can be used to track the types of engagements that are necessary across the area of responsibility (AOR) in order to achieve those objectives. This is information and data that can be very helpful in supporting capability planning and advocacy efforts. This information can also be used to provide planners with additional guidance on the higher-level objectives – both in their own country and across the AOR – that their proposed engagement activities are intended to attain. It also highlights possible positive and negative second order effects either to be avoided where detrimental to US objectives, or encouraged where they represent efficiencies that planners should consider when designing an engagement program or plan. Completing the CLO Worksheet is also an opportunity to

⁷ The CLO-Level subset criteria are contained within the second tab, labeled "CLOs", within the HEART excel file.

engage in an assessment of the host country's interest and objectives as well as identify security threats to supplement the host country military gap analyses.

HEART for Milestones & Project Plans

The full HEART, including cost items and summary measures, is best suited to the level of country plan milestones and/or project plans for implementing CCPs. Using the HEART to develop engagement measures and prioritization as well as identify choice trade-offs for decision makers consists of five basic steps:

1. Identify prospective engagements (or CLOs) to be evaluated and input descriptive information.

Drawing from the country objective (CLO), the military objective (IMO), and the various country cooperation plans (CCP) the HEART user will identify the proposed engagements, as well as the various on-going or planned engagement opportunities under consideration for continuation or implementation within the area of impact. This step may also include reaching out to the key players (e.g., other USG organizations, host nation) identified for additional information.

2. Input interaction, cost, feasibility, and impact information for each engagement option.

The second step requires the HEART user to assess the expected performance, impact, feasibility, cost, and outcome of each engagement opportunity. The information required is either numeric (ordinal or categorical) or unstructured text (e.g. descriptive language or specific program names). Appendix A contains the AFRICOM HEART measures and criteria, a brief description of the measure, and a potential information source. The HEART user either enters the unstructured text or selects an option from the row below the response (in the associated excel file the options are contained in row 5 and the response is entered into row 4).⁸ In the event the HEART user is unable to identify or obtain information necessary to select a response, the user has the option to input a code for "unknown" or "unclear" (generally "99") to signal an information gap, and allow quick identification of missing or incomplete information.

3. Choose Evaluation Criteria.

HEART contains a standard set of summary measures based on input data and intended to facilitate engagement prioritization and comparisons. These can be computed from the input data. However, a key feature of HEART is flexibility; allowing the user to search and sort proposed engagement activities and programs by any of the 82 HEART items according to the specific criteria of interest. For example, if the issue is one of cost, a user could select and sort engagements only according to summary measure SM1 (unweighted cost per year) or by SM10 (total cost including mitigation costs). However, although they are exponentially more complex, it is generally preferable to consider more than a single criterion in assigning ranks or deciding among alternatives. "Pre-packaged" HEART summary measures are shown in Appendix B.

4. Examine Results

⁸ Note: As noted, the beta version of HEART was built, no-frills, into Microsoft Excel to allow easy migration into the AFRICOM Theater Sync System. If the tool remains in Microsoft Excel, version 2.0 would include modifications to allow the user to utilize the drop-down and select functionality rather than the current manual entry.

5. Evaluate Alternative Criteria and Engagement Portfolios. Especially where there are ties or unclear ranking across chosen evaluation criteria, returning to HEART to include additional or secondary evaluation criteria can be a useful technique. In addition, although HEART was designed primarily as a tool for prioritizing and comparing engagement activities, many of the HEART items can be used by J5 and others to evaluate and track its “portfolio” of activities in a country or region. Is there a favorable balance of high to low cost activities? Are priority missions served directly or indirectly? Are some areas receiving significantly more attention than others? etc. This step can be an enriching one, providing J5 with a means of quickly characterizing and mapping its full range of planned activities relative to the criteria of greatest interest.

Each column within the matrix asks the HEART user specific questions, clearly identifying the type and nature of the information required. A user may rely on approximations and information of which they are immediately aware for a quick, yet possibly incomplete measurement and analysis, or use the HEART items as a basis for soliciting information from specialized sources (e.g., funders, other USG government players, the host nation), providing a deeper and more detailed analysis and ranking of engagement options. While it is unlikely that any single user would have all of the information needed to complete a HEART measurement in a comprehensive manner, HEART is designed so that it can be used for quick turn-around assessments as well as thorough analysis. The time available and the level of granularity required determine the breadth and depth of the information used in any HEART measurement.

Considerations

HEART is a multi-criteria decision tool and as such the utility is dependent upon the quantity and quality of the information that is used to complete the matrix, including clearly written, objective, and measurable objectives and criteria. Additionally, although it is designed to inject objectivity and rigor into complex decision making HEART still contains subjective elements and should be used as one tool to aid in decision making.

Furthermore, it is likely that implementation of HEART would require all users to undergo initial training on how to best use the tool. Training would include an overview of the methodology, a session on how to identify sources, and how to find the required data and information. This is of particular importance for the criteria that fall outside of those typically considered by US military planners (e.g., secondary economic or social effects). A final training topic is on how to best tailor, understand, and interpret the summary measures.

Nigeria: An Initial Test

In order to complete a full Nigeria test case of HEART the NSI team found that modifications to the 2014 Nigerian Country Cooperation Plan (CCP) would be required to ensure that AFRICOM’s objective for involvement in Nigeria was clearly articulated, that the proposed engagement options aligned to the overall objective, and that milestones were pertinent to the CLO and were measurable. For the purpose of demonstration one engagement was selected from the current CCP to showcase the intent and functionality of HEART: *Enhance Training at Nigerian Army Amphibious Training Center*. The “Milestones – Component Plans” sheet in the corresponding HEART Excel file shows user input for this engagement on each of the individual HEART items as well as the “pre-packaged” summary measures. For each HEART item (in columns) all possible response options can be found below the author’s assessed input for the Nigerian engagement example (row). Engagement Descriptives items which require users to input unstructured text are shown in Figure 3 below. Moving to the right in the Excel file, the Interaction, Cost, Feasibility and Outcome items, and finally the Summary Measures follow these items.

Code	D2	D17	D4	D19	D18
Measure	Activity Name	Which Country Level Objective (CLO) does this activity serve?	Brief Description of activity with rationale	Identify program milestones	What is the Office of Primary Responsibility (OPR) and OCR/Subordinate units responsible for this activity?
NIGERIA TEST CASE	Enhance Amphib Training at Nigerian Army Amphibious Training Center **assume that this will be a tdy of US Marines to Calabar to train the trainers	Maritime Security; Nigeria has the capability to effectively respond to threats or incidents in its internal waters by 2018	10 Marines tdy for 14 days to Calabar Nigerian Army Amphib Training Center in each of 2015, 2016, 2017 and 2018 to provide classroom instruction to Nigerian Army trainers who will train members of the 81st, 82nd, and 86th divisions	Nigerian Army Amphibious Training School has capability to train Nigerian Army small boat/riverine operations, maintenance and tactics to members of the 81st, 82nd and 86th Divisions by 2018	OPR: MARFORAF OCR: NAVAF
ENGAGEMENT DESCRIPTIVES	OPTIONS Unstructured text field naming Milestone	OPTIONS Unstructured text field	OPTIONS Unstructured text field	OPTIONS Unstructured text field	OPTIONS Unstructured text field

Figure 3. Enhance Training at Nigerian Army Amphibious Training Center - HEART Screenshot

Given that the component plan with the details of the engagement was not available, for this test case we assumed that the engagement would involve 10 US Marines on temporary duty to Calabar Nigerian Army Amphibious Training Center for a total of 14 days in each of 2015, 2016, 2017 and 2018. The Marines would provide classroom instruction to Nigerian Army trainers who would then train members of the 81st, 82nd, and 86th divisions. Once the Nigerian Army Amphibious Training School has the capability to train Nigerian Army small boat/riverine operations, maintenance and tactics to members of the 81st, 82nd and 86th Divisions by 2018 the program milestone would be achieved.⁹

⁹ “The Nigerian Army Amphibious Training School in Calabar trains the Nigerian Army on small boat/riverine operations. It also trains foreign officers from West Africa. The 82nd Division provides security for oil installations in the Niger Delta and internal security in hard to reach areas. This activity directly supports the Nigerian Army objective that dates from the 1980s of

HEART Results as Decision Aid

HEART provides a framework within which planners can store and organize information about engagement activities in a way that is accessible, transparent, updatable and, perhaps most important, can be easily transported and shared with AFRICOM's US and non-US partners. In addition to aiding users to better understand the value, cost and possible side effects of individual activities, HEART is designed to facilitate tailorable comparison between engagement options. Figure 4 depicts a comparison between Nigerian Army Amphibious Training and notional option "X".¹⁰ Here the user has decided to use five of the summary measures contained in HEART as the basis of comparison between the two activities. (Depending on user or decision maker interests and priorities however, nearly every individual item in HEART could be used as a criterion for comparison). As shown below, activity "X" makes moderate, modest and nominal contributions to four AFRICOM missions which produces a higher score on this measure than the Amphibious Training which in and of itself makes only nominal contributions to three mission sets. If there are no priorities among missions this would make Activity X preferable to Training *on this single criterion*. However, if there was a command directive to pursue only those activities that contribute to Counter-terror, a user would quickly see that Activity X was out of the running. Moving to the right, Training is less costly per year than X although X is cheaper over the course of each activity. However, the training activity comes with an average 5% change of losing \$6750 per year due to corruption, theft, mismanagement, etc. This means that there is a slight probability that the training would end up "costing" AFRICOM \$156,750 to receive \$150,000 worth of benefit (or \$627,000 to receive \$600,000 in value over the course of the project.) By contrast there is no threat of loss estimated for Activity X.

Moving again to the right in Figure 4, there is some question about the composite feasibility of the Amphibious Training, specifically with regard to the US or host country legal authorities (again, based on author assumptions) while there is an assessed "low risk" of infeasibility or an unsuccessful engagement for Activity X. The aggregate summary measure for Risk to US Personnel however, shows that Activity X is significantly more hazardous than the Training. Finally, as shown here, the Training adds direct value to two identified host nation programs or objectives. It also is consistent with and moderately reinforces two programs run by US allies or friends. Finally, there are five named programs to which the Training appears to be relevant but the user is unclear about the interaction. Depending on command priorities, especially regarding cost this may signal a need for the user to pursue additional information. By contrast, Activity X is shown to add no value to other AFRICOM, USG, host nation, friendly nation or NGO/IGO program. In fact, it is shown to be redundant with another USG effort.

In all, the Amphibious Training engagement contributes a small amount to three AFRICOM missions: building partner defense, crisis response and TCO/CT response and is well aligned with two host nation

reorganizing and modernizing by creating amphibious, airborne and air mobile brigades (globalsecurity.org/military/world/Nigeria).

¹⁰ Because of classification and plan limitations mentioned earlier, the authors provided one fictional, unnamed, engagement option to demonstrate the HEART comparison functionality. The tool requires a minimum of two potential engagement options for comparison; there is no maximum limit.

efforts and one USG activity.¹¹ While there is minor risk of some financial loss, feasibility risk (of failure) is moderate, and there is low risk to US personnel, in this case from violence and disease. On the other hand, Activity X contributes significantly to disaster relief/ humanitarian crisis and non-crisis response; building partner capacity and regional prosperity and there is no question of feasibility. However, it presents high risk to US personnel and is redundant with another US effort in the area.

HEART Summary Measures					
	SM9	SM1	SM12	SM3	SM7
Activity	Total Expected Contribution to AFRICOM Missions ¹²	Cost per year & loss vulnerability	Feasibility Risk ¹³	Risk to US Personnel	Program Alignment Adds Value (AV) Diminishes Value (DV)
Enhance Training at Nigerian Army Amphibious Training Center	3 <i>(Expected nominal added value to: building partner defense; improving crisis response; TCO/CT)</i>	\$150K/year \$600K total over 4 years Loss Vulnerability/year = \$6750, at marginal (1-9%) likelihood of loss	2* <i>(*US or host country legal authorities unknown)</i>	Marginal	DV Total = 0 AV Total = 4.39¹⁴ <i>(High AV sources: added value to: 2 Host Nation programs moderately reinforces: 2 friendly nation programs) consistent with but not redundant: 1 USG program unclear contribution to: 4 NGO/IGO 4 programs, 1 friendly nation program)</i>
Option X	14 <i>(Expected moderate added value to:</i>	\$550/year Loss Vulnerability/year = \$0,	1	High	AV Total = 0 DV Total = -.28 <i>(Minimal DV source:</i>

¹¹ The training adds direct value to the Nigerian military modernization strategy and the Nigerian Extractive Industries Transparency Initiative (NEITI). It is also consistent but not redundant with the USAID Nigeria Regional Transition Initiative (to improve stability and strengthen democratic institutions in northeast Nigeria.) See HEART Excel document for additional information.

¹² Measure range = “0”, no contribution to missions, to “91”, all AFRICOM missions are 100% satisfied by the single activity. It is estimated that for the majority of single, steady state engagements, values in the teens and twenties represent a reasonable expectation for high value. It is important to remember that the scores (i.e., 3, 14) are intended for comparison. Because they are built on ordinal measures they should not be interpreted as having inherent numeric properties such that scores can be added, subtracted, multiplied or divided.

¹³ SM12 is an aggregate measure for reporting the average level of risk to successful completion of the proposed activity. It includes estimated feasibility risk that US, ally or host nation partners lack the: personnel capacity to accomplish the effort successfully; funds to accomplish the effort successfully; ready access to the equipment needed accomplish the effort successfully; transportation required to accomplish the effort successfully; the US or host country legal authorities to accomplish the effort successfully. The measure range = “1”, low risk to “4”, high risk.

¹⁴ The highest Adds Value score possible for this set of related programs would be AV = 5.6 if all related programs were coded as “directly contributes to the operational success of.”

	<p><i>disaster relief/ humanitarian response in crisis</i></p> <p>Expected modest added value to:</p> <p><i>building partner capacity</i></p> <p>(Expected nominal added value to:</p> <p><i>humanitarian non-crisis response; regional prosperity)</i></p>	<p>high likelihood</p>			<p><i>redundant with: 1 USG program)</i></p>
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Figure 4 Summary Measures for Nigeria Case Study and notional Option X

The rule by which a final choice or prioritization would be made depends on factors outside HEART. Namely, command preferences and exigencies like limited funding that can change quickly. Finally, Figure 5 shows how the same table might be presented for decision makers or used by program advocates. Some of the “raw” detail is removed from Figure 4, and cells are color-coded to give viewers a visual prompt to the scores of each engagement; the darker the blue, the higher the value for AFRICOM.¹⁵

Engagement Comparison Table					
Activity	Total Expected Contribution to AFRICOM Missions	Cost per year & loss vulnerability	Feasibility Risk	Risk to US Personnel	Program Alignment Adds Value (AV) Diminishes Value (DV)
Enhance Training at Nigerian Army Amphibiou s Training Center	3 <i>building partner defense; improving crisis response; TCO/ CT</i>	\$150K/year Loss Vulnerability: marginal likelihood	2*	Marginal	DV Total = 0 AV Total = 4.39 ¹⁶
Option X	14 <i>disaster relief/ humanitarian response in crisis; building partner capacity; humanitarian non-crisis response; regional prosperity</i>	\$550/year Loss Vulnerability: none at high likelihood	1	High	AV Total = 0 DV Total = -.28

Figure 5 Simplified Comparison Table for Nigeria Case Study and notional Option X

¹⁵ For this example it was assumed that all AFRICOM missions are equally valued, i.e., there is no prioritization among them.

¹⁶ The highest Adds Value score possible for this set of related programs would be AV = 5.6 if all related programs were coded as “directly contributes to the operational success of.”

Conclusion

There has been a major effort at AFRICOM to align Command resources with strategy. AFRICOM J58 has done the initial work of creating a new planning and synchronization paradigm that aligns country level objectives (CLOs) with command-level intermediate military objectives (IMOs) and various engagement activities with measurable milestones derived from CLOS. Program plans for achieving each milestone ultimately contribute to satisfaction of CLOS and IMOs. If DoD controlled all factors that determined the success of engagement programs (i.e., so that every engagement implemented was fully successful), or if finances were unlimited, the synchronization process could stop there. Unfortunately, these conditions are rarely if ever met and further analysis measurement and ultimately prioritization of engagement investments is required to provide decision makers with the information needed to optimize the alignment of resources with engagement programs, CLOs, and regional and continent-wide strategy. This is where HEART comes in. HEART is a multi-criteria decision framework for understanding engagement options as well as for conducting systematic evaluation and comparisons of prospective engagement activities both within and across countries. HEART allows decision makers, planners, and analysts to assess engagement opportunities in a collaborative manner, involving a country team and Defense Attaché on two different continents as well as US Embassy personnel, representatives from DoS, AID and other various interagency. In doing so it addresses several resource-to-strategy synchronization challenges identified by AFRICOM J5 and outlined in the table below.¹⁷

Program Synchronization Challenges	HEART ...
<ul style="list-style-type: none"> • Laser focus versus a thousand points of light • Sometimes willingness trumps priorities – where we “can” invest versus where we “should” invest 	<ul style="list-style-type: none"> • HEART offers an adjustable focus – users can look at as few or as many criteria as necessary or desired. • HEART helps planners understand and convey information about the severity of resources trade-offs associated with the difference between “can” and “should” investments as well as those imposed from outside of the process.
<ul style="list-style-type: none"> • Dialogue across other USG and international entities 	<ul style="list-style-type: none"> • By design HEART integrates information typically associated with DoD/ security cooperation with contextual information and analyses more commonly held by DoS, AID, and other agencies, and is a good candidate to serve as the framework around which this dialogue can be initiated.
<ul style="list-style-type: none"> • Insufficient Partner Nations pre-investment analysis 	<ul style="list-style-type: none"> • HEART points users to a shortened set of the data needed for at least minimum pre-investment analysis. However it is likely that specific studies for key states (e.g., stability conditions for Nigeria) would need to be outsourced and those results applied to HEART.

¹⁷ Source of Program Synchronization Challenges is the AFRICOM 2015 Sync Conference: Plenary Session briefing slides September 8, 2014.

<ul style="list-style-type: none"> • Inconsistent strategic messaging • Synchronized engagements that build on one another • Promised outside DoD lane or capabilities; or not aligned with strategy and TCP 	<ul style="list-style-type: none"> • HEART leads users to identify other engagements that are planned or on going in the same geographic area or addressing the same, or similar objectives and in so doing can be used to encourage collaboration across lanes and alignment to overarching objectives.
<ul style="list-style-type: none"> • Ever-changing program requirements and timelines outside of AFRICOM • AFRICOM “owns” only a small portion of the resources it expends 	<ul style="list-style-type: none"> • HEART was designed for quick use or more in-depth data search depending on the time users have to complete the task. In less than 30 minutes a user can have a better understanding of the value-added of an engagement relative to others. With more time, more sophisticated analyses and more reliable data can be used. • Users can easily tailor HEART to reflect the every-changing nature of the AOR and US policy and Command preferences: each of its 82 items could be used individually or as part of the full HEART. Moreover, the output reports of the fully completed HEART are not predetermined. Users can choose individual items to highlight, report pre-packaged summary measures or use individual items in HEART to create their own measures.

