



Improving Analytical Support to the Warfighter: Campaign Assessments, Operational Analysis, and Data Management

Working Group 3

-- *Operational and Tactical Assessments* --

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WG 3 Demographics

Participants

- Canada
- Australia
- Marine Corps
- Army
- Special Inspector General for Afghan Reconstruction
- Air Force
- Lockheed Martin
- JFCOM
- JIEDDO Counter IED Operation Integration Center
- Human Terrain Systems
- CENTCOM
- PACAF/PACOM
- OSD CAPE
- SOCOM Lessons Learned

Backgrounds

- Intelligence
- Psychology
- Planning
- Operations research
- Academia
- Political science
- Engineering
- Deployed/Reachback



WG 3 Purpose/Focus

- Discuss issues related to operational and tactical assessment and the challenges associated with collecting valid metrics and indicators, in particular:
 - What methods have been used in theater to generate metrics that meet the doctrinal intent?
 - How was the metric validated as an accurate indicator of a given trend?
 - How were the metrics collected and how did you ensure that the data was valid?
 - What unique indicators correlated with certain desired effects?
 - Describe an effective and efficient method to present metrics and indicators to the commander.
- Learn from each other



WG 3 Approach

- Broaden our analytical perspective – recruit Interagency and Coalition partners
 - Canadian and Australian participation
 - US Agency for International Development (US AID) unable to attend, but provided brief
 - Department of State and US Institute for Peace/Army Corps of Engineers unable to attend
- Eight briefs to educate, stimulate thoughts, and encourage discussion
 - Brigade Combat Team Perspectives on Metrics and Indicators
 - Marine Corps District Level Assessments and Tactical Factor Diagrams
 - Strategic Communications Assessment
 - Tactical Conflict Assessment Planning Framework
 - Canadian Discussion of Polling
 - Australian Assessment Experiences
 - ANSF Assessments Perspectives from SIGAR
 - Human Terrain Systems
- Format of the WG was to brief, then discuss the brief to bring it into the WG context
- WG intentionally did not expend time defining terms



Common Understanding of Analysis vs. Assessments

- Assessment is a Staff product aided by operations research analysts
 - Goal of assessment is to identify shortcomings in the engagement plan and changes in the operational environment to aid the commander's decision making process
 - Lines between assessment and analysis continue to blur as additional and varied types of information are made available to the Staff.
 - Assessment is a complex problem that requires a multi-disciplined solution
 - Assessments should be built into the plan from the start



WG 3 #1: What methods have been used in theater to generate metrics that meet doctrinal intent?

- Prequel to the question:
 - Understand the question to answer using iterative dialogue to elicit REAL problems and ATTAINABLE measures
 - Socialize the problem and planned measures and use feedback to adjust the assessment plan
- People - identify the necessary knowledge, skills and abilities of those contributing to the Assessment
- Processes
 - Periodic re-assessment of the metrics and their relevance...sometimes by external organizations
- Tools
 - Doctrine provides guidance, but it will likely be adapted
 - Literature review of Joint, Coalition, and academia to learn better practices
 - Campaign plan
- Metrics definition should be part of the planning process



WG 3 #2: How was the metric validated as an accurate indicator of a given trend?

- Two part process: Choice of metric should be validated as well as the collection mechanism
- Validation methods include:
 - Historical review
 - SME review to include the use of the Intelligence section
 - Definition of the metric for and with the Commander allows for validation afterwards
 - Transparency and availability of the data allows for validation by other parties
 - Test accuracy of proxies
 - Polls are a proxy measure for people's attitudes, beliefs and feelings
 - Concurrent validity - Second and third party research, testing, etc of varying perspectives and sources
 - "Causality" is the goal, "correlation" is the objective, and "contribution" is reality
 - Examine the validity of previous metrics in the new environment
 - Use of independent Validation Teams
- Challenges to validation include:
 - Turnover and change
 - At mercy of foreign polling mechanisms – data ownership and contract management
 - Getting narrow perspective – geographically and sampling coverage (age, sex, etc.)
 - Subtle language nuances, e.g. many words for "corruption" in Afghanistan
 - Dueling databases can provide contradictory trends
 - "Denominator problem" – what were blue and green doing?



WG 3 #3: How were the metrics collected and how did you ensure that the data was valid?

- Collection mechanisms:
 - Polling, surveys, and focus groups
 - Key leader engagements and local event participation
 - Interviews (providing broader and richer context)
 - Unit data (position, missions, activity, etc.)
 - Significant activity databases
 - Atmospherics and human terrain
 - Intelligence summaries
 - Checklists, e.g. capability milestones (CM) and capability endorsements (CE)
 - Open source
- Validity checks:
 - Training in handling the strengths and limitations of polling data
 - Understanding and use of reachback capabilities
 - Focus groups to vet surveys, polls and questionnaires
 - Intercoder reliability used as a check to standardize definitions and evaluation criteria
 - Internal consistency tests for questionnaires
 - Common sense check of data for validity and utility by various SMEs
 - Check data and data collection processes for randomness, bias, and influence
 - Comparisons with other data sources



WG 3 #4: What unique indicators correlated with certain desired effects?

- EFFECT: Ability of host nation to function effectively without International assistance
 - CM ratings and CE checklists (problematic)
 - Is measure measuring trainee or trainer?
 - Logistics?
 - Literacy?
 - Corruption impact?
 - Ministerial effectiveness/capacity
- EFFECT: Economic growth/recovery
 - Number of lingerie shops – measure in Bosnia
 - Nylons being readily available – measure for Germany
- EFFECT: Security
 - Number of civilian deaths – measure in Iraq and Afghanistan
- Commander is concerned about perceptions at home as well as in Theater
- Examine what falls out as a result of establishing the campaign plan termination criteria and limit appropriately
- Draw from current Assessments frameworks and research
 - FM 3-24 COIN Manual
 - FM 3-07 Stability Operations
 - Marine Expeditionary Brigade – Afghanistan District Level Assessments
 - ISAF and USF-I Assessments Frameworks
 - Measuring Progress in Conflict Environment – 600+ metrics with varying utility



WG 3 #5: Describe effective and efficient methods to present metrics and indicators to the commander.

- Geospatial representation of the data
- Temporal representation (show changes over time)
- If showing percentage, show raw numbers to exhibit magnitude
- Combinations of spatial, time series, and resource allocation information in one chart
- Remind of definitions and explanations of standards
- Indicating confidence of reporting adds to decision making capability
- Stand alone tables can be okay...as well as statistics
- Mapping the culture is not the same as a point on a map...
- Document supporting material
- What does the boss want to know; what do you think the boss needs to know; and what should everyone else know that the boss knows
 - Include what commander needs to know that is not part of the Assessments plan



WG 3 Recommendations

- **Develop an Assessment handbook of best practices for Interagency and Coalition**
 - Influenced by operations research
 - Similar to Deployed Analyst Handbook
 - Establish initial Assessments and reporting framework
- **Create an Assessments WG at the annual MORS Symposium**
- **Establish an Assessments Community of Practice**
 - On line repository of Assessments related documents and references for Interagency and Coalition use