Information Operations (IO) measures of effectiveness (MOE) is one of the biggest challenges in developing a good IO campaign strategy. The Iraqi Operational Environment (IOE) is characterized by varying degrees of success and methodology in this effort. This is largely due to the decentralized and diverse areas of operation (AO) and the lack of formal training in developing MOE amongst the staff.

Specific indicators to measure IO effectiveness are extremely hard to establish. One of the more effective methods to use is face-to-face interaction with the targeted audiences to gain feedback. Assets used to conduct face-to-face include unit patrols, PSYOP teams, and CA assets. CA personnel are one of the more effective face-to-face assets to use to gain feedback from a targeted audience. They have an advantage in that their mission requires them to establish a rapport with the local population. Although CA teams are not doctrinally intelligence collectors, CA teams in the field have provided feedback from the local population to their unit S2s for inclusion into a database.

These feedback databases can be an excellent source for IO personnel to use to develop indicators of success/failure of IO conducted and to aid in their MOE analysis. S2s should be included in the IOWG. Dedicate and incorporate intelligence specialists into the IO cell for MOE analysis. These specialists must also stay plugged in to the S2/G2. They also must have a base knowledge of IO in order to develop and analyze MOE.

One U.S. division uses both subjective and objective criteria for measuring effectiveness in its IO operation. Each of these is tied to a specific IO objective, which in turn relates to one of the four pillars identified by the Coalition Provisional Authority (CPA). These four pillars include governance, economy, military, and infrastructure.

This unit has established a website on the SIPRNET exclusively for the IO campaign plan. On this site, there are many products pertaining to the plan, including IO estimate, IO objectives, and MOE. Each of the IO objectives has specific MOE listed underneath. The MOE are measured by green, amber and red status. Each of these is monitored by the brigades, and the IOCOORD updates the MOE each week. The IOCOORD assesses how the division is doing with regard to each of these goals each week. It is virtually impossible to collect on each of the goals, nor is there a way to collect on all these things without putting additional requirements on an already over-tasked unit. Therefore, the IOCOORD makes this assessment based on his understanding of the AOR and feedback from the brigades.

Another division in Southern Iraq uses an operational analysis (OA) cell for the development and analysis of MOE. Although the questions run the spectrum of operations, it has a heavy emphasis on IO. The unit uses weekly surveys to query population samples throughout the AO. They then take the results and analyze the trends that occur over time. It is a continuous Iraqi attitude survey and is conducted by an independent civilian scientific research organization.
This has two advantages:

1. The research organization provides trained, dedicated personnel to perform the task, and
2. Since they are not in the unit's chain of command, the organization can be the honest broker.

We observed that when dealing with statistical analysis, data can be used to provide a picture other than reality. The survey consists of approximately 20-30 questions, and includes overall climate attitude questions such as, "What do you think of what the Coalition is doing?" and, "When do you think Coalition forces should leave?" They use their own unit patrols to conduct the surveys, but have recently begun to hire local Iraqis and train them in survey techniques in order to conduct the surveys. This will provide a wider range of population to sample and should prompt the locals to provide more honest answers. Other sources used in their operational analysis are patrol reports, campaign effectiveness data assessment, and reporting (CEDAR), political advisor (POLAD) reports, and intelligence reports.

A U.S. maneuver battalion near Baghdad uses graphic depiction of security and infrastructure events matched with their goals and objectives to measure their effectiveness. Their brigade headquarters has goals/objectives which they call lines of operation. The battalion is nested underneath that with key tasks (KTs). The KTs are further broken down into collective tasks that support each of the KT. Security is measured by number of incidents, IEDs, demonstrations, weapons firing, etc. This is graphed to show the decline or rise in incidents by sector. If there is an increase, the battalion looks at what was done differently. If there is a decline, then it will be similarly investigated. The battalion also looks at anti-Coalition graffiti or flyers, random weapons firing, and IEDs. These are the information requirements (IR) on which the patrols report. In the KT of civil infrastructure, the battalion evaluates details such as the number of hours of electricity or water available per day and the frequency of trash pick up in the neighborhood. Some of the criteria in these areas are rather subjective in nature, but provide additional tools for analyzing the operational environment.

The unit has clearly identified indicators in their sector to measure security and infrastructure needs which are matched with their campaign goals and objectives. The KT are measurable and can be graphically depicted to show rises or declines in overall compliance by the Iraqi people. The battalion commander is directly involved in this process, which gives it the credibility and leverage desired to make this a good program for the staff and company commanders.

**Lessons Learned**

- One of the most effective methods for obtaining data for use in measuring IO effectiveness is face-to-face encounters with targeted audiences. Units can use patrols, PSYOP teams, and CA teams to gain this essential feedback.

- Incorporating IO MOE into the collection plan will provide the necessary information for input into the IO feedback database. The feedback database can then be used to develop indicators of success/failure of the IO plan and aid in the MOE analysis.
- The SIPRNET website is a good tool for units to use to share data regarding the MOE of the IO campaign. The unit makes subjective analysis using feedback from subordinate units to evaluate MOE.

- One unit successfully used an OA cell, supported by data from an independent organization, to survey the local population and provide operational assessments.

- The use of both subjective and objective criteria that are nested beneath the division and the CPA's goals and objectives has worked well in measuring the effectiveness of one unit's IO campaign.

**DOTMLPF Implications**

_Doctrine:_ Incorporate the concept of embedded media into doctrine. Successful embracing and integration of the embedded media paid huge dividends to many.

_Doctrine:_ Incorporate planning and execution of PA TTPs at the appropriate tactical level units in order to support IO planning and execution.

_Doctrine:_ Incorporate the concepts of local/host country media support into PA and IO doctrine. Integrate local/host country journalists into PA operations and support them in their mission to provide news for their news media.

_Organization:_ Add PA personnel and equipment to applicable unit organizations/MTOEs in order to plan and execute PA TTPs at tactical level.

_Training:_ Incorporate integration of embedded media, support of local/host country media, and interaction with all IO elements into training scenarios and events.

_Leadership and Education:_ Incorporate the concept of IO integration into the Army's education systems; the concept that "not everything has to be killed or destroyed in order to execute a successful mission" is necessary for successful operations across the ROMO.

_Materiel:_ Develop and resource the force with Joint and Army IO automation tools that provide commanders and staff a common IO operational picture and uniform IO planning tool.