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Enhanced Multi-Criteria Decision Support: A Case Study in Iraq

Track 1: C2 Concepts, Theory, and Policy

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About the Authors and Disclaimer

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Abstract

Using results from adapting a multi-criteria decision support methodology for use by Multi-National Force, Iraq (MNF-I), this paper develops an argument for adopting a similar approach across the Department of Defense (DoD). While in Baghdad, the authors adapted a methodology to visually frame problems in a decision-matrix format and logically arrange courses of action for scoring against how well each would support the varied range of major campaign objectives. A simple spreadsheet application that linked a diverse range of substantiating data and information with dynamic weighting of rating factors enabled more productive group discourse and testing of assumptions. One notable use of the methodology in Iraq was to assess the likely campaign-level impacts of a contentious proposal to accelerate the release of detainees under US control. Results showed accelerated release the best option for achieving Joint Campaign Plan objectives, and General Petraeus cited the work as very helpful in fine-tuning his implementation guidance. By helping to more comprehensively examine problem factors, variables, and solution options, the methodology overcame many shortfalls, providing operational senior leaders with enhanced decision support. This result and the existence of similar decision support shortfalls throughout DoD argue for wider adoption of the methodology.

Introduction

This paper describes the authors' adaptation of a multi-criteria decision support methodology developed for Multi-National Force-Iraq (MNF-I) and argues for adoption of a similar approach across the Department of Defense (DoD). While deployed to Baghdad's International Zone in 2007, the authors adapted a methodology that logically arranges courses of action for scoring against how well each would support major campaign objectives. The approach does this by visually framing problems in a decisionmatrix format and using a simple spreadsheet application, called DynaRank,¹ to more explicitly link objectives to substantiating data (objective and subjective; quantified and qualitative) and to dynamically weight rating factors. These features served to bolster the productivity of group discourse and testing of assumptions. One notable use of the approach involved broadly considering the impact on joint campaign objectives of implementing a contentious proposal to accelerate the release of Iraci detainees held by US forces. The issue dealt with whether to hold detainees, many of them likely members or at least supporters of the insurgency, in detention camps to keep them off the streets and boost security, versus the need to promote the political goal of building public support for the government. The results of our study showed accelerated release as the best option for achieving Joint Campaign Plan objectives. General Petraeus found the approach rigorous and results useful for refining his policy implementation guidance. This adaptation of a multi-criteria decision support methodology enabled more comprehensive examination of problem factors, variables, and options, leading to a more informed decision. Despite complicated implementation factors, these results and the existence of similar decision support shortfalls across DoD suggest the possibility of attaining even greater benefits if the methodology were to be more broadly applied.

To develop its argument for adopting a DoD-wide decision support approach, this paper begins by providing background about the detainee situation in Iraq, then highlights key factors about the accelerated detainee release proposal that emerged towards the end of 2007. Next, it details study methodology, briefly touching on how we adapted a campaign assessment methodology that we had previously developed for MNF-I into a multi-criteria decision support approach. This section emphasizes key benefits of the approach, explaining how certain features helped the study effort in Iraq deal with the difficult tradeoff and impact comparisons demanded by this time-compressed operational decision situation. It then summarizes how results were received and applied, including expected campaign level detainee release effects. This part includes observations about how the decision was being implemented

as of April 2008 and some abbreviated follow-up as of August 2008. While acknowledging that a lot of time has passed and much has changed since we left country, the paper wraps up our case study explanation by pointing out the recognition our enhanced decision support got from applying a more rigorous, agile methodology to the complex operational setting in Iraq. Finally, it goes on to highlight broader DoD decision support shortfalls and suggests how the approach used in Iraq might be further applied to improve DoD-wide decision-making.

Background

Mentioning Iraq and detainees immediately causes many to think of Abu Ghraib prison – the 2004 debacle that seriously damaged the United States' image and war effort. Since that unfortunate incident, the US has struggled to regain the moral high ground and support of Iraqis. Lingering anger over what Iraqis viewed as wrongful detention by occupiers was due, at least in part, to the shocking photos that came out of Abu Ghraib. Unchecked, such anger can provide fertile ground for insurgent recruiting – something we termed in the study "detainee alienation effect."² At the same time, releasing detainees in an effort to reduce this alienation effect risks turning loose many who, given the chance, would rejoin the insurgency. A new idea eventually emerged for dealing with this dilemma that sought to promote political reconciliation by moderating detainees and releasing them back into their communities to spread more moderate views of Islam. This idea led to the dramatic reformation of detainee policy, increasing the potential for turning detainees away from supporting insurgents and towards becoming a broader force for moderation and support of the Government of Iraq (GoI).

New Approach – Expanded Mission and Strategy. In 2007, Major General Douglas M. Stone, US Marine Corps Reserve, assumed command of Task Force 134 (TF-134) and brought to the job a new approach. Taking charge of Theater Internment Facilities (TIFs) and the detention of thousands of Iraqis captured by US forces, Stone's approach stressed practical problem solving and initiative, along with listening to detainees to understand their motivations. He credited this to his experience as a successful businessman and entrepreneur; the fact he speaks Arabic and routinely studies the Koran enhanced his grasp of Iraqi motivations and culture.

While many reforms began before his arrival, General Stone deserves credit for accelerating the pace and formally extending TF-134's mission focus beyond just warehousing Iraqis taken off the streets to "Fighting for Victory from inside the wire."³ Stung by Abu Ghraib, the United States until General Stone's arrival had mainly focused on upholding "care and custody"⁴ standards related to humane treatment of detainees. Insurgents, on the other hand, had been working to recruit and train forces inside detention facilities; a relatively small number of hard-core detainees were essentially able to wage a prolonged struggle from inside the detention camps. Recognizing this, General Stone began separating insurgent agitators from other detainees, giving moderates within the camps the freedom to choose a path other than violence. Initial results convinced him that at least a third of all detainees could be persuaded to reject insurgency within the camps' controlled setting. This opportunistic view of detention argues against just locking detainees away for several reasons, two of which are:

- 1. Imprisoning Iraqis raises the "alienation effect," i.e., it angers other Iraqis, pushing them toward supporting the insurgency and away from supporting the coalition and GoI.
- 2. It squanders an opportunity to persuade some detainees to embrace a more tolerant world-view that reflects Islam's true principles, and perhaps even to transform them into actively opposing Islamic extremism and Iraqi insurgents.⁵

Encouraged by initial successes, TF-134 started focusing on turning detainees into cooperative moderates with a goal to "Establish an alliance with and empower moderate Iraqis to effectively marginalize the violent extremists."⁶ This shift prompted them to strive to:

"...ensure that all standards of care and custody are met; determine if a detainee is an Imperative Security Risk—if so, reduce the risk, replace the destructive ideology, and when assessed as no longer a threat, release detainees less likely to be recidivist/identify irreconcilables/defeat any insurgency within the TIF."⁷

Multi-layered Release Policies. Figure 1 summarizes the multi-layered process TF-134 began using to pursue its new vision and goal. This process included assessing incoming detainees to initially identify and separate moderates from extremists. Isolating extremists within the camps not only improved security but also gave moderates a better chance to reject extreme views, cooperate with guards, avoid disruptive activities, participate in education and training programs, and generally transform their outlook and behavior.

One key aspect was developing many religious, academic, and vocational education programs. One of these programs used local Imams to teach and discuss moderate interpretations of Islam, thereby exposing detainees to non-violent thinking. While voluntary, sessions were well attended, with many participants saying afterward that it was their first exposure to moderate religious views. Other job training and education programs targeted

- <u>**Transition Barracks In**</u> Initially assesses motivation for joining the insurgency, criminal history, religious status, education, and job skills
- <u>Religious Discussion Program</u> Voluntary, but used to determine extent of religion in their lives and to foster a moderate view of Islam
- <u>Dar al-Hikmah (Basic Education)</u> Chance to get a minimum 5th Grade education
- **<u>Vocational Education</u>** Job skills training
- <u>Work Program</u> Compensated for voluntary work activities (e.g., Sewing Center, Work Parties)
- <u>Individual Assessments</u> Occurs before their release hearing to consider mental health, religious ideology, education, work program performance, guard force input
- <u>Family Advocacy and Outreach</u> Includes family in the rehabilitation process and grants greater access based on progress
- <u>Lion's Spirit</u> Continuing moderate religious education and training for those desiring to become an Imam
- <u>Transition Barracks Out</u> May spend up to a week in this program, which includes courses on civics, public health, and how to effectively reintegrate back into Iraqi society and the family

Figure 1. Key TF-134 Programs

basic learning and labor skills. Besides addressing high unemployment, imparting the skills necessary to make an honest living also eased temptations for releasees to take on jobs for the insurgents – such as planting Improvised Explosive Devices (IEDs) – just to provide for their families. Classes included sewing, carpentry, and masonry. At one time, TF-134 had also explored the possibility of arranging follow-on micro-loans.⁸

Leveraging tribal influences was integral to TF-134's approach. Iraqi tribes form a societal hierarchy accommodating the political, security, and social needs of their members. Tribes and cultural operating codes, like *shame and honor* and *patronage*, play an important role in shaping individual behavior, and were vital to reintegrating released detainees back into society.⁹ (TF-134-sponsored studies showed stronger societal bonds afford even a detained Iraqi the potential to influence over 100 other Iraqis.¹⁰) Respecting such cultural factors was critical to preventing detainees from supporting the insurgency within the camps or rejoining after release.¹¹ TF-134 strived to respect local customs and involve tribes and family members in developing and conducting its programs, to include working closely with Iraqi Imams and others. Capitalizing on the closest of Iraqi societal bonds, TF-134 family advocacy and outreach, for instance, offered family visitation as a privilege to detainees who followed facility rules. For cooperative detainees, expanded ties to family and community provided enhanced support networks and further invigorated detainee transformation and reintegration efforts.¹²

Another practice that capitalized on strong social links and cultural codes of honor, commitment, and patronage was having detainees sign a pledge prior to release. In fact, some detainees with troubled

backgrounds also had to secure a guarantor, often a tribal leader, to assume at least some responsibility for their post-release conduct. Pledges were frequently part of formal release ceremonies where important Iraqi leaders recognized detainee achievements and reinforced the significance of being given a new start.¹³ Iraqi judges formally administered this pledge and violators of its provisions were liable to be charged in Iraqi courts. Besides leveraging an Iraqi detainee's sense of honor and commitment, such practices also served to reinforce the patronage networks of politically influential and supportive Iraqis.

Multi-National Force Review Committee (MNFRC) boards formed the cornerstone of the shift away from mostly warehousing detainees to a multi-layered risk assessment for each detainee that also aligned well to local Islamic customs. To achieve the goal of releasing only those detainees assessed as very low risk, these boards, manned by military members from in-theater headquarters and operational units, recommended release based on whether a detainee posed a continued security risk. In making determinations, boards conducted face-to-face interviews with detainees and reviewed evidence from internment facility guards, counselors, teachers, and evaluations, along with information from arresting units and other sources. In this regard, MNFRC boards and related TF-134 processes reinforced the local Islamic custom of conducting communal, non-judicial hearings for accused persons to air grievances and publicly present facts.

Combined, all of the elements outlined above formed a comprehensive TF-134 strategy in the "battle for the mind" to help achieve victory in Iraq. Its goal was to encourage detainees to freely adopt more moderate views, rejecting violence and the insurgency in favor of peaceful conduct more conducive to political reconciliation. As such, initiatives were specifically designed to address key motivations, both ideological and material, encouraging detainees to move away from supporting the insurgency and towards backing the government or coalition. Faced with a potential crisis, this first-hand experience and success from inside the camps caused TF-134 to propose even more ambitious actions.¹⁴

Avoiding a Potential Crisis. In fall 2007, a number of factors converged into a potential crisis that triggered the new TF-134 proposal. As the surge in US troops and operations against al Qaeda in Iraq caused numbers of detainees to spike, the prospects for a mass release of hardened insurgent detainees increased. While Iraqi politicians' renewed calls for amnesty for selected detainees fueled the need to differentiate reconciled and "reconcilable" detainees from hardened insurgents,¹⁵ the possibility that the United Nations (UN) might not renew the US's authority to detain Iraqis was a vastly more troubling, and urgent, prospect. In fall 2007, the UN decision whether to renew this authority was only months away and coming under increasing political pressure. Even if renewed at the end of 2007, few believed the authority would be renewed again at the end of 2008. Thus, a mass turn over of tens of thousands of US-held detainees was a very real prospect in fall 2007 – something that might easily overwhelm Iraq's prison capacity, creating another problem for the GoI. Responding to this situation, TF-134 proposed a less risky alternative.

TF-134's proposal had two main objectives: (1) reduce the potential for a mass turnover of hardened insurgents, and (2) promote political reconciliation by extending positive moderate influences to more Iraqis, reducing support for insurgents and bolstering the GoI. Due to initial success of its programs and a sense that faster release would be favored by Iraqis and promote broader political reconciliation, TF-134 proposed a dramatic increase in the number of moderate detainees to be released, starting in late 2007. While the proposal stressed there would be *no* general mass releases and *no* release of any high-risk, irreconcilable detainee, many still found reasons to oppose it.

Conflicting Viewpoints. From the very beginning TF-134's proposal met strong opposition from some commanders, who were convinced that detained Iraqis would feign moderation and resume attacking coalition troops as soon as they were released. While some detainees probably were committed insurgents at one time, many (some say most) of those siding with insurgents and implanting IEDs were largely

motivated by the need for a job and money. No one was really sure how many detainees might have been innocent. This is due to the mixed standards applied by coalition units in rounding up and screening Iraqis suspected of being insurgents during operations. Some did this more carefully, detaining only those that they were confident were indeed insurgents; while others cast a much wider net, detaining larger groups that they were certain contained insurgents but more than likely could have also included less than willing bystanders. In making this point, Brigadier General Janis Karpinski, commander of Abu Ghraib at the time of the scandal, stressed how different security related detentions in Iraq were from more traditional and familiar prisoner-of-war or criminal-detention operations; as late as 2005 she estimated the population at Abu Ghraib was at least 90 percent security detainees. ¹⁶, ¹⁷

By the time Major General Stone took over in 2007, the transition from holding enemy prisoners of war and criminals was complete and all US-held detainees fell into the security-detainee category. As mentioned earlier, authority for these detentions sprang from continuing UN resolutions. If enough evidence was available to bring criminal charges, the US turned detainees over to the Iraqi justice system for prosecution. Under this UN-sanctioned system, the US initially detained and continued to hold individuals who posed an imperative security risk. The term "imperative," however, was open to interpretation and judgment. Units in the field used their interpretation and judgment to initially detain and, as explained earlier, MNFRC boards subsequently applied their judgment in determining whether to continue to detain.

While some troop commanders agreed with TF-134's proposal, many remained unconvinced and understandably concerned.¹⁸ Given deeply divided opinions and pressed to inform a pending MNF-I commander decision, the staff called for a more objective look to sort through all the factors. Thus, the Strategy, Plans, and Assessments Directorate asked us to assess the proposal's impacts on Joint Campaign Plan security, political, and other objectives – and to do so quickly.

Assessment Methodology

The assessment had to accommodate operational dynamics and deliver in only a few weeks. Plus, the varied nature, volume, and condition of the data made for an atypical study effort. Before estimating the impacts of accelerated release on security and political reconciliation, we began by reviewing doctrine and literature to establish how well the new approach recommended by TF-134 fit within overall counterinsurgency (COIN) doctrine and theater strategy.

Support of Campaign Strategy in Iraq. Our broad review of COIN doctrine and literature showed a solid basis for TF-134's accelerated release proposal. For instance, COIN doctrine and literature generally indicate that it is essential to drive a "wedge" between the hardened insurgent cadre and those less committed or motivated to join, sympathize, or support the insurgency.¹⁹ Many experts agree with this.

Work by recognized COIN expert David Kilcullen especially reinforced the legitimacy of TF-134's proposal. Dr. Kilcullen characterizes an insurgency as being comprised of a stratum of member elements, ranging from an ideologically hardened core and a highly dedicated cadre element to a less dedicated and ideologically motivated group of general members, and, ultimately, to even less actively involved, or committed, supporter and sympathizer elements.²⁰ By identifying and separating Iraqis into groups, TF-134 was already driving a physical, sociological, and ideological wedge between these factions within the detention camps. But the accelerated release proposal represented a dramatic change to that policy, with two distinct facets: (1) leveraging detainees' influence over Iraqis outside the detention camps, and (2) using expanded release as a wedge to influence greater political dynamics. While both support COIN tenets of reducing support for insurgent forces and bolstering the government, implementing them would be a bold, complicated undertaking with one aspect, securing the population, being especially difficult.

TF-134's proposal incorporated key features to enhance the Coalition's ability to control the population at a critical phase in the conflict. The proposed approach was, in essence, seeking to support Joint Campaign Plan strategy and objectives by extending friendly force ability to drive a wedge between the insurgency and the population. If successful, this would have dramatic campaign-level impact, especially on the top campaign objectives of political reconciliation and increased support for the GoI.

Other authoritative sources also caution against actions that could upset the population, making it easier for insurgents to recruit forces and gain support. While reducing insurgent numbers is critical, successful COIN does *not* typically overemphasize "...killing and capturing the enemy rather than securing and engaging the populace."²¹ Reducing overall insurgent force strength is more complicated than simply killing its members, or capturing and indefinitely detaining them. Effective reduction necessitates that the populace turn against insurgents and towards the government. To achieve such a turn-about in popular support, COIN must constantly weigh the benefits of military action against political, economic, and other factors, with a goal of ensuring that their performance in doing this overmatches that of their opponents.²²

In fall 2007, nationwide polls, interviews, and other sources indicated that Iraqis overwhelmingly viewed coalition detention and detainee treatment as unfair, particularly Sunnis, since most detainees were Sunni. As former Iraqi Minister of Defense and Finance, Ali Allawi, notes in his book, "The Shi'a were not subject to the heavy-handed security measures that played a large part in crystallizing anti-Coalition feelings in the Sunni areas."²³ Such perceived unfairness was fertile ground for sowing discontent and alienating the population, particularly Sunni leaders and those demanding release of detainees. Limiting such discontent – i.e., reducing the "detainee alienation effect" – was a way for counterinsurgents to deplete the pool of *potential* insurgents that might lead to still more insurgents.

Detainee Alienation and Insurgent Recruiting. To answer the main security related question, "Do insurgents get more recruits from among detainees who've been released or from other Iraqis who join because of resentment over the detainee alienation effect?," the study developed a way to roughly estimate likely impacts of moderate detainee views on the population and willingness to support the insurgency. The Insurgent Recruitment and Growth Model in Figure 2 illustrates possible impacts of detainee practices on insurgent recruiting. Black boxes represent relevant population and insurgent elements covered earlier. Red arrows show elements of the population gravitating towards the insurgency, producing correspondingly greater insurgent force levels; green arrows show population elements trending away from the insurgency, over time reducing insurgent force levels. In determining detainee alienation effect, we sought to incorporate Iraqi perspectives by drawing heavily from Iraqi-Americans and native Iraqis working for the coalition.²⁴ We also leveraged official MNF-I insurgent troop strength estimates, historical recapture data, nationwide polls, special surveys, focus groups and other data, including working group and expert inputs. The objective was to derive a plausible range of release, recidivism, and "detainee alienation effect" rates on which to base further analysis.

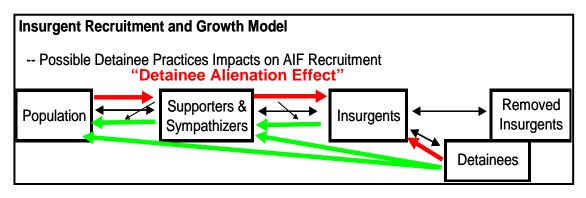


Figure 2. Insurgent Growth Model Showing Detainee Alienation Effect²⁵

While precisely determining detainee alienation effect is difficult, the approach for estimating its overall impact was relatively straightforward. In order to perform more detailed computations our approach first had to determine how many new recruits the insurgency would need to at least maintain its existing force level. To initially derive this number of needed recruits we turned to supporting information the MNF-I staff had consolidated in conjunction with the command's input to the "Measuring Stability and Security in Iraq" report to Congress.²⁶ Since the actual estimated numbers of insurgent troops, numbers of insurgents killed, number of foreign fighters, etc. are classified we cannot disclose them here. Notwithstanding the omission of these numbers, it is at least important to mention this point to ensure readers that the first step of our commercially adapted approach used an authoritative basis to initially derive its baseline total of new recruits needed to maintain current insurgent force levels, signified as "Number 'Derived' Insurgent Recruits Needed" in the equation:

(# 'derived' insurgent recruits needed) = (# insurgents killed) + (# insurgents detained) + (# insurgents otherwise leaving the insurgency)

Estimating Detainee Alienation Effect. The next challenge was determining a plausible range of release, recidivism, and "detainee alienation effect" rates for the more detailed follow-on analysis. Here, the team used historical release and recapture rates going back to 2004 to postulate a low and high release rate of 8000 and 20000, respectively, and low-, medium-, and high-recidivism rates of .5, 3, and 8%, respectively. Determining other plausible rates was more difficult but before exploring that we need to clarify how MNF-I used and defined recidivism versus recapture.

In the context of security detainees, MNF-I defined recidivism as a person previously detained in a theater internment facility as a threat to security who again becomes an insurgent after being released. But due to the unstable situation in Iraq, the main way of measuring recidivism was to record when recaptured detainees' identifying numbers were reactivated as they passed through the magistrate's cell at Camp Cropper. Released detainees who were killed, and those re-detained by Iraqi Security Forces, were also included in this measurement, provided the information was made available and their identity confirmed by biometric data from previous US-held detention. While such reporting did happen on occasion, it was fairly uneven. This measure did not, however, include detainees recaptured and subsequently released at lower unit levels or those recaptured by Iraqi forces and unreported to the coalition. While many in MNF-I used recidivism and recapture as interchangeable terms, for the purposes of our study and in the context of this paper we use "recidivism" when referring to the overall objective of preventing released detainees from reverting to insurgent behavior or support, regardless of the motivations (ideological or material). We use "recapture" when referring to the main measure used to gauge that recidivism as explained above. The reader should be clear on these distinctions to avoid confusion with how these terms are more commonly used and understood within a criminal, or penal, context. With this clarification we move on to explaining our calculation of detainee alienation effects.

The study turned to more subjective sources and considerations in determining a plausible range of detainee alienation rates. We initially reviewed the results of nationwide polls and focus groups, mentioned earlier, but supplemented this by conducting special surveys of Iraqi-Americans who were working as contracted cultural advisors for Multi-National Corps–Iraq. These Iraqi-Americans had extensive knowledge of the various areas, to include routine contact with Iraqis throughout the country. We similarly surveyed indigenous Iraqis who were employed by MNF-I as open-source media translators. Comparing the results of these polls, focus groups, and surveys, we decided on a range of low, medium and high detainee alienation effect rates of 5, 10, and 20%, respectively. Figure 3 below summarizes the release, recapture, and detainee alienation rates and formulas used in subsequent analysis.

				Recidivism (Recapture) Rates	Detainee Alienation Rates				
	Release Rates			Low	0.5%	5%			
	Low	High		Medium	3%	10%			
# Released	8000	20000		High	8%	20%			
 Formulas for computing detainee alienation effect: (# indigenous Iraqi insurgent recruits needed) = (# 'derived' insurgent recruits needed) – (# foreign fighter insurgents) (# indigenous Iraqi insurgent recruits needed from sources other than insurgent releasees) = (# indigenous Iraqi insurgent recruits needed) – (# recaptured insurgent releasees) 									
 (# insurgent recruits from detainee alienation effect) = (% of Detainee alienation Effect) x (# indigenous Iraqi insurgent recruits needed from sources other than insurgent releasees) 									
Note: Examples of sources of indigenous Iraqi insurgent recruits from "other than insurgent releasees" include: displaced persons, refugees, and those motivated by Iraqi security force detention policies.									

Figure 3. Summary of Release, Recidivism and Detainee Alienation Rates and Formulas for Calculating Detainee Alienation Effect

Using the rates and formulas in Figure 3 above, the following illustrates how we calculated the number of insurgent recruits likely to come from Iraqis alienated by detention policies. In equation one, if al Qaeda needs 500 total recruits to maintain its current force levels (as might have been calculated from the earlier formula of "# 'derived' insurgent recruits needed") and only five foreign insurgent fighters joined al Qaeda, the number of *indigenous* Iraqi insurgent recruits needed is 495. Inserting this result into the second equation, if the number of new al Qaeda insurgents recruited from those released detainees that are recaptured is 10 (from releasee recapture statistics), the number of indigenous Iraqi insurgent recruits needed from sources **other than** released detainees is 485 (495 – 10). Finally, inserting this number into equation three, if the percentage of insurgent recruits attributed to detainee alienation effect is assumed to be at the higher rate (i.e., 20%, or 0.2), the number of indigenous Iraqi insurgent recruits from detainee alienation effect equals 97 (485 x .2). In this notional example, al Qaeda recruited 10 insurgents from released detainees (that were recaptured), but got 97 more indigenous Iraqi recruits mainly due to these persons being alienated by detainee policy (i.e., recruits directly attributed to detainee alienation effect).

The next step was to develop several roughly estimated cases with differing combinations of release, recapture, and detainee alienation effect rates for further comparison.

Detainee Alienation Effect: Estimated Results, Discussion, and Implications. Without disclosing classified details, results of comparing insurgent recruitment cases suggested new policies *could* lead to a lower detainee alienation effect – i.e., fewer overall recruits and less support for insurgents. In determining this, we developed ten illustrative cases, each consisting of a different release, recapture, and detainee alienation rate combination (see Figure 4 below with cases roughly ordered from those with most recruits from Iraqis being alienated by detentions through those with more recruits from released detainees). While inconclusive, results generally show detainee alienation as having the greater impact on

insurgent force levels.²⁷ In most illustrative cases, the number of released detainees who return to the insurgency is *less than or equal to* the number of insurgents created by detainee alienation (6 of 10 cases, as noted by an asterisk below), even when higher numbers of detainees are released. This suggests that the benefits of lower detainee alienation tend to offset the risks of released detainees rejoining the insurgency – producing lower overall insurgent force levels.

		Detainee		More Recruits	More Recruits from
Illustrative	Recapture	Alienation	Release	from Released	Iraqis Alienated by
Case #	Rate	Rate	Rate	Detainees	Detentions
*5	High	High	Low		++
*3	Medium	Medium	Low		++
*1	Low	Low	Low		++
*2	Medium	Low	Low		+
*6	Low	Low	High		+
*8	Medium	Medium	High	Same	Same
→4	High	Low	Low	+	
→7	Medium	Low	High	+	
→10	High	High	High	+	
→9	High	Low	High	++	

* = Denotes cases producing more or equal recruits from Iraqis alienated by detentions

 \rightarrow = Denotes cases producing more recruits from released detainees

+ = More Recruits

++ = Many More Recruits (normally two or more times as many)

Figure 4. Illustrative Case Results Suggesting Less Insurgents Likely

Results also point to low recidivism as a possible leading indicator of whether the approach is succeeding. In this respect, eliminating cases with higher recruits from released detainees that also exhibit higher recapture rates (i.e., cases # 4, 7, 10 and 9, with High or Medium recapture rates, as indicated by arrows above) further suggests the possibility of yielding fewer insurgent recruits in nearly *all* remaining examined cases (i.e., cases #5, 3, 1, 2, 6, and 8 above). Although recidivism, as measured by recapture rates, was reduced substantially after new TF-134 policies were placed in effect, whether the lower rate would hold was not clear even at the time of this writing in January 2009.

There are other study considerations worth mentioning that also have potential for producing lower insurgent recruitment rates. One in particular, communication initiatives, is covered in more detail later; it basically sought to get the word out to Iraqis about the releases and encouraged releasees to tell friends and families about their more moderate views. Of note, our study did *not* specifically try to account for potential added intelligence benefits from moderate, pro-GoI detainees cooperating with friendly forces after their release. Depending on the degree of this cooperation, we recognized that its effects could have been substantial but felt compelled by our circumstances to merely accept what we considered to be conservative results.

Although inexact, results in the preceding paragraphs are consistent with current COIN thinking and other studies. For instance, an article in Joint Force Quarterly at the time of the study noted that "There are many examples of arrests and internment... [creating] ...more insurgents than the arrests neutralize."²⁸ Results of DARPA-funded Massachusetts Institute of Technology study²⁹ published in July 2007 had also concluded, in general terms, that COIN campaigns that focus on reducing support for insurgents and their recruiting efforts are likely to be more effective in the long run than killing or otherwise "removing" insurgents. Figure 5 is a graph from this study that depicts the long-term advantage of reducing the

population's support of insurgents versus removing insurgents (e.g., kill or capture), a point that COIN doctrine strongly reinforces.³⁰

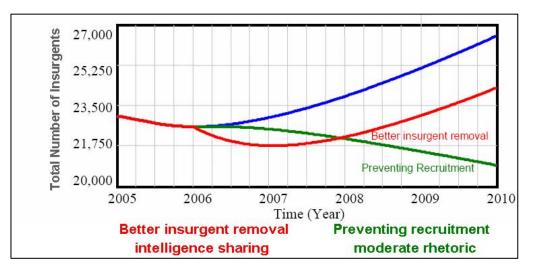


Figure 5. MIT Study Report: Impacts of "Kill and Capture" Versus Preventing Recruitment on Insurgent Growth³¹

Coping with Broader Campaign Goals and Complexities. Besides insurgent recruiting and other related security concerns, the broader assessment had to account for numerous other competing operational objectives and factors, including political impacts; number of coalition troops committed to detention operations; and effects of detainee turnover to Iraq. To deal with this challenge we adapted the Campaign Assessment Methodology (CAM),³² which we had previously developed for MNF-I, into a detainee release multi-criteria decision support system (DSS). CAM uses Joint Campaign Plan political, security, economic, and diplomatic lines of operations objectives as decision criteria within a spreadsheet-enabled decision matrix format to weigh desirability of actions based on how well each action promotes "tipping" Iraqis to be pro-GoI. In total, CAM represented over 60 campaign objectives as specific decision criteria, including certain key social and essential community service considerations. Since our approach differs from more traditional, technically-oriented DoD decision support efforts and is possibly unfamiliar to some readers, it is important to explain why we chose this methodology. In doing so, however, we also note that the methods incorporated have, in fact, been successfully employed in the past. They are not merely "academic curiosities," but practical techniques and – given our first-hand, on-site consideration – well matched for dealing with our complex operational setting and, thus, to our study purposes.³³

In determining an appropriate methodology for handling the complexity and uncertainty associated with the broader aspects of our research, the work of noted experts Richard Hillestad and Paul K. Davis, *Resource Allocation for the New Defense Strategy: the DynaRank Decision Support System*, captured the essence of our challenge and provided an approach well matched to our situation and purposes. These noted experts clearly explain why a decision-support system for applying a multi-objective strategy necessarily implies methods that have generally not been used by DoD decision makers but they point out that this is for a variety of good reasons related to complexity and the fuzziness of many analyses reflecting subjective judgments explicitly. Their approach essentially implements a new decision support paradigm similar to the portfolio approach used by the financial world – our situation had many of the same challenges their approach was designed to handle. First, we were focused on using key capabilities in an ongoing conflict that had multiple conflicting campaign level objectives, where the relative importance of these objectives changed as a function of operational strategy. And the strategy, in turn, is a function of the perceived enemy, our capabilities against that enemy, and other political, strategic, and

economic factors. We were also susceptible to many scenario variations because of uncertainty about the conditions under which a conflict might play out, like warning time before detainees might be granted amnesty or when UN authority for the US to detain Iraqis might end, enemy objectives, assumptions about allies, etc. In this regard, their established approach and toolset, called DynaRank, incorporated methods cited as having been successful in similar past situations. Appearing a good fit, we adopted it for our purpose.³⁴

While not itself a model but rather a decision support tool, DynaRank is a systematic application of "scorecard" methodology. The scorecard, sometimes called a stoplight chart, has historically been a key way of presenting policy analysis results to decision makers. Colors represent the relative ranking of various options based on a variety of measures. Such a display helps to quickly summarize how options fare across the measures of interest. These experts also emphasized the importance of recognizing that high level policymakers must bring a number of judgments and constraints to bear that cannot and probably should not be buried in technical analyses done by their staffs – i.e., one should separate what can be accomplished "technically" from what actual decision makers must assess themselves. DynaRank enabled this more systematic approach appropriate to our study situation and purposes.³⁵

Adapting CAM into a multi-criteria DSS allowed us to more rigorously apply this expert thought in comparing options than what might have otherwise been possible. We did this by using the hierarchical DynaRank "scorecard" framework software running in Microsoft® Excel to rank each option as a function of judgments about the relative importance of contributing to attaining campaign level objectives and criteria, including broad security, political and economic categories. Since senior leaders possessed a strong, nuanced sense of overarching campaign strategy and other factors, we deemed this an appropriate application of the DynaRank methodology. Using DynaRank's hierarchical structure as prescribed, we proceeded to link and integrate several levels of more detailed analysis with those components of campaign level strategy most emphasized by senior MNF-I leaders. In this respect, we were *not* conducting technical-level operations research, but rather better integrating specialized expert judgment and available data to better inform senior level decisions – precisely what DynaRank was intended to do. Key benefits of the approach included intermingling of subjective judgments about capabilities with other quantitative analyses of capabilities, better visual framing of key decision criteria, and dynamic weighting of rating factors to better rank options.³⁶

Better visual framing of the problem that expressed decision criteria and weights derived from details reflected in campaign level plans and strategy helped illuminate key relationships and interdependencies that may have otherwise remained obscure. Referring to Figure 6, the top row depicts the two key campaign-level security and political objectives [Defeating AIF (Anti-Iragi Forces) and Political Reconcil (Political Reconciliation), respectively], as well as two other important accelerated detainee proposal considerations (Implementation Feasibility and Implementation Costs), as its four top-level decision categories. The two main security and political categories are further sub-divided into more detailed. second- and third-level sub-categories represented within the Joint Campaign Plan. Each category and sub-category can be individually weighted as an expression of various assumptions and viewpoints. Note that some columns relate more "technical" (or quantitatively measureable) assessments (e.g., less insurgents), while others pertain to various subjective assessments of interest (e.g., fair treatment), and another implementation costs. With respect to including "costs," Hillestad and Davis specifically cite the difficulties of gauging costs and acknowledge how some professions might disagree with including costs as a criterion within the hierarchy. They contend their methodology addresses these concerns, making the inclusion of costs in this manner perfectly acceptable and, in fact, either preferred or recommended in many cases, provided certain limitations are understood and guidelines followed. Basically, they argue that experienced decision makers are able to draw valid conclusions based on an integrated variety of information presented through their methodology. In our experience we found that this argument held.³⁷

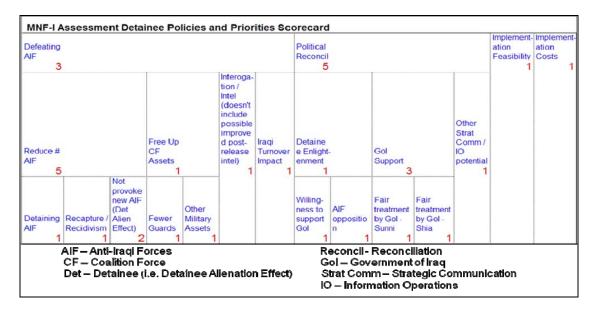


Figure 6. Accelerated Detainee Release Decision Criteria Scorecard Header Summary³⁸

Part of DynaRank's strength is its simple and straightforward use of weights, with the emphasis being not on getting the weights just right but on examining the influence of various factors and views.³⁹ Referring back to Figure 6, red numbers next to each category or sub-category are assigned weights that signify importance relative to other criteria at that level and within that same sub-grouping. For instance, weights across the top level in Figure 6 (i.e., 3, 5, 1, and 1) signify relative weights of the four main categories: "Defeating AIF" has three times and "Political Reconcil" five times the weight of either "Implementation Feasibility" or "Implementation Costs." Looking at the second level under the top-level "Defeating AIF" category, "Reduce # AIF" is weighted five times more heavily than "Free up CF Assets," "Interrogation / Intel," or "Iraqi Turnover Impact." Finally, at the third level under "Reduce # AIF," "Not provoking new AIF (Det Alien Effect)" (third column from the left) has twice the weight of either "Detaining AIF" or "Recapture/Recidivism." Also note the scorecard structure when level-three criteria are omitted (for instance, seventh column from the left, "Iraqi Turnover Impact"). In these cases, no sub-category appears at level three and there is no weight at that level. It is also possible to omit both levels two and three, as in the two far right columns. The simple spreadsheet software application had embedded macros that automatically normalized weights. Thus, weights of 3, 5, 1 and 1 for the set of four top-level measures were actually transformed to 0.3, 0.5, 0.1 and 0.1, respectively, when used to calculate and aggregate scores for each option. Aggregation included automatically calculating the combined weights for any column expressed as a product of all the normalized weights in its hierarchy and assigned score(s). Weights did not have to total a certain number at any of the three levels; these numbers could vary (e.g., 1, 5, 10, 100, etc.). To start off, we approximated and directly assigned weights based on our initial understanding, but we reviewed, further substantiated, challenged, and tested their credibility with other experts over the course of working group sessions. This culminated in an ultimate review by the MNF-I Commanding General who cited the scorecard as closely approximating his appreciation of the situation.40 The approach's flexibility, inherent in its ability to dynamically adjust weights to accommodate alternate viewpoints, proved very useful and a key point to how we handled uncertainty.

As advertised, DynaRank's ability to examine and vary underlying assumptions was fundamental to its purpose, and especially critical to how we handled "uncertainty analysis." Unlike other multi-criteria analysis methods that depend on myriad assumptions that cannot be readily altered (or are expressed in constructs more familiar to technical-level analysts than to senior leaders), DynaRank offered a practical way of constructing alternative "views" of the problem.⁴¹ The circumstances of our study made it nearly

impossible to alter and examine each assumption one by one. With DynaRank, we constructed alternative "views" consisting of a different set of many assumptions corresponding to a key senior, or other, level perspective. Instead of merely considering "point solutions" in our broader analysis being discussed here, we also factored in the plausible ranges of key factors, other considerations, and results from the earlier part of our study effort dealing with estimating the impacts of detainee alienation effect. Incorporating our earlier study work in this manner further focused and enriched our exploration of differing views with other expert individuals and groups. In this respect, the spreadsheet software provided the dynamic flexibility needed within a fairly intuitive decision matrix framework format.⁴²

This decision matrix format, in the enabling spreadsheet depicted in Figure 7, helped logically organize and explicitly relate the various options, groups of variables, and substantiating data with dynamic weighting and rating of likely outcomes. This integration aided analysis and general sensitivity testing by helping to clarify and order impacts that, in turn, facilitated more agile exploration of assumptions and alternative courses of action during individual and group sessions. Sessions mainly entailed stimulating more vigorous group debate and rapidly distilling key points of competing arguments.

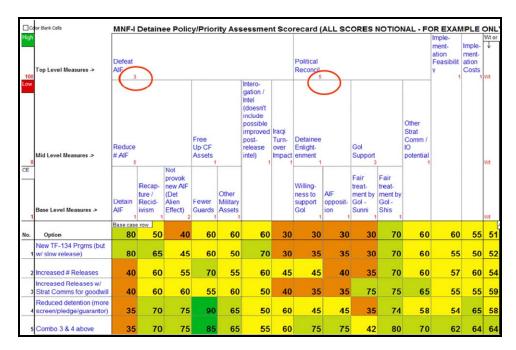


Figure 7. MNF-I Detainee Policy Assessment Scorecard Showing Course of Action Options and Objectives with Notional Individual and Weighted Aggregate Scores

While the DynaRank methodology may at first appear to merely produce a first-order ranking of policy options, our experience indicates the results are more than that. The DynaRank methodology basically depends on whether the underlying evaluations in the scorecard are understandable and credible. We used the matrix as a common conceptual construct, or framing, of the problem when dealing with study participants, whom we considered functional and subject matter experts (e.g., combat operations, provost marshals, intelligence, Foreign Service Officers, and Iraqi cultural experts). Although this construct, or framing, was based on the formally promulgated Joint Campaign Plan and detainee release proposal details, we necessarily assumed a level of familiarity with these details that may not have been universal. To ensure a degree of uniformity in data interpretation and application, we personally facilitated all interviews and working group sessions, manually mapped supporting data into the matrix, and handled any major data transfers or transformations.⁴³ Recording and summarizing participant views in terms of matrix weights and scores enabled better tracing of substantiating data by explicitly linking it within the

matrix. Data came in diverse types and forms, including objective and subjective; quantitative and qualitative; statistical measures and metrics; polls and surveys; modeling and simulation outputs; expert opinion, etc. Participants provided data directly or, if subsequently identified by other means, we linked it in later. While DynaRank allows for direct embed of analyses as low-level (high-resolution) spreadsheet models (e.g., a particular war-fighting scenario or other assessment), we did not use this feature. Any detailed analyses used to substantiate positions were thus off-line (not part of DynaRank itself), meaning that we had to manually link them in. Due to various circumstances, including strongly-held emotions, more detailed analyses frequently did not exist. Senior leaders and their staffs often relied on their general and specific knowledge and intuition to make judgments and justify positions. As DynaRank also acknowledges, we recognized these were potentially as credible as anything that might be "generated by legions of analysts," provided they were reasonably substantiated and considered with sufficient rigor and objectivity. As groups embraced the framing construct, we were able to inject more rigor by introducing 'in-stride' changes of weights, measures, and other factors to dynamically check and challenge different perspectives and test sensitivities. This produced more comprehensive exploration of the problem and proved especially helpful to considering Iraqi, versus US or western, perspectives in certain areas (e.g., detention policy not provoking Iraqi populace, Sunni and Shia perspectives about fair treatment by the government, etc.).44

To represent the detainee screening and moderation policy base case as it existed in fall 2007, we had experts indicate how well existing policy supported each criterion by assigning a score from 0 to 100.⁴⁵ The top row of colored squares with black numbers in Figure 7 shows a notional base case scoring. In general terms, a "0" indicates experts assessed the option in the left-hand column as providing absolutely no support for satisfying Base Level Measures, a "100" the very strongest possible support. DSS scores reflected a wide range of inputs and means and provided a gauge of combined contributions to achieving each objective measure that scaled linearly, with the score from 0-100. In deriving final scores we mainly relied on natural language discourse (versus mathematical computations) to focus individual and working group level scoring sessions to explore areas where scores significantly differed. We resolved key points and derived ultimate scores by fostering more rigorous debate and discourse, affording higher validity to the more substantiated positions as determined by the most compelling facts, evidence, and expert opinion offered. Once scored, the spreadsheet automatically calculated an aggregate weighted score in the far right-hand column based on the tiered weighting scheme and each column score in that row, as already explained. Dynamic weighted aggregation of scores was very useful for comparing options.

Starting from the pre-change-of-policy base case just discussed, we used the methodology and scorecard approach to produce a refined ranking of policy options. This entailed additionally working with the individuals and groups in a manner similar to that explained above to incrementally explore each of the proposed detainee engagement options (including aggressive communication efforts). This incremental process ultimately yielded increasingly positive results. Referring again to Figure 7, the far left column shows options progressing from the initial baseline with similar assessments of each of the proposed options, including improved programs but with continued lower release rates; increased releases; increased releases with an aggressive communication plan; reducing detainee intake through better screening and other measures; and, ultimately, a more intricate combination of several options. Rather than mathematically combine scores to derive the last option, we scored it separately as we had the other options. Of note, the "Strat Comms [strategic communications] for goodwill" option included a range of actions to take advantage of detainee releases, including their return to localities and follow-up stories. While the aggregate score for each option registered negligible gains, the more intricate option that combined several proposed measures ranked highest and was thus deemed best overall.

Another benefit was helping to provide more robust, multi-disciplinary treatment of the problem, precluding a 'group think' solution. First, the matrix framework provided a degree of organizing rigor, forcing more comprehensive consideration of a broader range of relevant criteria. This rigor enabled

individuals and groups to better appreciate the broader context while systematically focusing in on specific decision criteria, one at a time. The framework also served as a common way to order substantiating facts and evidence relative to options, criteria, and opinions posed in the scoring sessions. Automatically calculating aggregate scores for each proposed option provided an on-the-fly summary of deliberations and a quick way to compare and gauge contributions of various actions and combinations of actions. This allowed us to rapidly identify where people agreed and to more meaningfully probe key points of difference. The essence of this probing was to stimulate more vigorous debate, enhancing the productivity of natural language discourse and promoting better exploration of details about how to implement each option. In short, more dynamic, multi-disciplinary treatment of the problem allowed study participants to rapidly identify relevant factors, facilitated more comprehensive exploration of the problem space, and assured the capture of key points of competing arguments for later review by senior leaders. In this regard, the study was *not* focused on reaching a consensus but, rather, on more completely exploring relevant options, variables, factors and interdependencies to report objective findings. Flexible and robust, the approach proved consistent with emerging doctrine, new operational military practice, and research experts that advocate better framing of complex problems to improve quality and timeliness of results.⁴⁶,⁴⁷,⁴⁸ Some of these same attributes also helped in checking a "worst case" scenario.

One of the most notable benefits of at least partially quantifying results of combining objective and subjective data in a spreadsheet-enabled decision-matrix format involved a quick check of assumptions related to a "worst case" scenario. Figure 8 shows the key aspects of this worst-case check (note Figure 8 includes the same Figure 7 notional scores, except for the substituted "0" scores in the lower left-hand columns). To do this we reversed the overall security and political weights (from 3 to 5 and from 5 to 3, respectively) and assigned "0" scores to the two key security related third tier sub-criteria in the spreadsheet matrix (i.e., "Detaining AIF" and "Recapture / Recidivism"). But even given these decidedly reversed assumptions, results still ranked accelerated release as the best for achieving Joint Campaign Plan objectives. Even though absolute scores for each course of action's total were lower in the worst-case test, the more intricate combination of options still persisted as the highest ranking. As an added bonus, this quick check took only a matter of minutes versus hours or days.

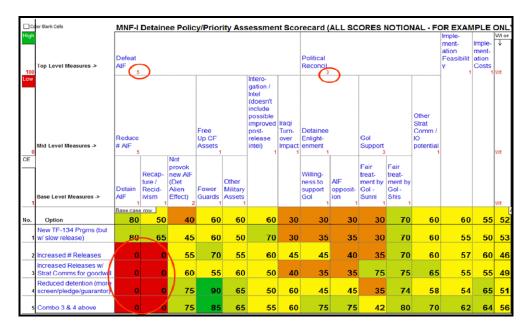


Figure 8. MNF-I Detainee Policy Assessment Scorecard Showing "Worst Case" Scenario Considerations, Weightings, and Notional Individual and Weighted Aggregate Scores

While DynaRank filled a gap in existing methods and tools by helping to produce a first-order ranking of policy options in minimum time that proved operationally useful, it has limitations that need to be understood. First, we suspect that the "additivity" of effects related to costs, which DynaRank treats linearly, was at least somewhat nonlinear. Depending on the degree of nonlinearity, cumulative results shown may be meaningless. This is because measures are very likely not independent. Thus, the additive accumulation of weighted effects across measures may reflect more weight than realized on some measures. Also, while implying complicated mathematical issues related to multi-attribute theory, our situation lent itself more to overcoming these theoretical limitations through extensive sensitivity testing and care in how we structured and restructured the problem. Basically, we considered all of these points to some degree and developed abbreviated guidelines for each. For example, besides extensive sensitivity testing as already explained to frame the problem in more relevant terms, we derived our understanding of decision criteria, goals, and notional value functions directly from the Joint Campaign Plan (JCP) to assist in standardized scoring. While the JCP included an authoritative, commonly recognized list of near- and longer-term goals, conditions, and objectives, aspects were open to our subjective interpretation. Although we would have preferred to be more precise in this treatment and we recognize that others accustomed to technical level operations research treatments and results may take exception, time constraints and the magnitude of what had to be accomplished precluded more exactness or formal documentation. We must, however, point out that even though we carefully stressed the inexact nature of the estimates and considerable uncertainty of results in our briefing to the MNF-I Commanding General, he appeared comfortable with the work and its output, citing it as "very useful." We encourage others to consider this response in their overall assessment as being from someone well positioned to judge the work's merit.49

Broader Campaign Implications. Study results generally showed that faster release of detainees was likely to both reduce ill will among Iraqis and inject greater numbers of detainees with more moderate views of Islam back into the population. Though some released detainees will no doubt rejoin the insurgency, data as of August 2008 suggested the overall rate should be much lower than in the past, due mainly to the various initiatives described here. Interestingly, in many cases most of the insurgents coming from releasees should be *fewer* than the total number of recruits the insurgents are likely to have gained from the general population due to a lower "detainee alienation effect." After completing TF-134's moderation programs, many released detainees have the potential to become a powerful force for shaping and convincing others to reject Islamic extremism and the Iraqi insurgents.

Overall, study results pointed to an aggressive information campaign and low recidivism as particularly important to achieving campaign goals. Lower recidivism seemed dependent on training and education programs in detention facilities as well as effective reintegration of releasees back into society, to include securing a job, education, job training, etc. New accelerated release policies, which might have affected many of the 23,000 detainees held when the decision was made in December 2007, seemed to be producing lower recidivism rates as we were leaving country in mid-2007. In the months since implementing the program and up through August 2008, recapture rates remained under 1%, substantially less than historical rates of 6 to 9%.⁵⁰ The rate of change at that time suggested that recidivism probably would not reach dangerous levels but, even then, we anticipated that many more months would be needed to see if those rates would hold. Interestingly, while TF-134 initiatives are vital, ultimate success may depend more on how other MNF-I elements follow through on and synchronize the broader communication campaign and releasee reintegration efforts during implementation.

Senior Level Decision

Using the DSS to compare policy alternatives across decision criteria with differing assumptions about recapture rates, insurgent recruiting, and political reconciliation benefits, suggested that the accelerated release policy was the preferable course of action. Possibly more important, the study illuminated and at least partially quantified the value and impact of effective strategic communication and of low recidivism.

With a neutral to positive effect on security and a potential for major improvements to political reconciliation from both the release of detainees (a major demand of Iraqis, especially Sunnis) and the impact of more moderate Iraqis in society, results supported the accelerated detainee release proposal but with an aggressive communication component and close monitoring of recidivism.

General Petraeus approved TF-134's accelerated release proposal, with the addition of a strong information plan to maximize political reconciliation benefits, in December 2007. In supporting this decision, the study mainly served to reinforce and partially quantify the impact of an aggressive information component while illuminating the potential importance of measures to ensure reduced recidivism. Upon being briefed, General Petraeus fully acknowledged the uncertainty involved but cited the multi-criteria DSS approach and results as being "very useful... [and] ...rigorous." In additionally encouraging us to publish the results of our detainee experience and work, he went on to elaborate on how other, more detailed technical operations research products had frequently failed to meet his decision needs and mentioned a specific example of some results he had recently received.⁵¹

Post-decision Developments. Even after the decision, controversy over accelerated detainee release persisted. TF-134's view that detainees could not only be moderated, but could also become a force for spreading moderate beliefs across Iraqi society continued to face opposition from those who thought it was best to keep detainees locked up for as long as possible. Some commanders reported that locals also continued to oppose detainee releases, characterizing detainees as criminals or fearing that they would rejoin the insurgency. While some of those concerns were no doubt legitimate, they sometimes masked another problem. It was not uncommon for one Iraqi to steal from another and provide false information to authorities, spurring a false arrest and detention. Fear of revenge therefore motivated some of the release program's most ardent opponents.

As of April 2008, the program was continuing to experience growing pains, partly because no single organization with the requisite range of varied competencies had total, end-to-end responsibility for holistic program implementation or results. As of that date, release rates were still lower than TF-134 had initially proposed. Efforts to help spread the news of faster release and assist in transmitting moderate messages had still been only partially developed and implemented. Local reintegration efforts, critical to curbing recidivism, were also fragmented. Some disparities like these were to be expected, especially in a dynamic and uneven security environment. Despite the challenges, progress was being made to effectively coordinate accelerated detainee evaluation and release.

As of January 2009 with the signing of the Strategic Framework Agreement, the mass turnover of detainees forewarned in fall 2007 appears to be coming to pass, albeit without the catastrophic consequences some feared. Whether the smooth transition experienced so far is the result of the December 2007 decision, subsequent implementation actions, or something else entirely, we will probably never know for sure. We do know, however, that when asked to weigh in on a particularly contentious and complex decision situation and produce quality results quickly, the MNF-I Commander found the results of our adaptation of a multi-criteria decision support methodology rigorous and useful to informing his tough decision and subsequent implementation actions.

Broader, DoD-wide Implications

Based on results in Iraq, consistent, wide-spread use of a flexible, multi-criteria DSS could help address one of DoD's biggest barriers to improved effectiveness: inconsistency in how the Department frames and considers problems for decision. In this respect, lack of a profit bottom line need not preclude DoD from adapting the proven commercial practice of using a common DSS, adapted to the Department's unique operational risk-based needs. Although DoD's situation is very different from the commercial sector, with many more objectives and other complications, it, too, can benefit from better analysis,

collaboration and decision-making by adopting a specially tailored, flexible multi-criteria DSS for department-wide use.

To reap benefits similar to that of the commercial sector and those experienced in Iraq, DoD should adopt its own DSS. At the very basic level, this entails adopting a "multiple criteria decision-making" (MCDM) approach that can be enabled by spreadsheet applications. While relatively simple in concept, DoD's adoption of such an approach would allow it to harness the power of improved analysis, greater linkages to underlying data and details, common data display formats, accountability for results, and more cost-effective resource management.

The experiences one of us has had rotating between jobs in business, the Secretary of Defense Comptroller's Office, a leading DoD think tank, and the Air Force, point to inconsistency in how DoD frames and considers problems for decision as one of the biggest barriers to improved effectiveness. Much commercial effectiveness stems at least in part from consistent use and understanding of a familiar DSS – namely, the income, or profit and loss (P&L) statement. Commercial businesses use the P&L accounting approach and spreadsheet formats to consistently frame and present key information. This provides persons from various disciplines who view underlying financial and other data in particular ways a common framework that can be easily adjusted to enable a shifting of perspectives to consider details from differing viewpoints. Flexible shifting of perspectives facilitates better group discourse and fosters greater understanding across disciplines and organizational boundaries, often key ingredients to considering larger organizational group goals within the broader organizational, or situational, context.

While a commercial P&L spreadsheet would be inappropriate for DoD, using a DSS can enhance its decision processes. For instance, lack of a DSS frequently forces senior leaders to rely on an ad hoc mix of PowerPoint briefings, 'group think' outputs, and 'gut instinct' rather than more rigorous consideration of quantified results. Briefings, for instance, often reflect a collective staff consensus substantiated mainly by truncated text or abstract graphics. This occurs when processes incrementally aggregate cross cutting details – a practice that frequently obscures underlying complexities or nuances, leading to overly simplistic outputs. Instead of presenting competing positions with associated justifying logic and details for senior level consideration, results frequently present only variations of a single course of action with a consensus recommendation and minimal substantiation. Results rarely illuminate competing subordinate level arguments and concerns or group processes, dynamics, or accountability to any significant degree. Even when such aspects are covered, they usually fail to address key lower level detail or cross-cutting factors. Brevity notwithstanding, briefings frequently lack critical information senior leaders need to ascertain broader implications and interdependencies at their levels. Lacking sufficient details and relegated to 'group think' staff consensus favoring a limited set of options, senior leaders are often forced to rely upon their own intuition and 'gut feel' in making important decisions. Such limitations are now preventing DoD from attaining the effectiveness that Defense leaders, the Government Accountability Office, and others believe it can and must achieve.

The MCDM DSS does not thoroughly "model" a decision or "compute" an answer but, rather, it helps consider objectives and assumptions and analyze (and shape or alter) alternatives through more comprehensive, multi-disciplinary treatment of the problem. It does this by consolidating and arranging a diverse array of objective and subjective data in a flexible, spreadsheet-based format. When used in dialogue with decision makers, this ordering and spreadsheet flexibility permits dynamic selection of weights for criteria, which then stimulates better group discussion of implications of differing weights, ratings, and alternatives and on-the-fly adjustments. Basically, such a MCDM DSS approach provides a common conceptualization of the problem and harnesses the power of spreadsheets for use in decision-making. It does this by taking a wide variety of facts, evidence, and consolidated knowledge gained from any number of venues and converts it into a succinct 'decision format.' In so doing, it serves to promote

improved analysis, greater linkages to underlying data and details, common data display formats, accountability for results, and more cost-effective resource management.

After making the decision, the MDCM Scorecard associated with the best option can be saved and used to summarize and document the decision, together with any expected performance results. This is precisely how the income statement is used in business. Beyond planning a line of business and submitting a budget for executing that line, once the "base plan" (i.e., income statement) is approved, it is not left buried in a PowerPoint briefing but, rather, is regularly compared to the "actuals" to see how managers are doing in executing the plan—thus, holding them directly accountable for results. MCDM would also allow for tailored DoD use of related techniques like "Values Focused Thinking" and the "Analytic Hierarchy Process." It also has good potential to be closely coordinated with other emerging approaches, like the Joint Capability Area (JCA)-to-effect matrix mapping spreadsheets used in the Institute for Defense Analyses Linking Plans to Resources (LPTR) methodology that Joint Staff J8 has recommended that all Combatant Commands use in their capability based planning efforts (e.g., preparing IPLs – integrated priority lists).

Despite mixed DoD understanding and reaction to using a MCDM DSS and business income spreadsheetlike format, favorable review of its results by the MNF-I Commander encouraged us to further explore the idea. Although some "operations research" analysts in DoD use MCDM, many are reluctant to present this type of analysis to decision-makers because it would mean having to educate them on its use. For instance, one three-star officer rejected using a MCDM DSS in a Pentagon brief, partly because he thought it too complex and detailed, but mainly because he didn't have the time to explain to senior executives how it worked. But business executives look at far more complex financial models and spreadsheets, routinely "drilling down" into details to probe for bad assumptions and to better understand key issues. The lack of a DSS for DoD continues to hinder the kind of rigorous, multi-disciplinary group discussion, analysis, and decision making reviews that are common in business—and that are vital for instituting cost and risk discipline and tradeoff effectiveness.

Conclusion

Signing of the Strategic Framework Agreement may preclude us from ever knowing whether initiatives studied in Iraq will complement the "Awakening" to convince more Iraqis to reject extremist views. By themselves, detention policy changes will not turn the insurgency around but they already represent a new patch in the larger quilt of counterinsurgency studies. Although impacts of accelerated detainee release and other innovations may seem counterintuitive to many, new COIN doctrine stresses the importance of adaptability and innovation to achieve success in turbulent, unfamiliar, and uncertain situations. As Iraq regains its full sovereignty, including the pending transfer of detainees from US control, we may not ever know for sure whether new detainee policies and other COIN innovations made a difference, but our troops and senior leaders should be credited with taking the bold action needed and making the decisions necessary to open the window for political progress and success.

As in Iraq, DoD should take the bold, innovative action needed to widely adopt a multi-criteria decision approach. Implementation of just such an approach is possible today using the same software employed in Iraq (an Excel macro/visual basic program) as its principal resource and management framework for decision-making. The diversity and enormity of DoD does not preclude use of a common DSS—just as businesses in diverse industries all use a P&L with the same basic format. While the criteria, basic elements of value, and overall consequences are certainly different in military situations than in most businesses, these distinctly different venues share a common need to incorporate multiple objectives and criteria in their resource management DSS. If anything, DoD stands to benefit even more from adopting this approach than the commercial sector, and an Excel-based MCDM DSS offers plenty of flexibility to handle DoD's increased diversity. In this respect, lack of a profit "bottom line" need not be a barrier to achieving increased effectiveness. DoD could greatly benefit from using a DSS similar to that used in

Iraq to improve consistency, analysis, collaboration, and accountability in its decision-making. Ideally, this implementation includes DoD's adopting a Multiple Criteria Decision Support System and directing its consistent use throughout the Department.

⁴ As used here, the general term "care and custody" refers to humane handling of detainees and conduct of detention personnel as established by Geneva Convention agreements, international law, various Service and Joint doctrine publications, as well as OSD and other Directives.

⁵ General Stone 14 December 2007 interview.

⁶ TF-134 documents describing their moderation programs and mission. (Note: While these documents are For Official Use Only, aspects described here are unclassified and cleared for public release)

⁷ "US Detention in Iraq," summary sheet of information for MG Stone, Commander Task Force 134; provided to authors, November 2007. (Note: While the cited summary sheet is For Official Use Only, information used herein is unclassified and been approved for public release)

⁸ General Stone 14 December 2007 interview.

⁹ William S. McCallister, *COIN and Irregular Warfare in a Tribal Society*, 2007 Pamphlet, pp. 14 and 24; Elizabeth A. Nathan and Kevin M. Woods, "Saddam and the Tribes: How Captured Documents Explain Regime Adaptation to Internal Challenges (1979-2003)," Iraqi Perspective Project Series Phase II, Institute for Defense Analyses, Joint Advanced Warfighting Program Paper P-4263, August 2007, pg. 37.

¹⁰ General Stone 14 December 2007 interview citing preliminary results of an on-going TF-134 commissioned RAND study. Other studies also cite collectivistic societies that consider the group or the community as more important than any given individual as having distinctly different, but somewhat predictable behavior patterns. Shira Fishman, et al, "Predictors of Support for Anti-Western Terrorism," National Consortium for the Study of Terrorism and Responses to Terrorism Research Brief, October 2006, <u>www.start.umd.edu</u>.

¹¹ General Stone 14 December 2007 interview.

¹² MNF-I TF-300 TIFRC (Theater Internment Facility Regional Center) Services Brief, undated; additionally confirmed and supplemented by COL James B. Brown (former Commander, Camp Bucca) e-mail, 19 Mar 08.
 ¹³ MNF-I Battle Update Assessment Briefing, 14 Feb 07, Slide #28.

¹⁴ General Stone 14 December 2007 interview.

¹⁵ Joshua Partlow and Amit R. Paley, "Maliki Renews Call to Give Some Insurgents Amnesty," Washington Post Foreign Service, November 12, 2007; Page A16, accessed http://www.washingtonpost.com, 15 Mar 08

¹⁶ Brigadier General Janis Karpinski, US Army Reserve, former Commander, Abu Ghraib Prison, speech the Commonwealth Club, "What Really Happened at Abu Ghraib?, 8 Apr 2005. Following this speech she was eventually demoted for her lack of insight regarding the abuse.

¹⁷ Brigadier General Janis Karpinski, US Army Reserve, former Commander, Abu Ghraib Prison, telephone interview with Leon Warden, Signal City Editor, 29 June 2004.

¹⁸ In our judgment the majority of detainees probably were guilty of at least supporting insurgents, while payments from insurgents for working and the fear of retribution if they refused were the two most likely motivations.

¹⁹ Besides other experts and sources specifically cited (including US Army FM 3-24), this review included many US Army Combined Arms Center Military Review Counterinsurgency Reader sources and other expert works by: David Galula, James Corum, Brian Reed, LTC John F. Hussey, the 1968 RAND Vietnam Hamlet Evaluation System Study, and the J.M. Carrier and C.A.H. Thomson, "VietCong Motivation and Morale: The Special Case of Chieu Hoi," RAND study of May 1966.

²⁰ Frank G. Hoffman, "Mind Maneuvers," Armed Forces Journal, April 2007.

²¹ Army FM 3-24, Counterinsurgency, Dec 2006, Table 1-1: Successful and unsuccessful counterinsurgency operational practices.

²² US Army FM 3-24, Counterinsurgency, Dec 2006, pp 1-26 – 1-28.

²³ Ali A. Allawi, *The Occupation of Iraq: Winning the War, Losing the Peace*, Yale University Press, 2007, p. 187.

¹ The authors used DynaRank, a multi-criteria decision support system developed by RAND. For more details see Richard Hillestad and Paul K. Davis, *Resource Allocation for the New Defense Strategy: the DynaRank Decision Support System*, Santa Monica, CA: RAND, 1998.

² Detainee alienation effect: Study-coined term indicating the degree that elements of the Iraqi population are driven to align with insurgents and other maligned actors due to actions by counterinsurgents.

³ Major General Douglas Stone, Commander, TF-134, interview with the authors, 14 December 07.

²⁴ Efforts to incorporate Iraqi perspectives include closely interacting with Iraqi-Americans working in Iraq who collect information and maintain a continuing dialogue with a large network of Iraqis across the country and interacting with other Iraqis living in Baghdad and working in the International Zone for MNF-I open source intelligence as media translators. This latter group is noted for publishing the Baghdad Mosquito and its associated weekly "rumors" session reports.

²⁵ While influenced by other models and works, this Insurgent Growth Model was devised by the authors for use in their analysis.

²⁶ While the commonly referred to "9010 Report" is unclassified, the MNF-I staff traditionally consolidates additional authoritative classified supporting information and forwards it along with their input.

²⁷ While not disclosing actual numbers, this does provide a good, relative representation of the comparison the authors developed in their analysis.

²⁸ Captain Kyle B. Teamey, USAF, "Arresting Insurgency," Joint Forces Quarterly, Issue 47, 4th Quarter 2007.
 ²⁹ Nazli Chourcri, et al, "Using System Dynamics to Model and Better Understand State Stability," Working Paper #2007-03 of the Composite Information Systems Laboratory at the Massachusetts Institute of Technology, July 2007, pg 18.

³⁰ Army FM 3-24, Counterinsurgency, Dec 2006, Table 1-1: Successful and unsuccessful counterinsurgency operational practices.

³¹ Nazli Chourcri, et al, "Using System Dynamics to Model and Better Understand State Stability," Working Paper #2007-03 of the Composite Information Systems Laboratory at the Massachusetts Institute of Technology, July 2007, pg 18.

³² Campaign Assessment Methodology (CAM) rates how key factors affect Iraqi views and support for the national level GoI by using campaign level objectives as criteria to weigh the desirability of actions based on how each promotes "tipping" Iraqis pro-GoI. Adapting it into a multi-criteria decision support (DSS) was fairly simple. Besides being able to import and directly reapply public opinion and "atmospherics" data from CAM into the Iraqi detention DSS situation, this approach afforded many other benefits.

³³ Richard Hillestad and Paul K. Davis, *Resource Allocation for the New Defense Strategy: the DynaRank Decision Support System*, Santa Monica, CA: RAND, 1998, pg. 11.

³⁴ Ibid, pg. 11.

³⁵ Ibid, pg. 11.

³⁶ Ibid, pp. 4, 11.

³⁷ Ibid, pg. 11.

³⁸ Detainee Release Scorecard Header Summary as developed by the IDA assessment team.

³⁹ Hillestad and Davis, pg. 84.

⁴⁰ General David Petraeus, Commander, MNF-I, Summary remarks at Accelerated Detainee Release briefing with the authors, 4 Dec 07.

⁴¹ Ibid, pg. 16.

⁴² NATO Code of Best Practice (COBP) for C² Assessment, DoD Command and Control Research Program (CCRP), Assistant Secretary of Defense (C3I), Revised October 2002, pp. 247-257.

 43 Compared to more controlled study settings (e.g., exercises, experiments, etc.), our situation made it impossible to apply all data collection and handling principles as precisely as we would have preferred. We did, however, attempt to adhere to "best practice" guidelines wherever possible. In that regard, being the two main researchers working the study did at least help to standardize how data was collected, recorded, interpreted, and transformed to some degree. *NATO COBP for C² Assessment* Ibid, pp. 190, 232, 239.

⁴⁴ Ibid, pp. xii, xv.

⁴⁵ Hillestad and Davis use the term "utility value" in describing their similar scoring methods. It is obvious that their methodology recognizes that Value and Utility in many professional circles have their own theories and are used to indicate whether the subjective assessments of an option's score on each metric were compiled while considering the decision-maker's attitudes towards risk or uncertainty (Value, uncertainty not considered in the assessment; Utility, uncertainty was considered in the assessment). While we certainly considered risk and uncertainty in our approach, we use the term "score" to reflect a first-order ranking of policy options. See Hillestad and Davis, pg. 57.

⁴⁶ The US Army's Commander's Appreciation and Campaign Design (CACD), draws from several current and classic elements of operational design. It calls for a different approach to problem solving that includes a well-framed, conceptual formulation by commanders that enhances common appreciation of key aspects to better guide subsequent staff action. This formulation, then, is a creative, heuristic and iterative activity done upfront in the planning process. Once a commander formulates his problem appreciation he, then, turns it over to the staff for

execution. The United States Army Commander's Appreciation and Campaign Design, TRADOC Pamphlet 525-t-500 Version 1.0, United States Army, 28 January 2008, pg. i.

⁴⁷ Colonel Stefan J. Banach, US Army, and Alex Ryan, Ph.D., *The Art of Design: A Design Methodology*, Military Review, March-April 2009, pp. 105-115. Article also references a related companion article in the same issue that expands on US Army and Joint leader education efforts: Colonel Stefan J. Banach, US Army, *Educating by Design: Preparing Leaders for a Complex World*, Military Review, March-April 2009, pp. 96-104.

⁴⁸ Dr. Davis refers to this as "multiplicity of conflicting goals" in his *Regaining Equilibrium: How Defense Planning Can Help US Forces Balance Multiple Goals*,

http://www.rand.org/publications/randreview/issues/rr.spring.99/index.html, accessed 15 Feb 07. ⁴⁹ Hillestad and Davis, pg. xvi.

⁵⁰ Yochi J. Dreazen, "US Begins Freeing Thousands Of Captives In Iraq Detention Policies Have Been Source Of Public Anger," Wall Street Journal, April 18, 2008, Pg. 3, as confirmed and supplemented by e-mail with TF-134 PA, 21 Apr 08.

⁵¹ General David Petraeus, briefing with the authors, 4 Dec 07. He also cited this work as satisfying his decision requirements better than another, more detailed technical operations research product he had recently been briefed on.