BRAC 2005
Technical Joint Cross-Service Group (TJCSG)
Meeting Minutes of 4 January 2005

BG Fred Castle chaired the meeting until the arrival of Mr. Al Shaffer. The agenda is enclosed in attachment 1. The list of attendees is enclosed in attachment 2. Read ahead materials for the meeting are enclosed in attachment 3. The primary objective for the meeting was to review COBRA Guidelines and Scenario Incompatibilities. The agenda topics are listed below in the order in which they were covered. The key points, decisions and action items from the meeting are as follows:

COBRA Guidelines

Key Points:

- Innovation Subgroup Lead explained a proposed process for the subgroups to use in applying judgment to and clarification of field data. This process was developed by a team led by BG Castle on Thursday, 30 December 2004.
- The TJCSG will need to document any assumptions applied to data from the scenario data call.
- The Subgroups have the required expertise needed to apply the proposed process.
- The TJCSG and the Subgroups should decide when the movements of personnel occur and how many positions will be eliminated. RFCs are not necessary for this process.
- The TJCSG can run excursions using COBRA. The key is to develop assumptions prior to conducting COBRA and to clearly document using the footnote feature the assumptions used.
- Any MILCON issues can initially be validated using the TJCSG Capacity Analysis results. The TJCSG Service Principals can resolve any additional MILCON issues with their respective Service BRAC Offices and the field installations
- The TJCSG needs to determine how to deal with any required movement of FFRDCs.

Decisions:

- The TJCSG will need to approve all COBRA Runs requiring assumptions to be applied to the data.
- The TJCSG made various additional changes to the proposed process. Innovation Subgroup Lead took an action to modify the proposed process in accordance with the TJCSG guidance and to present it again at the 6 January 2005 TJCSG Meeting.
- The TJCSG will meet via telecon on a daily basis at 1700 hrs EST, starting tomorrow, to review all COBRA runs requiring assumptions to be applied to the data, as well as the status of other COBRA runs and scenario data calls. Analysis Team will provide a location on the portal to provide any necessary read aheads for these telecons.

Scenario Incompatibilities

Key Points

- The TJCSG agreed to track the outstanding RFCs to closure, use the data set to calculate the final values for Military Value and Capacity. Any discrepancies, including the explanations for any discrepancies, between Scenario Data Call data and Military Value Data Call data and/or Capacity Data Call data will be documented by the Subgroups. However, Capacity and Military Value will not be recalculated using Scenario Data Call data. Scenario Data Call data will only be used to evaluate scenarios.

Decision

- The 2 slides presented by a TJCSG Principal will be consolidated into a single slide.

Scenario Inconsistencies Issue Paper (#12-28-04-01)

Key Points

- The Navy CIT member presented his paper outlining concerns regarding strategies and supporting rationale used by the C4ISR Subgroup in determining which sites would be receivers versus donors for TECH-0008.
- The C4ISR Subgroup Lead stated that their scenarios have been consistent with the TJCSG guidance and their rationales have been documented..
- It was noted that the TJCSG needs to review the rationale for all candidate recommendations to ensure the TJCSG guidance had been consistently applied.

Decisions

- The TJCSG decided to have each of the Subgroup Leads document the underlying rationale for strategies they used for each of their scenarios that turn into official TJCSG recommendations.
- The CIT will review all candidate recommendations to ensure that the supporting rationale is consistent with TJCSG guidance.
- These strategies will be reviewed once again by the TJCSG prior to submitting any formal recommendations.

C4ISR Subgroup COBRA Matrix

Key Points

- No Army data has been received for scenarios 8, 42, 30 and 47.
- It was recommended that the Analysis Team maintain the status charts for each of the Subgroups as the Analysis Team has the data required to complete the spreadsheet,

with the exception of the "Validated" column. The "Validated" column will be maintained by the Subgroups.
- "Validated" means the data has been received and the Subgroup has determined the data is usable and is adequate for use in COBRA.

Decisions

- The Analysis Team will maintain the Scenario Data Call status charts for each of the Subgroups.
- The Subgroups will be prepared to discuss the Analysis Team's SDC Status sheet and any associated "reds" at tomorrow's TJCSG teleconference call.

COBRA Template

Decisions:

- The Analysis Team will update the template to be consistent with the COBRA Process agreed to by the TJCSG today.

Closing Comments

- For the issue regarding Newport, the scenario dealing with the disposition of Newport will be remanded back to the Navy.
- The TJCSG will use the Service BRAC Offices for issuing Scenario Data Call RFCs. The TJCG Service Principals will provide to Mr. Shaffer, by COB tomorrow, the name of the Service TJCSG POC who will work with their respective Service BRAC Offices to issue all RFCs.

Action Items:

1. OSD BRAC will work on policy clarification for the FFRDC issue Air Force will provide OSD BRAC a copy of the contract requirements discussed.
2. The Innovation Subgroup will modify the proposed process in accordance with the TJCSG guidance and present it for final approval at the 6 January 2005 TJCSG Meeting.
3. The Joint Service Principal will consolidate his two slides, "Data Guidelines" and "Scenario Incompatibilities/Analytical Refinement", into a single slide. This will be reviewed again at the 6 January 2005 TJCSG Meeting.
4. The Analysis Team will update the COBRA template to be consistent with the COBRA Process agreed to by the TJCSG today and present the revised version to the TJCSG for approval at the 6 January 2005 TJCSG Meeting.
5. The TJCG Service Principals will provide to Mr. Shaffer, by COB tomorrow, 5 January 2005, the name of the Service TJCSG POC who will work with their respective Service BRAC Offices to issue all RFCs.

Approved: _____
Mr. Al Shaffer
Chairman, Capabilities Integration Team

Attachments:

1. Outline -Agenda
2. List of Attendees
3. Read Ahead Materials

Attachment 2
Technical JCSG Meeting
January 4, 2004
Attendees

Members:
Mr. Al Shaffer, Alternate Chairman for Dr. Ron Sega, Chairman
Dr. Dan Stewart, Air Force Alternate for Mr. Blaise Durante, Air Force
Mr. Brian Simmons, Army
Dr. Barry Dillon, Marines
Mr. George Ryan, Navy Alternate for RADM Jay Cohen
Mr. Jay Erb, JCS

Other:
BG Fred Castle, OSD
Mr. Gary Strack, OSD
Mr. Roger Florence, DoD IG
Mr. Larry Schuette, Innovative Technologies Subgroup Lead
Mr. Bob Arnold, Weapons & Armaments Subgroup Rep
COL Pete DeSalva, Analytic Team
Mr. Andy Porth, OSD BRAC
COL Walt Hamm, Marines CIT Rep
Mr. Al Goldstayn, Air Force CIT Rep
COL Eileen Walling, Air Force
Mr. Thom Mathes, ALSS Subgroup Lead
Mr. Pete Cahill, Army
Mr. Doug Nation, Air Force
COL Bob Buckstad, OSD
Mr. Don DeYoung, Navy
Mr. Matt Mleziva, C4ISR Subgroup Lead
Dr. Bill Berry, Enabling Technologies Subgroup Lead
Dr. Jim Short, OSD

TJCSG Agenda
4 Jan 05, 1200-1400 hrs EST
Crystal City, PT-1, Rm 4600

- COBRA Guidelines - Mr. Erb
- DeYoung's Issue Paper - Mr. Shaffer
- Deconfliction Site Picture - Mr. Shaffer
- Subgroup COBRA Matrix - Mr. Shaffer
- COBRA Template - Col DeSalva

Attachment 2
Technical JCSG Meeting
January 4, 2005
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Members:
Mr. Al Shaffer, Alternate Chairman for Dr. Ron Sega, Chairman
Dr. Dan Stewart, Air Force Alternate for Mr. Blaise Durante, Air Force
Mr. Brian Simmons, Army
Dr. Barry Dillon, Marines
Mr. George Ryan, Navy Alternate for RADM Jay Cohen
Mr. Jay Erb, JCS

Other:
BG Fred Castle, OSD
Mr. Gary Strack, OSD
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Mr. Bob Arnold, Weapons & Armaments Subgroup Rep
COL Pete DeSalva, Analytic Team
Mr. Andy Porth, OSD BRAC
COL Walt Hamm, Marines CIT Rep
Mr. Al Goldstayn, Air Force CIT Rep
COL Eileen Walling, Air Force
Mr. Thom Mathes, ALSS Subgroup Lead
Mr. Pete Cahill, Army
Mr. Doug Nation, Air Force
COL Bob Buckstad, OSD
Mr. Don DeYoung, Navy
Mr. Matt Mleziva, C4ISR Subgroup Lead
Dr. Bill Berry, Enabling Technologies Subgroup Lead
Dr. Jim Short, OSD

COBRA Process

1) All undocumented numbers should be explained by the field.
2) All equipment lists should be sent to the receiving locations and cross checked to ensure items are actually needed.
3) We should challenge the amount of MILCON
4) We should request a breakdown of personnel based on Admin, P&T, and within P&T those that are management/overhead versus actually Scientist/Technical
5) RFC the movement timing of the personnel/equipment so that the best possible ROI will occur

B) Once the RFC process is exhausted (this may take multiple iterations with carefully crafted questions) run COBRA for the record with the data provided by the field.

C) In the event that the Subgroup feels that assumptions based on expert military judgment supercede or modify the answers provided by the field those Subgroup assumptions and the Baseline COBRA run will be brought forth to the TJCSG for deliberation and approval prior to the modified COBRA run being performed.

D) COBRA run with Subgroup assumptions will then be made for the record.

SCENARIO INCOMPATIBILITIES/ANALYTICAL REFINEMENT

- **Incompatibility**
  - When Two or More Scenarios Move All or Part of a BRAC Technical Facility to Different Locations
  - Example: Disposition of AFRL/IF in Tech #0009 and Tech #0034
- **Analytical Refinement**
  - Refinement Team Comprised of CIT/Subgroup/Analytical Team Members With Focal Points From Affected Technical Facilities
  - Scenario Specific Assumptions With Supporting Analysis
    - COBRA – e.g. Management Overhead Savings…
    - Mil Value – e.g. Synergy From Other BRAC Scenarios
    - Capacity Assessment – e.g. Limiting Office Space to Gov't Standards
  - Revised COBRA, Mil Value, and Capacity Assessments
  - Expert Military Judgment Using Assessments to Eliminate Lower Performing Scenarios and/or Modify Advocated Scenarios for the "Record"
- **Integrate with Other JCSGs and Service BRAC Scenarios**

DATA GUIDELINES

- Data will continue to change and accuracy improve…thus, all certified data (and BRAC recommendations or data for record) are "Time Stamped"
  - Mil Val and Capacity Analysis will be complete once all current RFCs are closed out. This will establish the baseline. These calculations will only be redone at the approval of the TJCSG.
- Only certified data will be used for BRAC recommendations or data for record
  - The only modification of certified data will occur through the Scenario Data Call RFC Process
- Previous BRAC recommendations or data for record may require re-accomplishment based on new certified data, but only through TJCSG approval

SCENARIO INCONSISTENCIES
Issue # 12-28-04-01

Issue: In late-November, Military Value (MV) scores became available for assessing the judgment-driven scenarios of the Technical Joint Cross-Service Group (TJCSG). On 24 November, the TJCSG's Chair of the Capabilities Integration Team (CIT) requested identification of any scenario found to be "inconsistent with the Mil value scores," (i.e., where an action realigns workload from a site with a higher score to a lower one).[1] Instances of inconsistencies were subsequently reviewed by the Sub-Groups and declared justified because they were found to be congruent with underpinning strategies. However, while the MV scoring inconsistencies were judged to be justified by strategy, a number of the strategies themselves appear to contradict each other within one of the more important scenarios, TECH-0008.

Point of Contact: Don DeYoung, Capabilities Integration Team (Alternate), U.S. Navy

Issue Summary

1. *Four Categories of Scenarios*

For each scenario, there are four possible categories of outcomes: (A) *Data-Driven / Judgment-Validated* (no TJCSG scenario qualifies for this category for reasons explained in Issue Paper #11-15-04-01), (B) *Judgment-Driven / Data-Validated*, (C) *Judgment-Driven / Strategy-Validated*, and (D) *Judgment-Driven / Strategy-Rationalized.* The definition for rationalized is a "rational but specious explanation" [Oxford Dictionary], so Category D would not portend viable scenarios.

2. *Very Few Scenarios Are Inconsistent*

The great majority of the TJCSG's scenarios were validated by the MV scores, which means they belong in Category B: Judgment-Driven / Data-Validated. A strong correlation between the selected "gainers" and their higher MV scores is not surprising given that the scenario "gainers" and "losers" were, with few exceptions, chosen by workload, and because MV scores are strongly determined by that workload (i.e., gross numbers of people and dollars).

The few actions that do, in fact, move workload from a site with a higher MV score to one with a lower score will receive close attention by the Commission and communities. Therefore, to be viable, these *must* fall into Category C: Judgment-Driven / Strategy-Validated. The Sub-Groups reviewed the MV inconsistencies and declared the proposed actions to be consistent with strategies formulated by their expert judgment. Unfortunately, strategies within scenario TECH-0008 contradict each other; one is built upon a false premise; and the overarching strategy is applied inconsistently across sites.

3. *Analysis of the Strategies in TECH-0008*

- *Strategy #1*: Consolidate Missions at Sites with Higher Military Value: The C4ISR Sub-Group's overarching strategy for the 40 individual actions within TECH-0008, is "mission consolidation," where improved synergies are gained by greater masses of workload at the gaining sites.[2] Of those 40 actions, three are "inconsistent" by realigning work from higher ranked sites to lower ranked sites. The following discussions analyze each action and its enabling strategy.

[1] Al Shaffer, Subj. "Mil Value Posting", 24 November 2004.
[2] The strategy was explained at the 8 December CIT session when scenarios were filtered and scored by the "decision factors."

- *Strategy #2*: Sensors Research Outweighs Info-Systems Research: Action 19 would realign both Ground *Sensors* and *Information Systems* (IS) *Research* from the Communications-Electronics Command (CECOM) Ft. Monmouth to the Army Research Laboratory (ARL) Adelphi.

> ***Data***: Ft. Monmouth (Loser) has a higher score than ARL Adelphi (Gainer) in *IS Research* (**0.4582** vs. **0.2563**). In addition to its higher MV score, Ft. Monmouth has a substantially greater workload as measured by FTEs and dollars (**380** FTE vs. **114** FTE, and **$96,000 K** vs. **$36,000 K**). ARL, on the other hand, has a higher MV score in *Sensors Research* (**0.5018** vs. **0.3397**) and a larger workload (**446** FTE vs. **238** FTE, **$147,000 K** vs. **$65,000 K**).

In explaining its enabling strategy, the C4ISR Sub-Group stated that:

> "preference was given to the more infrastructure intensive Sensors work…hence the Activity with the highest Military Value in Ground Sensors (Adelphi) was selected to host the consolidated activity."[3]

By applying a preference to *Sensors*, Ft. Monmouth's lower score in *Sensors Research* (**0.3397** vs. **0.5018**) causes it to lose *both* its *IS* and *Sensors Research*. When asked about the significant disparity in IS MV scores (where Ft. Monmouth has the higher score), the Sub-Group pointed out that it used a "cross-binning" technique where ARL's *Sensors Research* score, not its *IS Research* score, is the decisive metric based on the infrastructure intensive nature of Sensors work.[4]

The Sub-Group's use of a cross-binning technique for MV scoring — across two technical capabilities — is significant. Up to this point in the TJCSG's deliberations, the very idea of aggregating and / or weighting scores across functions (i.e., Research, D&A, T&E), or across capability areas (i.e., IS and Sensors), has been a "third-rail" issue. In fact, it was difficult to reach agreement on "rolling-up" the scores by zip code (i.e., where individual respondents, from the *same Service*, at the *same installation*, and within the *same bin*, are combined into one score).[5]

In summary, this proposed action realigns *IS Research* from higher-ranked Ft. Monmouth to lower-ranked ARL Adelphi based upon an underpinning strategy that *Sensors Research* is of higher value due to its more infrastructure intensive. Therefore, both *IS* and *Sensors Research* are realigned from Ft. Monmouth to ARL Adelphi.

It should be noted that the cross-binning technique is used again in Action 40, which realigns both Air *IS* and *Sensors T&E* from NAWC-Pax River to Edwards AFB. The Sub-Group again states that "preference was given to the more infrastructure intensive Sensors work."[6] But, it also claims Edwards has the higher Sensors T&E MV score, which the MV data does not show. In fact, Pax River has a significantly higher MV score in *both* IS and Sensors T&E. This apparent discrepancy needs to be resolved, or the strategy statement needs to be better articulated.

- *Strategy #3*: Info-Systems Acquisition Outweighs Sensors Research: Action 29 would realign Rome's *Sensors Research* to Wright-Patterson AFB (WPAFB). Action 32 would realign Air *IS Research* from Rome Laboratory to Hanscom AFB.

[3] C4ISR Sub-Group, "Scenario Description & Rationale," 14 December 2004 [DRAFT].
[4] CIT Meeting, 8 December 2004.
[5] MV "roll-up" by zip code, an analytically sound and common-sense approach took until 9 December to be approved.
[6] C4ISR Sub-Group, "Scenario Description & Rationale.".

Data: In Action 32, Rome (Loser) has a far higher score than Hanscom AFB (Gainer) in *IS Research* (**0.6053** vs. **0.0421**). In addition, Rome's workload as measured by both FTEs and dollars shows a huge difference (**1,119** FTE vs. **0 FTE**, and **$535,000 K** vs. **$3,000 K**). In Action 29, Rome has a lower score in *Sensors Research* than WPAFB (**0.2345** vs. **0.5405**).

These two actions are identical to the Ft. Monmouth proposal in the sense that together they remove both *Sensors* and *IS Research* from the "loser", which in this case is Rome Laboratory. Given the Sub-Group's expert judgment in the previous action (i.e., Strategy #2) that the Sensors MV score is decisive, one would think that Rome's *IS Research* program would be realigned along with its *Sensors Research* to WPAFB, which has the #2-ranked Sensors Research program. But, that is not the Sub-Group's proposal.

Recall that ARL Adelphi received *both* Ft. Monmouth's *Sensors* and *IS Research* programs. ARL had a higher score in Sensors and a lower one in IS, just as WPAFB has with regards to Rome. However, in the case of Rome Laboratory, the Sub-Group does not invoke Strategy #2's "cross-binning" technique to realign Rome's higher-ranked *IS Research* work to WPAFB. Instead, the Sub-Group would send it to Hanscom AFB. Essentially, Action 32 sends work from a site that does Research, and no D&A, to a site that does D&A, and almost no Research. In explaining its proposal, the Sub-Group states that:

> "...preference was given to the significantly larger Development & Acquisition workload; hence the activity with the highest Military Value in Air Information Systems Development & Acquisition (Hanscom AFB) was selected to host the consolidated activity."[7]

Apparently, the synergistic gains that may accrue to Air Force C4ISR by realigning Rome's #2-ranked *IS Research* to the #2-ranked *Sensors Research* site at WPAFB are not judged to be as valuable as those that might accrue from collocation with Hanscom's D&A expertise. So, in this action, the expert judgment behind Strategy #3 is that Info-Systems Acquisition outweighs Sensors Research. But, Strategy #3 contradicts Strategy #2.

If Strategy #3 was used in the previous case, then Ft. Monmouth would have kept its *IS Research* because ARL Adelphi has no D&A and Ft. Monmouth has the highest MV score for Army *IS D&A*. But the Sub-Group found it more important to instead break Ft. Monmouth's *IS Research* away from high ranked IS D&A work, and consolidate it with ARL Adelphi's *Sensors Research*.

The Rome realignment to Hanscom may be founded on a desire to move the *IS Research* closer to Rt. 128, a center of commercial IS expertise. However, in the case of Ft. Monmouth, the Northern New Jersey area is not an IS backwater with local firms like Lucent and Honeywell / AlliedSignal. So, despite the similar circumstances, the Sub-Group proposes that Ft. Monmouth's work be moved away from that center of expertise and from the Army's highest ranked site for IS D&A.

To highlight the contradiction further, use of Strategy #3 would reverse the outcome in the previous case by sending *ARL Adelphi's IS Research program to Ft. Monmouth* where the Army's IS D&A function is located *and* there is a center of industrial IS expertise. This also has the advantage of being consistent with the MV scores for Ft. Monmouth and ARL Adelphi (**0.4582** vs. **0.2563**).

- *Strategy #4*: Coastal Sensors Integration Outweighs Inland Sensors Development: Action 1 would realign NRL's Maritime Sensors D&A to NSWC Dahlgren.

[7] C4ISR Sub-Group, "Scenario Description & Rationale."

Data: NRL (Loser) has a higher score than NSWC Dahlgren (Gainer) in *Sensors D&A* (**0.3633** vs. **0.3007**). In addition to a higher MV score, NRL has a greater workload measured both by FTEs and dollars (**280** vs. **245**, and **$79,000 K** vs. **$60,000 K**).

The C4ISR Sub-Group explains the strategy that underpins Action 1 in the following way:

> "...preference was given to where the Maritime Sensors, Electronic Warfare and Electronics were integrated with their host maritime platforms; hence the surface warfare center located near the coast with the Highest Military value (NSWC Dahlgren) was selected..."[8]

Strategy #4 gives preference to coastal proximity and sensors integration over MV scores. The Sub-Group asserts that NRL's mission is Research, therefore its "non-mission" Sensors D&A should be consolidated at a *"surface warfare center."*[9] This premise, upon which Strategy #4 is built, is false. NRL's mission is, in fact, broader in some technology areas than that of the Air Force and Army corporate laboratories, which focus on 6.1 through 6.3, and 6.1 through 6.2, respectively. This is why NRL has a sizeable workload in Sensors D&A and a substantial MV score — one that ranks higher than the selected warfare center, NSWC Dahlgren. The following evidence is provided to show that the strategic premise is false.

NRL has performed sensors development from its pioneering of the first U.S. radar, more than 80 years ago, to its development of Dragon Eye, a portable, hand-launched sensor system based on expendable countermeasures technology. Dragon Eye was mentioned in a *New York Times* front-page article about the U.S. Marines' fight for Falluja.[10] Another recent example is Specific Emitter Identification technology, which identifies any radar by its unique characteristics with accuracy enough to "fingerprint" it. The National Security Agency selected it as the national standard.[11] With the Coast Guard, naval warships, and aircraft using it to monitor the movement of materials used in weapons of mass destruction, its value to the nation's war on terrorism is obvious.

Finally, expert judgment from ADM Hal Gehman (ret.) also refutes the Sub-Group's premise. ADM Gehman was appointed Chair of the Columbia Accident Investigation Board shortly after he made this comment about NRL's sensors program, which he and other defense experts reviewed in September 2001.

> "What we saw was a Category A+ laboratory... its forté is sensors. What they showed us was impressive, relevant, and capable of being turned into fielded products... *nearly everything they develop they build a prototype on site and test it* (emphasis added), sometimes in an operational environment, sometimes not...they see the path to turning basic research into useful products."[12]

The harmful result of the Sub-Group's false premise is a proposed action that would sever the connectivity within an acknowledged center of excellence in sensors R&D. NRL's record of success is the product of the synergy achieved between its sensors systems development and its sensors research, which *ranks #1 in MV.*

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[8] C4ISR Sub-Group, "Scenario Description & Rationale," 14 December 2004 [DRAFT].
[9] CIT Meeting, 8 December 2004.
[10] Dexter Filkins, "In Falluja, Young Marines Saw the Savagery of an Urban War", *New York Times*, 21 November 2004, p.1.
[11] "Accordingly, NSA has selected the Naval Research Laboratory processor (L-MISPE) to be the standard for conducting SEI/UMOP collection operations..." [NSA Message DTG 01144OZ, June 1995]
[12] Section 913 Report #1: *Sensors Science and Technology and the Department of Defense Laboratories*, (National Defense University: March 2002), p. 31.

4. *Strategy #1 is Applied Inconsistently*

As mentioned earlier, the C4ISR Sub-Group's overarching approach for the actions within the TECH-0008 scenario is "mission consolidation," where improved synergies are gained by creating greater masses of workload at the gaining sites. For example, while Ft. Monmouth loses Research workload in Action 19 to ARL Adelphi under Strategy #2, it gains D&A workload by virtue of its top-ranked Army D&A score in Actions 21, 22, 23, 24, and 25.

The problem is that Strategy #1 is applied inconsistently. For example, while NRL's *Sensors D&A* is to be realigned to NSWC Dahlgren — Dahlgren's *Sensors Research* is not being sent to NRL, which has the #1-ranked *Sensors Research* program out of all sites evaluated by the TJCSG (66 sites). NRL's MV score in relation to NSWC Dahlgren is **0.8037** vs. **0.3009**. Even if one were to accept the false premise that NRL's mission is confined to Research, why is the *Sensors Research* mission not being consolidated at NRL?

Furthermore, in Action 8, NRL's *IS D&A* is being realigned to the SPAWAR Systems Center (SSC), the site selected as the location for Maritime *IS D&A* consolidation. However, SSC's *IS Research* is not being realigned to NRL, whose Research program has a much higher MV score than SSC's (**0.6059** vs. **0.3671**). Like its *Sensors Research* program, NRL's *IS Research* is also *rated #1 out of all sites evaluated by the TJCSG (68 sites).*

When asked about this inconsistency, a Sub-Group member responded that TECH-0008 defers Research consolidation to TECH-0009, "Defense Research Service-Led Laboratories." But the explanation does not hold up under scrutiny. As seen earlier, AFRL-Wright-Patterson and ARL Adelphi gain Research workload — and both are part of TECH-0009.

Since NRL is ranked #1 in both *Sensors* and *IS Research*, these inconsistencies can be readily fixed. Actions can be added where NRL gains NSWC Dahlgren's lower-ranked *Sensors* (ranked #10) and *IS* (#10) Research programs (78 FTEs and $18 M), as well as SSC's lower-ranked *Sensors* (#21) and *IS* (#6) Research programs (436 FTEs, and $170 M).

Conclusion: TECH-0008 contains: several actions whose enabling strategies contradict each other; one action based on a false premise; and an overarching strategy that is applied inconsistently. These problems require resolution. Correcting problems and errors and before going "prime-time" with our proposals will serve us, and the country, well.

Recommendations: Ensure that all actions within TECH-0008 qualify for Category (C) *Judgment-Driven / Strategy-Validated* by resolving identified problems, or by canceling the proposed actions if they cannot be validated by sound strategy.

Army Position: _____
AF Position: _____
Navy Position: _____
Marine Corps Position: _____
JCS Position: _____

Final Resolution:

POC Signature: _____ Date: _____

CIT Chair: _____ Date: _____

Comments on Issue Paper # 12-28-04-01
(Scenario Inconsistencies

Contrary to the assertion in the issue paper, scenario TECH-0008 is internally consistent.

The TJCSG directed the C4ISR subgroup to cross-bin activities so as to minimize the number of installations. In order to do that, the C4ISR subgroup adopted a minimum set of cross-bin guidelines, such as giving preference to Sensors work when combining Sensors and Information Systems Research (cross-DTAP, same Function) or giving preference to D&A when combining Information Systems Research and D&A (cross-Function, same DTAP). Military Value (or early on, its surrogate – quantity of professional FTEs) was used to rank the Technical facilities in a "bin" and then the cross-bin guidelines were applied consistently. So in the issue paper, *Strategy #2* (Issue Paper terminology) is an application of the cross-DTAP, same Function guideline. Similarly, Strategy #3 is an application of the cross-Function, same DTAP guideline. Strategy #2 and #3 are not at odds with each other – they simply apply to different cross-bin situations.

Regarding the Issue Paper assertion that a corporate Laboratory should continue to work outside the Research area because of its track record, numerous organizations have and will continue to field great products. The single greatest challenge in the C4ISR world today is delivery of non-interoperable systems to the warfighter. Consolidating maritime C4ISR D&A under one Center provides the opportunity to address that #1 problem, and hence the C4ISR subgroup scenario proposes consolidation to achieve Jointness, economy and efficiency (the BRAC objectives). Status quo just perpetuates the problem of multiple "hobby shops".

Regarding the Issue Paper assertion that Applied Research activities should go to Corporate Laboratories, that is not what the TJCSG set about to achieve. The Framework is constructed to consolidate Basic Research into a DOD managed activity, but Applied Research is to be linked more closely with its D&A counterpart in Centers to the degree possible. This is especially true in C4ISR where one can go from Applied Research to D&A, T&E and electronic fielding in a matter of days, not years. Recognition of this reality is reflected in the C4ISR scenarios approved by the TJCSG.

As the C4ISR subgroup performs scenario analysis, we will revalidate the underlying assumptions before we offer draft Candidate Recommendations for TJCSG consideration. The TJCSG will have that additional opportunity to review the proposed actions with the insight gained from the analysis of the Scenario Data Call responses.

Date: 3 January 2005

To: Matt Mleziva (Lead, C4ISR Sub-Group),

I have read your comments on Issue Paper #12-28-04-01, "Scenario Inconsistencies," and remain concerned that the strategies in question (i.e., those that drive TECH-0008's realignment of work from sites with higher military value scores to sites with a lower scores) are not analytically sound. Some key questions remain for me regarding the reasons why, and when, different strategies are applied to proposed actions that have very similar circumstances. The success of TECH-0008 relies on the credibility of these strategies, especially when our process is not data-driven and the subject actions at issue here ignore the Military Value (MV) scores that we derived for these sites. There is no rule that prevents lower scoring sites from becoming "gainers" at the expense of higher scoring sites, but at a minimum, I believe the Sub-Group's strategies need a much more thorough justification and greater clarity in their supporting rationale.

In paragraph #2 of your response to the issue paper, you mention that the Sub-Group developed:

> "cross-bin guidelines, such as giving preference to Sensors work when combining Sensors and Information Systems Research or giving preference to D&A when combining Information Systems Research & D&A."

As you know, the above guidelines are called Strategy #2 and #3, respectively, by the issue paper. That paper may not have made its point clearly, so in the interests of clarity, its key question stated a different way is: "What is the rationale for the Sub-Group's decision to invoke Strategy #2 in one case, and to invoke #3 in another?" Just saying that the rationale was to optimize Sensors Research for one, and to optimize IS D&A for the other, and that these "guidelines were applied consistently," does not reveal *why* IS Research is realigned by different strategies in two actions with very similar circumstances.

Specifically, the first two actions analyzed in the issue paper involve realigning IS Research; one action realigns Ground IS Research, and the other realigns Air IS Research — and the strategies dictate where the realigned work is sent. In the Ground case, Strategy #2 sends the work from a site that performs both IS Research and D&A, to a site with a higher score in Sensors Research. But, if #3 was invoked to optimize IS D&A, the "loser" would instead become the "gainer" by gaining IS Research — *from the "gainer" under Strategy #2, who becomes the "loser" under Strategy #3*. In other words, the direction of the realigned work actually reverses by virtue of the strategy selected. Similarly, the destination of the Air IS Research is determined by the strategy selected. So, the key issue is *why*, in two cases involving IS Research, the C4ISR Sub-Group gives preference to optimizing D&A in the Air Force case, while in the Army case, it gives preference to optimizing Sensors work? Why was Strategy #2 not used in both cases? Or, why was Strategy #3 not used in both?

In paragraph #3 of your response, you raise the third case analyzed by the issue paper, where Maritime Sensors Research is realigned from a site with a higher MV score to a warfare center closer to the shore in order to optimize systems integration. You mention that the Sub-Group makes this proposal to:

> "achieve Jointness, economy and efficiency (the BRAC objectives)."

These are indeed BRAC objectives, but they do not support your case. TECH-0008 has 40 individual actions, of which 16 are Navy-to-Navy, 10 are Army-to-Army, and 9 are Air Force-to-Air Force. It is hard to defend this scenario as one that forges a significant degree of "jointness." Moreover, *none of the actions analyzed by the issue paper involve the few, and rather minor, "joint actions."* And, as far as the objectives of "economy and efficiency" are concerned, it is more likely that the proposed Maritime Sensors action will range anywhere from cost-neutral to very costly. By optimizing D&A (for systems integration purposes) at one site, we are sub-optimizing R&D at the losing site. The case for savings would be stronger if the losing site was being closed by the action.

In the end, the only relevant BRAC objective for this scenario — especially with our nation at war — is *mission effectiveness*, as measured by military value. In fact, the law is clear on the point that "military value is the primary consideration in the making of recommendations for the closure or realignment of military installations" [Public Law 101-510]. The primacy of mission effectiveness is why the track record of the "losing" site was addressed in the issue paper. The expert judgment of ADM Gehman that the site is a "Category A+ laboratory… its forté is sensors" was reported to show compelling, documented evidence for the high military value of the sensors development work at that site. Other experts on the panel with ADM Gehman included a former DDR&E and Secretary of the Air Force, a former CINC for Central Command who was later selected by the President as a diplomatic envoy to the Middle East, and a former NSC advisor to the President. The Sub-Group's expert judgment is at stark odds with that panel's assessment when it places the "losing" site, as you do in paragraph #3, in the class of a "hobby shop."

On the other hand, as a technical expert from Hanscom AFB, you and your Service-lead colleagues from ARL Adelphi and SPAWAR San Diego, possess expert judgment that is significant and valid in its own right. But your expert judgment that the site's sensors development program is a "hobby shop" must nonetheless be documented and justified in some manner. That justification should also account for the fact that the purported "hobby shop" has a higher MV score and a larger workload than the "gainer."

Finally, paragraph #4 of your response makes a point of differentiating "Basic Research" and "Applied Research" in order to explain an apparent inconsistency in mission consolidation (i.e., Strategy #1) that the issue paper describes as a "one-way street" with regard to the Navy's corporate laboratory. Your response is that the TJCSG's intent has been to realign Applied Research to "its D&A counterpart in Centers" instead of Corporate Laboratories. There are two problems with this explanation.

First, our analytical convention does not distinguish Basic (6.1) from Applied Research (6.2), and there is therefore *no data to make such distinctions*. In fact, both are combined with Advanced Technology Development (6.3) under our Technical Function called "Research." Second, the corporate laboratories in the Air Force and Army gain Sensors and IS Research (6.1-6.3), *which means they gain Applied Research.* This appears to contradict your assertion regarding the TJCSG's intent. The point made in the issue paper is that the Navy's corporate laboratory, despite being ranked by MV as #1 in IS Research *and* #1 in Sensors Research, does not gain any Research — even though it qualifies as a "gainer" under Strategy #1 (Mission Consolidation of IS and Sensors) and Strategy #2 (Optimize Sensors).

I offer these observations and arguments to help ensure that our product is ready for the close scrutiny it will receive in a matter of months. I hope my response to your comments, as well as the clarifications of issue paper #12-28-04-01, are helpful.

vr/

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Comments on DeYoung 3 Jan 2005 Paper

A facility's Military Value (MV) is a function of the other facilities in the bin the way we developed the MV scoring; hence MV is only a relative goodness within a bin and cannot be used across bins. The C4ISR subgroup used MV within the bins and when asked by the TJCSG to consolidate cross bins, used professional military judgment to determine the receiving facility from amongst the leaders in the bins.

The objective was to develop scenarios that implemented the TJCSG adopted Framework. The Air and Ground domain scenarios do involve more than one MILDEP, hence are Joint. The Maritime domain scenarios only involve the Navy as they were the only MILDEP known to be reporting maritime C4ISR RDAT&E. The strategies were selected to achieve the BRAC objectives of Jointness, Efficiency and Effectiveness.

In the C4ISR world, the potentially short timelines from applied research to operational capability led to the Warfare/Product Center construct. With respect to NRL, its high MV, the DRL concept, and its not being a Warfare center led to no recommended change to its Basic Research activities. Also, no C4ISR Maritime Basic Research activities outside of NRL were identified to realign to NRL. NRL is one of the organizations that has demonstrated the ability to rapidly field combat capability. Feedback from the field is that capability deployed by non-acquisition organizations tends not to interoperate with the rest of their equipment (provided by the traditional acquisition organizations) and tends not to have a supportability tail. The C4ISR subgroup developed scenarios which consolidated the Maritime C4ISR Applied Research and D&A activities in a domain (per the Framework) to address these issues rather than let them persist.

SUBGROUP: C4ISR

SCENARIO #	DONOR DATA	VALIDATION	RECEIVER DATA	VALIDATION
8,42	A [redacted]	A	A [redacted]	A
	AF	AF	AF	AF
	N	N	N	N
	AGENCY N/A	AGENCY N/A	AGENCY N/A	AGENCY N/A
SCENARIO #	**DONOR DATA**	**VALIDATION**	**RECEIVER DATA**	**VALIDATION**
30,47	A [redacted]	A	A	A
	AF N/A	AF N/A	AF	AF
	N [redacted]	N	N N/A	N N/A
	AGENCY	AGENCY	AGENCY N/A	AGENCY N/A
SCENARIO #	**DONOR DATA**	**VALIDATION**	**RECEIVER DATA**	**VALIDATION**
	A	A	A	A
	AF	AF	AF	AF
	N	N	N	N
	AGENCY	AGENCY	AGENCY	AGENCY
SCENARIO #	**DONOR DATA**	**VALIDATION**	**RECEIVER DATA**	**VALIDATION**
	A	A	A	A
	AF	AF	AF	AF
	N	N	N	N
	AGENCY	AGENCY	AGENCY	AGENCY
SCENARIO #	**DONOR DATA**	**VALIDATION**	**RECEIVER DATA**	**VALIDATION**
	A	A	A	A
	AF	AF	AF	AF
	N	N	N	N
	AGENCY	AGENCY	AGENCY	AGENCY
SCENARIO #	**DONOR DATA**	**VALIDATION**	**RECEIVER DATA**	**VALIDATION**
	A	A	A	A
	AF	AF	AF	AF
	N	N	N	N
	AGENCY	AGENCY	AGENCY	AGENCY

Summary

Scenario: Tech040	One Time costs	ROI Years	Billets Eliminated	Billets Moved	Total Milcon Costs
Baseline: Input Scenario data without Adjustment					
Mid Level cost					
Low Level Cost					
Final Delibrative Recommendation					

One Time Costs

Scenario: Tech 040	Constr.	Pers	Ovhd	Move	Other	Total costs	Savings	Net Costs
Baseline: Input Scenario data without Adjustment								
Mid Level cost: Used 220 Sq FT per person to calculate MILCON and adjusted down DARPA move costs								
Low Level Cost: Used 220 Sq FT per person to calculate MILCON and adjusted down DARPA move costs								
Final Delibrative Recommendation								

Note Costs are in $K

Personnel Summary

Scenario Tech 040		OFF	ENL	CIV	STU	Contractor	Total
Baseline: Input Scenario data without Adjustment	Eliminate						
	Move						
Mid Level cost: Used 220 Sq FT per person to calculate MILCON and adjusted down DARPA move costs	Eliminate						
	Move						
Low Level Cost: Used 220 Sq FT per person to calculate MILCON and adjusted down DARPA move costs	Eliminate						
	Move						
Final Delibrative Recommendation	Eliminate						
	Move						

MILCON Summary

Scenario: Tech 040

Excursion	Receiving Activity	Total Cost
Baseline: Input Scenario data without Adjustment		
Mid Level cost: Used 220 Sq FT per person to calculate MILCON and adjusted down DARPA move costs		
Low Level Cost: Used 220 Sq FT per person to calculate MILCON and adjusted down DARPA move		
Final Delibrative Recommendation		