



DEPARTMENT OF THE ARMY  
U.S. ARMY AUDIT AGENCY  
Office of the Deputy Auditor General  
Acquisition and Logistics Audits  
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DCN 9406

SAAG-IMT

30 August 2004

MEMORANDUM FOR The Director, The Army Basing Study Group

SUBJECT: Validation of Army Installation Capacity Data for Base Realignment and Closure 2005, Technical Joint Cross-Service Group (Project Code A-2003-IMT-0440.041), Audit Report: A-2004-0476-IMT

1. You asked us to validate Army installations' responses to the capacity data call that The Army Basing Study Group and six Joint Cross-Service Groups<sup>1</sup> will use for Base Realignment and Closure (BRAC) 2005 analyses. This is our report on the validation of Army capacity data call responses to questions the Technical Joint Cross-Service Group was interested in.
2. Generally, Army installations' certified responses to capacity data call questions in the samples we validated were adequately supported with appropriate evidentiary matter and were accurate based on the criteria we applied. However, in some instances Army installations could not support their responses to the questions and did not accurately answer all questions. Details of our validation are in enclosure 1. The scope of our validation for the Technical Joint Cross-Service Group capacity questions is in enclosure 2. A flowchart of the 2005 Army basing study process is in enclosure 3.
3. We discussed these results with key personnel at Army installations. They took corrective actions for the problems we identified and submitted certified changes to the Study Group for answers we identified as requiring correction. We also discussed these results with the Army representative on the Technical Joint Cross-Service Group. Consequently, this report doesn't contain any recommendations and is not subject to the official command-reply process described in AR 36-2.
4. We appreciate the courtesies and cooperation extended to us during the capacity data validation. If you have any questions or need

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<sup>1</sup> The Study Group did not collect capacity data for a seventh group—the Intelligence Joint Cross-Service Group. Accordingly, we will report data validation results for that group to the Deputy Chief of Staff, G-2.

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FOR THE AUDITOR GENERAL:

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(Dr. Robert Rohde)

**VALIDATION OF ARMY INSTALLATION CAPACITY DATA FOR  
BASE REALIGNMENT AND CLOSURE 2005  
TECHNICAL JOINT CROSS-SERVICE GROUP**

**WHAT WE VALIDATED**

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You asked that we validate Army installations' responses to the capacity data call that The Army Basing Study Group and six Joint Cross-Service Groups will use for Base Realignment and Closure 2005 analyses. Our validation efforts focused on determining if responses were adequately supported and accurate. This enclosure summarizes the results of our validation efforts for the Army capacity data that the Study Group collected, certified and provided to the Technical Joint Cross-Service Group. We will also include these results in our overall summary reports on the capacity data call and the 2005 Army basing study process.

**BACKGROUND**

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The Secretary of Defense initiated BRAC 2005 on 15 November 2002. The Secretary of the Army established the Deputy Assistant Secretary of the Army (Infrastructure Analysis) to lead the Army's efforts to support BRAC 2005. The Deputy Assistant Secretary directs The Army Basing Study Group, an ad hoc, chartered organization that serves as the Army's single point of contact for planning and executing the Army's responsibilities in the development of BRAC 2005 recommendations. The Study Group will gather and analyze certified data to assess the capacity and military value of Army installations, evaluate base realignment and closure alternatives, and develop recommendations for BRAC 2005 on behalf of The Secretary of the Army. The BRAC 2005 process requires certification of all data from Army installations, industrial base sites and leased properties; Army corporate databases; and open sources. A flowchart of the 2005 Army basing study process is at enclosure 3.

Enclosure 1

## **SCOPE AND METHODOLOGY**

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The Army's inventory included 88 installations that met the BRAC 2005 threshold for study. For the capacity data call, the Study Group sent each installation a total of 552 questions: 548 questions to answer, if applicable, and 4 questions pre-populated from Army databases. During our validation efforts, we visited 31 installations and validated responses to a sample of 68 questions the Technical Joint Cross-Service Group was interested in: 12 that we judgmentally selected for validation at each installation we visited, plus a random selection of the remaining questions. (The number of capacity questions answered and the number of responses we validated at each installation is at enclosure 2.) We tested 183 of 532 total responses for adequacy of support and 169 responses for accuracy. We also reviewed all 1,576 responses to questions the Technical Group was interested in that Army installations answered as "not applicable" to determine if that answer was appropriate.

The Technical Group did not issue its supplemental capacity data call until 6 August 2004. The Office of the Inspector General, DOD requested that we validate a sample of responses for this data call. We may validate a sample of the 10 Technical Group questions that were issued as part of our validation efforts of the military value data call.

We conducted our review from April to August 2004 in accordance with generally accepted government auditing standards, which include criteria on the adequacy and appropriateness of evidentiary matter, accuracy and management controls. We assessed the accuracy of installation answers using these specific criteria:

- For questions with a single answer and minimal support requirements, we did not allow any margin for error except for answers reporting square footage.
- For questions with answers involving square footage, we defined significant errors as greater than 10 percent.
- For questions with multiple answers and single answers with voluminous supporting documentation, we allowed errors up to 25 percent in the samples we reviewed, provided the errors were not significant (determined by auditor judgment except for answers reporting square footage).

We did not rely on computer-generated data to validate responses from Army corporate databases, but instead validated the accuracy of the data by comparison with installation source documents or physical attributes. When practicable, we also validated installation responses from other databases in the same manner. For all other responses, we worked with the installation administrators to obtain the evidence needed to answer our objectives.

We also evaluated installation compliance with the Study Group's Internal Control Plan, but we will address those results in our overall reports on the capacity data call and the 2005 Army basing study process.

## **OBJECTIVE AND CONCLUSION**

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We established one objective for validation of Technical Joint Cross-Service Group capacity data. Here is our objective and our conclusion.

**Objective:** To determine if Army installations' certified responses to capacity data call questions the Technical Group had an interest in were adequately supported with appropriate evidentiary matter and were accurate.

**Conclusion:** Generally, Army installations' certified responses to capacity data call questions the Technical Group was interested in were adequately supported with appropriate evidentiary matter and were accurate, based on the criteria we applied to responses in our samples. In addition, we concluded that the "not applicable" responses were appropriate. However, we found some instances where Army installations could not support their responses to capacity questions and did not answer all questions accurately. We discussed the potential risk of using inaccurate or inconsistent data in the Technical Group's analyses with the group's members. The members responded that the Technical Group acted to mitigate the potential risk.

**Adequate Support.** Of the 183 responses we validated for adequacy of support, 164 responses were adequately supported with appropriate evidentiary matter. The 19 other responses were not adequately supported because:

- Army installations submitted answers that differed from the supporting evidence.
- Functional responders provided estimates, but did not gather and keep any evidence to support their answers.

We noted that responses to one question—asking for information about facilities currently under construction (no. 22)—frequently were not supported with adequate evidence (at more than 3 of the 31 installations). The Army installations we visited satisfactorily corrected most of the problems we identified with supporting documentation.

**Accuracy.** Of the 169 responses we validated for accuracy, 115 responses were accurate. Answers were not accurate for the remaining 54 questions primarily because Army installations inappropriately included or excluded facilities in square footage responses, incorrectly included or excluded authorized personnel when compiling responses, and made mathematical errors. Responses to 5 questions frequently were inaccurate (at more than 3 of the 31 installations):

- Facility square footage (no. 11).
- Facilities currently under construction (no. 22).
- Authorized personnel involved in providing and maintaining long haul strategic information systems/networks/communications services for installations hosting service/agency-level information technology enterprise activities (no. 324).
- Authorized personnel dedicated to daily monitoring, maintaining, and operation and security of the service/agency-level strategic information systems/networks/communications services for installation commanders hosting service/agency-level information technology enterprise activities (on. 327).
- Research, development, test, evaluation or acquisition functions (no. 687).

The Army installations we visited corrected the answers that were not accurate, recertified them and resubmitted the responses to the Study Group. The Study Group, in turn, provided the corrected and recertified responses to the Technical Group.

**Potentially Misinterpreted.** We also determined that Army installations may not have consistently answered one question (no. 687)—which asked for research, development, test, evaluation or acquisition functions—in accordance with question amplification and clarification guidance. As discussed in the preceding paragraph, responses to question no. 687 frequently were not accurate. Consequently, we concluded that the Technical Group had reduced assurance that responses from all Army installations that answered question no. 687 were consistent and reliable.

**Potential Risk.** In our opinion, the Technical Joint Cross-Service Group would have assumed a higher degree of risk if it used in its analyses Army responses that frequently were inaccurate, or responses to questions that Army installations did not consistently answer. We discussed the potential risk with members of the Technical Group to determine what—if any—actions the group needed to take for the five questions we identified with systemic problems. The members responded that the Technical Group:

- Does not intend to use responses to question nos. 11 and 687 during the capacity analysis, but will use this data during scenario analyses. However, because the Technical Group recognized the risk associated with the high frequency of errors within this data, it will gather the necessary facility and major and unique research, development, test, evaluation or acquisition data with specific data calls during scenario development.
- Will not use data in responses to question nos. 22, 324 and 327. Although the Army representatives initially expressed a need for data from these questions before the capacity data call, the group members decided that the data was not germane to technical capacity measurement and would not be used in the Technical Group's analyses.

In our opinion, these actions acknowledged the potential risk and should help mitigate the risk of using inaccurate or inconsistent data responses in the Technical Group's analyses.

## SCOPE OF VALIDATION FOR TECHNICAL JOINT CROSS-SERVICE GROUP CAPACITY QUESTIONS

Installation/Activity	Technical Facilities*	Total Questions Answered	Judgmental Sample	Random Sample	Total Responses Validated**
Aberdeen Proving Ground	X	61	9	5	14
Anniston Army Depot		5	3	0	3
Blue Grass Army Depot		32	8	1	9
Corpus Christi Army Depot		4	2	1	3
Detroit Arsenal		21	5	4	9
Fort Belvoir	X	35	6	3	9
Fort Benning		48	10	6	16
Fort Bliss		9	3	0	3
Fort Bragg		16	4	2	6
Fort Campbell		4	4	0	4
Fort Drum		2	2	0	2
Fort Eustis	X	24	7	0	7
Fort Gordon		12	4	1	5
Fort Hood		28	7	4	11
Fort Huachuca	X	43	8	5	13
Fort Lee		14	2	2	4
Fort Lewis		4	2	0	2
Fort McCoy		3	2	0	2
Fort Rucker	X	24	7	2	9
Fort Sam Houston		25	4	2	6
Fort Shafter		4	4	0	4
Fort Stewart/Hunter Army Airfield		3	2	0	2
Lima Army Tank Plant		12	3	4	7
McAlester Army Ammunition Plant	X	6	2	0	2
Picatinny Arsenal	X	26	5	5	10
Radford Army Ammunition Plant		1	1	0	1
Red River Army Depot		3	1	0	1
Redstone Arsenal	X	42	6	2	8
Schofield Barracks		2	2	0	2
Tobyhanna Army Depot		6	3	0	3
Tripler Army Medical Center		13	4	2	6
<b>Totals</b>		<b>532</b>	<b>132</b>	<b>51</b>	<b>183</b>

\* "X" represent installations that the Army representative identified as having technical facilities.

\*\* Responses to all questions selected judgmentally were validated for accuracy and adequacy of evidentiary matter. Responses to all questions selected randomly were validated for adequacy of support. When time permitted, we also validated the responses for accuracy.

Enclosure 2

**DELIBERATIVE DOCUMENT – FOR DISCUSSION PURPOSES ONLY**  
**Do Not Release Under the Freedom of Information Act**

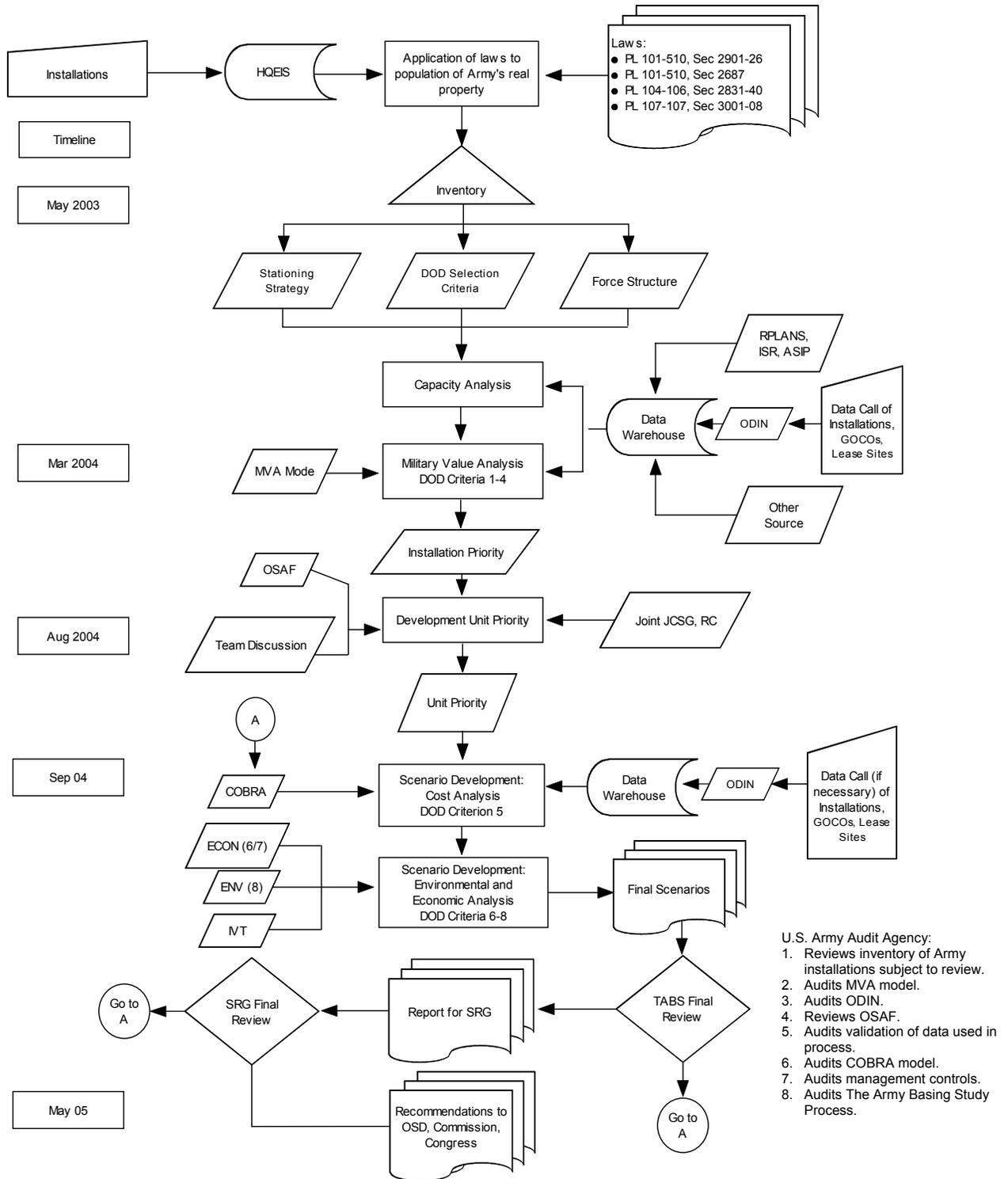
**Acronyms and Abbreviations Used:**

ASIP = Army Stationing and Installation Plan  
 COBRA = Cost of Base Realignment Action Model  
 ECON = Economic Model  
 ENV = Environmental Model  
 GOCO = Government-Owned, Contractor-Operated  
 HQEIS = Headquarters Executive Information System

ISR = Installation Status Report  
 IVT = Installation Visualization Tool  
 JCSG = Joint Cross-Service Group  
 MVA = Military Value Analyzer Model  
 ODIN = Online Data Interface Collection  
 OSAF = Optimal Stationing of Army Forces

OSD = Office of the Secretary of Defense  
 PL = Public Law  
 RC = Reserve Components  
 RPLANS = Real Property Planning and Analysis System  
 SRG = Senior Review Group

**FLOWCHART OF 2005 ARMY BASING STUDY PROCESS**



Enclosure 3