



DEPARTMENT OF THE AIR FORCE  
WASHINGTON DC

OFFICE OF THE ASSISTANT SECRETARY

25 Mar 03

MEMORANDUM FOR PRINCIPAL ASSISTANT DEPUTY UNDERSECRETARY OF  
DEFENSE (INSTALLATIONS & ENVIRONMENT)

FROM: THE SERVICES BRAC DIRECTORS

SUBJECT: Funding for Critical BRAC Tools

The undersigned have met with our technical experts and present in the attachment a consolidated funding requirement for critical BRAC tools development and sustainment. These tools are necessary to support BRAC 05 analysis, and must be in place not later than Jan 04.

Urgently request the release of funds identified in the attachment, so that development can continue in order to make these tools available in BRAC 05. Funding received NLT 15 Apr 03 will ensure that the tools are available to support the BRAC 05 analysis effort.

*Craig E. College*  
Deputy CRAIG E. COLLEGE, Ph.D.  
Assistant Secretary of the Army  
(Infrastructure Analysis)

*Anne R. Davis*  
ANNE R. DAVIS  
Deputy Assistant Secretary of the Navy  
(Infrastructure Analysis)

*Michael A. Aimone*  
MICHAEL A. AIMONE, P.E.  
Deputy Assistant Secretary of the Air Force  
(Basing & Infrastructure Analysis)

Attachment:  
As stated



## Headquarters Air Force Geo Integration Office

# Memo

To: SAF/IEB  
From: HAF GIO (Col Cullis, USAF)  
Date: 03/24/2003  
Re: BRAC 2005 Tools Investment Strategy

### Mr Aimone:

This memo package provides background information for the proposed OSD investment strategy for developing and sustaining the use of IT to meet BRAC 2005 needs. A summary of costs follows:

Service Lead	Capability	Cost in Thousands		
		Apr 03-Mar 04	Apr 04-Mar 05	Apr 05-Mar 06
USN	Optimization Methodology	153	305	41
USA	Cost of Base Realignment Actions (COBRA) Modeling	185	69	54
USAF	DOD Installation Visualization (Strategic GeoBase)	12700	10820	10770
<b>FY Totals</b>		<b>13038</b>	<b>11194</b>	<b>10865</b>

Three important issues must be considered with these estimates:

1) The cost estimate for the optimization methodology includes both developing and documenting the methodology, and also supporting the JCSGs in the use of the tool. The COBRA modeling cost estimate includes only the development cost, but no support for the use of the tool by the JCSGs beyond telephone hot line technical support. The Strategic GeoBase estimates include the necessary staffs to attain, maintain, and sustain the Strategic GeoBase capability through Mar 06.

2) The Strategic GeoBase estimates assumed the government would be providing workspace and standard office resources to contracted teams. The actual DOD Strategic GeoBase governance process still needs to be defined by the Air Force in cooperation with SAF/IEB and OSD/AT&L.

3) If these tools are to be available in time for BRAC 2005, OSD must allocate the funds **NLT 1 Apr 03**.

V/R,

//signed//

Brian Cullis, Colonel, USAF  
Chief, HAF Geo Integration Office

## **BULLET BACKGROUND PAPER FOR STRATEGIC INSTALLATION MAPPING CAPABILITIES**

The HAF Geo Integration Office was tasked to compile a 'way ahead' for the Air Force to lead development of a DOD-wide Strategic GeoBase capability to satisfy near-term BRAC 2005 visualization requirements using commercially-available geographic information resources.

### **ASSUMPTIONS**

- Air Force serves as lead agency for enabling easy, virtual access for BRAC 2005 authorities to an accurate, medium-resolution, image-based geospatial information database capable of delivering installation situational awareness via map products of all major US Army, Navy and Air Force installations identified by OSD/AT&L in CONUS
- The geospatial database to be compiled and delivered by Mar 04 will include:
  - Geo-referenced commercial 1-meter resolution satellite imagery (color and B/W) for the built-up cantonment areas acquired through NIMA where all displayed features on the image are within 4-meters of their true earth position at least 90% of the time
  - Geo-referenced commercial 5-meter resolution satellite imagery for the major ranges acquired through NIMA where all displayed features on the image are within 25-meters of their true earth position at least 90% of the time
  - Base legal boundaries, 100-year floodplains and wetlands, Air Installation Compatibility Use Zone Clear Zones (AICUZ), Accident Potential Zones (APZ) 1 & 2, AICUZ noise contours, and explosive safety quantity-distance arcs for munitions/weapons storage areas (if applicable)
  - All the data noted above will be submitted with necessary metadata describing the source, age, quality, and methods used to capture the data for auditing purposes
- Legacy imagery, staffing, data resources and IT architecture and data investments across the services will be leveraged and normalized to maximize fiscal efficiencies
- No new primary data collection efforts will be performed with this effort; rather existing data will simply be converted to a common datum and coordinate system
- Every effort will be made to qualify DOD Strategic GeoBase data for use throughout the BRAC 2005 process and thus maximize its contribution to more informed decision-making, to include certification (if required)
- All costs attributed to acquiring and sustaining DOD Strategic GeoBase aims will be funded by OSD/AT&L through Mar 06 to derive maximum value from this installation knowledge investment for both BRAC and other OSD requirements such as homeland security and enterprise-wide real property accountability

## **USAF ROLES AND RESPONSIBILITIES**

- The HAF GIO will compete and award a time and materials contract to staff a DOD Strategic GeoBase Office with a full-time Program Manager, two full-time GeoBase Analysts, and a part-time GeoDatabase Administrator thru Mar 06.
  - The DOD Strategic GeoBase Office will coordinate all GeoBase requirements as stipulated by the OSD BRAC authority with the respective USA, USN, and USAF GeoBase cells, centrally manage imagery acquisition, and implement a suitable technical solution to satisfy BRAC 2005 installation complex visualization requirements
    - This office will establish a close working relationship with the appropriate audit authorities to ensure maximum value can be derived from the Strategic GeoBase investment throughout and beyond the BRAC 2005 process
- The HAF GIO will serve as the focal point responsible for providing USAF Strategic GeoBase vector datasets to the DOD Strategic GeoBase Office
- The Chief of the HAF GIO will be responsible for the DOD Strategic GeoBase Program and also serve as the Contracting Officer's Representative for acquiring staffing and resources for the DOD Strategic GeoBase Office

## **USA ROLES AND RESPONSIBILITIES**

- The US Army will be responsible for designating a government focal point responsible for providing the specified USA datasets to the DOD Strategic GeoBase Office and coordinate with USA BRAC authorities
  - This focal point will be responsible for all aspects of the USA Strategic GeoBase effort to include securing contract support, programming, data solicitation, compilation, conversion, validation and delivery to the DOD Strategic GeoBase Office

## **USN/USMC ROLES AND RESPONSIBILITIES**

- The US Navy will be responsible for designating a government focal point responsible for providing the specified USN/USMC datasets to the DOD Strategic GeoBase Office and coordinate with USN/USMC BRAC authorities
  - This focal point will be responsible for all aspects of the USN/USMC Strategic GeoBase effort to include securing contract support, programming, data solicitation, compilation, conversion, validation and delivery to the DOD Strategic GeoBase Office

## **OSD/AT&L ROLES AND RESPONSIBILITIES**

- OSD/AT&L will need to transfer \$12.7M in FY03 funds to the GeoBase PEC (31025F) for re-distribution to the services to satisfy their stated requirements
  - The US Navy/Marine Corps focal point will receive \$4.2M in FY03 funds for contracted manpower, travel, technology assets, and data services

-- The US Army focal point will receive \$4.6M in FY03 funds for contracted manpower, travel, technology assets, and data services

-- The US Air Force focal point will receive \$3.9M in FY03 funds for US Navy/Marine Corps and US Army installation imagery, DOD Strategic GeoBase Cell contracted staffing, and associated expenses

-- SAF/IE has already extended FY03 funding to the HAF GIO to secure delivery of a USAF Strategic GeoBase capability by Dec 03

- OSD/AT&L will also need to fund an estimated \$10.82M in FY04 and \$10.77M in FY05 to sustain the DOD Strategic GeoBase capability throughout BRAC 2005 deliberations and also enable widespread sharing of this information resource across the DOD enterprise

**BULLET BACKGROUND PAPER  
FOR SECURING  
CENTER FOR NAVAL ANALYSIS OPTIMIZATION METHODOLOGY CAPABILITIES**

As part of its support to the DoN BRAC process, CNA analysts will assist in the work of the Joint Cross-Service Groups (JCSGs). The assistance provided to the JCSGs will include developing and documenting a common optimization methodology for use by all the JCSGs and providing analytical support to each JCSG during their deliberations.

- An estimated 3 analysts working for 30 days will be required to develop the methodology
  - This would include coordination with the DoN BRAC leadership, meeting with Army and Air Force analysts supporting this task, and developing code and/or models
- Documenting the methodology will require 2 analysts to work for 10 days
- An estimated 6 analysts working approximately 30 days will be required to support the individual JCSGs during their deliberations
- Since the staffing for this effort is not entirely determined, we have used an average, fully-loaded daily cost for a CNA analyst of about \$1,000 to provide cost estimates in the following table *for planning purposes only*.

Task	FY2003		FY2004		FY2005		Task total cost (\$K)
	Number of analysts	Days	Number of analysts	Days	Number of analysts	Days	
Develop common analytical methodology	3	40					122
Document methodology	2	15					31
Provide analytical assistance to each JCSG			6	50	2	20	346
<b>Total FY costs</b>		153		305		41	499

**BACKGROUND PAPER  
FOR SECURING  
COST OF BASE REALIGNMENT ACTIONS (COBRA) MODELING CAPABILITIES**

The scope and costs associated with preparing and using COBRA in support of DoD's BRAC 05 efforts are:

- 1. FY03 **\$185K**
- FY04 **\$ 69K**
- FY05 **\$ 54K**
- \$308K**

- 2. FY 03 funding requirements. **\$185K** for:

- a. Update of COBRA (less any JPAT directed changes to the algorithms/functions) and operation of the JPAT for 18 months - \$111K. Work includes:

- 1) JPAT initial training conducted during July 2003.
    - 2) Functional support to the JPAT from 1 July 2003 to 31 December 2004.
    - 3) Review of Standard Factors.
    - 4) Support to review the algorithms.
    - 5) Documentation for COBRA.

- b. Any special enhancements/revisions to COBRA directed by the JPAT will be costed and added to the contract as a mod - \$50K.

- c. Update/enhancement of ADDER - \$24K. Adds the capability to compare two COBRA scenarios and summarize the differences in both tabular and graphical formats.

- 3. FY 04 funding requirements. **\$69K** This includes:

- a. Reproduction & distribution of the COBRA software.
    - b. User training to Services, Agencies, and OSD.
    - c. One year of Hotline support January to December 2004.

- 4. FY 05 funding requirements. **\$54K** for technical and Hotline support.