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The Honorable Daniel K. Inouye
Chairman
Committee on Appropriations
United States Senate

The Honorable Tim Johnson
Chairman
Subcommittee on Military Construction, Veterans Affairs,
and Related Agencies
Committee on Appropriations
United States Senate

Subject: Defense Planning: DOD Needs to Review the Costs and Benefits of Basing Alternatives for Army Forces in Europe

Since the early 1990s, the Army has reduced its force presence in Europe by bringing troops and their families back to the United States and consolidating remaining forces and infrastructure at fewer locations. In 2004, the Department of Defense (DOD) announced an overseas basing strategy that called for further decreases of U.S. forces in Europe. As a result, the Army initiated actions to reduce personnel stationed in Europe by 30,000 personnel by fiscal year 2013 and reduce the number of Army brigade combat teams in Europe from four to two. Since 2004, the Army has consolidated operational forces close to the European training facility at Grafenwoehr, Germany and at Vicenza, Italy. The consolidation included significant investments to construct new or renovate facilities at remaining bases to improve the quality of life for soldiers and their families. To help offset the costs of these investments, the Army closed some bases in Germany and has planned additional closures. Amid the implementation of the Army's draw down in Europe, DOD announced in the February 2010 Quadrennial Defense Review that it would retain the four Army brigade combat teams in Europe, rather than return two to the United States as originally planned, pending the outcome of a review of the North Atlantic Treaty Organization strategic concept and ongoing U.S. defense posture reviews. The DOD announcement cast considerable uncertainty on the Army's future force structure in Europe. For instance, the Army will now retain installations to house the brigades for an indefinite period of time while decisions are made. Regardless of these decisions, the Army is planning future investments of almost \$200 million in Europe to construct a new theater-level Army headquarters facility at Wiesbaden,

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Germany and the TRICARE Management Agency is planning a future investment of approximately \$1.2 billion to replace aging medical facilities at Ramstein and Landstuhl, Germany with a new consolidated medical center adjacent to Ramstein Air Base in Kaiserslautern, Germany. In light of these significant investments and the uncertainty about the Army's future force structure in Europe, you asked us to assess (1) the cost implications of potentially keeping more Army forces in Europe than originally planned, and the extent to which the Army's plans align with an evolving European strategic concept and U.S. posture plans, and (2) whether the process used by the Army to determine facility requirements provides an adequate basis for its infrastructure plans.

Scope and Methodology

To assess the cost implications of potentially keeping more Army forces in Europe than originally planned, and the extent to which the Army's plans align with an evolving European strategic concept and U.S. posture plans, we reviewed selected planning documents, such as project justifications, pertaining to military construction and budget documents for fiscal years 2004 through 2012. We also interviewed officials at the Army Installation Management Command-Europe; the U.S. Army Europe, and three garrisons in Germany (Heidelberg, Grafenwoehr, and Wiesbaden) to discuss and obtain relevant documentation on the status of completed, initiated, and planned renovations and military construction at those locations. In addition, we reviewed Medical Command and TRICARE Management Activity documentation and interviewed command officials from both organizations concerning the costs to replace or renovate the Landstuhl Regional Medical Center. We also assessed the potential impact, in terms of plans and costs, of the 2010 Quadrennial Defense Review decision to retain four combat brigade teams in Europe. This included assessing the projected costs of keeping bases open that, according to U.S. Army Europe officials, had been scheduled for return to the German government. We also assessed the future cost ramifications of consolidating U.S. Army Europe and 7th Army's headquarters and movement of forces from Heidelberg to Wiesbaden. Further, to assess the rationale and costs associated with the Army's options for keeping forces in Europe or returning them to the United States, we used as criteria relevant guidance from DOD, the Office of the Joint Chiefs of Staff, and U.S. Army Europe on the types of analyses to be performed and actions taken in considering changes to overseas force structure. For transformation and consolidation efforts yet to be completed, such as the consolidation of the headquarters complex at Wiesbaden, Germany, we obtained the documentation available to support the decision to consolidate and compared the documentation to criteria to determine to what extent it considered alternatives and captured potential cost savings. We met with officials from the following organizations to gather further information on U.S. Army Europe's analyses and justifications: Headquarters, Department of the Army, Assistant Chief of Staff for Installation Management; Headquarters, Army Installation Management Command; Office of the Under Secretary Defense for Policy; Headquarters, Department of the Army, Deputy Chief of Staff (G-3/5/7); and the Office of the Joint Chiefs of Staff-Global Posture Issues Team.

To evaluate whether the Army's process for determining facility requirements provides an adequate basis for its infrastructure plans in Europe, we reviewed data from the Army's systems used to identify facility requirements—the Real Property Planning and Analysis System, the Army Stationing and Installation Plan, and the Army Criteria Tracking System. For several European locations, we compared force structure and population data in the Army Stationing and Installation Plan to facility requirements for these locations in the Real Property and Planning System. We also conducted a data reliability assessment for both the Real Property Planning and Analysis System and Army Stationing and Installation Plan. Further, we interviewed officials at the U.S. Army Europe's Global Rebasing and Restructuring Division in Heidelberg, Germany and Army officials at Grafenwoehr and Wiesbaden to discuss and document to what extent their current and planned facilities will meet force structure needs, as well as their processes, including any informal methods, for determining facility requirements. Although we did not independently validate the budget, construction, stationing, and facility planning data provided by the Army, we discussed with officials steps they have taken to ensure reasonable accuracy of the data. As such, we determined the data to be sufficiently reliable for the purposes of this correspondence. We conducted this performance audit from February 2009 to July 2010 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Summary

Keeping more Army forces in Europe than originally planned would result in significant additional costs; however, it is unclear the extent to which DOD plans to weigh these costs against the benefits of having additional forces overseas, especially in light of an evolving European strategic concept and U.S. posture plans. In the near term, delays in decisions associated with two initiatives will impact the Army's costs in Europe. First, prior to the 2010 Quadrennial Defense Review, the Army had planned to return two of four brigade combat teams stationed in Europe to the United States in fiscal years 2012 and 2013, which would have saved millions annually in overseas stationing costs by allowing the closure of installations located at Bamberg and Schweinfurt, Germany. However, these plans are on hold pending an announcement of the North Atlantic Treaty Organization's strategic concept planned to be announced in November 2010, as well as ongoing U.S. assessments of the global defense posture, which have a less clear time frame for completion. The decision to retain these brigades in Europe will require the Army to seek funding of roughly \$176 million annually to support the Bamberg and Schweinfurt communities beginning in fiscal year 2013, according to Army estimates. Second, U.S. Army Europe estimated that closing Heidelberg and moving its headquarters to Wiesbaden would save hundreds of millions of dollars annually beginning in 2013. However, because of uncertainty for the funding of construction in Wiesbaden, Heidelberg will remain open longer than originally planned and the previously estimated savings will be delayed by 2 years or more. As a result, the Army estimates it will need approximately \$150 million annually to support continued operations. Both our review and an analysis performed by the Army found gaps in the support used to justify the decision

to close Heidelberg and consolidate forces in Wiesbaden. Our work revealed that the original analyses were poorly documented, limited in scope, and based on questionable assumptions. Department of the Army officials also found the U.S. Army Europe's original analysis inadequate and performed another more detailed analysis in mid-2009 that affirmed the decision to consolidate but lowered the estimated savings. In the longer term, if DOD decides not to return two of the four Brigade Combat Teams in Europe to the United States the incremental cost could be significant. The Army estimates that, depending upon the assumptions used, it will potentially cost between \$1 billion and \$2 billion more from fiscal years 2012-2021 to keep the two brigades in Europe than it would cost to return them to the United States.¹ DOD is reconsidering retaining the brigades in Europe in part because senior military officials in Europe have said that four brigade combat teams in Europe are needed to meet operational and mission requirements. According to DOD officials, the evaluation of U.S. forces in Europe will be primarily focused on whether four combat brigades will be retained in Europe. DOD and Army guidance call for the department to consider alternatives as part of the economic analyses conducted when contemplating construction or real property acquisition, which are decisions that often arise in the basing decision process, but we found that prior analyses have been limited in scope, or based on assumptions that were questionable. Without a comprehensive analysis, the Army may lack sufficient information to determine the most cost effective approach to maintaining a continued military presence in Europe that will align with the evolving North Atlantic Treaty Organization strategic concept and U.S. defense posture.

Once DOD determines its force structure and basing plans for a region, it then needs to determine the types and quantities of facilities necessary to provide operational and quality of life support to its soldiers and families; however, we were unable to validate whether completed or planned facilities in Europe would meet Army facility planning criteria because U.S. Army Europe planners use inconsistent processes to generate facility requirements. The Army in Europe does not consistently use the official Army facility planning tools that are designed to calculate, using population data and facility space criteria, the facilities required to accommodate forces and ensure that quality-of-life and other facility standards are met. Army officials stated that its facility planning systems do not always include current force structure and installation population data because overseas basing decisions are sensitive and not reflected in the systems before public announcements are made. The Army's systems showed populations at some installations even after anticipated closure dates, making the requirements generated by the systems inaccurate. Army planners in Europe use unofficial, locally developed systems to determine requirements, and we found that planners at different installations were not using consistent methods to calculate requirements for barracks and other facilities. The Army planners in Europe told us that they are developing their own criteria for determining the requirements that varies among the installations. Because these alternative methods are not linked with the Army's official system and its resident facility criteria and vary among the installations, we were unable to determine if completed and planned facilities will meet the Army's quality-of-life and other facility planning criteria. Our inability to validate infrastructure requirements reflects systemic issues that have been brought

¹These estimates vary depending upon assumptions such as whether the Army includes costs to deploy forces from the United States to Europe for training to maintain a constant presence in Europe.

to the Army's attention, but have not yet been resolved. For example, in a June 2010 report addressing domestic facility requirements, we reported that the Army's Real Property Planning and Analysis System did not always produce reliable results for some types of facilities because the systems have often relied on data that were not complete, current, or accurate.² Until the Army has a process to calculate facility requirements based on current and accurate information, the department cannot be assured that planned Army facilities in Europe will meet quality-of-life and other facility standards.

We are recommending that DOD require the Army to conduct a comprehensive analysis of alternatives for stationing forces in Europe that, at a minimum, should be done as expeditiously as possible upon the completion of the North Atlantic Treaty Organization's strategic concept announcement and consider the costs and benefits of a range of force structure and basing alternatives. Additionally, we are recommending that the Army develop a consistent process to determine specific facility requirements associated with the various basing options. In written comments on a draft of this correspondence, DOD stated that it concurred with our recommendations and have already initiated a strategy-based assessment of U.S. defense posture to be completed by the end of calendar year 2010 and that the Army intends to develop a central, on line classified site containing Army Stationing and Installation Plan population data that will reflect out-year stationing decisions that are classified due to host-nation sensitivity.

Background

Since 2004, as part of DOD's Integrated Global Presence and Basing Strategy, the Army has drawn down its forces in Europe and consolidated remaining forces and infrastructure at fewer locations. As a result, according to Army officials these efforts have resulted in significant recurring savings. As shown in figure 1, the Army's plan called for reducing the number of permanent, or enduring, major installations in Europe to six located in Germany at Wiesbaden, Baumholder, Kaiserslautern, Grafenwoehr, Stuttgart, and Ansbach, and one located in Italy at Vicenza. Figure 1 also shows installations located in Germany at Schweinfurt and Bamberg that the Army originally planned to close; however, the status of these installations is now uncertain because of the February 2010 Quadrennial Defense Review tentative decision to retain forces in Europe pending a global force posture review.

²GAO, *Defense Infrastructure: Army Needs to Improve Its Facility Planning Systems to Better Support Installations Experiencing Significant Growth*, GAO-10-602 (Washington, D.C.: June 24, 2010).

Figure 1: Major Installations Supporting U.S. Army Forces in Europe



Sources: U.S. Installation Management Command—Europe Region, Map Resources (map).

From fiscal years 2004 to 2009, the Army spent approximately \$1.3 billion dollars to support its infrastructure transformation and consolidation plans in Europe.³ The majority of this investment was used to undertake two main efforts: (1) the consolidation of operational forces close to Europe's training facilities at Grafenwoehr, Germany and (2) the consolidation of the U.S. Army Europe's Airborne Brigade Combat Team in Vicenza, Italy. In and around Grafenwoehr, the Army spent about \$473 million on facilities. These included new or renovated operational complexes, maintenance and operations centers, and barracks to support Army brigade combat teams and other units. Other work at Grafenwoehr included upgrading a medical and dental facility and constructing a new post exchange and commissary, dining facility, physical fitness center, as well as numerous other facilities to support unit operations, the soldiers, and their families. Looking forward,

³The \$1.3 billion consists of funding from five funding sources: (1) Military Construction—the largest amount, comprised of \$957 million; (2) Army Family Housing; (3) Sustainment, Restoration, and Modernization; (4) Operations and Maintenance; and (5) Payment-in-Kind. Payment-in-Kind is compensation received from a host nation in the form of construction, repair, and base support projects instead of residual value cash payment. (Residual Value is the negotiated monetary or non monetary compensation DOD receives from host nations for DOD-funded facilities or other capital improvements returned to the host nation under a realignment action.)

the Army is planning military construction to build barracks facilities at Grafenwoehr to meet the current barracks standard, though this was not part of the original transformation and consolidation plan.⁴ At Vicenza, Italy, the Army has spent about \$424 million on facilities to accommodate an expected increase in the forces stationed in Italy. The Army's construction and renovation projects include headquarters and maintenance buildings, barracks, child development centers, and schools at various locations around Vicenza. The remainder of the Army's investment, including Payment-in-Kind and Sustainment, Restoration, and Modernization funds, were used to support transformation and consolidation-related projects throughout Germany, including at Ansbach, Heidelberg, and Kaiserslautern, among others.

In addition to the Army's projects at Grafenwoehr and Vicenza, the Army and TRICARE Management Activity have plans for two major infrastructure projects to support forces in Europe at a cost of almost \$1.4 billion. These include construction of an Army headquarters facility at Wiesbaden, Germany and construction of a replacement regional medical center adjacent to Ramstein Air Base near Kaiserslautern, Germany. Moving and consolidating several Army headquarters from Heidelberg and other locations to Wiesbaden is the last step in the U.S. Army Europe's transformation and consolidation plan that began in 2004.⁵ According to U.S. Army Europe officials, consolidating the headquarters would optimize command and control, intelligence, and signal capabilities; provide a more responsive organizational structure; offer better force protection options than at the current location in Heidelberg; and provide access to a nearby Army airfield. The Wiesbaden location would include a theater-level command and control center, a consolidated intelligence center, and a network warfare center at a cost of approximately \$240 million. The first increment of \$59.5 million was appropriated for fiscal year 2009 to build the command and control center and the U.S. Army Corps of Engineers began design work for the facility in the first quarter of the fiscal year 2010. DOD's second project is to replace the regional medical center located in Landstuhl and the Medical Clinic at Ramstein Air Base in Germany with a new consolidated medical center adjacent to Ramstein Air Base near Kaiserlautern, Germany at a cost projected at \$1.2 billion. According to DOD, this project is being driven by the effort to recapitalize medical facilities worldwide, and was not part of the effort to transform and consolidate Army forces in Europe. The medical center is a major hospital that provides primary care for more than 40,000 military personnel and 245,000 beneficiaries in the European Command. The facility also provides medical support for casualties that are air-evacuated from Iraq and Afghanistan: wounded personnel are flown into Ramstein Air Base and then taken by bus to Landstuhl Regional Medical Center, approximately 20 minutes away. According to TRICARE Management Activity officials, a 2002-2003 Army Medical Department study recommended that DOD renovate and add to the existing hospital in Landstuhl.

⁴Beginning in fiscal year 2005 the Army changed its barracks criteria for enlisted soldiers. The new criteria places two junior soldiers (grades E-1 to E-4) in a suite composed of two private living and/or sleeping rooms, with walk-in closets, connected by a shared bathroom, and service area with sink, counter, refrigerator, and either a stove or cook top and a microwave oven. Junior non-commissioned officers (grades E-5 and E-6) occupy the entire suite, providing them a living room, a bedroom, and a separate bathroom.

⁵In addition to closing Heidelberg, U.S. Army Europe also initiated plans to close communities located in both Darmstadt and Mannheim, Germany and the associated savings for closing these installations was included in U.S. Army's Europe's calculated savings for the Wiesbaden consolidation.

However, in 2009, the Senate Appropriations Committee directed DOD to complete a site assessment for this approach⁶ and the Office of the Deputy Under Secretary of Defense (Installations and Environment) conducted a new analysis that included consideration of alternative sites. One of the reasons officials decided upon the new construction adjacent to Ramstein Air Base was because it allows for easier access to the airfield where wounded personnel arrive from combat zones.

Many defense organizations are involved in force structure and basing decisions. According to Army, Joint Staff and DOD guidance, unit commanders, U.S. Army Europe, and European Command are responsible for providing analytical support and coordinating proposed basing actions.⁷ For example, for stationing actions and unit moves, commanders of units stationed in Europe will review the mission, operational facilities, base support, available resources, potentially including available funds, and political and environmental effects of the proposed basing action. For force structure changes, Army Headquarters or U.S. Army Europe obtains input and comments from affected commands, including European Command, the functional combatant commands and the component commands. Army Headquarters transmits the resulting proposal to the Joint Staff and requests approval by the Secretary of Defense. European Command conducts an assessment of the implications of potential force structure changes, to inform the Joint Staff and Office of the Secretary of Defense of the relative values or benefits and costs or risks. The assessment includes political-military, operational risk, force structure, infrastructure, and resource implications of the proposed change, and it should address alternatives considered, where applicable.

Future Plans for Army Forces in Europe Are Uncertain, but Costs Are Likely to Be Higher Than Earlier Army Estimates

Keeping the four brigades in Europe will require the Army to seek funds to keep installations open in the near term (fiscal years 2013 and 2014) and future decisions about force structure could result in \$1 billion to \$2 billion in incremental costs in the long term if four combat brigades, rather than two, are retained. The Army's force structure in Europe is subject to the results of several pending reviews including a comprehensive review of U.S. defense posture worldwide. To date, however, DOD has not announced the details of the scope and timing for the completion of this comprehensive review.

⁶S. Rep. No. 111-40, at 20-21 (2009). The Committee noted that Ramstein Air Force Base could potentially accommodate the new hospital, and directed the DOD to conduct a cost versus benefit analysis of locating the replacement hospital at Landstuhl or Ramstein.

⁷Relevant regulations include U.S. Army Europe Regulation 220-5, *Peacetime Stationing* (Sept. 4, 2002); Chairman of the Joint Chiefs of Staff Instruction 2300.03C, *Realignment of Overseas Sites* (Dec. 26, 2007); Chairman of the Joint Chiefs of Staff Instruction 2300.02F, *Coordination of Overseas Force Structure Changes and Host-Nation Notification* (Sept. 30, 2009); and Department of Defense Instruction 4165.69, *Realignment of DoD Sites Overseas* (Apr. 6, 2005).

Retaining Forces in Europe Will Require the Army to Spend Additional Funds,
Lowering Anticipated Near-Term Savings

Delays and changes in decisions will require the Army to seek hundreds of millions of dollars more annually than planned to support facilities in Europe that they originally intended to close. As part of its plans to return two brigade combat teams stationed in Europe to the United States in fiscal years 2012 and 2013, U.S. Army Europe intended to close installations located at Bamberg and Schweinfurt, Germany. However, the decision to retain these brigades in Europe delays or eliminates these savings and, according to Installation Management Command-Europe, will require the Army to seek funding of roughly \$176 million annually beginning in fiscal year 2013 to support base operations at these two communities.

In addition, U.S. Army Europe planned hundreds of millions in savings by closing Heidelberg and consolidating in Wiesbaden by 2013 and did not program funding to operate this installation beyond 2012. However, because of uncertainty for the funding of construction in Wiesbaden, Heidelberg will remain open longer than originally planned and the previously estimated savings will be delayed by 2 years or more. As a result, the Army estimates it will need approximately \$150 million annually to support continued operations.⁸

Both our review and the subsequent analyses performed by the Army found gaps in the support used to justify the decision to close Heidelberg and consolidate forces in Wiesbaden. The original analyses were poorly documented, limited in scope, and based on questionable assumptions. Army and DOD guidance describing economic analyses to support military construction projects or decisions about the acquisition of real property indicate that reasonable alternatives should be considered when contemplating projects. For example, DOD Instruction 7041.3 indicates that the analyses should address alternatives that consider the availability of existing facilities and estimated costs and benefits, among other factors.⁹ Similarly, Army Pamphlet 415-3 identifies the consideration and evaluation of alternatives as sound economic principles underlying the economic analyses to be performed in support of military construction projects.¹⁰ When we asked to see the original analyses for the 2005 decision, U.S. Army Europe officials provided us with an information paper that had been prepared in response to our request but did not produce documentation to support the original decision. Little detail was available about the alternatives that had been considered, or how quantitative criteria (like cost savings) and qualitative criteria (like force protection and access to airfields) were weighed in the decision. Army officials told us that alternatives to Wiesbaden had been considered in discussions, and that these were rejected in favor of Wiesbaden. In addition, although they noted that estimated cost savings was one of the key reasons for the decision, they also told us that the decision was primarily based on judgment. Furthermore, according to DOD officials, the analysis was not rigorous or documented. Department of the Army officials also deemed the analysis inadequate to defend the operational and business needs for the consolidation and as a result called for additional cost

⁸This amount includes estimates provided by Installation Management Command-Europe for family housing, base operations support, and sustainment, restoration, modernization.

⁹Department of Defense Instruction 7041.3, *Economic Analysis for Decisionmaking* (Nov. 7, 1995).

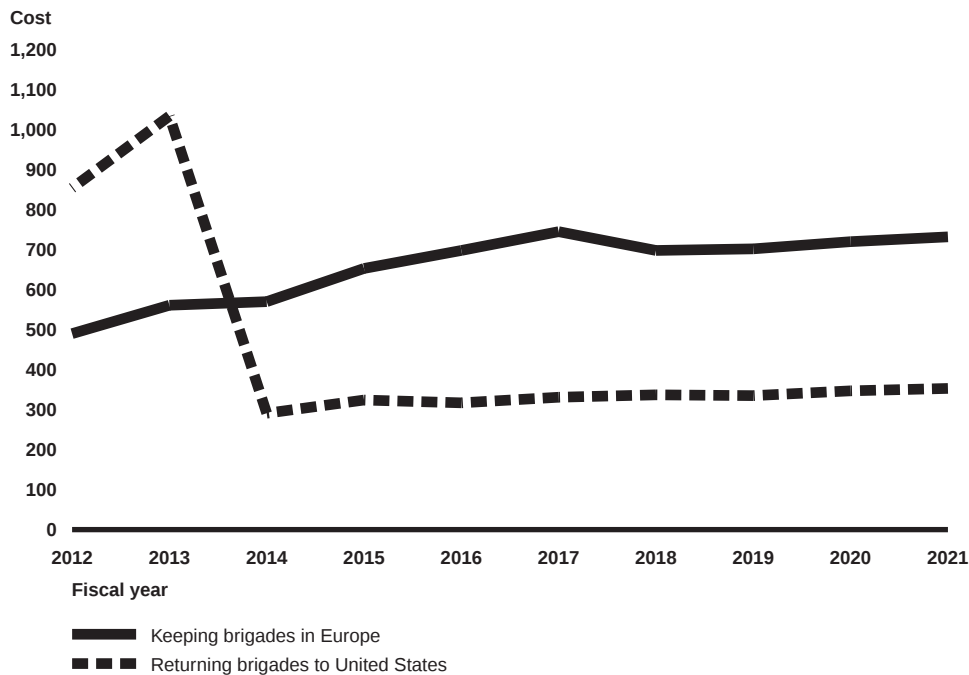
¹⁰Army Pamphlet 415-3, *Economic Analysis: Description and Methods* (Aug. 10, 1992).

analysis to be conducted by officials from the Assistant Chief of Staff–Installation Management. A subsequent, more robust cost analysis completed in 2009 reduced the estimated annual cost savings to less than half of the original estimate, but affirmed the decision to consolidate in Wiesbaden. DOD has updated its plans and has announced that its current plan is to close the facilities in and around Heidelberg by 2015, but has not yet obtained all the funding to build the new headquarters complex in Wiesbaden.

Keeping More Forces in Europe Than Originally Planned Could Cost Up to \$2 Billion in the Long Term

DOD has not yet made a final decision on the number of brigades that will remain in Europe for the long term; however, the Army’s Office of the Deputy Chief of Staff for Programs (G8) estimates that the long-term incremental costs for keeping the two brigades in Europe will be between \$1 billion and \$2 billion for fiscal year 2012 through 2021. The projected costs will vary depending on whether forces are sent from the United States to Europe for training to maintain a constant presence in Europe. Figure 2 compares the Army’s annual estimated cost for fiscal years 2012 through 2021 for keeping the two additional brigades in Europe versus returning them to the United States, assuming no rotational costs. As shown, in years 2012 and 2013 the need to construct facilities in the United States to house the returning brigades would cost more than retaining the brigades in Europe at existing installations. However, Army analyses show that for fiscal year 2014 through 2021 it will cost on average \$360 million more per year to retain the brigades in Europe.

Figure 2: Estimated Annual Total Costs for Basing Two Brigades in Europe Compared to Returning Them to the United States for Fiscal Years 2012-2021 (dollars in millions)



Several factors make keeping the two additional brigades in Europe more expensive than returning them to the United States. These include the cost to provide schools

and commissaries overseas, increased personnel costs due to overseas allowances, and additional funds for needed infrastructure projects to continue operations at Bamberg and Schweinfurt. For example, the Army estimates that for fiscal years 2016 to 2021 it will need approximately \$370 million to improve facilities at Bamberg and Schweinfurt to meet quality of life standards because improvements had not been planned for either of these locations as they had previously been scheduled to be returned to the German government.

Even with the potential significant long-term costs, senior military officials in Europe have argued that the larger force structure is necessary. In March 2010, the Commander of European Command stated in written testimony that without four brigade combat teams and certain headquarters capabilities European Command assumes risks in its capability to conduct steady-state security cooperation, shaping, and contingency missions and that deterrence and reassurance are at increased risk.¹¹ He also stated that the loss of certain headquarters combined with significant force requirements in support of Overseas Contingency Operations outside the European Command region makes retaining four brigade combat teams critical to the United States Army Europe's and European Command's mission.

DOD's Plans for Reviewing U.S. Global Defense Posture Are Unclear, but Alternatives Under Consideration Are Limited

The Army's force structure in Europe is subject to the results of a pending review of the North Atlantic Treaty Organization's Strategic Concept and an accompanying U.S. assessment of the U.S. European defense posture network. The new North Atlantic Treaty Organization strategic concept is scheduled to be unveiled at a November 2010 meeting in Lisbon, Portugal. The 2010 Quadrennial Defense Review announced plans for a comprehensive review of U.S. defense posture worldwide and the Secretary of Defense issued a memorandum in May 2010 identifying global posture as a critical issue to be scrutinized in preparation for the fiscal year 2012 budget process. To date, DOD has yet to announce the details of the scope and timing for the completion of its comprehensive review of global posture.

DOD and Army guidance should prompt the department to consider alternatives when contemplating basing decisions. In our past work, we have found weaknesses in the department's process for adjusting defense global posture and linking it with current strategy.¹² And, even though DOD has stated that it plans to conduct a comprehensive review of global posture, DOD and Army officials told us their review of Army forces in Europe will focus on whether four combat brigades will be retained in Europe. Additionally, until the North Atlantic Treaty Organization new strategic concept is unveiled, it is not known if DOD and the Army are making basing decisions that will support the new strategy.

¹¹See Statement of Admiral James G. Stavridis, Commander, United States European Command, before the Senate Committee on Armed Services (Mar. 9, 2010).

¹²GAO, *Force Structure: Actions Needed to Improve DOD's Ability to Manage, Assess, and Report on Global Defense Posture Initiatives*, GAO-09-706R (Washington, D.C.: July 2, 2009).

Inconsistent Processes to Develop Facility Requirements Hampers Validation of Facility Needs

Once DOD determines its force structure and basing plans for a specific region, it then needs to determine the types and quantities of facilities necessary to provide operational and quality of life support to its soldiers and families; however, we were unable to validate whether completed and planned facilities in Europe meet Army facility planning criteria because U.S. Army Europe planners use inconsistent processes to generate facility requirements. The Army in Europe does not consistently use official Army facility planning tools to calculate its requirements. The Army's official tools for determining facility requirements do not use the most current and accurate information for European locations, such as installation population data and, in some cases, planners have used alternative or workaround methods to develop facility requirements.

Army guidance directs garrison planning staff to use an Army-wide system, known as the Real Property Planning and Analysis System, to conduct facility requirements analyses which determine requirements for the number, type, and size of facilities needed to accommodate forces stationed at each installation. The planning and analysis system uses installation population data from the Army Stationing and Installation Plan and Army standardized facility criteria needed to support the population and meet mission requirements and quality-of-life standards. For example, the system uses installation population data to determine the required number and size of headquarters and administrative buildings, maintenance facilities, barracks, medical and dental clinics, commissaries, and other support facilities needed at each installation.

According to Army officials, the force structure and installation population data used by the Real Property Planning and Analysis System are not current and thus not accurate. Army officials stated that its facility planning systems do not always include current force structure and installation population data because overseas basing decisions are sensitive and not reflected in the systems before public announcements are made. For example, we found in the case of Vicenza that the facility requirements in the planning and analysis system did not track with anticipated increases in the installation population. Specifically, the Army's force structure is expected to almost double in Vicenza, Italy for fiscal years 2010 to 2014, yet the planning and analysis system was not edited to reflect a corresponding increase in facility requirements.

Because the stationing data do not always reflect current or planned force structure decisions, U.S. Army Europe planners often use alternative methods to determine facility requirements. However, such methods use spreadsheets that are not linked to the planning and analysis system or the criteria database. And, because the alternative requirements determination methods are not linked with the official planning system and its resident facility criteria and standards, it is unknown if planned facilities will meet Army quality-of-life and other facility standards contained

in that system. We found that planners were not using consistent methods to calculate facility requirements. To illustrate, key U.S. Army Europe officials told us that because accompaniment rates for troops in Europe are different than in the United States, Army installation planners in Europe were not using the Army's facility planning criterion for determining barracks and family housing requirements; instead, they are using their own subjective estimates that vary among the installations. Planners explained that it was a challenge to develop these rates because the documents available to them that provided details on installation population were not always up to date and did not accurately reflect future Army force structure decisions. This lack of consistency in the methods used by planners in Europe and not knowing to what extent the planners are using current information to determine facility requirements precluded us from validating whether completed or planned facilities in Europe would satisfy its infrastructure needs.

Our inability to validate infrastructure requirements reflects systemic issues that have been brought to the Army's attention, but have not yet been resolved. A 2006 Army Audit Agency report on military construction requirements in Europe noted that Army systems for planning construction projects often contained conflicting or inaccurate information and planners sometimes generated incorrect requirements when they used the systems.¹³ Although the Army Audit Agency found that planned military construction projects were adequate to support U.S. Army Europe's installation plans, it also identified concerns with the accuracy of the information used to determine facility requirements in Europe. The report noted that project planners often did not maintain adequate documentation supporting how they determined requirements and, as a result, often had to recreate the information to support their analysis. In addition, in a June 2010 report that examined facility requirements for Army installations in the United States, we found that the Army's Real Property Planning and Analysis System did not always produce reliable results for some types of facilities because the system has often relied on data that are not complete, current, or accurate.¹⁴ For instance, we found that the facility design criteria had not been updated to reflect current standard designs for 47 of the 58 facility types in the system. As a result of our findings, to improve the accuracy and completeness of the Army's Real Property Planning and Analysis System as a tool for generating facility requirements, we recommended that the Secretary of Defense direct the Secretary of the Army to develop and implement guidance that requires the Army Criteria Tracking System which feeds standardized facility criteria into the Army's Real Property Planning and Analysis System to be updated to reflect changes to facility designs as they are made. DOD concurred with our recommendation and stated that the Army has already taken action to enhance the accuracy of its planning systems to better respond to changing requirements.

Conclusions

With over \$1.3 billion invested since 2004, another \$1.4 billion in infrastructure investments planned for the Wiesbaden consolidation and the recapitalization of

¹³U.S. Army Audit Agency, *Military Construction Requirements in Europe*, Audit Report: A-2006-0077-ALE (Wiesbaden, Germany: March 17, 2006).

¹⁴GAO-10-602.

medical facilities, and the potential to increase costs by up to \$2 billion over the next 10 years if all four Army brigades are kept in Europe, the financial stakes are high for DOD as it considers its future posture. Existing guidance should prompt the department to consider analyses of alternatives when contemplating basing options; however, previous Army analyses have not been well documented, and the plans being pursued are based on a previous strategy developed in 2004 and may not be aligned with a new strategic concept that has yet to be determined. In addition, the Army's approach to managing its facilities thus far has resulted in uncertainty concerning whether completed and planned facilities will meet infrastructure needs. Until facility requirements reflect quality-of-life and other standardized facilities criteria, there is inadequate assurance that the Army's facilities in Europe will fully meet the needs of soldiers and their families. Without a comprehensive review the Army may lack sufficient information to determine the most cost effective approach to maintaining a continued presence in Europe.

Recommendations for Executive Action

To take advantage of the pause before final decisions on the Army's European force structure are made and determine the best course of action for its European posture, we recommend that the Secretary of Defense direct the Secretary of the Army to take the following two actions:

1. Conduct a comprehensive analysis of alternatives for stationing forces in Europe. At a minimum, the review should be done as expeditiously as possible upon the completion of the North Atlantic Treaty Organization's strategic concept announcement and consider the costs and benefits of a range of force structure and basing alternatives.
2. Develop a consistent process to determine specific facility requirements associated with the various options.

Agency Comments and Our Evaluation

In written comments on a draft of this correspondence, DOD stated that it concurred with our recommendations and certain actions have already been initiated. In response to our first recommendation, DOD stated that it is currently conducting a strategy-based assessment of U.S. defense posture, including a broad review of the European theater and analysis of the total ground force requirement in Europe. DOD anticipates that its assessment should be complete by the end of calendar year 2010. In response to our second recommendation, the Army intends to develop a central, on line classified site containing Army Stationing and Installation Plan population data that will reflect out-year stationing decision that are classified due to host-nation sensitivity. DOD's comments are reprinted in their entirety in enclosure I. DOD also provided a number of technical and clarifying comments, which we have incorporated where appropriate.

We are sending copies of this report to other congressional committees and interested parties. We are also sending copies to the Secretaries of Defense and the Army. In addition, this report will be available at no charge on our Web site at <http://www.gao.gov>. If you or your staff have any questions about this report, please contact me at (404) 679-1816 or pendletonj@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in enclosure II.

A handwritten signature in black ink that reads "John H. Pendleton". The signature is fluid and cursive, with a long horizontal stroke at the end.

John Pendleton, Director
Defense Capabilities and Management

Enclosure I: Comments from the Department of Defense



ACQUISITION,
TECHNOLOGY
AND LOGISTICS

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

AUG 19 2010

Mr. John Pendleton
Director, Defense Capabilities and Management
U.S. Government Accountability Office
441 G Street, N.W.
Washington, DC 20548

Dear Mr. Pendleton:

This is the Department of Defense (DoD) response to the GAO draft report, GAO-10-745R, "DEFENSE INFRASTRUCTURE: DoD Needs to Review the Costs and Benefits of Basing Alternatives for Army Forces in Europe," dated July 12, 2010 (GAO Code 351325). Specific comments are enclosed.

Sincerely,

A handwritten signature in black ink, appearing to read "Dorothy Robyn", is positioned above the printed name.

Dorothy Robyn
Deputy Under Secretary of Defense
(Installations and Environment)

Enclosure:
As stated

**GAO DRAFT REPORT – DATED JULY 12, 2010
GAO CODE 351325/GAO-10-745R**

**"DEFENSE INFRASTRUCTURE: DoD Needs to Review the Costs and Benefits of
Basing Alternatives for Army Forces in Europe"**

**DEPARTMENT OF DEFENSE COMMENTS
TO THE RECOMMENDATIONS**

RECOMMENDATION 1: The GAO recommends that the Secretary of Defense direct the Secretary of the Army to conduct a comprehensive analysis of alternatives for stationing forces in Europe. At a minimum, the review should be done as expeditiously as possible upon the completion of the North Atlantic Treaty Organization's strategic concept announcement and consider the costs and benefits of a range of force structure and basing alternatives.

DOD RESPONSE: DoD concurs. The 2010 Quadrennial Defense Review (QDR) stated the intent to retain four brigade combat teams and a Corps headquarters in Europe pending a review of the NATO Strategic Concept and an accompanying U.S. assessment of our European defense posture network. DoD is currently conducting a strategy-based assessment of U.S. defense posture, including a broad review of the European theater and analysis of the total ground force requirement in Europe (in addition to other key posture issues). Evaluation of options will consider a broad range of criteria to include political-military factors, operations, force structure/force management, and cost. The assessment should be complete by the end of calendar year 2010.

RECOMMENDATION 2: The GAO recommends that the Secretary of Defense direct the Secretary of the Army to develop a consistent process to determine specific facility requirements associated with the various options.

DOD RESPONSE: DoD concurs. The Army will develop a central on-line classified site containing Army Stationing and Installation Plan (ASIP) population data that will reflect out-year overseas stationing decisions that are classified due to host-nation sensitivity. This information will update the Real Property Planning and Analysis System (RPLANS), and allow the Office of the Assistant Chief of Staff for Installation Management to accurately represent and justify out-year overseas facility requirements.

Enclosure II: GAO Contact and Staff Acknowledgments

GAO Contact

John Pendleton, (404) 679-1816 or pendletonj@gao.gov

Staff Acknowledgments

In addition to the individual named above, Laura Durland (Assistant Director), Tim Burke, Ron La Due Lake, Kelly Rubin, Brian Chung, Robin Nye, Michael Shaughnessy, and Mae Jones made key contributions to this report.

(351325)

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