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INSTITUTIONALIZING NET ASSESSMENT IN
THE DEPARTMENT OF DEFENSE

A CONCEPT PAPER

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The attached paper is being circulated to promote general discussion. It reflects only the personal opinions of the author and is not in any way an official OASD(I) or DoD position. It was written to stimulate thought about the future of net assessment within DoD and as a "strawman" through which to obtain others' views and reactions.

Executive Summary

Net assessment is now weakly institutionalized in DoD and is isolated from most of the regular operations of DoD policy planning, intelligence, and programming. The planning and analysis activity of DoD thus lacks both a common focus and an adequate picture of the relative balance between U.S., allied, and threat forces and capabilities.

Most of the DoD programming effort centers on resource constraints and is not focused on improving capabilities within those resource constraints. Adversary relationships persist in which basic facts and figures regarding the relative balance are unnecessarily debated in areas where most of the data should be well established and used as a common basis for planning and meaningful resource allocation debates.

At the same time, the Defense Intelligence effort lacks focus and substantive direction. It produces individual reports and estimates on threat and allied forces, which cannot be directly compared or related to U.S. forces and capabilities. Moreover, various contract and in-house study efforts compete directly with official intelligence production as planners seek balance analyses from outside the intelligence and net assessment systems.

The time has come for major reform in the DoD PPBS and intelligence system. This can best be achieved by institutionalizing net assessment within DoD in ways which tie both the planning cycle and intelligence production to common perceptions of the relative balance.

There are four main areas in which such institutionalization must take place:

- in a regular cycle of net assessment documentation;
- in the planning cycle;
- in intelligence production; and
- in other studies and analysis activity.

At the same time, net assessment has to better organize its own staff functions, and develop suitable management procedures. These two functions are as essential to the long-term use of net assessment as the four above.

Institutionalizing Net Assessment

A Concept Paper

Introduction

The Department of Defense (DoD) can be led for a time by direct guidance at the policy level, but such guidance has a limited span of influence even in the short term. It can only have a significant and long-term impact if it is institutionalized into the daily operations of the Services, OJCS, and OSD.

This seems particularly true of "net assessment." Like program budgeting and systems analysis, "net assessment" is an approach to problem solving rather than a solution to a problem. Unless the components of DoD come to make practical and effective use of the technique, it can vanish even more quickly than a policy, a planning document, or a weapons concept.

It is now little more than a year before the next Presidential election. At present, net assessment is poorly institutionalized and isolated from much of the regular operations of OSD. Three small offices produce largely uncoordinated studies to meet the needs of the Secretary, DDR&E, and certain ASDs. They rely on contract studies, and essentially compete with the regular staff system. Quality control is uncertain because the net assessment staffs are so small, and the impact of the research and other efforts of each office must be imposed upon the DoD "system" rather than generated by it.

A. Major Areas for Institutionalization

If net assessment is to work, it must be institutionalized in DoD. There are four main areas in which such institutionalization must take place:

- in a regular cycle of net assessment documentation;
- in the planning cycle;
- in intelligence production; and
- in other studies and analysis activity.

At the same time, net assessment has to organize better its own staff functions and suitable management procedures must be developed. These two functions are as essential to the long-term use of net assessment as the four above.

B. Setting Up a Regular Cycle of Net Assessment Documentation

The most basic step in institutionalizing net assessment is to shift from contract studies to a cycle of regular OSD net assessment documents generated by the DoD staff system. There are several reasons for instituting such a system:

-- The lack of net assessment analysis in all phases of DoD activity was a major reason for establishing net assessment offices. Contract studies do not shape DoD staff activities or plans.

-- The individual efforts at "balance" studies in DoD follow no organized pattern or methods of analysis. Most tend to serve the parochial position of the drafting component(s). They are not net assessments, and are highly perishable in impact.

-- A reliance on contract offices forces the net assessment effort to compete with the offices it is attempting to reform.

-- No current OSD document exists which focuses the U.S. planning effort and intelligence effort into a common framework. An expanded posture statement cannot substitute for detailed net assessments of critical areas.

-- The present Defense intelligence effort lacks focus. There is no series of documents that orients it towards comparison of U.S., allied, and threat capabilities. Each aspect of the intelligence effort tends to develop in "bits and pieces" production efforts. The focus tends to come at the NIE level, which is generated outside DoD, and which does not provide a basis for direct force comparisons.

-- No "institutional memory" exists of either net assessment products or balance comparisons. Contractor efforts involve long learning curves, do not develop team expertise which is later available in DoD, and are quickly lost in file cabinets. NSSM, MBFR, and SALT efforts involve the same learning curve and turnover problems as contract studies.

Accordingly, a series of regularly updated net assessment documents needs to be generated under the leadership of OSD(NA) which are team efforts by the components of DoD. These should include such subjects as:

- the strategic balance;
- the theater nuclear balance;
- the NATO/Warsaw Pact balance;
- the maritime balance;
- the Middle East balance;
- the balance of U.S., PRC, Korean, and Japanese capabilities;
- capabilities for military intervention in peripheral areas;
- military assistance and arms trade balance;
- the technology balance;
- capabilities for long-term competition (including the balance of defense expenditure).

The Department already does this work in episodic and uncoordinated forms. Generating these documents on a regular annual or semi-annual cycle would allow the content and methodology in each document to be steadily refined. Putting the effort under OSD(NA) would minimize the adversary approach since OSD(NA) has no budgetary or force requirement position to defend and the existence of such products would help allow OSD to drive the NSSM and NIE efforts rather than be driven by them.

Most significantly, such products would allow OSD(NA) to institutionalize the staff work of the relevant components to support each product. The fact the effort was repetitive would allow OSD(NA) to improve the output over time and to break the current staff effort out of its previous bureaucratic mold. This would compensate for shifting away from directly controllable contract support.

C. Institutionalizing Net Assessment in the Planning Cycle

Efforts are already underway to shift the Secretary's Posture Statement towards a net assessment approach. This is a valuable step towards institutionalization. It is not, however, a substitute for institutionalizing a broad requirement for summary net assessment reporting in other major OSD and DoD policy documents, and as required basic supporting rationale for force improvements, planning guidance, weapons developments, etc.

Such net assessment rationales would not have to provide great detail in most cases, but the brief force comparisons presented in the Issue Papers fall short of what is required, and most other planning guidance documents generated within OSD and DoD fail to state an explicit rationale based on a clear statement of the relevant balance. This encourages the

submission of projects on their particular or sub-optimized merits in terms of technology, force quality, or logic regardless of their overall value in improving U.S. capabilities relative to definable threats. It also encourages improving U.S. force capabilities regardless of the effectiveness of the improvement relative to the capability of our allies, or the total balance of capabilities relative to the threat.

Further, the fact that net assessment-oriented statements of the balance are not required encourages special interest analysis even when some kind of balance statement is now provided. For example, weapons system developments tend to be defended in terms of the balance of technology or tactical capability in a highly selected area regardless of their overall impact on the balance. The strategic balance is often presented in ways which are so selective as to plead the position of the office writing the paper.

A survey will be needed of current planning and guidance documents to establish what instructions for institutionalizing net assessment would be most useful. It would also help if such a requirement could be based on the use of agreed or official OSD net assessment documents of the type suggested previously. This would provide guidance as to the key factors to be considered and provide a common data base and set of assumptions.

Inevitably, it will take time to develop suitable formats for each document, and to give them the content and quality necessary to be fully useful. The initial efforts may well be crude, particularly in the absence of any OSD or DoD "official" net assessment documents to use in measuring the balance and as a source of agreed figures and summary data. Such reforms are, however, an essential step forward in reducing the tendency towards parochial or "hobbyshop" justification that occurs in DoD planning, and in giving OSD guidance and programming documents an explicit substantive rationale. The McNamara reforms of the 1960s succeeded in institutionalizing a broad perspective in DoD regarding force costs, but largely failed to do so for force effectiveness. The institutional bias of DoD now tends to be skewed towards management by resource constraint rather than a balanced effort at cost-effectiveness. This encourages individual offices in trying to boost or sell policy or weapons systems in isolation from its overall force impact as a way of compensating for the fact its cost can be understood in terms of its overall effect. It makes meaningful management by objective difficult since only the cost objective can be understood in DoD-wide or broad terms, and it inhibits resource management because costing cannot be made more meaningful unless it can be related to well identified critical elements in the balance.

D. Institutionalizing Net Assessment in Intelligence Production

The U.S. intelligence community has failed to keep pace with the advances in research and analytic techniques taking place elsewhere in defense and outside the intelligence community. The following critical problems exist in virtually every major intelligence document generated within DoD:

- the limitations in intelligence are not explicitly stated;
- intelligence cannot be separated from analysis, and analysis cannot be separated from judgement;
- uncertainty is not explicitly stated, and is rarely quantified;
- critical assumptions are not listed;
- vague adjectives are applied in ways where their meaning is unclear;
- the structure of the intelligence provided cannot be directly correlated to data on other countries;
- the assessments made in intelligence cannot be related to a specific standard or to U.S. capabilities. They represent the value judgements of analysts and estimators who are neither trained nor experienced in the capabilities of those forces on which they are reporting;
- the intelligence sub-optimizes around specific areas or interests. It does not cover the full range of factors that should be addressed, even within the specific area treated, necessary to make an effective force-on-force comparison;
- the overall effort is heavily biased towards order-of-battle and historical production. Because intelligence is not explicitly required to compare the capabilities of various forces, it falls into the mode of repeating past reports and counting those things it already counts efficiently.

There are many reasons why these problems occur but one of the most critical is that scheduled Defense intelligence never has an ultimate consumer. Virtually all intelligence products act as an end in themselves. They do not provide an input to comparisons of U.S., allied, or threat forces. They do not attempt to relate the capabilities of one foreign force directly to another. The product ends with an estimate or assessment which by its nature does not force analytic discipline or common analytic structure on the community. Intelligence also continuously sub-optimizes. Its products are never forced to make force-on-force or theater-wide comparisons.

Accordingly, no integrating pressure drives the intelligence effort except in terms of generalized pressures or requirements from consumers.

The cumulative impact is that scheduled intelligence production cannot be directly compared to U.S. forces and capabilities. Intelligence judgements are made in compartments, and the consumer can never be sure that the analysts involved have any experience or clear criteria for judging how foreign forces compare in quality or capability against some common standard.

The U.S. intelligence effort thus lacks both focus and a structure that encourages analytic discipline and integrative analysis. The fault, however, does not lie within the intelligence community alone. The community is explicitly prevented from certain types of analysis of allied forces, and from comparing U.S. and foreign forces. Further, command and other pressures often prevent the community from directly comparing allied and threat forces when the ally receives U.S. military assistance. There are strong pressures upon the intelligence community to avoid any assessment that might reflect on the success of an aid mission or a combined allied/U.S. command overseas.

The primary catalyst in correcting this situation would be to establish regular net assessment reports within DoD. These would provide a means for directing and focusing the intelligence production structure into a form that compares U.S., allied, and threat forces in the broad context required and in a form where the data are properly organized, structured, and qualified. At the same time, however, the intelligence community should be directed to do its own net assessment of foreign forces in critical areas, and to regard these as a critical aspect of its reporting effort, and as a means of reviewing its success in substantive intelligence management.

Such DIA reporting should include semi-annual net assessment of the capabilities of foreign forces in the following order of priority:

- NATO and the Warsaw Pact
- Israel and the Arab states
- North and South Korea, PRC, and Japan
- the Persian Gulf
- Southeast Asia
- Africa
- Latin America.

Again, the initial efforts by Defense intelligence may tell us more about the limitations in intelligence collection and analytic methods than force capabilities. They will, however, provide the starting point for the steady improvement of the Defense intelligence process, and vital management tools for addressing substantive problems in intelligence.

E. Institutionalizing Net Assessment in DoD Studies and Analysis

The following major problems occur in most DoD studies, analyses, and war games which assess U.S., allied and threat forces:

-- different and constantly evolving proprietary methodologies are used by each element of DoD.

-- widely different data bases, assumptions, and effectiveness factors are used.

-- no common starting point exists in the assessment of relative capabilities or the overall balance. No common picture exists of the trends in capabilities.

-- much of the effort is consumed in "learning curve" activity to establish a net assessment base to begin the study of a given problem. The resource limitations involved inevitably restrict the effort that can be devoted to providing such perspectives and various biases or limitations in perspective are inevitable.

-- no common data requirements exist for reporting on U.S. forces or for intelligence production.

-- cooperative study efforts are difficult because each component element of DoD starts from a different perspective. This compounds other bureaucratic problems.

-- No real coordination exists in the study effort, and no criteria exist for relating studies to broad net assessment force-on-force analysis. Like intelligence, no focus exists for the DoD studies and analysis process which relates it to a common framework.

-- Institutional memory is short and decision makers' attention span often is non-existent because of the ephemeral nature of any given study effort, the inability to relate one study to another, and the inability to relate studies to a common picture of the balance.

Again, institutionalizing net assessment reporting to the DoD could provide a common framework and perspective that is essential in improving this situation. More substantive management action, however, is also necessary. Specifically, central direction is needed which will:

- standardize data bases.
- standardize methodologies, or put them through a common text and evaluation process and set criteria for their being included in a DoD family of models.
- standardize the criteria for reporting studies.
- rationalize study efforts and resources to meet the common needs of various elements of DoD and to show different views or address issues through parametric analysis rather than competing studies.
- start all studies from a common net assessment perspective and set of data/summary analyses of the factors that need to be addressed in dealing with a given problem.
- shift scheduled intelligence and U. S. force reporting to a standard net assessment framework.
- cut down on the number of study efforts.
- develop an organized and effective common file of completed and planned studies to establish a suitable institutional memory in DoD.

The best way of accomplishing these goals would be to expand the role of the Office of the Director of Net Assessment and to provide suitable staff. At the same time, similar offices need to be set up under each ASD, in the OJCS, and in the Services and Defense agencies. These will ensure that improved central direction and coordination will not prevent legitimate differences in interest and approach from being addressed and that each major element of DoD can work directly with the other elements of DoD under a common framework.

F. Paying for Improved Net Assessment Management

An expansion of OSD (NA) and creating related offices may

seem initially expensive, but could be funded through direct trade-offs with the resources now spent on multiple data bases, analytic models, and duplicative in-house and contract study efforts. They could be paid for easily, simply by the improvement in ADP standardization that could result or by the ability to improve scheduled intelligence planning and reduce duplicative unscheduled intelligence support efforts.

Both PA&E and OJCS(SAGA) have already made impressive efforts in providing the tools for such an effort. The PA&E NT FAM data base might well be a suitable starting point for a standard DoD data base for net assessment. Similarly, SAGA's PROJECT RESPONSE offers a tool for combining various analytic models, data bases, and effectiveness factors into a common computer system that allows various elements of DoD to preserve their particular needs while putting them into a directly comparable overall structure. The tools necessary to such an effort are, therefore, under development. They may soon be supplemented by a file on all studies requiring special intelligence support, and a central file on all DoD studies and analysis. Mr. Clements has initiated such action and suitable implementing language or draft DoD directives already exist.

The trade-offs necessary to set up suitable net assessment staffs are also largely a "no risk" proposition. The current output of studies, analyses, and war games overloads the system to the point where many valuable studies are simply not utilized. The talent pool necessary to accomplish such analysis is diluted to the point where many efforts lack the quality their subject deserves. The result is a steady erosion of credibility and high level decision maker support for studies in general, and a growing recognition that resources are being wasted -- even when studies are good -- because they cannot be effectively utilized.

These points also seem to be the answer to the issue of whether such an approach will force false consensus. At present, the output of studies in DoD is simply too great for agencies to reflect their views efficiently or "compete" effectively. Since there are always too many potentially relevant studies for any given consumer to address, access to principals tends to be determined on an "old boy net" basis rather than by study importance or quality. Even when access is obtained, it leaves the consumer with so little basis to relate the study to other efforts that attention span is necessarily poor. There simply is no point behind the current level of competition. It does not even serve the parochial interests of most of the offices that engage in it.

Accordingly, if improved management techniques fail and this does not seem likely given the nature of the problems involved, the cut in study funds or related activity is unlikely to have any negative effect. Further, the alternative to improved management and effectiveness seems in any case, to be a drastic cut in overall funding of contract and in-house study funds and personnel slots. Such a trade-off would, if nothing else, test the sensitivity of the current effort to such reductions.

G. Organizing Net Assessment Staff Functions

Institutionalizing Net Assessment should not mean layering another level of bureaucracy over the existing staff system within DoD. Three key offices dealing with Net Assessment already exist within OSD:

-- OSD(Net Assessment). Reports directly to the Secretary. Already tasked with most of the authority necessary to manage and direct the institutionalization of net assessment within DoD.

-- ODDR&E(Net Technical Assessment). Reports to DDR&E and OSD(NA). Provides the net assessment direction necessary to institutionalize net assessment within the RDT&E process.

-- OASD(I)(Product Evaluation Division). Reports to OASD(I) and informally to OSD(NA). Conducts net threat assessment and acts to link the improvement of the substantive intelligence product to net assessment activity.

Other net assessment-oriented offices are growing up within the Services, and major components exist within OSD that could supplement the work of the previously listed offices. These include:

-- DoD MBFR Task Force: Deals with NATO and Warsaw Pact balance for MBFR. Could serve as focus for DoD effort to develop net assessment for entire NATO/Warsaw Pact balance.

-- SALT Support Group: Could perform same function for strategic balance.

-- Middle East Task Group or METG: DoD-wide group under ISA which could be tasked with Net Assessment of Middle East balance.

-- ATSD(AE): Develops major policy regarding theater nuclear forces. Could be tasked with developing net assessment of theater nuclear capabilities.

The Estimates office within DIA could help to orient defense intelligence production to support institutionalized net assessments, and at the same time help link the results to the national intelligence estimate process. PA&E has special capabilities in several areas to support or participate in the development of institutionalized net assessments, and could assume responsibility for their integration into the cycle of DoD planning and guidance documents.

No expansion of staff seems necessary in any of the above offices to carry out the organization and management of institutionalized net assessment office within DoD, except for OSD(NA). This office would have to be expanded to 15-20 people from four professionals and two clericals. This, however, could be achieved by minor shifts of personnel within OSD and the rotation of military officers. No increase in personnel should be necessary and -- as suggested earlier -- it should be possible to achieve major savings in resources through better and non-duplicative management of DoD studies and analysis and intelligence support to DoD consumers.

The basic problem, therefore, is not to provide new staffs or new organizations, but rather to give the Director of OSD(NA) the authority and responsibility necessary to institutionalize net assessment. To some extent his charter already permits this. The major problem is that the Secretary of Defense must:

-- give OSD(NA) a specific mandate to assume such a role;

-- provide the necessary additional staff to implement the mandate;

-- provide suitable DoD Directives and guidance where necessary; and,

-- give OSD(NA) tasking authority over the ASDs and

Services to perform his function, and support him during the initial period of adjustment in the inevitable bureaucratic debates that follow.

What is required is leadership rather than resources.

H. Suitable Management Procedures

Some of the management procedures necessary to institutionalize net assessment have already been discussed. The most critical of these is that all DoD plans, studies, and analysis use agreed net assessment data and reports as a starting point for their effort (which does not preclude parametric or contradictory analysis to argue other conclusions and figures). Other procedures will have to be evolved as a matter of practice if such concepts are implemented. There are some procedures or responsibilities which should, however, be given to OSD(NA) to manage by exception in order to give him the authority necessary to act. These include:

- review of all proposed studies and analyses involving comparisons of U.S. and foreign forces that are covered by the new draft DoD Directive on Studies and Analysis with authority to approve or disapprove the study and to change or expand its terms of authority;

- tasking authority over all components of DoD to produce or support net assessment studies and plans;

- review authority over PPBS and guidance documents using net assessment data or comparing U.S. and foreign forces;

- tasking authority over the Defense intelligence community;

- tasking authority over all component groups within OSD and DoD conducting or supporting net assessment;

- review authority over the creation or support of all data bases comparing U.S. and foreign forces;

- review authority over all models comparing U.S. and foreign forces, and over all model development funded by DoD; and,

-- review authority for the Department of Defense over the terms of reference for all national intelligence documents.

Such authority and procedures would best be exercised only by exception and as necessary to support major policy decisions. The staff of OSD(NA) should necessarily focus its work on essential management activity rather than on comprehensive line management activity over entire programs. A single office in OSD must, however, be able to manage. The responsibility cannot be left divided among endless competing compartments as it is today.

I. Conclusions

Six measures have been recommended in discussing how net assessment should be institutionalized within DoD. They are:

-- create a regular cycle of net assessment documentation;

-- orient the planning cycle towards net assessment programming, as well as control of budgets and resources;

-- structure intelligence production to support net assessment;

-- rationalize management of studies and analysis activity;

-- staff net assessment offices and redefine the mission of existing offices to support net assessment; and,

-- set up suitable management procedures.

The value of such measures depends on two perceptions. First, how well DoD currently manages itself and the quality of its management tools. Second, the extent to which institutionalizing net assessment can help to correct the problems that are perceived to exist.

It is an underlying thesis of this paper that DoD:

-- is not managing well enough;

-- makes an inadequate effort to measure and state the balance;

-- fails to properly relate its resource requirements to the balance;

-- does not properly tie its management activities to improved capability to carry out essential missions and make necessary force improvements;

-- does not properly organize and support its management and study efforts; and,

- lacks a system for shaping the Defense intelligence effort to support U.S. operational and force planning.

It is the central thesis of this paper that properly structured and institutionalized net assessment can make most of the necessary improvement.

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