SUBJECT: Implementation of Data Collection, Development, and Management for Strategic Analyses

References: (a) DoD Directive 8260.1, "Data Collection, Development, and Management in Support of Strategic Analysis," December 6, 2002
(b) DoD Directive 5105.18, "DoD Committee Management Program," February 8, 1999
(e) JCS Publication 1-02, "Dictionary of Military and Associated Terms," current edition
(f) DoD Instruction 5000.61, "DoD Modeling and Simulation (M&S) Verification, Validation, and Accreditation," April 29, 1996

1. PURPOSE

Pursuant to reference (a), this Instruction:

1.1. Implements policy, assigns responsibilities, and prescribes procedures for generating, collecting, developing, maintaining, and disseminating data on current and future U.S. and non-U.S. forces in support of strategic analyses conducted by the Department of Defense.

1.2. Establishes the Joint Analytic Data Management Steering Committee (JADMSC) under the provisions of DoD Directive 5105.18 (reference (b)).
2. **APPLICABILITY**

This Instruction applies to the Office of the Secretary of Defense, the Military Departments, the Chairman of the Joint Chiefs of Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the Department of Defense (hereafter referred to collectively as "the DoD Components").

3. **DEFINITIONS**

Definitions of terms used in this Instruction can be found in enclosure 1.

4. **POLICY**

This Instruction implements policies established in DoD Directive 8260.1 (reference (a)). The JADMSC shall help implement the procedures outlined in this Instruction.

5. **RESPONSIBILITIES**

Pursuant to reference (a):

5.1. The **Director of Program Analysis and Evaluation** (D, PA&E), in coordination with the **Heads of the DoD Components**, shall:

5.1.1. Oversee compliance with this Instruction.

5.1.2. Establish, chair, and provide administrative support to the JADMSC.

5.1.3. With the Chairman of the Joint Chiefs of Staff, prepare annually an integrated multiyear program for developing analytical baselines for use in strategic analyses, based upon scenario priorities identified by the Under Secretary of Defense for Policy (USD(P)).

5.1.4. Lead the development and maintenance of analytical baselines for use in strategic analyses of future forces.

5.1.5. Have authority to release future-year analytical baselines to organizations that are not members of the JADMSC.
5.1.6. Build a joint data repository to facilitate management of analytical baselines and their associated data.

5.1.7. Identify the data necessary to develop analytical baselines and collect these data from the DoD Components.

5.1.8. Manage the data and analytical baselines and disseminate them to the DoD Components that conduct current and future-year strategic analyses.

5.2. The Under Secretary of Defense for Policy (USD(P)), in coordination with the Heads of the DoD Components, shall:

5.2.1. Develop and/or update DoD scenarios for strategic analyses at least every 2 years.

5.2.2. Prioritize and distribute to the DoD Components the scenarios to be used in developing analytical baselines.

5.2.3. Identify critical planning factors (e.g., warning time, concurrency, assumed postures of engagement) for use in strategic analyses.

5.3. The Chairman of the Joint Chiefs of Staff, in coordination with the Heads of the DoD Components, shall:

5.3.1. With the D, PA&E, prepare annually an integrated multiyear program for developing analytical baselines for use in strategic analyses, based upon scenario priorities identified by the USD(P).

5.3.2. Lead the development and maintenance of analytical baselines for use in strategic analyses of current forces.

5.3.3. Have authority to release current-year analytical baselines to organizations that are not members of the JADMSC.

5.4. The Heads of the DoD Components shall:

5.4.1. Implement procedures to generate data for the development of analytical baselines.

5.4.2. Provide timely, integrated, and validated Component-specific data for the analytical baselines, consistent with requirements identified by the D, PA&E.
5.4.3. Participate in the development and maintenance of the analytical baselines.

5.4.4. Use the analytical baselines (where possible) as starting points for strategic analyses.

5.4.5. As appropriate, appoint a representative to the JADMSC, as prescribed in enclosure 2. The Secretary of the Navy may appoint two representatives, one from the U.S. Navy and one from the U.S. Marine Corps.

5.5. The Director of the Defense Intelligence Agency, under the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence, in coordination with the Heads of the DoD Components, shall provide timely, integrated, and validated all-source non-U.S. data for the analytical baselines, consistent with requirements identified by the D, PA&E.

6. PROCEDURES

6.1. Concept. The desired end state is analysis-ready baselines, which the DoD Components are encouraged to use when performing strategic analyses, as defined in enclosure 1. The anticipated requirement is to build up to and maintain 12-15 analytical baselines (five to six current and seven to nine future baselines). Each baseline shall be:

6.1.1. Developed transparently and collaboratively by a joint analytical baseline development team, led by the Chairman of the Joint Chiefs of Staff (current-year baselines) or the D, PA&E (future-year baselines).

6.1.2. Managed by the Joint Data Support (JDS) organization under the D, PA&E.

6.1.3. Consistent with policies established by the JADMSC.

6.1.4. Available for use by the DoD Components as a starting point for strategic analyses. The baselines should be available in time to support analyses conducted for the Department's resource allocation process.

6.1.5. Modified as needed to reflect major military, budgetary, or political events.
6.1.6. Reviewed annually for relevance and currency and updated at least once every 24 months.

6.1.7. Placed under version control so that baseline users can review changes.

6.1.8. Developed in accordance with policies set forth in DoD Directive 8320.1 (reference (c)).

6.2. Management and Oversight

6.2.1. JADM Steering Committee (see enclosure 2)

6.2.2. Joint Data Support

6.2.2.1. Mission. Pursuant to reference (a) and this Instruction, JDS, under the D, PA&E, shall provide support for the identification, collection, development (including verification and validation), management, and dissemination of data and associated analytical baselines.

6.2.2.2. Data Identification and Collection. JDS shall specify the data needed to support development of analytical baselines, consistent with plans established by joint analytical baseline development teams. JDS shall work with the data providers to collect and store data, metadata, assumptions, scenario contexts, and other information needed for the analytical baselines.

6.2.2.3. Verification and Validation Checks. Working with the data providers, JDS shall perform verification checks on data received, and deposit verified data and associated metadata in the data repository. JDS shall work with the DoD Components to ensure data are used in an appropriate manner.

6.2.2.4. Data Management and Dissemination. JDS shall manage the data repository for the analytical baselines and supporting data, including the preparation and archiving of analytical baseline data sets and associated metadata used in strategic analyses conducted by the DoD Components.

6.3. Process. Analytical baselines shall be developed and disseminated for use by the DoD Components in strategic analyses in the following manner:
6.3.1. **Develop and Prioritize Scenarios.** The USD(P), in coordination with Heads of the DoD Components, shall develop and/or update DoD scenarios for strategic analyses at least every 2 years, and shall prioritize the scenarios used in developing analytical baselines.

6.3.2. **Prepare Analytical Baseline Programs.** The Chairman of the Joint Chiefs of Staff and the D, PA&E, in coordination with the Heads of the DoD Components, shall annually publish an integrated multiyear program for constructing and maintaining current-year and future-year analytical baselines, including a plan for generating and collecting the requisite data.

6.3.2.1. The analytical baseline program shall be based upon scenario priorities identified by the USD(P), and be synchronized to support the requirements of the Department's resource allocation process.

6.3.2.2. The analytical baseline program shall include information necessary for the DoD Components to prepare estimates of resources they will need to support the development of analytical baselines.

6.3.3. **Generate and Collect Data.** Joint analytical baseline development teams shall establish plans for constructing the analytical baselines, including identifying objectives, timelines, broad data requirements, etc. In developing the baselines, the teams may employ models and simulations used within the Department of Defense for strategic analyses. Data specifications should focus on the needs of these models and simulations, when used.

6.3.3.1. **Identify Data.** JDS, under the D, PA&E, in collaboration with the joint analytical baseline development teams, shall identify detailed data needs.

6.3.3.2. **Provide Data.** The DoD Components shall provide all requested data that is within their capability to generate via new or existing databases and processes. They should notify the D, PA&E of any significant data issues through the appropriate JADMSC member.

6.3.3.3. **Provide Metadata.** Decisions about the appropriate use and reuse of data must be informed by the data set's pedigree (e.g., under what assumptions the data are valid, the security classification of the data, etc.). Therefore, data collected and placed into the JDS data repository should be accompanied by associated metadata.
6.3.4. **Conserve Resources.** To conserve the Department's resources, U.S. and non-U.S. data-collection activities should, whenever possible, make use of existing data-collection vehicles and routine production cycles.

6.3.4. **Develop Analytical Baselines.** Joint analytical baseline development teams, led by the Chairman of the Joint Chiefs of Staff (current-year baselines) or the D, PA&E (future-year baselines), shall develop analytical baselines as called for in the program described in subparagraph 6.3.2., above.

6.3.4.1. Joint analytical baseline development teams shall brief the JADMSC on the products of their work.

6.3.4.2. JDS shall collect, manage, and archive the completed analytical baselines.

6.3.5. **Disseminate and Use Analytical Baselines**

6.3.5.1. **Use of Baselines.** The DoD Components are encouraged to use the analytical baselines as common starting points for strategic analyses, in accordance with Departmental requirements and priorities.

6.3.5.2. **Requests for Baselines.** All organizations needing an analytical baseline shall submit a request to JDS. The request must identify the point of contact for the request, describe the purpose of the analysis, explain how the data will support the analysis, and indicate if the organization intends to disseminate the data to foreign nationals. JDS shall maintain, for review by the DoD Components, a file showing the status of all analytical baseline requests.

6.3.5.3. **Release of Baselines**

6.3.5.3.1. For DoD Components represented on the JADMSC, the respective JADMSC member shall have authority to approve a baseline's release.

6.3.5.3.2. For organizations not represented on the JADMSC, the Chairman of the Joint Chiefs of Staff (current-year baselines) or the D, PA&E (future-year baselines), in coordination with the Heads of the DoD Components, shall have the authority to release analytical baselines.

6.3.5.3.3. The DoD Components must comply with security policies and regulations when releasing analytical baselines containing data that require special handling (e.g., dissemination to foreign nationals, caveated or compartmented data, etc.).
6.3.5.4. **Distribution of Baselines.** JDS shall distribute those analytical baselines approved for release, and shall simultaneously inform all JADMSC members of the distribution. The JDS distribution shall include the analytical baseline metadata (see subparagraph 6.3.3.3.).

6.3.6. **Update Analytical Baselines**

6.3.6.1. The DoD Components should plan to revise existing analytical baselines and develop new baselines on a schedule that supports the multiyear development plan described in subparagraph 6.3.2., above.

6.3.6.2. The DoD Components shall review the JDS data repository holdings for which they are responsible, and update the data and metadata when events warrant such changes. Assessment and revision of data are particularly important upon receipt of a revised threat assessment (normally every 24 months but, in some cases, more frequently).

7. **INFORMATION REQUIREMENTS**

The data collection activities described in this Instruction are exempt from licensing, in accordance with paragraphs C4.4.1., C4.4.2., and C4.4.3. of DoD 8910.1-M (reference (d)).
8. **EFFECTIVE DATE**

This Instruction is effective immediately.

Enclosures - 2

  E1. Definitions
  E2. Joint Analytic Data Management Steering Committee (JADMSC)
E1. ENCLOSURE 1

DEFINITIONS

E1.1. DEFINED TERMS

E1.1.1. Analytical Baseline. A package comprising a scenario, concept of
operations, and integrated data used by the DoD Components as a foundation for
strategic analyses. Examples of analytical baselines include scenarios and supporting
data used for computer-assisted war games and theater campaign simulations. (See
reference (a).)

E1.1.2. Concept of Operations. A verbal or graphic statement, in broad outline, of
a commander's assumptions or intent in regard to an operation or series of operations.
The concept of operations frequently is embodied in campaign plans and operation plans,
in the latter case particularly when the plans cover a series of connected operations to
be carried out simultaneously or in succession. The concept is designed to give an
overall picture of the operation. It is included primarily to clarify the purpose of the
operation. Also called commander's concept or CONOPS. (See reference (e).)

E1.1.3. Current Forces. Forces in existence in the current fiscal year (the
execution year) or planned to be available in the first year of the Future Years Defense
Program (FYDP).

E1.1.4. Data. Representations of facts, concepts, or instructions in a formalized
manner suitable for communication, interpretation, or processing by human or automatic
means. Any representations, such as characters or analog quantities, to which meaning
is or might be assigned. (See reference (c).)

E1.1.5. Data Repository. An organized collection of data and metadata, suitable
for use in developing analytical baselines, strategic analyses, or associated products.

E1.1.6. Data Verification and Validation. The process of substantiating the
internal consistency and accuracy of data and certifying that the data represent
real-world entities and are appropriate for their intended purpose or expected range of
purposes. When carried out by data providers, the term "data validation" refers to the
documented assessment of data by subject-area experts and the comparison of the data
to known values. (See reference (f).)

E1.1.7. Force. An aggregation of military personnel, weapon systems, equipment,
and necessary support, or a combination thereof. (See reference (e).)
E1.1.8. **Future Forces.** Forces projected to be available beyond the first year of the FYDP.

E1.1.9. **Joint Analytical Baseline Development Team.** An ad hoc team of representatives from selected DoD Components, charged with creating an analytical baseline.

E1.1.10. **Metadata.** Information describing the characteristics of data; data or information about data; and descriptive information about an organization's data, data activities, systems, and holdings. (See reference (c).)

E1.1.11. **Scenario.** An account or synopsis of a projected course of action or events. For purposes of this Instruction, the focus of scenarios is on strategic and operational levels of warfare. Scenarios include information such as politico-military contexts and/or backgrounds, assumptions, operational objectives (threat and friendly), major force arrivals, and planning considerations. (See reference (a).)

E1.1.12. **Strategic Analysis.** An analysis of force sufficiency and effectiveness conducted by the DoD Components to support the development and evaluation of the defense strategy. Such analyses address both forces and enablers (e.g., inter-theater and intra-theater lift capability). (See reference (a).)

E1.1.13. **Strategic Analysis of Current Forces.** An analysis of the sufficiency and effectiveness of current forces, including enablers. Such analyses examine the current force's ability to execute the defense strategy. These analyses inform longer-term strategic analyses. (See reference (a).)

E1.1.14. **Strategic Analysis of Future Forces.** An analysis of the sufficiency and effectiveness of out-year forces, including enablers. Such analyses examine force structure and program alternatives and evaluate risks in the midterm and beyond. (See reference (a).)
E2. ENCLOSURE 2

JOINT ANALYTIC DATA MANAGEMENT STEERING COMMITTEE (JADMSC)

E2.1. THE JADMSC

The JADMSC is an executive-level DoD committee (reference (b)) comprising Senior Executive Service members, flag officers, or individuals of equivalent rank and precedence.

E2.2. MISSION

The JADMSC assists the Chairman of the Joint Chiefs of Staff and the D, PA&E in developing analytical baselines. Specifically, the Committee facilitates the generation and collection of data; advises on the development, management, and dissemination of baselines for strategic analyses; and proposes solutions to data issues raised by JADMSC members.

E2.3. FUNCTIONS

The JADMSC shall:

E2.3.1. Develop policies and processes for preparing analytical baselines.

E2.3.2. Facilitate the development, management, and dissemination of analytical baselines.

E2.3.3. Assist the Chairman of the Joint Chiefs of Staff and the D, PA&E in annually developing a multiyear program for constructing analytical baselines, including a plan for generating and collecting the requisite data.

E2.3.4. Propose solutions to significant data issues raised by JADMSC members.

E2.3.5. Review analytical baselines.
E2.4. **ORGANIZATIONAL MEMBERSHIP**

The following DoD officials shall be represented on the JADMSC:

- E2.4.1. Director of Program Analysis and Evaluation (chair).
- E2.4.2. Under Secretary of Defense for Acquisition, Technology, and Logistics.
- E2.4.3. Under Secretary of Defense for Policy.
- E2.4.4. Under Secretary of Defense for Personnel and Readiness.
- E2.4.5. Under Secretary of Defense (Comptroller).
- E2.4.6. Assistant Secretary of Defense for Command, Control, Communications, and Intelligence.
- E2.4.7. Service Secretaries.
- E2.4.8. Chairman of the Joint Chiefs of Staff.
- E2.4.9. Director of the Defense Intelligence Agency.

E2.5. **MEMBER RESPONSIBILITIES**

Individual members shall:

- E2.5.1. Represent the Head of their Component in matters relevant to this Instruction.
- E2.5.2. Identify representatives of their Component to serve on joint analytical baseline development teams.
- E2.5.3. Notify the D, PA&E of any significant data issues.
- E2.5.4. Have authority to approve the release of analytical baselines within their Component.
E2.5.5. Coordinate with the Chairman of the Joint Chiefs of Staff (current-year baselines) or the D, PA&E (future-year baselines) concerning the release of analytical baselines to organizations not represented on the JADMSC.

E2.6. **MEETING FREQUENCY**

The JADMSC shall meet at least twice a year. The committee chair may convene additional meetings if needed.

E2.7. **ADMINISTRATIVE SUPPORT**

The D, PA&E shall provide administrative support to the JADMSC.