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SECRETARY OF THE AIR FORCE**

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**Intelligence**

**INTELLIGENCE SUPPORT TO  
ACQUISITION**

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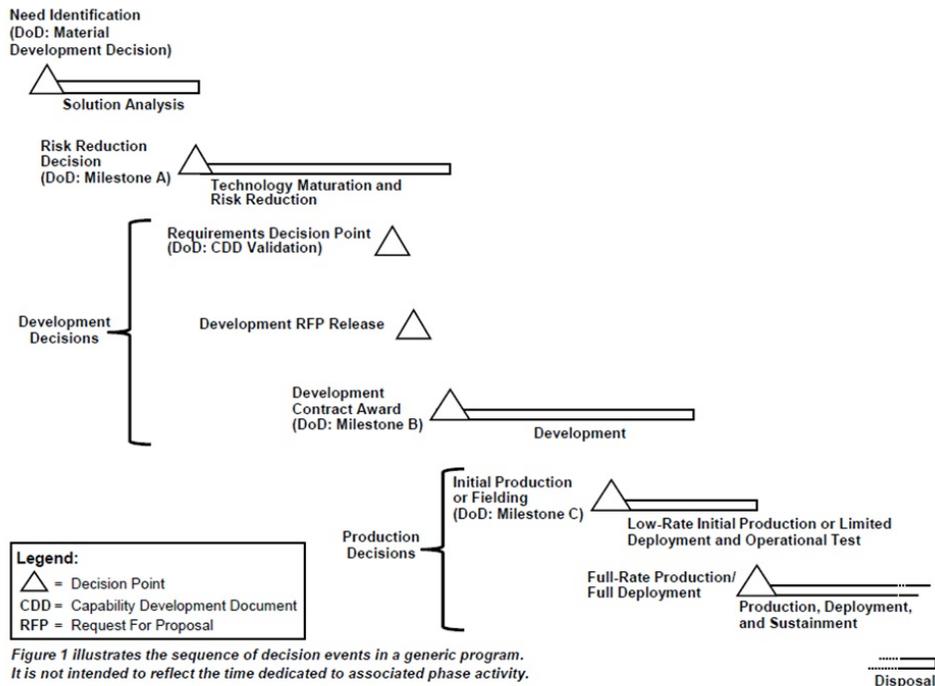
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This publication implements Air Force Policy Directive (AFPD) 14-1, *Intelligence, Surveillance, and Reconnaissance (ISR) Planning, Resources, and Operations*, and is consistent with Department of Defense Instruction (DoDI) 5200.39, *Critical Program Information (CPI) Protection Within the Department of Defense*, AFPD 10-6, *Capabilities Based Planning & Requirements Development*, AFPD 65-5, *Cost and Economics*, and guidance portions in Department of Defense Directive (DoDD) 5250.01, *Management of Intelligence Mission Data (IMD) in DoD Acquisition*, and AFI-14-111, *Intelligence Support to the Acquisition Life-Cycle*. This publication should be used in conjunction with Air Force Instruction (AFI) 10-601, *Operational Capability Requirements Development*, AFI 63-101/20-101, *Acquisition and Sustainment Life Cycle Management*, AFI 63-114, *Quick Reaction Capability Process*, AFI 65-508, *Cost Analysis Guidance and Procedures*, AFI 99-103, *Capabilities-Based Test and Evaluation*. This publication applies to all Air Force (AF) active duty members and civilian employees, the Air Force Reserve, and the Air National Guard. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with (IAW) Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW Air Force Records Disposition Schedule (RDS) located in the Air Force Records Information Management System (AFRIMS). Submit change recommendations using an AF Form 847, *Recommendation for Change of Publication* to the Office of Primary Responsibility (OPR). This publication may be supplemented, but all supplements must be coordinated with the OPR prior to certification and approval. Upon publication, MAJCOMS will ensure copies are provided to the OPR.

1.	OVERVIEW. ....	3
Figure 1.1.	Generic Acquisition and Procurement Milestones and Decision Points .....	3
2.	LINKAGE TO REQUIREMENTS, PLANNING AND PROGRAMMING. ....	4
Figure 2.1.	DoD Decision-Support Systems. ....	5
3.	INTELLIGENCE SUPPORTABILITY ANALYSIS (ISA) PROCESS. ....	5
Figure 3.1.	ISA Process Flow Chart. ....	7
Table 3.1.	Types of Requirements. ....	15
4.	PLANNING, PROGRAMMING, BUDGETING AND EXECUTION (PPBE) PROCESS. ....	22
5.	JOINT CAPABILITIES INTEGRATION AND DEVELOPMENT SYSTEM (JCIDS). ....	24
Figure 5.1.	CFMPs. ....	26
6.	THE DEFENSE ACQUISITION SYSTEM. ....	27
Figure 6.1.	MSA Phase. ....	30
Figure 6.2.	Technology Maturation & Risk Reduction Phase. ....	34
Figure 6.3.	EMD Phase. ....	38
Figure 6.4.	PD Phase. ....	40
Figure 6.5.	OS Phase. ....	41
Table 6.1.	Acquisition Life Cycle Tasks. ....	41
7.	Acquisition Document Development and Management (ADDM). ....	42
<b>Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION</b>		<b>44</b>
<b>Attachment 2—RISK MATRIX</b>		<b>75</b>
<b>Attachment 3—INTELLIGENCE HEALTH ASSESSMENT QUAD CHART TEMPLATE</b>		<b>76</b>
<b>Attachment 4—SAMPLE INTELLIGENCE HEALTH ASSESSMENT MEMORANDUM FOR RECORD</b>		<b>78</b>
<b>Attachment 5—ISP FORMAT</b>		<b>79</b>
<b>Attachment 6—INTELLIGENCE SENSITIVITY SURVEY/INTELLIGENCE SENSITIVITY TIER MATRIX</b>		<b>80</b>
<b>Attachment 7—ORIENTATION GUIDE FOR THE AFMC SIPRNET AI DATABASE</b>		<b>92</b>

**1. OVERVIEW.** This publication is a reference tool for acquisition, operations and intelligence personnel who manage, sponsor or provide support for intelligence-sensitive acquisition programs. This applies to all aspects of the acquisition life cycle, from the conception and initial development of the requirement, through development, acquisition, fielding, and sustainment, until the time the capability is either consumed in use or disposed of as being excess to all known materiel requirements. This document includes changes introduced by Interim DoDI 5000.02, *Operation of the Defense Acquisition System*. While the names for some acquisition processes and phases have been changed in DoDI 5000.02, the general processes remain unchanged. Figure 1.1 depicts generic acquisition and procurement milestones and decision points under the Interim DoDI 5000.02. This document includes a link to checklists that specify best practices for accomplishment of specific tasks. These “how-to” checklists include references to additional support material to ensure traceability with governing policy and guidance. Acquisition intelligence (AI) specialists are trained in the application of these practices and can help program managers and action officers utilize the AI tools and processes that would add greatest value, based upon program attributes. Air Force Materiel Command (AFMC) acquisition intelligence personnel maintain a website to provide extensive information associated with intelligence support to acquisition activities at the following address: <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>.

**Figure 1.1. Generic Acquisition and Procurement Milestones and Decision Points**



- ... a generic product acquisition program would follow the structure depicted
- ... the sequence of decision events in a generic program, which could be a Defense program or, except for the unique DoD terminology, a commercial product
- Each product-tailored process model is a variant of this basic structure

**1.1. Intelligence Supportability Analysis (ISA).** ISA is the principal process by which Air Force (AF) intelligence personnel analyze proposed weapon system performance capabilities, determine optimum intelligence solutions, and formally submit associated requirements into intelligence planning and requirements systems. ISA is directed per AFI-14-111, *Intelligence Support to the Acquisition Life-Cycle*. This document and corresponding checklists are intended to help readers execute intelligence supportability analysis and ensure intelligence is effectively addressed within life cycle acquisition processes.

**1.2. Design, Analysis, Planning, Testing, Risk Mitigation and Making Resource Decisions.** These are the activities that are essential to successful AF capabilities development. They provide the analytical framework that is essential to successful requirements development.

## **2. LINKAGE TO REQUIREMENTS, PLANNING AND PROGRAMMING.**

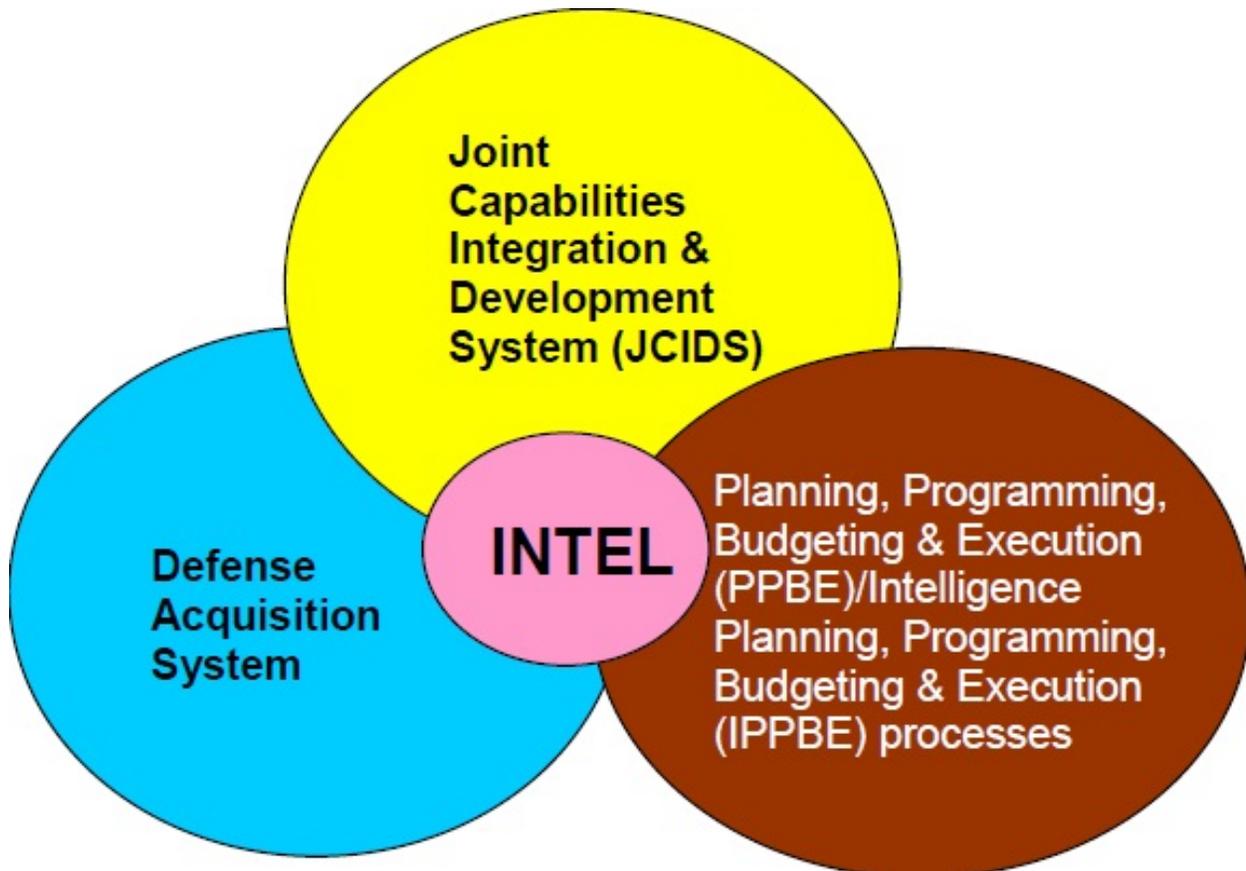
**2.1. DoD Decision-Support Systems.** Requirements derived through ISA are known as derived intelligence requirements (DIRs). They flow into standard requirements, planning and programming systems through the Department of Defense (DoD) Decision Support Systems (Figure 2.1). There are three principal DoD decision-support systems that can be used to develop intelligence capabilities: the Planning, Programming, Budgeting and Execution (PPBE) Process; the Joint Capabilities Integration and Development System (JCIDS); and the Defense Acquisition System. Together, the three systems provide an integrated approach to strategic planning, identification of needs for military capabilities, systems acquisition, and program and budget development. This pamphlet characterizes the way outputs from acquisition intelligence processes may be used by each of these systems.

**2.2. Identifying and Correcting Deficiencies.** The formal submission of derived intelligence requirements into the AF, Defense Intelligence Agency (DIA), National Geospatial-Intelligence Agency (NGA), National Security Agency (NSA) and JCIDS requirements processes prompts the DoD Decision Support Systems to address deficiencies identified in the submission. Requirements submission is the first step; however, this act alone does not always result in programmatic action to address deficiencies. It is important for acquisition intelligence specialists to highlight the impact of deficiencies by explaining to acquisition and operations personnel the potential impact on the required capability at Initial Operational Capability (IOC) and beyond if the required intelligence support is not fully provided, and engaging in appropriate planning and programming processes to address each deficiency. PEMs in SAF/AQ capability directorates are a primary entity in the AF, along with their equivalents in Joint & interagency departments, to facilitate coordination of Multiple Funding Sources.

**2.3. Deficiencies and the Funding of their Solutions.** Identifying a funding source to address deficiencies is not always an easy, straight-forward task. If deficiencies are to be addressed within the AF programming process, action must be initiated through the appropriate Core Function Lead (CFL), whereas those to be addressed within the National Intelligence Program (NIP) must be submitted through AF/A2 into NIP programming processes. Some requirements could be appropriately supported through multiple funding sources, thus necessitating a planning effort across multiple communities to resolve the deficiency. In a current development program there was a deficiency case where much of the required production is supported within the NIP whereas some production is supported

through AF funding. AF requirements were initiated through the Global Integrated CFL planning and programming process into the AF corporate process; NIP requirements followed a path through AF/A2 into NIP processes. In this case, program, operations and intelligence stakeholders are working across requirements, planning and programming communities of the AF, DoD and the National Intelligence Community to build effective funding approaches for the IMD deficiency.

**Figure 2.1. DoD Decision-Support Systems.**



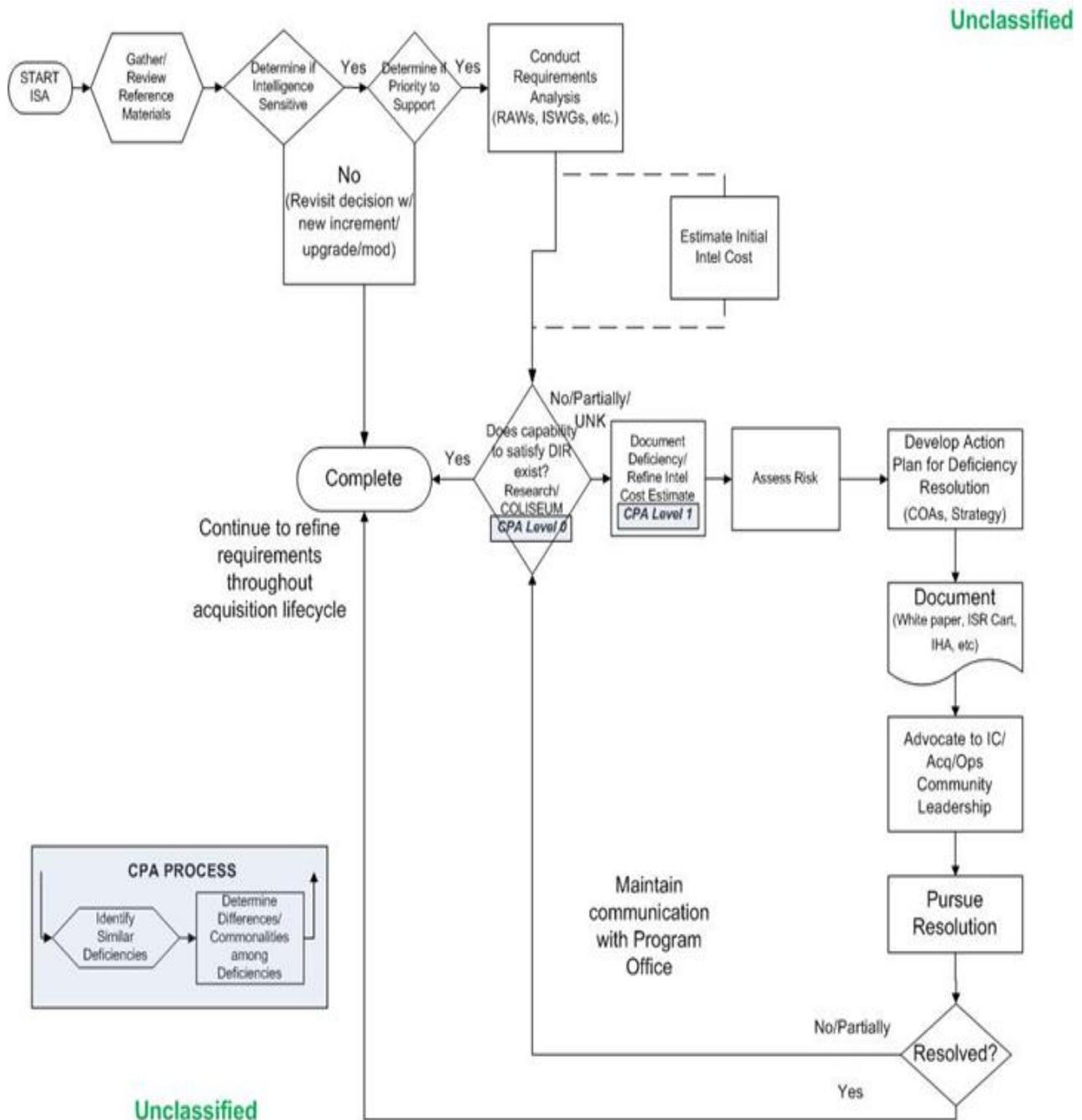
### **3. INTELLIGENCE SUPPORTABILITY ANALYSIS (ISA) PROCESS.**

**3.1. Requirements and Risk.** ISA is the process by which AF intelligence, acquisition and operations analysts identify, document and plan the best strategy to meet requirements necessary to successfully acquire and employ AF capabilities. ISA is typically initiated by the supporting A2 using organic resources to manage the process. This process must consider a wide range of disciplines that could ultimately impact mission effectiveness. These disciplines include doctrine, organization, training, materiel, leadership & education, personnel and facilities and are represented throughout the DoD acquisition community by the acronym DOTMLPF. ISA results provide stakeholders with the information necessary to compare a capability's derived intelligence (data and infrastructure) requirements (DIRs) with the intelligence that has already been planned for delivery throughout that capability's life cycle. Deficiencies, along with their associated impacts to both acquisition and operational capability, can then be understood and managed within acquisition processes as a

component of program risk. Deficiencies can be caused by a variety of factors, including, but not limited to: lack of system availability, trained personnel, necessary energy supplies, and enemy counterintelligence activities. For the purpose of the ISA section of this document, the term “effort” refers to any project, program, modification/upgrade to system, research and/or development projects, demonstrations, feasibility/acquisition studies, concept development, Special Access Program (SAP), Quick Reaction Capability (QRC), capability concepts, or any other activity at any point leading into, or contained within, the acquisition cycle. As such, the term “effort manager” refers to the manager of the overall lead program/project/etc.

**3.2. ISA Activities and Documentation.** The ISA process is depicted in the form of a flowchart in Figure 3.1. The rest of this section describes each ISA-associated task, identifies roles and responsibilities, and states policy and guidance associated with each task in the flowchart. A file structure for storing documents that pertain to the tasks of the ISA process can be found on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>. **Note:** Intelink Passport access is required. Whenever ISA is initiated, the file structure can be followed to document ISA and stored under the applicable organizational tab. It is recommended that other major commands (MAJCOMs) document ISA results in a similar fashion. Websites identified throughout this section of the document are used by AFMC to post ISA-related documents. These sites may also be used by other MAJCOMs as a vetted structure/guide for developing additional ISA tools. This guide describes an unconstrained ISA process. All ISA process elements may be tailored by users to best support their needs. The outcomes of ISA principally support documentation of DIRs within service and joint IC requirements systems. Authoritative documentation for purposes of recording the results of ISA includes all documentation approved by an intelligence support working group, Center Intelligence Office (CIO), Senior Intelligence Officer (SIO), or MAJCOM/A2.

Figure 3.1. ISA Process Flow Chart.



3.3. **Initiating ISA.** ISA should begin as early as possible and continue through all phases of the system life cycle for intelligence-sensitive efforts. As a minimum, ISA should identify, as specifically and completely as possible, projected requirements for intelligence products, the infrastructure needed to produce or consume intelligence, and the enablers (such as energy) necessary to achieve the operational objective. Intelligence, Surveillance, and Reconnaissance Capabilities Planning and Analysis (ISR CP&A), Core Function Master Plan (CFMP), Development Planning (DP), and Capabilities-Based Assessment (CBA) processes look at the early stages of acquisition that generally lead to Materiel Development

Decisions (MDDs) and Analysis of Alternatives (AoAs). ISA helps shape the trade space for these efforts by ensuring the AF reviews viable options and associated planning and direction, Collection, Processing and exploitation, Analysis and Dissemination (PCPAD) impacts for system-of-systems capability development. Based upon requirements established by MAJCOMs through the JCIDS process, AFMC and AFSPC Centers support programs of record that execute acquisition requirements and support planning for future defense programs. Air Force Research Laboratory (AFRL) activities generally support pre-acquisition projects, programs, and pure research that do not always transition into future programs of record and, thus, rarely utilize JCIDS. Nevertheless, many AFRL activities are intelligence-sensitive and require ISA to ensure sufficient lead time to effectively manage the effects of DIRs on programmatic cost, schedule, and performance. This is especially pertinent for AFRL activities that seek to transition to a JCIDS program of record. Technologies with a Technology Readiness Level (TRL) of six or higher are priorities for ISA, since lower TRL levels are not considered ready for transition. While many AFRL activities never mature to a program of record, the lessons learned can influence future development of research activities and acquisition programs.

**3.4. ISA Roles and Responsibilities.** Center leadership, Joint, Headquarters Air Force (HAF), MAJCOM, or representatives from the acquisition, intelligence and/or operational communities can initiate an evaluation to determine if an effort is intelligence-sensitive and requires ISA. SIOs or their acquisition intelligence representatives for the affected operating commands/programs will coordinate on the evaluation and identify the appropriate effort manager for the ISA. Notification to start ISA can be done by email, phone call, video teleconference, memo, or almost any format.

**3.5. ISA Policy and Guidance.** ISA must be completed for efforts determined to be intelligence-sensitive. ISA is conducted to provide inputs to concept development, early acquisition decisions, risk assessments, JCIDS documents, Milestone Decisions, development requirements needs, test and evaluation requirements needs, new modifications, AF-level Program Objective Memorandum (POM) and funding drills, capability studies, etc. Other doctrine that supports such actions includes DoDD 5000-series documents, CJCSI 3170.01H , *Joint Capabilities Integration and Development System*, CJCSI 3312.01B, *Joint Military Intelligence Requirements Certification*, CJCSI, AFI 63-101/20-101, *Integrated Life Cycle Management*, AFI 10-601, and other documents. There is currently no mandate for when an ISA is initiated; however, it is best accomplished as early as possible in an effort's life cycle to allow appropriate planning and programming processes to be initiated that support closure of identified deficiency.

**3.6. ISA Outcome.** Requirements identified through ISA are documented in relevant requirements systems. ISA results are also reflected within intelligence and program activities and documents, such as program reviews, intelligence health assessments, development of Capability Concept Technology Descriptions (CCTDs), JCIDS documents, etc.

**3.7. Gather/Review Reference Materials.** The Gather/Review Reference Materials step depicted in Figure 3.1 includes a top-level familiarization of the effort and an assessment of basic functionality, data needs, and interoperability requirements to support the effort. Depending on the stage of the effort, there may be only top-level data available. Data can be gathered from PowerPoint presentations, JCIDS documents, white papers, individual

research, transition plans (either from lab to product center or product center to sustainment), capability demonstration documents, feasibility studies, concept development QRCs, capability concepts, previously completed ISAs, etc. This can also require contacting effort managers, previous intelligence support analysts, subject matter experts (SMEs) from the operational community, engineering community, academia, IC, support contractors, Federally-Funded Research and Development Centers (FFRDC), security classification guide, etc. To find data for early acquisition-stage efforts, it could be necessary to focus on a concept or technology rather than on a more tangible weapon, platform or system. For AFRL efforts, contact AFRL/XP2 if assistance is needed to identify and gather reference materials.

3.7.1. **Gather/Review Roles and Responsibilities.** The acquisition intelligence analyst leads a team of operations, acquisition, and intelligence stakeholders who are responsible for gathering, reviewing and researching relevant data using available resources, some of which are outlined above. It is critical to gather enough information regarding the effort to start answering the questions in Attachment 6 (Intelligence Sensitivity Survey/Intelligence Sensitivity Tier Matrix); future steps in the ISA process require more in-depth analysis than this step in order to identify specific intelligence needs. Since it is not unusual to encounter information during this stage of ISA that is associated with experimental or developmental technologies, great care must be taken to protect sensitive or proprietary information, particularly if individuals who work for different contractors are involved in the same effort or work in spaces that share access. Reference materials collected should be stored as outlined in the “AFMC ISA Process” paragraphs in Section 3, on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>, or another designated repository.

3.7.2. The supporting acquisition intelligence analyst is most commonly an analyst assigned to the intelligence office established to support the organization managing the effort. If there is no intelligence office supporting the effort, then the senior intelligence officer of the sponsoring MAJCOM should designate an acquisition intelligence specialist to execute the function. For programs transitioning across organizations, the implementing command (AFMC or AFSPC) A2 organization is responsible for coordinating with the gaining and losing acquisition intelligence organizations to ensure that available materials are provided to the gaining acquisition intelligence analyst.

**3.8. Determine Intelligence Sensitivity.** The Intelligence Sensitivity Survey (ISS) is a top-level, first-look used to help assess whether an effort is intelligence-sensitive. A definition of intelligence-sensitive can be found in Attachment 1 of this document.

3.8.1. **ISS Roles and Responsibilities.** The supporting acquisition intelligence analyst can use Attachment 6 (Intelligence Sensitivity Survey) to conduct an initial interview with the Chief Scientist, Program Manager, Lead Engineer, or designated representative for a given effort. The completed ISS should be stored as recommended in the “AFMC ISA Process” paragraphs in Section 3, on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>, or other designated repository.

3.8.2. ISS Policy and Guidance. IAW AFI 14-111, the first step in the acquisition intelligence process is determination of intelligence sensitivity of the program by the implementing command A2 or delegate. If management (higher HQ, center-level, etc.) mandates that ISA be conducted, completing the ISS is not necessary; however, completing the ISS could assist in identifying intelligence supportability needs that might not otherwise be considered (i.e., DOTMLPF or PCPAD). Efforts determined not to be intelligence-sensitive do not require a Life Cycle Mission Data Plan. The ISS in Attachment 6 outlines how to determine whether an effort is intelligence-sensitive.

3.8.3. ISS Outcome. If an intelligence sensitivity determination is needed, analysts should utilize and tailor the Intelligence Sensitivity Tier (IST) Matrix in Attachment 6, and determine priority to support. If no intelligence sensitivity determination is needed, the acquisition intelligence analyst should document the rationale that leads to a decision that a system is not intelligence-sensitive. Documentation associated with the decision is not standardized; however, the recommended method is to generate a memorandum for record to be signed by the MAJCOM/A2 or delegate and forwarded to the office managing the initiative. This documentation will be needed as the initiative moves through various stages of the acquisition process. Refer to paragraph 3.2.

**3.9. Determine if the Effort is a Priority to Support.** Intelligence-sensitive efforts should be evaluated to determine the degree of intelligence sensitivity (high/medium/low). This helps to determine the amount of resources required to support the effort. High-priority efforts usually need a full-time analyst assigned, medium priority may receive support from part-time analysts and low priority efforts may not warrant support depending upon resource availability.

3.9.1. Priority Support Determination Roles and Responsibilities. The acquisition intelligence analyst should use the IST Matrix (Attachment 6) to determine the effort's relative priority when compared to other portfolio efforts. The CIO/SIO can use the grades across the entire portfolio to determine resource allocation. However, the determination may be made at a higher functional level, organizational level, or operational MAJCOM. Additionally, IST level can change based on shifting priorities or technology maturity and should be reviewed as needed and documented. Levels of support based upon intelligence sensitivity should be coordinated between the SIO and the effort manager as part of acquisition planning and risk management processes. The SIO should document the decision as to whether the effort is a high enough priority to receive acquisition intelligence support with existing resources. Documentation associated with the decision is not standardized and should be decided by the SIO; however the recommended option is a memorandum for record which is maintained in a location designated by the SIO. The documented decision should be stored as recommended in the "AFMC ISA Process" paragraphs in Section 3, on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>, or other designated repository.

3.9.2. Priority Support Determination Policy and Guidance. The IST Matrix in Attachment 6 is a tool for assessing high/medium/low sensitivity. Centers may have their own tools/procedures to determine prioritization of those efforts, including how to support review boards (i.e., Air Force Review Board (AFRB), Program Support Review

(PSR), Joint Requirements Oversight Council (JROC), Air Force Requirements Oversight Council (AFROC), Acquisition Strategy Panel [ASP]) that could influence portfolio prioritization.

**3.10. Intelligence Sensitivity Tier Prioritization.** To determine prioritization of a program, conduct ISS and IST. If the effort is determined to be intel-sensitive, then conduct remaining steps of ISA.

**3.11. Conducting Requirements Analysis.** This phase is the most critical aspect of the process. The goal is to further understand and decompose the effort in order to identify DIRs for incorporation into the effort's overall requirements analysis and risk assessment. Several tools and techniques can be employed to perform this task. Some of the techniques are described in this section. Decomposition is the primary responsibility of acquisition intelligence analysts who support the effort, but requires active participation and support from the acquisition and operations stakeholders to achieve accurate decomposition and derivation of intelligence requirements.

3.11.1. The information from the Gather/Review Reference Material phase of ISA should be leveraged as a primary resource for decomposing a system. Access to appropriate personnel (engineers, program managers, contractors, etc.) is essential, as they provide the performance documentation and design approach that enable the acquisition intelligence analyst to perform in-depth analysis.

3.11.2. DIRs identified for pre-Milestone A (MS-A) activities such as lab efforts, development planning efforts and AoAs, are often less defined than those found in later parts of the acquisition life cycle. Decomposition of these efforts is still possible, but would be macro level, based on the limited amount of detail available. In such cases, ISA could support development of the trade space and assessing the risks of potential deficiencies driven by technology limitations and a lack of alternatives. These deficiencies should be defined sufficiently so that they can be included in total life cycle cost estimates for efforts entering the PPBE and JCIDS processes.

3.11.3. Requirements Analysis Workbook (RAW) is a tool developed by the 21<sup>st</sup> Intelligence Squadron (21 IS) and used by acquisition intelligence analysts to accomplish decomposition of the effort and conduct ISA. RAW uses a systems engineering analysis drill-down through a list of questions to identify DIRs. The RAW should be applied as early as possible, then updated as needed throughout the life cycle to ensure intelligence supportability requirements remain current. The RAW checklists to identify the tasks needed to accomplish effort decomposition are available on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>. The RAW checklists can also be accessed by using the link to the Acquisition Document Development & Management (ADDM) SharePoint site in Chapter 7.AFMC/A2, AFLCMC, AFSPC/A2 and SMC/IN should continue to create and employ RAWs for intelligence-sensitive system attributes as acquisition intelligence processes newly identify intelligence-sensitive system attributes.

3.11.4. Requirements Analysis Roles and Responsibilities. IAW AFI 63-101/20-101, the program manager (PM) must identify and document derived intelligence requirements in collaboration with the SIO. Acquisition intelligence specialists help PMs accomplish this

work and may be assigned to intelligence organizations or to the office that leads the effort. Support contracted to execute acquisition intelligence functions should be under the purview of the SIO. Air Force ISR Agency (AFISRA), MAJCOMs, and other acquisition, test, and operational communities may provide additional support. Documents associated with intelligence requirements analysis (RAWs, Technical Exchange Meeting (TEM) materials, Intelligence Support Working Group (ISWG) materials, etc.) should be stored as recommended in the “AFMC ISA Process” paragraphs in Section 3, on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>, or other designated repository. All DIRs should be documented in the DIR repository on the AFMC SIPRNET Acquisition Intelligence Intelink webpage: <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>, or other designated repository.

3.11.5. The following forums are used to identify and understand the details associated with an effort’s DIRs:

3.11.5.1. Intelligence Support Working Group (ISWG). The ISWG brings together functional representatives from the intelligence, operations and acquisition communities to conduct and document ISA and to assess their collaborative ability to adequately support each effort at a level that will enable mission success. Responsibilities of an ISWG are to derive requirements and verify their traceability, assess deficiencies and shortfalls; research and develop potential solutions to the deficiencies; create action plans to accomplish those solutions; estimate solution costs; and document results. The frequency of face-to-face or virtual ISWG meetings can vary, depending on the intelligence sensitivity of the effort, the visibility of the effort, Congressional oversight, etc. Depending on intelligence sensitivity, ISWG meetings are usually held at least annually; however, the ISWG team members continually interact between formal meetings to identify, refine, clarify requirements and discuss potential solutions. ISWG meetings are typically held more frequently as an effort matures, particularly prior to major acquisition life cycle milestones, or when directed by the SIO or effort manager. This can be accomplished either virtually or face-to-face, time permitting. A link to the checklist that identifies tasks to complete, ISWG attendees, and responsibilities is included in the ISWG section of the Intelligence Working Groups checklist. The checklist can be accessed by using the link to the Acquisition Document Development & Management (ADDM) SharePoint Site in Chapter 7.

3.11.5.2. Technical Exchange Meetings (TEMs). TEMs are the most common working-level forum for face-to-face fact-finding, problem-solving and coordination of Threat Working Group (TWG), ISWG, and Threat Steering Group (TSG) action items. A typical TEM could be squadron-level mission planners meeting with software developers to clarify system compatibility issues or a meeting of acquisition and IC SMEs to discuss the gap between data needed to fully support the mission and the data the provider can supply and seek potential solutions. TEMs may also be held to discuss intelligence supportability of one specific DIR versus an ISWG where all the effort’s DIRs are identified and discussed. TEMs are held as needed throughout the effort. A link to the TEM checklist that identifies tasks to complete and lists TEM

attendees and responsibilities can be accessed by using the link to the ADDM SharePoint Site in Chapter 7.

3.11.6. Requirements Analysis Policy and Guidance. IAW 63-101/20-101, the program manager (PM), in collaboration with the Center Intelligence Office and other stakeholders, develops and documents requirements and level of intelligence support required for the life cycle of intelligence-sensitive programs. A link in Chapter 7 can be used to connect to the ADDM SharePoint site that hosts checklists that may be used to complete RAWs and support working group meetings (i.e., TEMs, ISWGs, etc.). Centers may create their own tools/procedures to support these efforts.

3.11.7. Requirements Analysis Outcomes. Requirements identified through ISA are documented in relevant requirements systems. They are also reflected in intelligence and program activities and documents such as program reviews, intelligence health assessments, development of Capability Concept Technology Descriptions (CCTDs), JCIDS documents, etc.

3.12. **Initial Intelligence Cost Estimation.** An integral part of addressing deficiencies identified through ISA is the estimation of costs associated with the intelligence resources required to resolve them. Failure to consider these within program life cycle cost estimates can result in requirements creep, scheduling delays, costly work-arounds, and, ultimately, unplanned adjustments to operational budgets.

3.12.1. Cost Estimation Roles and Responsibilities. The Acquisition Intelligence Lifecycle Cost Estimating Structure (AILCES) was developed by the AF Intelligence Cost Working Group as a tool to systematically identify intelligence cost requirements throughout the life cycle of the effort (to include capabilities development, research and development, testing, fielding, operations and support). It is also referred to as a work breakdown structure for intelligence activities that are required to support an effort. MAJCOM cost analysts use AILCES tool to determine and document the costs associated with DIRs. This activity is accomplished through coordination between the supporting acquisition intelligence analyst and effort personnel. The acquisition intelligence analyst should contact the MAJCOM cost analysts to discuss the DIRs and work through the necessary details as appropriate for the program. The 21 IS oversees AILCES activities. Proper application of AILCES early in the life cycle of an acquisition program could help avoid program delays and additional costs caused by failure to consider all DIRs supporting testing, fielding, and sustainment of the effort. Documents associated with intelligence cost estimates should be stored as recommended in the "AFMC ISA Process" paragraphs in Section 3, on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>, or other designated repository.

3.12.2. Cost Estimation Policy and Guidance. The acquisition intelligence cost estimating process is iterative. Early in the life cycle of the effort, only a rough order of magnitude can be achieved; later in the life of the effort, the estimate will become more detailed and accurate as the DIRs, concept of operation/employment, and other effort documentation are better understood. AFI 14-111 requires that intelligence costs be included in life cycle cost estimates and program budgets. Documents require intelligence cost estimates at the earliest possible time according to the AFMC Office of

Aerospace Studies (OAS) Analysis of Alternatives (AoA) Handbook and the AFMC OAS Pre-MDD Analysis Handbook. Consult DoD 5000.4M, Cost Analysis Guidance and Procedures; AFPD 65-5; AFI 65-503, *US Air Force Cost and Planning Factors*; AFI65-508 Cost Analysis Guidance and Procedures; AF Cost Analysis Handbook and the DTM-09-027 Letter on Implementation of the Weapons System Acquisition Reform Act of 2009 for cost estimation.

3.12.3. Cost Estimation Outcomes. The intelligence cost estimating process results in cost data to be incorporated into overall effort cost estimates, thus providing a more realistic estimate of the total cost of the effort.

### 3.13. DIRs.

3.13.1. Proper handling of DIRs. As DIRs are identified, the supporting acquisition intelligence analyst needs to determine whether each DIR can be satisfied using existing resources. If the DIR is unable to be fully satisfied with available or programmed future resources, it is considered a deficiency or shortfall, as long as a solution is in the pipeline and been programmed for. If no solution has been identified and programmed for, the DIR is considered a shortfall and must receive particularly close attention as the initiative develops. It is critical that all categories of DIR be properly documented and tracked throughout the effort, since changes in the effort can quickly impact the intelligence requirements process. Although it is faster to only document deficiencies and shortfalls, many products are driven by requirements. If efforts fail to document all DIRs, continued production of the products they depend on to perform their mission could be terminated if those products no longer have any recorded DIRs because the other efforts that initially required them could be terminated. Deficiencies and shortfalls should be documented as the first step in solving or mitigating an effort's risk because of that need. Requirements and deficiencies are used to drive the IC to prioritize the collection and production of needed intelligence data.

3.13.2. DIR Roles and Responsibilities. The supporting acquisition intelligence analyst should conduct research to determine if the DIRs can be satisfied. Depending on the type of DIR, research websites (Intelink, COLISEUM), internet searches, interviews, etc. are a good place to start. Intelligence analysts remain engaged in technical discussions where intelligence supportability concerns arise. If the DIR is a DOTMLPF need, it should not go into COLISEUM; proceed to the "Document Deficiency" task to document the need. Documents associated with researching intelligence needs should be stored as recommended in the "AFMC ISA Process" paragraphs in Section 3, on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>, or other designated repository. A separate folder should be used for each program's DIRs. When intelligence product gaps are identified that cannot be satisfactorily overcome through research, the acquisition intelligence analyst submits a request for information (RFI) or production requirement (PR) in the appropriate requirements database (e.g., COLISEUM on Joint Worldwide Intelligence Communication System (JWICS) at <http://coliseum.dia.ic.gov/>). The tasked production agency will research intelligence sources and task collectors to answer the question or establish that the RFI/PR cannot be answered. Specific procedures for RFI/PR submission and maintenance should be addressed through local or MAJCOM requirements managers or MAJCOM COLISEUM

managers. Because a RFI/PR is a formal requirement for performance of analytical work, creation of new RFIs/PRs relevant to an effort prepares the IC to address the acquisition community’s needs. If the derived requirement is the responsibility of another organization and is a deficiency, it needs to be submitted to the organization (i.e., NGA) in the preferred format (See Table 3.1).

**Table 3.1. Types of Requirements.**

Derived Requirement Type	Method to Satisfy	Can Meet Requirement	Cannot Meet Requirement
DIA Intel Threat & Data Reqt	COLISEUM (RFI/PR)	Products are provided to the effort as requested	Build the plan with DIA, program and MAJCOM stakeholders to address the deficiency. Document this plan and manage closure of deficiencies in appropriate program and JCIDS documents
AF DOTMLPF Reqt	DOTMLPF Change Recommendation	Change to DOTMLPF is already planned or under way by appropriate org(s)	Document deficiency with further discussions with MAJCOM and AF/A2
NGA Intel Data Reqt (Governed by AFI 14-132 and AFI 14-205)	MFR through A2 Functional Chain	Information is provided	Build the plan with NGA, program, and MAJCOM stakeholders to address the deficiency. Document this plan and manage closure of deficiencies in the LMDP
NSA Intel Data Reqt	MFR through A2 Functional Chain (coordinate with SIGINT Collection Manager to leverage off of existing NSA Intelligence Needs (IN) or to create and submit a new IN)	Information is provided	Build the plan with the SIGINT Collection Manager, program, and MAJCOM stakeholders to address the deficiency. Document this plan and manage closure of deficiencies in the LMDP

3.14. **Cross Program Analysis (CPA) Level 0.** CPA is designed to look across intel-sensitive programs and their related shortfalls to identify and consolidate like deficiencies.

The results of CPA can guide identification and development of common solutions to the documented deficiencies. Synergies between programs and cost savings may be realized when common solutions are identified that support multiple programs. Cross CPA Level 0 is conducted locally at center, labs, etc.

3.14.1. CPA Level 0 Goals. The goal of CPA level 0 is to identify requirements of a similar nature that are shared among programs. CPA Level 0 involves researching other efforts in the local portfolio to identify efforts that have similar intelligence requirements. This effort is valuable to the programs involved because it provides some shielding for a specific program from paying for new solutions as a sole requirements holder. Identification of common requirements also raises the priority and visibility of deficiencies gained by tying multiple AF and joint capabilities to the same requirement. If a solution to a shared requirement has already been produced by another program or initiative, the effort in question could potentially avoid associated costs entirely.

3.14.2. CPA Level 0 Roles and Responsibilities. It is the acquisition intelligence analyst's responsibility to work with center/center-level analysts to determine if the effort has DIRs in common with other programs or initiatives in the center's portfolio. For efforts with common requirements, it is the responsibility of each effort's supporting acquisition intelligence analyst and customer to work together to determine whether the commonality between the requirements is extensive enough that it could allow a common solution. TEMs are a common way to gather the appropriate stakeholders to accomplish this task. Including the intelligence data producer in the discussions is essential. Notify program manager and MAJCOM/A2 if CPA leads to a common solution. Like the "Gather/Review Reference Material" task, data can come from many sources. Documents associated with conducting CPA should be stored on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>, or other designated repository. The 21 IS conducts cross-program analysis among all programs and initiatives being managed through the Air Force Life Cycle Management Center (AFLCMC) and AFRL.

3.14.3. CPA Level 0 Determination of Differences/Commonalities Among Deficiencies. Once similar deficiencies have been identified, details associated with them need to be researched to determine if the same product can satisfy multiple deficiencies. The details of the requirements may prove different enough to warrant two products (i.e., efforts "X" and "Y" have the need for a signature of target "A"; however, effort "X" requires the signature in Ka-band and effort "Y" requires the signature in X-band. The difference in bandwidths means these two requirements cannot be fulfilled with one product).

3.14.4. CPA Level 0 Policy and Guidance. The COLISEUM handbook can be found on JWICS on the COLISEUM website at <http://coliseum.dia.ic.gov/> to assist in submitting a PR. 21 IS has also developed a User's Guide, that can be requested through the AFMC COLISEUM Manager.

### 3.15. DIRs and Supported/Not-Supported Decisions.

3.15.1. For supported decisions, document the decision as to the supportability of the derived requirement in the DIR template. If desired, reference supported DIRs in program and requirements documents.

3.15.2. For not-supported decisions, conduct “Document Deficiency/Refine Intelligence Cost Estimate” documentation. It is not required to fully document DIRs more than once for a program.

### 3.16. Document Deficiency/Refine Intelligence Cost Estimate.

3.16.1. When DIRs have not been satisfied, a deficiency exists. Once a DIR is identified as a deficiency, the DIR should be integrated into the appropriate JCIDS requirement and/or program documents IAW DoD, Joint and AF guidance. To better enable other ISA and CPA efforts, the DIR should also be entered/updated as a deficiency on the SIPRNET Acquisition Intelligence Intelink webpage at: <http://www.intelink.sgov.gov/sites/acqintel/default.aspx> for AFMC efforts, or designated repository for other MAJCOMs. If the deficiency was documented, the acquisition intelligence analyst can coordinate with MAJCOM cost analysts to refine the intelligence cost estimate to reflect the additional information gathered about the deficiency.

3.16.2. Deficiency-Handling Roles and Responsibilities. Once the program/MAJCOM stakeholders have formally acknowledged the DIR as being valid for their program, the supporting acquisition intelligence analyst can enter the deficiency into the MAJCOM-designated repository as appropriate. Each MAJCOM can establish routing and quality standards for submitting DIRs and deficiencies IAW DoD, Joint and AF guidance. For AFMC efforts, the supporting acquisition intelligence analysts should task the 21st IS via the webpage to review and validate the DIR. For AFSPC efforts, the supporting acquisition intelligence analysts should work with AFSPC/A2 and their intelligence cost analysts to determine the level of detail needed to validate DIRs and refine the intelligence cost estimate. The Acquisition, Operations, and Intelligence stakeholders are responsible for providing the MAJCOM cost analyst the details needed to cost out the deficiency. Once the cost details are determined, they will be reviewed by the stakeholders and then entered into the appropriate DIR. It is the responsibility of the MAJCOM-level intelligence analysts and cost analysts to validate or provide feedback on each DIR within 5 days of notification of receipt. AFSPC/A2 will create a repository on SIPRNET for tracking DIRs and deficiencies related to space and cyber programs. The supporting acquisition intelligence analyst should enter all DIRs and deficiencies in this repository to help track the status of these items and support CPA.

### 3.17. CPA Level 1.

3.17.1. Identify Common Deficiencies. CPA level 1 is conducted by the implementing MAJCOM. The MAJCOM focuses on the identification of efforts that have common intelligence requirements. This effort is valuable to the programs and enterprises involved. First, grouping requirements provides some shielding for a specific program from paying for the solution as a sole requirements holder. Additionally, a cross-program requirement raises the priority for resolution by tying multiple AF capabilities to the same requirement.

3.17.2. CPA Level 1 Roles and Responsibilities. MAJCOM-level analysts lead the task to identify MAJCOM-wide efforts that have common requirements. The primary resources used to research common requirements are various ISA repositories and requirements databases (for AFMC, the repository is located on the AFMC SIPRNET

Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>) and COLISEUM on JWICS at <http://coliseum.dia.ic.gov/>. However, like the “Gather/Review Reference Material” task, data can also come from PowerPoint presentations, JCIDS documents, white papers, individual research, transition plans (either from lab to product center or product center to sustainment), capability demonstration documents, feasibility studies, concept development QRCs, previously completed ISAs, etc. Documents associated with conducting CPA should be stored in the applicable ISA repository. For AFMC, the repository is located in the “AFMC ISA Process” paragraphs in Section 3, on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>.

3.17.3. Determine Differences/Commonalities Among Deficiencies. Once common deficiencies have been identified, details associated with the deficiencies need to be researched to determine if the same product can satisfy multiple deficiencies. The details of the deficiencies may reveal differences enough to require two products (i.e., efforts “X” and “Y” have the need for a signature of target “A”; however, effort “X” requires the signature in Ka-band and effort “Y” requires the signature in X-band. The difference in bandwidths means these two deficiencies cannot be fulfilled with one product).

3.17.4. CPA Level 1 Roles and Responsibilities. For efforts with common deficiencies, the MAJCOM or designated personnel is responsible for establishing and leading a team that includes each effort’s supporting acquisition intelligence analyst and customer to work together to determine if the common deficiencies are indeed the same. Including the intelligence data producer in the discussions is highly recommended. TEMs are a common way to gather the appropriate people (acquisition intelligence analysts, customers, and data producers) to flesh-out details of the intelligence needs and determine if one product can satisfy multiple intelligence needs. Cross program deficiencies have multiple avenues for documentation which will feed the request for advocacy (see paragraph 3.24) through acquisition and functional channels (including AFISRA’s Intelligence, Surveillance, and Reconnaissance – Capabilities and Requirements Tool (ISR-CART) (see AFISRA’s ISR-CART at SIPRNET URL <http://isr-cart.afisra.af.smil.mil/templates/index.cfm>) for AF-level requirements).

3.17.5. The ISR Capabilities, Planning and Analysis (CP&A) is the Air Force’s method of documenting Air Force ISR capability deficiencies and identifying potential solutions. Capability decomposition is necessary in order to determine intelligence supportability needs. The scope of solutions will be larger than one effort, because the ISR CP&A examines broad areas of multiple gaps. However, decomposition of each solution is similar to that of other efforts. This process feeds or influences the CFL Core Function Master Plans (CFMPs).

3.17.6. CPA Level 1 Policy and Guidance. IAW AFI 63-101/20-101, PMs must identify and document intelligence requirements. Guidance on the 21 IS SIPRNET Intelink site is available to assist in determining what mandatory information is needed in the DIR fields. MAJCOM-level cost analysts use the AILCES guide to project costs associated with the DIR.

**3.18. DIR Risk Assessment.** After a DIR is assessed to be a deficiency, the next step is to determine the potential impact to the capability if the deficiency is not satisfied. This must be done for managers of the effort to make resource prioritization decisions. Additionally, the IC needs to understand the impact so they can prioritize their support based on customer needs. Risk is analyzed by assessing the impact to cost, performance, and schedule. Depending on the risk, management may decide to assume the risk, employ more resources to reduce the risk, employ a different tactic or product design, or find another way to mitigate the risk.

3.18.1. Risk Assessment Roles and Responsibilities. IAW AFI 63-101/20-101, it is the effort manager's responsibility to assess the risk for their efforts. It is the responsibility of the supporting acquisition intelligence analyst to assist by collaborating with the effort manager/lead engineer or scientist, the MAJCOM-level intelligence analysts, subject matter experts, and the operational community to determine the impact associated with not having the DIR satisfied. Documents associated with risk analysis should be stored, as recommended, in the "AFMC ISA Process" paragraphs in Section 3, on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>, or other designated repository.

3.18.2. Risk Assessment Policy and Guidance. The Risk Management Guide for Acquisition provides the terminology and guidance for risk analysis.

**3.19. Developing a Deficiency Resolution Action Plan.** An action plan depicts a timeline of activities that should occur to satisfy the deficiency. Included in the plan are the organizations and personnel who are expected to perform each activity. This may include agreements for budgeting, reallocating resources, holding TEMs with potential deficiency suppliers to determine a course of action (COA), working with other organizations to resolve the deficiency, etc.

3.19.1. Deficiency Resolution Action Plan Roles and Responsibilities. IAW AFI 14-111, it is the effort manager's responsibility to develop and implement a plan or course of action. With the CIO/SIO's concurrence, the supporting acquisition intelligence analyst can assist the effort's action officer, user command, acquisition, test, and intelligence communities, etc. to get their support and inputs to develop, refine, and implement the action plan. MAJCOM/A2s should provide feedback on possible COAs based on lessons learned across the command and/or feedback from other efforts. Previously developed action plans are posted on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx> and can be used as examples to follow.

3.19.2. Deficiency Resolution Action Plan Documentation. Depending on the action plan, implementation documentation may include producing a white paper, advocacy briefing, ISR-Capabilities Analysis and Requirements Tool (ISR-CART) input, Intelligence Health Assessment (IHA), content for requirements documents (CDD/CPD Paragraph 9), an ISP (Issues section or, if necessary, Intelligence Appendix), and/or other program products (such as a Test and Evaluation Master Plan (TEMP), ASP briefing, etc.).

3.19.3. **Deficiency Resolution Action Plan Roles and Responsibilities.** Depending on the documentation needed, different people/organizations could be responsible for documenting the deficiency.

3.19.4. **Deficiency Resolution Action Plan White Paper.** The supporting acquisition intelligence analyst should produce a white paper if needed or directed. The white paper should contain enough background information to familiarize the reader with the issue. A clear statement of the issue and its impact must also be included. Finally a recommendation for potential solutions should be included. The white paper should be written concisely and in plain language so a reader with no prior exposure to the subject matter is able to comprehend the information. White papers are often collaborative efforts requiring information from published sources with direct input from subject matter experts.

3.20. **ISR CP&A.** For AFMC, the 21 IS is responsible for entering deficiencies in ISR-CART, with details provided by the supporting acquisition intelligence analyst and program/MAJCOM stakeholders. For AFSPC, AFSPC/A2 is responsible for entering the deficiency in ISR-CART, with details provided by the supporting acquisition intelligence analyst and program/MAJCOM stakeholders. Additionally, a data call goes out prior to ISR CART data cutoffs to request any additional deficiencies that intelligence analysts believe should be highlighted in the ISR CP&A process. ISR CART entries are submitted for inclusion in the ISR CP&A process. The supporting acquisition intelligence analyst remains listed as the deficiency's point of contact (POC), responsible for the overall management of actions aimed at obtaining a solution. The MAJCOM-level intelligence analysts interact with the owners of ISR-CART (currently AFISRA) and advocate for MAJCOM's entries. Intelligence professionals from all MAJCOMs prioritize ISR-CART entries and participate in capability teams to find solutions for selected needs.

3.21. **Intelligence Health Assessment (IHA).** The supporting acquisition intelligence analyst is responsible for completing an IHA on the effort, if required/requested by management seniors. The IHA can be used to advocate to acquisition, intelligence, and/or operational management for resolution of the DIR-related issues, potentially including additional resources or reprioritization of existing resources. The IHA can be in the form of a briefing or memorandum for record (MFR) (Refer to Attachment 4). Bullet Background Papers (BBP) may provide additional detail associated with each of the issues. BBPs should contain enough background information to familiarize the reader with the issue; the level of detail depends on the intended audience. A clear statement of the issue and its impact must also be included. BBPs are often collaborative efforts requiring information from published sources with direct input from SMEs.

3.22. **Memorandum For Record (MFR).** The supporting acquisition intelligence analyst is responsible for writing an MFR to support Defense Acquisition Boards (DABs), JROCs, AFROCs, and Review Boards, as required. The MFR should contain enough background information to familiarize the reader with the issue; the level of detail depends on the intended audience. A clear statement of the issue and its impact must also be included and potential solutions should be recommended. The MFR should be written concisely and in plain language so a reader with no prior exposure to the subject matter would be able to comprehend the information. MFRs are often collaborative efforts that require information from published sources with direct input from SMEs. MFRs are intended to provide

decision-makers with enough detail to determine if the deficiency is an issue that requires resolution and is worthy of advocating for resolution. MFRs are a useful way to document ongoing analysis for early, pre-acquisition efforts (i.e., technologies) and for programs in sustainment that do not have acquisition documents. Finally, MFRs are a useful way to prepare for self-assessments if no formal applicable programmatic documents are under development (refer to Attachment 4).

**3.23. ISP Intelligence Appendix.** If the PM decides to create an intelligence annex to the program's Information Support Plan (ISP), the acquisition analyst assists the effort. The acquisition analyst can follow the lead of the PM to document the intelligence needs in the format that best suits the program. The intelligence appendix to the ISP is not a required program document; however, it can be a useful tool if used to support day-to-day management of intelligence support within the effort.

**3.24. Advocating to IC/Acquisition/Ops Community Leadership.** Once an action plan is developed and documented, inform the applicable intelligence, acquisition, test, and operational community leadership and obtain approval on the resolution plan. The acquisition intelligence analyst works with the action officers (AOs) who supported the "Developing a Deficiency Action Plan" task to inform their respective chains of commands of the deficiency and proposed action plan and receive support to proceed or receive redirection. In consultation with the supporting acquisition intelligence analyst, the MAJCOM staff AO should lead the advocacy effort. Respective AOs need to maintain communication with each other on the progress of leadership approval. The supporting acquisition intelligence analyst needs to keep the program office apprised of status. Documents associated with resolution advocacy should be stored as recommended in the "AFMC ISA Process" paragraphs in Section 3, on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>, or other designated repository. The acquisition analyst typically has two avenues of support to pursue—through the supporting center chain of command (acquisition) and functional (intelligence channels). The center staff is typically the next level in the chain of command for a field intelligence unit. Each center has processes to move information through their channels for advocacy to the Assistant Secretary of the Air Force for Acquisition (SAF/AQ) and the larger acquisition community. Likewise, efforts in the Air Force Research Laboratory (AFRL) typically follow the chain of command for advocacy. For AFMC, 21 IS assists the field units to provide the pertinent information to AFMC-level intelligence analysts if requested. AFMC/A2 is the Intelligence Functional lead for AFMC and should work with HAF/A2, operating command A2s and impacted CFIs to gain advocacy and support from the applicable AF and national-level intelligence organizations. AFSPC/A2 is the intelligence functional lead for space and cyber efforts and should work with HAF/A2 and impacted CFL offices to advocate for support from AF and national-level organizations.

**3.25. Pursuit of Resolution.** Once a resolution is agreed upon to satisfy the deficiency, the decision needs to be acted on and the effort managers/leadership need to be informed of the plans and kept apprised of the status. Responsibility for resolving the deficiency is shared among all organizations involved in the effort. Ultimately, it must be remembered that all requirements must be satisfied for fielded capabilities if they are to be expected to perform their mission. Intelligence requirements are no less important than other requirements and

are the overall responsibility of the office leading the effort. However, it is commonly the case that many operations and acquisition personnel are unfamiliar with the nature of intelligence and to not understand why intelligence is essential to their effort. It is incumbent upon the intelligence personnel to inform personnel involved in the effort why intelligence requirements are essential and what the impact on their effort would be if DIRs are not resolved. Then, intelligence personnel must provide the expertise to obtain the intelligence support that will enable the effort to achieve success. Acquisition and Operations stakeholders should work with the supporting acquisition intelligence analyst to keep track of the status of each DIR's resolution and ensure that action plans are kept on schedule. Everyone in the advocacy chain should also remain engaged until a solution is determined or a program decides to assume the risk caused by the deficiency. Documents associated with pursuing DIR resolution should be stored as recommended in the "AFMC ISA Process" paragraphs in Section 3, on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>, or other designated repository.

**3.26. DIR Resolution.** For DIRs that are satisfactorily resolved, document resolution as recommended in the "AFMC ISA Process" paragraphs in Section 3, on the AFMC SIPRNET Acquisition Intelligence Intelink webpage at <http://www.intelshare.intelink.sgov.gov/sites/acqintel/default.aspx>, or other designated repository, and continue to "Complete." For DIRs that are not resolved (or partially resolved), whether the deficiency is partially supported or not supported at all, something might have changed that could fully or partially satisfy the need (i.e., new technologies may be in development, another effort may have the same requirement that you can leverage off of, etc.). Therefore, return to paragraph 3.7 "Does Capability to Satisfy DIR Exist?" to continue the cycle of trying to get the need supported.

**3.27. ISA Completion.** The ISA is complete at this time. However, intelligence sensitivity of the program should be revisited each time there is a major change to the effort, including modifications/upgrades, or if there is a significant change in the threat environment or intelligence infrastructure throughout the operational life of the effort. ISA is a continuous process; supportability requirements need to be monitored and refined throughout the entire acquisition life cycle. It is the supporting acquisition intelligence analyst's responsibility to revisit the program to determine intelligence sensitivity and supportability at the discretion of the SIO.

**4. PLANNING, PROGRAMMING, BUDGETING AND EXECUTION (PPBE) PROCESS.** Air Force intelligence, planning, programming, requirements, operations, and acquisition communities must work together to ensure derived intelligence requirements and intelligence deficiencies are identified early in the acquisition life cycle of new systems to ensure support is available, sustainable, suitable, and affordable. Resource implications of proposed solutions must be clearly understood and incorporated within corporate planning and programming efforts. Acquisition Intelligence ensures appropriate intelligence requirements are captured and input into the USAF PPBE process. These inputs must include non-material and downstream impacts to organizations/entities within and external to MAJCOMs and the USAF. The PPBE process is the strategic planning, program development, and resource determination process for the Department of Defense. The process is used to craft plans and programs that satisfy the demands of the National Security Strategy, National Defense Strategy, and the

National Military Strategy within resource constraints. The purpose of this process is to allocate resources within the DoD and the IC. It is important for PMs and their staffs to be aware of the nature and timing of each of the events within this process, since they may be called upon to provide critical information that could be important to program funding and success. In the PPBE process, the Secretary of Defense, the Under Secretary of Defense for Intelligence (USD[I]), and the Director of National Intelligence (DNI) establish policies, strategy, and prioritized goals for both the Department of Defense and the IC. They are used to guide resource allocation decisions that balance the guidance with fiscal constraints. The PPBE process consists of the following four distinct but overlapping phases. Air Force Intelligence, planning, programming, requirements, operations, and acquisition communities must work together to ensure DIRs and intelligence deficiencies are identified early in the acquisition life cycle of new systems to ensure support is available, sustainable, suitable, and affordable. Resource implications of proposed solutions must be clearly understood and incorporated within CFL planning and programming processes. Acquisition Intelligence ensures appropriate intelligence requirements are captured and input into the AF PPBE process. These inputs must include non-materiel and downstream impacts to organizations/entities within and external to MAJCOMs and the AF. AFMC uses the AILCES to facilitate cost estimating for PPBE purposes.

4.1. **Planning.** The planning phase of the PPBE, which is a collaborative effort by the Office of the Secretary of Defense (OSD), (USD[I]), and the Joint Staff, begins with a resource informed articulation of national defense policies and military strategy known as the Strategic Planning Guidance. The Strategic Planning Guidance is used to lead the planning process, now known as the Enhanced Planning Process. This process results in fiscally constrained guidance and priorities - for military forces, modernization, readiness and sustainability, and supporting business processes and infrastructure activities - for program development in a document known as the Joint Programming Guidance. The Joint Programming Guidance is the link between planning and programming, and it provides guidance to the DoD components (military departments and defense agencies) for the development of their program proposal, known as the Program Objective Memorandum (POM). The AF POM is developed annually by the CFLs and integrated by AF/A8. It is important to note that proposed programmatic changes are presented to the OSD leadership for review, and decisions are documented in the Resource Management Decision (RMD) document. DoD Components use the RMD to update their POM data sets which are then incorporated into the Department's Budget and Future Years Defense Program (FYDP) and submitted to the Office of Management and Budget (OMB) as part of the President's budget request

4.2. **Programming.** The programming phase begins with the development of a Program Objective Memorandum (POM) by each DoD component. This development seeks to construct a balanced set of programs that respond to the guidance and priorities of the Joint Programming Guidance within fiscal constraints. When completed, the POM provides a fairly detailed and comprehensive description of the proposed programs, including a time-phased allocation of resources (forces, funding, and manpower) organized by program and projected five years into the future. In addition, the DoD component may describe important programs not fully funded (or not funded at all) in the POM, and assess the risks associated with deficiencies. The senior leadership in OSD and the Joint Staff review each POM submission to help integrate the DoD component POMs into an overall, coherent defense

program. In addition, the OSD staff and the Joint Staff can raise issues with selected portions of any POM or any funding deficiencies in the POM, and propose alternatives with marginal adjustments to resources. Issues not resolved at lower levels are forwarded to the Secretary for decision, and the resulting decisions are documented in the Program Decision Memorandum.

4.3. **Budgeting.** The budgeting phase of PPBE occurs concurrently with the programming phase; each DoD component submits its proposed budget estimate simultaneously with its POM. The budget committee converts the programmatic view into the format of the Congressional appropriation structure, along with associated budget justification documents. The completed budget projects resources only one year into the future, but with considerably more financial detail than the POM. Upon submission, each budget estimate is reviewed by analysts from the office of the Under Secretary of Defense (Comptroller) and the Office of Management and Budget (OMB). The purpose of their review is to ensure that programs are funded IAW current financial policies, and are properly and reasonably priced. The review also ensures that the budget documentation is adequate to justify the programs presented to the Congress. Typically, budget analysts provide the DoD components with written questions in advance of formal hearings in which the analysts review and discuss the budget details. After the hearings, each analyst prepares a decision document (known as a Program Budget Decision [PBD]) for the programs and/or appropriations under his or her area of responsibility. The PBD proposes financial adjustments to address any issues or problems identified during the associated budget hearing. Proposed budget changes are presented to leadership for review and decisions are documented in the Resource Management Decision (RMD) document. DoD Components use the RMD to update their BES data sets which are then incorporated into the Department's Budget and FYDP and submitted to OMB as part of the President's budget request.

4.4. **Execution.** The execution review occurs simultaneously with the program and budget reviews. The purpose of the execution review is to provide feedback to the senior leadership concerning the effectiveness of current and prior resource allocations. Over time, metrics are being developed to support the execution review that will measure actual output versus planned performance for defense programs. To the extent that performance goals of an existing program are not being met, the execution review may lead to recommendations to adjust resources and/or restructure programs to achieve desired performance goals.

4.5. **Core Function Master Plan (CFMP).** The core function planning process assesses risk which, in turn, drives core function priorities and trade-space decisions, as articulated in the CFMP's planning force proposals (PFPs). PFPs and priority risk areas focus and guide solutions analysis and associated science and technology (S&T) work. The solutions analysis and S&T efforts are captured in the CFMP in the form of capability development roadmaps and modernization and sustainment roadmaps. This is the essential homework required to help initiatives develop and mature to the point they are viable candidates for entering into the POM process. The thirteen CFMPs are listed in Figure 5.1.

**5. JOINT CAPABILITIES INTEGRATION AND DEVELOPMENT SYSTEM (JCIDS).** JCIDS is a joint-concepts-centric capabilities identification process that allows joint forces to meet future military challenges. The JCIDS process assesses existing and proposed capabilities in light of their contribution to future joint concepts. JCIDS, supported by robust analytic processes, identifies capability gaps and potential solutions. JCIDS acknowledges the

need to project and sustain joint forces and to conduct flexible, distributed, and highly-networked operations. JCIDS implements a capabilities-based approach that leverages the expertise of government agencies, industry, and academia. JCIDS encourages collaboration between operators and materiel providers early in the process, and enhances the ability of organizations to influence proposed solutions to capability deficiencies. JCIDS defines interoperable, joint capabilities that will best meet the future needs. The broader DoD acquisition community must then deliver these technologically sound, sustainable, and affordable increments of militarily useful capability to the warfighters. The revolutionary transformation to JCIDS, coupled with the evolutionary emergence of a more flexible, responsive, and innovative acquisition process is intended to produce better-integrated and more supportable military solutions; a better-prioritized and logically-sequenced delivery of capability to the warfighters, despite multiple sponsors and materiel developers; and an improved Science and Technology-community focus on future warfighting capability needs. JCIDS informs the acquisition process by identifying, assessing, and prioritizing joint military capability needs. The identified capability needs then serve as the basis for the development and production of acquisition programs. Under JCIDS, once a capability gap has been identified, a High-Performance Team (HPT) convenes to capture, articulate, and document the operator's requirements in minimum time, while achieving stakeholder buy-in. Ideally, the HPT will consist of 7-11 core participants, which includes a lead (the sponsor, during a requirements development HPT), a facilitator, AF SMEs (i.e., operators, systems engineers, acquirers, testers, logisticians, acquisition intelligence professionals, etc.), government agencies and other Services (as required), and support team members (not physically present but available via phone or e-mail for reach-back). The HPT accelerates the documentation process; improves the quality of the requirements document; and can provide an enduring forum for developing, fielding, and sustaining warfighter capabilities. The HPT lead maintains responsibility for the document throughout the review and approval process. Acquisition intelligence participates in the JCIDS process by assessing intelligence supportability needs associated with the solution to the capability need (i.e., threat environment, intelligence data needed, infrastructure required, etc.) and incorporating that knowledge into all parts of the JCIDS process (document development, HPTs, etc.). Checklists to guide the acquisition intelligence analyst in supporting the tasks are included in Appendix A.

5.1. Capabilities-Based Assessment (CBA). CBA is the analytic basis of the JCIDS process. A CBA may be based on an approved joint concept; a concept of operations (CONOPS) endorsed by the JROC, a combatant command, Service, or defense agency; the results of a Senior Warfighter Forum (SwarF); or an identified operational need. It provides several key bits of information for the validation authority prior to approval: a description of the mission and military problem being assessed; identification of the tasks to be completed to meet the mission objectives; identification of the capabilities required; an assessment of how well the current or programmed force meets the capability needs; an assessment of operational risks where capability gaps exist; recommendations for possible non-materiel solutions to the capability gaps; recommendations for potential materiel approaches (if required); a well-defined baseline of capabilities; and a determination of whether the capability requires a materiel solution, a non-materiel solution, or a combination of both. The completed CBA becomes the basis for validating capability needs and results in the potential development and deployment of new or improved capabilities. A CBA checklist designed to guide analysts through the CBA process can be accessed by using a link to the ADDM SharePoint site in Chapter 7.

Figure 5.1. CFMPs.

<b>1. Agile Combat Support</b>	<b>8. Nuclear Deterrence Operations</b>
<b>2. Air Superiority</b>	<b>9. Rapid Global Mobility</b>
<b>3. Building Partnerships</b>	<b>10. Rapid Global Mobility</b>
<b>4. Command and Control</b>	<b>11. Space Superiority</b>
<b>5. Cyberspace Superiority</b>	<b>12. Special Operations</b>
<b>6. Global Integrated ISR (GIISR)</b>	<b>13. Education and Training</b>
<b>7. Global Precision Attack</b>	

## 5.2. JCIDS Documents.

5.2.1. Initial Capabilities Document (ICD). The ICD establishes linkages between key characteristics and capabilities identified through the Capabilities Based Assessment (CBA) and supports the concept decision MSA phase and Milestone Development Decision (MDD). The ICD justifies the requirement for a materiel or non-materiel approach, or an approach that is a combination of materiel and non-materiel, to satisfy specific capability gaps for a given timeframe. It accomplishes this by identifying required capabilities and describing capability gaps that exist in joint warfighting functions, as described in the Joint Operations Concept (JopsC) or a CONOPS in terms of the functional area, the relevant range of military operations, desired effects, time and DOTMLPF and policy implications and constraints. The ICD describes the capability gaps in the lexicon established for the joint capability areas (JCAs) and summarizes the results of the DOTMLPF and policy analysis and the DOTMLPF approaches (materiel and non-materiel) that could deliver the required capability. Representatives from multiple DoD communities (including acquisition intelligence) normally participate in an HPT to assist in formulating broad, time-phased, operational goals, and describe requisite capabilities in the ICD that is usually approved at MS-A. The outcome of an ICD could be one or more joint DOTMLPF Change Recommendation (DCR) or recommendations to pursue materiel solutions. Analysts can access an Initial Capabilities Document checklist, designed to guide analysts through the process of creating an ICD by using the link to the ADDM SharePoint site in Chapter 7.

5.2.2. Capability Development Document (CDD). The CDD builds on the ICD, and states the system-specific, technical, and sustainment-related performance attributes necessary to provide the operational capabilities required by the warfighter – attributes so significant they must be verified by testing and evaluation or analysis. Key performance parameters (KPPs) are those attributes or characteristics that are considered essential to the development of an effective military capability that can make a significant contribution to the characteristics of the future joint force. The CDD is the sponsor's

primary means of defining authoritative, measurable, and testable capabilities needed by the warfighters to support the Engineering and Manufacturing Development Phase of an acquisition program. The CDD captures the information necessary to deliver an affordable and supportable capability using mature technology within one or more increments of an acquisition strategy. The CDD must include a description of the DOTMLPF and policy impacts and constraints. The CDD must be validated, and approved, before Milestone B (MS-B). If the acquisition strategy calls for Preliminary Design Review (PDR) prior to MS-B, the primary content of the CDD should be completed and approved prior to release of the PDR Request for Proposal (RFP). An intelligence professional should work closely with the author of the CDD to ensure threat and intelligence issues, including deficiencies, are addressed in the document. A checklist designed to guide analysts through the ICD process can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

5.2.3. Capability Production Document (CPD). The CPD is the final step in the capabilities refinement process, normally due at Milestone C (MS-C) and is the sponsor's primary means of providing authoritative, testable capabilities for the Production and Deployment phase of an acquisition program. The CPD captures the information necessary to support production, testing, and deployment of an affordable and supportable increment within an acquisition strategy throughout a weapon system's life cycle. It presents performance attributes, including KPPs, to guide the production and deployment of the current increment. The CPD refines the threshold and objective values for performance attributes and KPPs that were validated in the CDD for the production increment. Each production threshold listed in the CPD depicts the minimum performance the PM is expected to deliver for the increment based on the system design subsequent to the design readiness review. The refinement of performance attributes and KPPs is the most significant difference between the CDD and the CPD. An intelligence professional should work closely with the author of the CPD to ensure that it addresses specific intelligence support requirements for each capability discussed in the document. A checklist designed to guide analysts through the CPD process can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

## 6. THE DEFENSE ACQUISITION SYSTEM.

6.1. **Role of Acquisition Intelligence.** The Defense Acquisition System is the management process that guides all DoD acquisition programs. DoDD 5000.01, *The Defense Acquisition System*, provides the policies and principles that govern the defense acquisition system. Interim DoDI 5000.02, in turn, establishes the management framework that implements these policies and principles. The Defense Acquisition Management Framework provides an event-based process where acquisition programs proceed through a series of milestones associated with significant program phases, which are illustrated below. Acquisition intelligence participates in the Defense Acquisition System by identifying the intelligence supportability needs of the weapon system across the entire acquisition life cycle. The acquisition intelligence support needed by any program depends on the phase of the life cycle the program is in and what the task is. Checklists to guide the acquisition intelligence analyst in supporting the tasks can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.1.1. Pre-Materiel Development Decisions. Requirements identified through ISA could ultimately be the responsibility of the program, the AF, and/or the IC. An Intelligence Supportability Analysis checklist that can help make this determination can be accessed by using the link to the ADDM SharePoint site in Chapter 7. Since acquisition intelligence resources are limited, SIOs might need to allocate support for intelligence-sensitive efforts according to the priority and degree of intelligence sensitivity of those efforts. The intelligence sensitivity assessment is used to determine whether an effort requires intelligence support. Efforts are considered to be intelligence-sensitive if they require intelligence data during development or to perform their mission, will handle intelligence data or information, require the direct support of intelligence personnel, or influence intelligence data at any point in the PCPAD cycle. The more reliant the effort is on intelligence or the bigger the role it will play in intelligence-related matters, the more intelligence-sensitive it is. The effort could be an acquisition program/initiative, research lab initiative, maturing technology, AoA concept study, Advanced Concept Technology Demonstration (ACTD), upgrade to an existing weapon system, or other acquisition-related effort. Prioritization programs should also consider what the impact to cost, schedule and performance would be if acquisition intelligence support were not provided. Decisions relative to meeting needs of intelligence-sensitive efforts should be made by the SIO in collaboration with the effort's acquisition leadership. This will aid in development of alternative approaches to ensuring acquisition intelligence functions are performed. The linked checklist and the supporting appendix provide the center and MAJCOM SIOs with tools to determine whether a program is intelligence-sensitive and prioritize those programs. **Note:** Chapter 7 contains a link to the ADDM SharePoint site that hosts checklists that can be used during the pre-Materiel Development Decision (MDD) and Materiel Solution Analysis (MSA) phases. It is likely that many of the questions contained in the checklists will not be fully known. The level of intelligence sensitivity will need to be revisited as the program matures. An Intelligence Sensitivity checklist to guide analysts through the process of assessing a program's intelligence sensitivity is process can also be found on the ADDM web site.

6.1.2. Requirements Analysis Workbook (RAW). The RAW is a strategy-to-task drill down through a list of questions to identify the intelligence supportability needs for a program (called DIRs). It can be conducted at any phase of the acquisition life cycle. The group of RAWs applicable to a program should be completed or updated multiple times throughout the life cycle to ensure intelligence supportability needs are identified and remain current. Every intelligence supportability task starts with identifying the effort's intelligence supportability requirements by completion of the applicable RAWs. A Requirements Analysis Workbook checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.1.3. Intelligence Health Assessment (IHA). The IHA checklist described in this AFPAM is based on criteria identified in CJCSI 3312.01B to scrutinize programs/projects/initiatives, systems, and capabilities deemed to be intelligence-sensitive and to identify potential risks that, if left uncorrected, might result in program delays, cost overruns or degraded system capability. During the ISA process, the analyst should work with and provide risk assessments to the program office regularly. The IHA can be provided to the PM in the form of a briefing or MFR (Refer to Attachment 2, IHA

Quad Chart Templates and Sample IHA MFR). The IHA should be incorporated into the program's overall risk assessment and address cost, schedule, and performance. The IHA checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.1.4. Independent Intelligence Assessment (IIA). IIA is an independent IHA initiated and accomplished at the MAJCOM level. IIA is the MAJCOM's overall and independent functional assessment of how well a program is being supported. IIA development is led by the MAJCOM and draws upon SME expertise from the field units. It leverages the IHA work as a supporting document, but should also take other factors into consideration. IIA's are used to support functional representation at requirements and program reviews, such as the AFROC, executive review boards, etc. It is also used to support AF intelligence certification as part of the JCIDS intelligence certification process.

6.1.5. Intelligence Working Groups. A detailed analysis of the intelligence products, services, and infrastructures impact the program is accomplished via various working groups, such as ISWGs, TWGs, TSGs, Cross Integrated Product Teams, TEMs, and senior-level ISGs. These groups engage appropriate experts from throughout the IC to conduct threat, infrastructure and cost analysis. It is primarily through this process that derived requirements, deficiencies and resulting solutions are identified. An Intelligence Working Groups checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

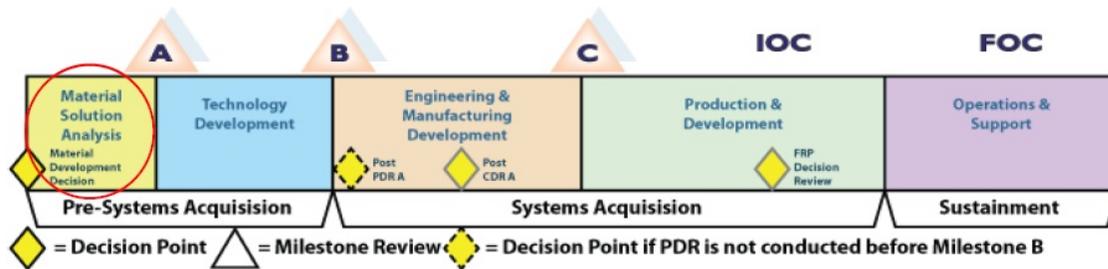
6.2. **Threat Assessment.** Threat assessments are usually required for all efforts, throughout the acquisition life cycle; the nature and level of intelligence support varies for each program. For pre-MS-A efforts, the initial threat assessment may be provided by the supporting acquisition intelligence office, the MAJCOM/A2 staff and/or the combatant command (CCMD)/J2 using authoritative intelligence threat references, while the National Air and Space Intelligence Center (NASIC) or other defense intelligence producers can support development of more in-depth threat reports, threat roadmaps, and/or threat portals. AFMC works with NASIC and the other service/Intelligence Production Centers to develop Threat Roadmaps, which can be used by pre-MS-A and post-MS-C programs to provide up-to-date information (Refer to Chapter 7, STA/STAR checklist). Upon request from organizations undertaking a Capability Based Assessment (CBA), or from JCIDS document sponsors, DIA will produce and validate an ITEA to support the development of an Initial Capabilities Document (ICD), the material development decision, and a subsequent material solution analysis via an analysis of alternatives (AoA). In coordination with DIA, DoD Components may produce ITEAs and submit them to DIA for validation.

6.3. **Capabilities-Based Assessment (CBA).** As described in paragraph 5.1, the CBA identifies capability needs and gaps and recommends non-materiel or materiel approaches to address gaps. A Capabilities-Based Assessment checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.4. **Materiel Solution Analysis (MSA) Phase.** The MSA phase is the first phase of the acquisition process. The purpose of this phase is to assess potential materiel solutions as part of an Analysis of Alternatives (AoA) and to satisfy the phase-specific entrance criteria for the next program milestone designated by the Milestone Decision Authority (MDA). Entrance into this phase requires an approved ICD resulting from the analysis of current mission

performance and an analysis of potential concepts across the DoD components, international systems from allies, and cooperative opportunities. The phase begins with MDD review. The MDD review is the formal entry point into the acquisition process and is mandatory for all programs. The amount of time, resources and analysis required between ICD and MDD is based on the magnitude of the problem, previous analysis, knowledge of the potential concepts, and other considerations determined by the MDA. Intelligence analysts should provide assistance, as required, for all aspects related to MDD support. The Materiel Solution Analysis Phase ends when the AoA has been completed, materiel solution options for the capability need identified in the approved ICD have been recommended by the lead DoD component conducting the AoA, and the phase-specific entrance criteria for the initial review milestone have been satisfied. Figure 6.1 depicts where the MSA phase falls within the Defense Acquisition Management System.

**Figure 6.1. MSA Phase.**



**6.5. Analysis of Alternatives (AoA).** AoA is a process used to assist in determining a preferred solution or solutions to identified deficiencies in operational capability. The purpose of the AoA is to assess the potential materiel solutions to satisfy the capability need documented in an approved ICD. The AoA is an analytical comparison of operational effectiveness and costs of proposed materiel solutions to needed operational capabilities. The AoA shall assess the critical technologies associated with each proposed materiel solution, including technology maturity, integration and manufacturing risk, and, where necessary, technology maturation and demonstration needs. It also provides the mechanism for documenting the rationale for determining a solution (or solutions) to capability deficiencies. To achieve the best possible system solution, emphasis shall be placed on innovation and competition. The AoA is statutory for all Major Defense Acquisition Programs (MDAP) (Acquisition Category (ACAT) and Major Automated Information Systems (MAIS) (ACAT IA, including National Security Systems (NSS)). IAW Interim DoDI 5000.02, all other acquisition programs require an AoA. AoAs are used to justify the need for starting, stopping or continuing acquisition programs. Threat changes, deficiencies, advances in technology or the obsolescence of existing systems can trigger the need for an AoA. An intelligence analyst should be included on the AoA team. An AoA checklist and an AoA Final Report checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

**6.6. Acquisition Strategy (formerly Technology Development Strategy).** IAW Interim 5000.02, an MDA-approved acquisition strategy is required to meet MS-A. The acquisition strategy is not a requirement at MS-B and beyond, but

6.6.1. The MDA determines who will prepare the acquisition strategy. AFRL will support the development of phased capabilities requirements by helping Program Offices and operators assess the maturity and viability of technologies being considered for incorporation in programs and assist, when appropriate, in the preparation of an acquisition strategy for MS-A. This process should result in higher fidelity requirements that are time-phased to a more realistic schedule with more accurate cost estimates.

6.6.2. The acquisition strategy focuses specifically on the activities of the Technology Development (TD) Phase. The Technology Development Phase focuses on the development, maturation, and evaluation of the technologies needed to provide the required capability. Where feasible, the acquisition strategy should also discuss activities associated with the post-program-initiation phases of the planned acquisition. The acquisition strategy is updated at subsequent milestones and submitted into the Acquisition Strategy. Intelligence professionals will be asked to assist the PM with the completion/review of the acquisition strategy. IAW DoDD 5250.01, signature support requirements and funding must be incorporated into a program's acquisition strategy. The acquisition strategy summarizes the program's anticipated signature support requirements (Refer to Interim DoDI 5000.02. Refer to Chapter 7, An Acquisition Strategy checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

**6.7. Life Cycle Mission Data Plan (LMDP).** IAW DoDD 5250.01, the LMDP has replaced the Life Cycle Signature Support Plan (LSSP) and is required for all intelligence-mission-data-dependent programs. For the purposes of the LMDP, IMD is defined as DoD intelligence used for programming platform mission systems in development, testing, operations, and sustainment including, but not limited to, the following functional areas: Signatures, Electronic Warfare Integrated Reprogramming (EWIR), Order of Battle (OB), Characteristics and Performance (C&P), and GEOspatial INTelligence (GEOINT). A program is considered IMD dependent in acquisition programs that require IMD (e.g., programs that carry out combat identification, ISR, targeting using, but not limited to, Signatures, EWIR, OB, C&P, and GEOINT). The LMDP is the means by which action plans to address intelligence deficiencies are documented and included within program management processes. Specific requirements for mission data should be fully documented within relevant requirements systems and only referenced in the LMDP to minimize duplication in requirements documentation. The LMDP defines specific plans to address closure of deficiencies between acquisition, requirements, and intelligence communities. It should be maintained and updated as a function of program risk management as all three communities progress toward addressing deficiencies. PMs shall submit the most recent version of their LMDP through their Program Executive Officer (PEO) and respective service requirements coordination hierarchy to the IMDC prior to MS-A, MS-B, MS-C, and during sustainment and/or block upgrades. An LMDP checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

**6.8. Test and Evaluation Strategy (TES).** At MS-A, the PM submits a TES that describes the overall test approach for integrating developmental, operational, and live-fire test and evaluation and addresses test resource planning. It shall include a test plan that addresses TD phase activity, including the identification and management of technology risk, and the evaluation of system design concepts against the preliminary mission requirements resulting

from the AoA. The TES is a broader view of the risk reduction efforts across the range of test activities that will ultimately produce a valid evaluation of operational effectiveness, suitability, and survivability before full-rate production and deployment. The MS-A test plan shall rely on the ICD as the basis for the evaluation strategy. Over time, the TES will evolve into the TEMP (due at MS-B). For programs on the OSD Test & Evaluation (T&E) Oversight List, the TES shall be submitted to the Deputy Assistant Secretary of Defense for Developmental Test & Evaluation (DASD DT&E), USD for Acquisition, Technology and Logistics (AT&L) and the Director, Operational Test and Evaluation (DOT&E) for approval. Ensure intelligence support concept and technologies are included in the strategy. Intelligence professionals should interact with the Integrated Test Team (ITT) to ensure accurate threat/target/environment information is addressed. A T&E checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

**6.9. Systems Engineering Plan (SEP).** The purpose of the SEP is to document the systems engineering effort early in the Materiel Solutions Analysis (MSA) phase of the program, guiding all technical aspects of the program from the technical strategy. The SEP is developed early in the MSA phase and updated prior to each subsequent Milestone. It should also incorporate the planning that is consistent with acquisition strategy. The plan should address both government and contractor systems engineering activities across the program's life cycle. It should describe the systems engineering processes to be applied, the approach to be used to manage the system technical baseline, and how systems engineering will be integrated across the integrated product team (IPT) structure. It should also detail the timing, conduct, entrance criteria, and exit criteria of technical reviews and it should be a living document, tailored to the program and serve as a roadmap to support program management by defining comprehensive system engineering activities, addressing both government and contractor technical activities and responsibilities. Coordinate with the program systems engineering personnel to address intelligence requirements and deficiencies. An SEP checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

**6.10. Life Cycle Cost Estimate (LCCE).** A LCCE attempts to identify all of the costs associated with an acquisition program, from its initiation through disposal of the resulting system at the end of its useful life. LCCEs for DoD systems serve two primary purposes. First, they are used at acquisition program Milestones and decision reviews to assess whether the system's cost is affordable, or consistent with the DoD's overall long-range investment and force structure plans. Second, LCCEs form the basis for budget requests to Congress. Intelligence professionals should identify and document applicable Intelligence supportability costs throughout the life cycle of the system. An LCCE checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

**6.11. Life Cycle Sustainment Plan (LCSP).** The LCSP is the integrated acquisition and sustainment strategy for the life of a system. It is a concise document that identifies relevant issues and recommends an acquisition and management approach, as well as a support strategy. The LCSP serves as a roadmap for life cycle sustainment, from concept development to disposal, tailored to the specific needs of a program. Further, it provides all product support requirements of a supported system, subsystem, or major end item. The DoD acquisition policy and statutory requirements are evolutionary; therefore, the LCSP is to be a "living" document, maximizing system effectiveness from the perspective of the warfighter. LCSP implementation is mandatory for all ACAT I and II non-space programs.

For ACAT III programs, the LCSP may be prepared at the MDA's discretion. The most effective approach to developing a LCSP is through the use of IPTs. Intelligence professionals should be identified as a key participant on the IPT that is developing the LCSP. An LCSP checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

**6.12. System Threat Assessment/System Threat Assessment Report (STA/STAR).** A STA/STAR checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7. For information about STA/STAR purpose and content, refer to Para 6.15.7.

**6.13. Technical/Program Reviews.**

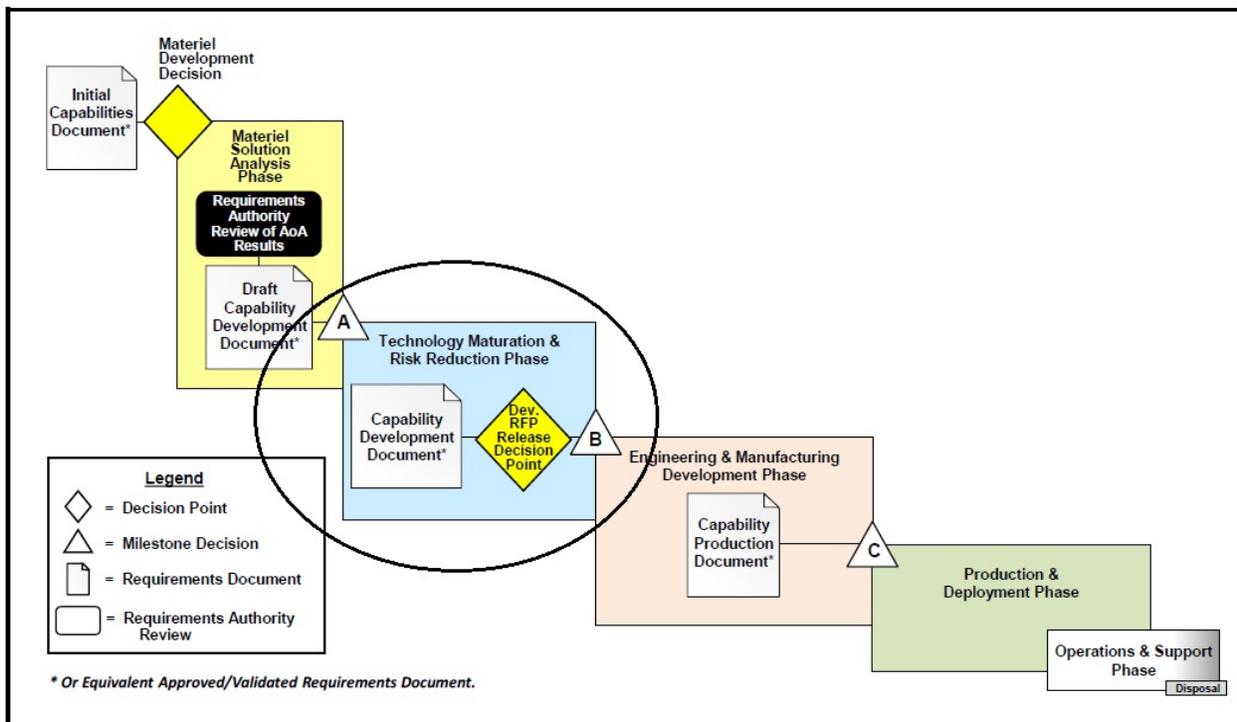
6.13.1. Initial Technical Review (ITR). The ITR is a multi-disciplined technical review to support a program's initial POM submission. This review ensures a program's technical baseline is sufficiently rigorous to support a valid cost estimate (with acceptable cost risk) and enable an independent assessment of that estimate by cost, technical, and program management SMEs. The ITR assesses the capability needs and materiel solution approach of a proposed program and verifies that the requisite research, development, test and evaluation, engineering, logistics, and programmatic bases for the program reflect the complete spectrum of technical challenges and risks. Additionally, the ITR ensures the historical and prospective drivers of system life cycle cost have been quantified to the maximum extent and that the range of uncertainty in these parameters has been captured and reflected in the program cost estimates. Intelligence professionals should be involved in this review to ensure all intelligence supportability requirements are appropriately addressed so that the program's baseline and cost estimate. An ITR checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.13.2. Alternative Systems Review (ASR). The ASR is a multi-disciplined technical review to ensure the resulting set of requirements addresses the customers' needs and expectations and the system under review can proceed into the TD phase. The ASR should be completed prior to, and provide information for the MS-A decision. Generally, this review assesses the preliminary materiel solutions that have been evaluated during the MSA phase, and attempts to verify that one of the proposed materiel solutions has the best potential to be cost effective, affordable, operationally effective and suitable, and can be developed to provide a timely solution to a need at an acceptable level of risk. Of critical importance to this review is an understanding of available system concepts to meet the capabilities described in the ICD and to meet the affordability, operational effectiveness, technology risk, and suitability goals inherent in each alternative concept. Further, the ASR is important because it is a comprehensive attempt to ensure the system requirements are aligned with the customer's needs. It attempts to minimize the number of requirements that would change in later phases. In general, the later in the program requirements change, the greater the impact on schedule and cost. The intelligence professional should be involved in this review to ensure all intelligence supportability requirements are appropriately addressed. An ASR checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

**6.14. Technology Maturation and Risk Reduction Phase (TMRR).** The purpose of this phase is to reduce technology risk, determine the appropriate set of technologies to be integrated into a full system, demonstrate critical technologies on representative platform

prototypes, and complete a preliminary design. TMRR is a continuous technology discovery and development process reflecting close collaboration between the S&T community, the user, and the system developer. It is an iterative process designed to assess the viability of technologies while simultaneously refining user requirements. Entrance into this phase depends on the completion and approval of the AoA results, a proposed materiel solution, and full funding for planned TMRR activities. The project exits the TMRR when an affordable program or increment of a militarily useful capability has been identified; the technology and manufacturing processes for that program or increment have been assessed and demonstrated in a relevant environment; manufacturing risks have been identified; a system or increment can be developed for production within a short timeframe (normally less than five years for weapon systems); or, when the MDA decides to terminate the program. During TMRR, the user prepares the CDD to support initiation of the acquisition program or evolutionary increment, refines the integrated architecture, and clarifies how the program will lead to a joint warfighting capability. A MS-B decision follows the completion of Technology Maturation & Risk Reduction. Figure 6.2 depicts where the TMRR phase falls within the Defense Acquisition Management System.

**Figure 6.2. Technology Maturation & Risk Reduction Phase.**



### 6.15. Developing and Updating Documents.

6.15.1. CDD. As described in paragraph 5.1.3.2, The CDD is a document that provides the operational performance attributes necessary for the acquisition community to design a proposed system(s) and establish a program baseline. A CDD checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.15.2. ISP. The ISP is an acquisition document mandated for most service and joint programs and initiatives by DoD and Joint Chiefs of Staff instructions. Among other

things, the ISP can include the more detailed results of ISA beyond what is described in the JCIDS requirements documents, including identification of PM's plans to mitigate intelligence deficiencies and details of solutions, with designation of responsible agencies. Due to its low impact on the identification and resolution of derived intelligence deficiencies and the new direction for LMDPs, the intelligence annex to the ISP is deemphasized in the AF. If desired for use by AF programs as a program management tool, the ISP checklist provides direction in drafting the ISP intelligence annex. The ISP checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.15.3. Test and Evaluation Master Plan (TEMP). The TEMP, required by DoD 5000.02, is an overall test and evaluation plan designed to identify and integrate objectives, responsibilities, resources, and schedules for all T&E to be accomplished prior to the subsequent key decision points. It should be prepared as early as possible in the acquisition process and updated as development progresses. The TEMP focuses on the overall structure, major elements, and objectives of the T&E program and must be consistent with the acquisition strategy, the SEP, the approved CDD or CPD, applicable threat document (STA, STAR, or applicable Capstone Documents), and the ISP. The TEMP should be consistent with and complementary to the SEP. For a program using an evolutionary acquisition strategy, the TEMP must also be consistent with the time-phased statement of desired capabilities in the CDD or CPD. It provides a road map for integrated simulation, test, and evaluation plans, schedules, and resource requirements necessary to accomplish the T&E program objectives. The TEMP is required for programs entering MS-B. It identifies and integrates the overall structure and objective of the T&E program. The TEMP also identifies responsibilities, resources, and schedules to accomplish prior to future milestone decision points. An intelligence professional should participate in TEMP development to ensure current and approved threat information is contained in the TEMP. A TEMP checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.15.4. Update to LMDP. As a program approaches MS-B, the LMDP shall be fully defined with mission capability specific details and threat signature/IMD requirements to support program development. For example, more details should be known about the mission of the sensor, technical parameters, and the threat target set. The program should also list any signature- or IMD-based models that will be required, intelligence PRs submitted to a Service Intelligence Production Center (e.g., NASIC, National Ground Intelligence Center (NGIC), Office of Naval Intelligence (ONI), etc.), and planned signature or IMD collection events that the program will conduct. Programs entering the life cycle at the TMRR phase must address the variety of IMD needs specified in paragraph 6.7. The LMDP checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.15.5. Program Protection Plan (PPP). Critical Program Information (CPI) is the foundation upon which all protection planning for the program is based, and the reason all countermeasures are implemented. Effective program protection planning begins by the PM reviewing the acquisition program to determine if it contains CPI. If a program contains CPI, program protection planning is required. The PM, with the assistance of a Working-level Integrated Product Team (WIPT) and/or appropriate support activities, is

responsible for developing and implementing a PPP. The identification of CPI is a program management, security, and systems engineering function that is assisted by the acquisition intelligence and counterintelligence specialists for intelligence-specific inputs. The PPP/Technology Protection Plan (TPP) identifies the foreign intelligence collections threats to a technology/program and prescribes necessary countermeasures to ensure the technology/program is adequately protected from compromise. Countermeasures can include the full spectrum of security disciplines (e.g., security classification, physical security, personnel security, OPSEC). A PPP checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.15.6. Risk Management Plan (RMP). Risk planning is the activity of developing and documenting an organized, comprehensive, and interactive strategy and methods for identifying and tracking root causes, developing risk mitigation plans, performing continuous risk assessments and control procedures to determine how risks and their root causes have changed, and assigning adequate resources. Risk management is a continuous process of identifying potentially undesirable program events, assessing their impact, and establishing and executing the appropriate risk mitigation actions. Risk management plans, any new program risks, and status reports must be monitored at set intervals to determine the need for revisions, program direction, additional resources, etc. The program office should establish the basic approach and working structure, to include intelligence support, it will use and document that approach in a RMP. An RMP checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.15.7. System Threat Assessment (STA)/System Threat Assessment Report (STAR). The STAR is an authoritative, system-specific threat capabilities reference for ACAT I programs and Space Major Defense Acquisition Programs (MDAP). The STAR is developed by NASIC and is either: (1) approved by DIA for ACAT ID programs and Space MDAP or (2) approved by the NASIC/CC for ACAT IC programs. The STAR is a system-specific assessment of foreign threats (both active and passive) that could compromise mission effectiveness of the capability being developed. It addresses the projected threat environment in which the U.S. system would operate at the system's projected initial operation capability (IOC) and IOC + 10 years. As a minimum, the STAR should include threat capabilities of those countries addressed in Multi-Service Force Deployment (MSFD) scenarios. The STAR is typically required by MS-A and is updated as necessary every 18 months throughout the development of the system. A STA is a system-specific threat capabilities reference for ACAT II and space major system programs. Similar to the STAR in format and content, the STA is developed by NASIC and approved by the NASIC/CC. The STA is typically required by MS-B and is updated as necessary every 18 months throughout the development of the system. ACAT III and space non-major system programs do not require a formal threat capabilities assessment. A STA/STAR checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

## 6.16. Technical/Program Reviews.

6.16.1. Systems Requirement Review (SRR). The SRR is a multi-disciplined technical review to ensure the system under review can proceed into initial systems development, and that all system requirements and performance requirements derived from the ICD or draft CDD are defined and testable, and are consistent with cost, schedule, risk,

technology readiness, and other system constraints. Generally, this review assesses the system requirements as captured in the system specification and ensures that the system requirements are consistent with the approved materiel solution (including its support concept), as well as available technologies resulting from the prototyping effort. The SRR is normally held during the TMRR phase, but may be repeated after the start of Engineering and Manufacturing Development (EMD) phase to clarify the contractor's understanding of redefined or new user requirements. Of critical importance to this review is an understanding of the program technical risk inherent in the system specification and in the EMD phase. Determining an acceptable level of risk is essential to a successful review. The SRR is important in understanding the system performance, cost, and scheduling impacts that the defined requirements will have on the system. This is the last dedicated review of the system requirements, unless an additional SRR is held. The intelligence professional needs to be involved in this review to ensure intelligence supportability requirements are addressed. An SRR checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.16.2. System Functional Review (SFR). The SFR is a multi-disciplined technical review to ensure the system's functional baseline is established and has a reasonable expectation of satisfying the requirements of the CDD within the currently allocated budget and schedule. It completes the process of defining the items or elements below system level. This review assesses the decomposition of the system specification to system functional specifications, ideally derived from use case analysis. A critical component of this review is the development of representative operational use cases for the system. System performance and the anticipated functional requirements for operations maintenance and sustainment are assigned to sub-systems, hardware, software, or support after detailed analysis of the architecture and the environment in which it will be employed. The SFR determines whether the system's functional definition is fully decomposed to its lower level, and that IPTs are prepared to start preliminary design. The intelligence professional needs to be involved in this review to ensure intelligence supportability requirements are addressed. An SFR checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.16.3. Preliminary Design Review (PDR). The PDR is a technical assessment that establishes the physically allocated baseline to ensure the system under review has a reasonable expectation of being judged operationally effective and suitable. This review assesses the allocated design documented in subsystem product specifications for each configuration item in the system and ensures that each function, in the functional baseline, has been allocated to one or more system configuration items. The PDR establishes the allocated baseline (hardware, software, human/support systems) and underlying architectures to ensure that the system under review has a reasonable expectation of satisfying the requirements within the currently allocated budget and schedule. The intelligence professional needs to be involved in this review to ensure intelligence supportability requirements are addressed. A PDR checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

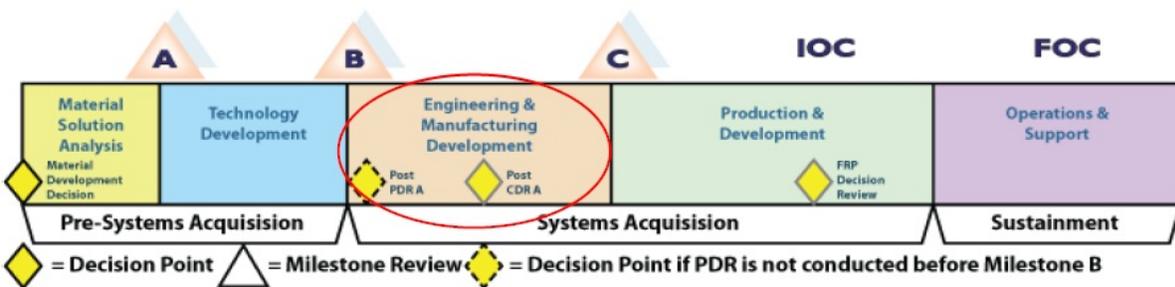
6.16.4. Technology Readiness Assessment (TRA). The TRA is a systematic, metrics-based process that assesses the maturity of critical technology elements (CTEs), including sustainment drivers. The TRA should be conducted concurrently with other technical

reviews, specifically the ASR, SRR, or the Production Readiness Review (PRR). The TRA is a tool for assessing program risk and the adequacy of technology maturation planning. The TRA highlights critical technologies (including critical manufacturing-related technologies) and other potential technology risk areas that require program manager attention. The intelligence professional needs to be involved in this assessment to ensure intelligence supportability requirements are addressed. A Technology Readiness Assessment checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.16.5. Acquisition Strategy Panel. Acquisition strategy planning is a “top-down” process focused on the PM and incorporates the guidance of a standing cadre of executive and senior advisors from functional disciplines early in the formulation of the acquisition strategy. Acquisition strategy planning starts once the purchase request is approved and the Air Force commits to the acquisition (i.e., commits resources), or if a program has undergone a major program change or redirection. Acquisition strategy planning should be tailored to complement the particular characteristics, such as size, complexity, risk, or importance of the acquisition. The objective of acquisition strategy planning is to ensure a consistent, sound, disciplined, functionally integrated acquisition strategy is developed and documented in the Single Acquisition Management Plan (SAMP) or Acquisition Plan (AP) to meet user’s needs within resource constraints.

6.17. **Engineering and Manufacturing Development (EMD) Phase.** The purpose of the EMD phase is to develop a system or an increment of capability; complete full system integration (technology risk reduction occurs during TMRR); develop an affordable and executable manufacturing process; ensure operational supportability with particular attention to reducing the logistics footprint; implement human systems integration; design for producibility; ensure affordability; protect CPI by implementing appropriate techniques such as anti-tamper; and demonstrate system integration, interoperability, safety, and utility. The CDD, Acquisition Strategy, SEP, and TEMP shall guide this program. Entrance into this phase depends on technology maturity, approved requirement, and full funding. The completion of this phase is dependent on a decision by the MDA to commit to the program at MS-C. Otherwise, the MDA will decide to end this program. Figure 6.3 depicts where the EMD phase falls within the Defense Acquisition Management System.

Figure 6.3. EMD Phase.



6.18. **CPD.** The CPD is the sponsor’s primary means of providing authoritative, testable capabilities for the Production and Deployment phase of an acquisition program. The CPD captures the information necessary to support production, testing, and deployment of an

affordable and supportable increment within an acquisition strategy. The CPD provides the operational performance attributes necessary for the acquisition community to produce a single increment of a specific system. It presents performance attributes, including KPPs, to guide the production and deployment of the current increment. A CPD is finalized after design readiness review and is validated and approved before the MS C acquisition decision. As a program or capability document progresses from Phase 1 to Phase 2 review, and more substantially as that program or capability progresses from CDD to CPD, sponsors will be responsible for ever increasing levels of refinement and analysis relating to intelligence supportability and deficiencies. A CPD checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

#### **6.19. Technical/Program Reviews.**

6.19.1. Critical Design Review (CDR). The CDR is a key point within the EMD phase. The CDR is a multi-disciplined technical review establishing the initial product baseline to ensure the system under review has a reasonable expectation of satisfying the requirements of the CDD within the currently allocated budget and schedule. Incremental CDRs are held for each configuration item culminating with a system-level CDR. This review assesses the final design as captured in product specifications for each Configuration Item in the system and ensures that each product specification has been captured in detailed design documentation. Configuration Items may consist of hardware and software elements, and include items such as airframe/hull, avionics, weapons, crew systems, engines, trainers & training, support equipment, etc. The intelligence professional needs to be involved in this review to ensure intelligence supportability requirements are addressed and/or identified at this level. A CDR checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.19.2. Test Readiness Review (TRR). The TRR is a multi-disciplined technical review designed to ensure the subsystem or system under review is ready to proceed into formal test. The TRR assesses test objectives, test methods and procedures, scope of tests, and safety and confirms that required test resources have been properly identified and coordinated to support planned tests. The intelligence professional needs to be involved in this review to ensure intelligence supportability requirements are addressed. A TRR checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

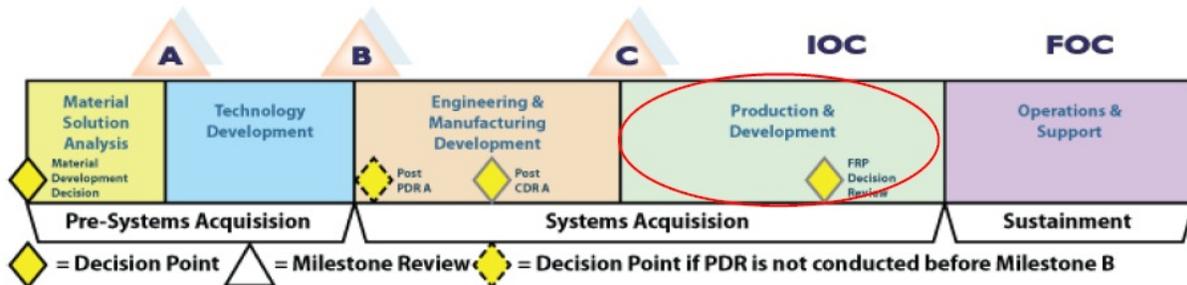
6.19.3. System Verification Review (SVR). The SVR is a multi-disciplined product and process assessment to ensure the system under review can proceed into Low-Rate Initial Production (LRIP) and Full-Rate Production (FRP) within cost (program budget), schedule (program schedule), risk, and other system constraints. Generally this review is an audit trail from the SFR. It assesses the system functionality, and determines if it meets the functional requirements (derived from the CDD and draft CPD) documented in the functional baseline. The SVR establishes and verifies final product performance. It provides inputs to the CPD. The SVR is often conducted concurrently with the PRR. The intelligence professional needs to be involved in this review to ensure intelligence supportability requirements are addressed. An SVR checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

6.19.4. TRA. The program manager should normally conduct a second TRA prior to MS-C. The intelligence professional needs to be involved in this assessment to ensure

intelligence supportability requirements are addressed. A TRA checklist can be accessed by using the link to the ADDM SharePoint site in Chapter 7.

**6.20. Production and Deployment (PD) Phase.** The purpose of the PD phase is to achieve an operational capability that satisfies mission needs. Operational test and evaluation (OT&E) shall determine the effectiveness and suitability of the system. The MDA shall make the decision to commit the DoD to production at MS-C. MS-C authorizes entry into LRIP (for Major Defense Acquisition Programs (MDAPs) and major systems), into production or procurement (for non-major systems that do not require LRIP) or into limited deployment in support of operational testing for Major Automated Information System (MAIS) programs or software-intensive systems with no production components. Entrance into this phase depends on the following criteria: acceptable performance in developmental test and evaluation and operational assessment (OSD OT&E oversight programs); mature software capability; no significant manufacturing risks; manufacturing processes under control (if MS-C is full-rate production); an approved ICD (if MS-C is program initiation); an approved CPD; a refined integrated architecture; acceptable interoperability; acceptable operational supportability; and demonstration that the system is affordable throughout the life cycle, fully funded, and properly phased for rapid acquisition. The CPD reflects the operational requirements, informed by EMD results, and details the performance expected of the production system. If MS-C approves LRIP, a subsequent review and decision shall authorize FRP. The completion of this phase depends on the following: a successful FRP decision review by the MDA; an approved CPD; and an approved Lifecycle Sustainment Plan (LCSP). Figure 6.4 below depicts where the PD phase falls within the Defense Acquisition Management System.

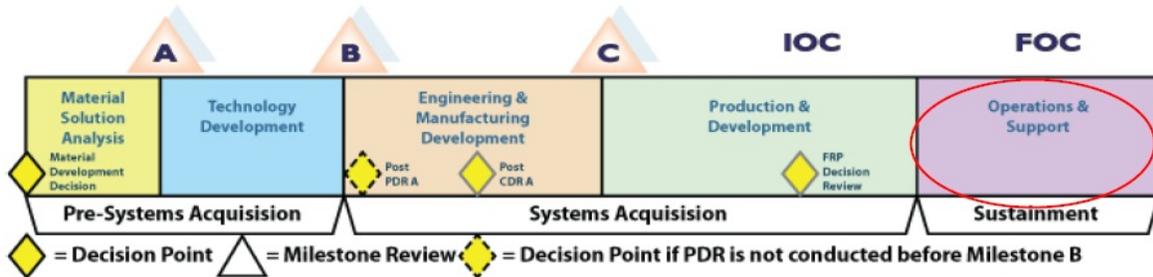
**Figure 6.4. PD Phase.**



**6.21. Operations and Support (OS) Phase.** The purpose of the OS phase is to execute a support program that meets materiel readiness and operational support performance requirements, and sustains the system in the most cost-effective manner over its total life cycle. Planning for this phase shall begin prior to program initiation and shall be documented in the LCSP. The OS phase has two major efforts – Life Cycle Sustainment and Disposal. Entrance into the OS phase depends on meeting the following criteria: an approved CPD, an approved LCSP, and a successful FRP decision. Much of the work done within this phase is driven by AF Form 1067, *Modification Proposal*. This form defines new requirements for weapon systems in sustainment. AF Form 1067 will often be the only documentation analysts have. When that occurs, the form takes the place of JCIDS documents in driving DIR identification during this phase. At the end of its useful life, a system shall be demilitarized and disposed of in accordance with all legal and regulatory

requirements and policy relating to safety (including explosives safety), security, and the environment. Figure 6.5 below depicts where the OS phase falls within the Defense Acquisition Management System.

Figure 6.5. OS Phase.



6.22. **Acquisition Life Cycle Tasks.** Table 6.1. illustrates tasks discussed throughout this document, and the associated phase in the acquisition life cycle in which it would be undertaken, if required.

Table 6.1. Acquisition Life Cycle Tasks.

Document/Task Checklists	MSA Phase	TMRR Phase	EMD Phase	PD Phase	OS Phase
Intelligence Supportability Analysis (ISA)	X	X	X	X	X
Intelligence Sensitivity	X	X	X	X	X
Requirements Analysis Workbook (RAW)	X	X	X	X	X
Capabilities-Based Assessment (CBA)	X				
Initial Capabilities Document (ICD)	X				
Capability Development Document (CDD)		X			
Capability Production Document (CPD)			X		
Intelligence Working Groups (IWG)	X	X	X	X	X
Analysis of Alternatives (AoA)	X	X	X	X	
AoA Final Report	X	X	X	X	
Acquisition Strategy	X				
Intelligence Health Assessment (IHA)	X	X	X	X	X
Life Cycle Signature Support Plan (LSSP)/Life Cycle Mission Data Plan (LMDP)	X	X	X	X	
Test and Evaluation Strategy (TES)	X				
Systems Engineering Plan (SEP)	X	X	X	X	X
Life Cycle Cost Estimate (LCCE)	X	X	X	X	X
Life Cycle Management Plan (LCSP)	X	X	X	X	X
Initial Technical Review (ITR)	X				

Alternative Systems Review (ASR)	X				
Test and Evaluation Master Plan (TEMP)		X		X	
Information Support Plan (ISP)		X			
Program Protection Plan (PPP)	X	X	X	X	X
Risk Management Plan (RMP)		X	X	X	X
System Requirements Review (SRR)		X			
System Functional Review (SFR)		X			
Preliminary Design Review (PDR)		X			
Technology Readiness Assessment (TRA)		X	X		
Critical Design Review (CDR)			X		
Test Readiness Review (TRR)			X		
System Verification Review (SVR)			X		
Quick Reaction Capability (QRC)	X				
Technology Transition Plan (TTP)	X				
System Threat Assessment Report (STAR)		X	X	X	

**7. Acquisition Document Development and Management (ADDM).** In recent years, numerous problems with reaching milestone decisions have been identified at the AF and OSD level. Milestones have been delayed due to non-timely document preparation. Even when the appropriate documents are completed and made available on time, their creation can consume a large amount of time and resources, and the rationale behind document tailoring decisions are not captured in a formal way. A key weakness in acquisition documentation has been inconsistent quality and the lack of a strong linkage among documents. Without such linkage, making cross-cutting changes to acquisition documents across an entire program require a massive effort. These problems combine to make adequate overall insight into MS readiness extremely difficult. The ADDM application was created in an attempt to mitigate these problems.

**7.1. The ADDM application.** The ADDM application was created to assist program offices and the organizations that support them prepare the documentation needed to successfully meet the next acquisition milestone (MS) review. The application resides on the ADDM SharePoint site. It provides program offices with a document roadmap that identifies documents required for each milestone based on ACAT category and supports Interim DoDI 5000.02. In addition to standardizing the process that prepares users to meet the next milestone decision, it also provides authoritative references, guidance and instructions.

**7.2. ADDM Content.** The ADDM SharePoint site is a repository for a wide variety of documentation, tools and templates to provide program managers and all who support their efforts with the guidance, instructions and references they need. In addition to a wide variety of resources to aid acquisition professionals, all of the checklists referenced in this document are hosted on this site.

**7.3. Accessing the ADDM SharePoint site.** The ADDM SharePoint can be accessed by using the following link: <https://cs3.eis.af.mil/sites/AF-AQ-00-04/default.aspx?RootFolder=%2Fsites%2FAF%2DAQ%2D00%2D04%2FAFKN%5F>

[Docs%2F2%2E%20ADDM%20Acquisition%20Document%20Templates%2FAcquisition%20References%2FAcquisition%20Intelligence&FolderCTID=0x0120003471C64B7C412E41BD717D53CCF0DA44&View=%7bB21F48FF-3BA6-427E-85BA-6F3B08A9B2CC%7d&InitialTabId=Ribbon%2EDocument&VisibilityContext=WSSTabPersistence.](#)

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**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

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***Adopted Forms***

- AF Form 847, *Recommendation for Change of Publication*, 22 September 2009

***Abbreviations and Acronyms***

**ACAT**—Acquisition Category

**ACC**—Air Combat Command  
**ACTD**—Advanced Concept Technology Demonstration  
**ACWG**—Alternative Comparison Working Group  
**ADDM**—Acquisition Document Development & Management  
**AETC**—Air Education and Training Command  
**AFISRA**—Air Force Intelligence, Surveillance and Reconnaissance Agency  
**AFI**—Air Force Instruction  
**AFLCMC**—Air Force Life Cycle Management Center  
**AFMC**—Air Force Materiel Command  
**AFOTEC**—Air Force Operational Test and Evaluation Center  
**AFPAM**—Air Force Pamphlet  
**AFPD**—Air Force Policy Directive  
**AFRB**—Air Force Review Board  
**AFRL**—Air Force Research Laboratory  
**AFROC**—Air Force Requirements Oversight Council  
**AFSPC**—Air Force Space Command  
**AILCES**—Acquisition Intelligence Life Cycle Estimating Structure  
**AoA**—Analysis of Alternatives  
**APOM**—Amended Program Objective Memorandum  
**ASR**—Alternative Systems Review  
**ASP**—Acquisition Strategy Panel  
**BBP**—Bullet Background Paper  
**CARD**—Cost Analysis Requirements Description  
**CAWG**—Cost Analysis Working Group  
**CBA**—Capabilities-Based Assessment  
**CC**—Commander  
**CCMD**—Combatant Command  
**CDD**—Capability Development Document  
**CDR**—Critical Design Review  
**CFL**—Core Function Lead  
**CFMP**—Core Function Master Plan  
**CI**—Counterintelligence

**CIO**—Center Intelligence Office  
**CIP**—Critical Intelligence Parameter  
**CJCSI**—Chairman of the Joint Chiefs of Staff Instruction  
**CJCSM**—Chairman of the Joint Chiefs of Staff Manual  
**COLISEUM**—Community On-line Intelligence System for End Users  
**COA**—Course of Action  
**COMINT**—Communications Intelligence  
**CONOP**—Concept of Operations  
**CP&A**—Capabilities, Planning and Analysis  
**CPA**—Cross Program Analysis  
**CPD**—Capability Production Document  
**CPI**—Critical Program Information  
**CRD**—Capstone Requirements Document  
**CRRA**—Capability Review and Risk Assessment  
**CTA**—Capstone Threat Assessment  
**CTE**—Critical Technology Elements  
**DAB**—Defense Acquisition Board  
**DAG**—Defense Acquisition Guidebook  
**DCR**—DOTMLPF Change Request  
**DIA**—Defense Intelligence Agency  
**DAI**—Defense Intelligence Agency Instruction  
**DIAP**—Defense Intelligence Agency Program  
**DIR**—Derived Intelligence Requirement  
**DNI**—Director of National Intelligence  
**DoD**—Department of Defense  
**DODI**—Department of Defense Instruction  
**DOT&E**—Director, Operational Test and Evaluation  
**DOTMLPF**—Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities  
**DPG**—Defense Planning Guidance  
**DP**—Development Planning  
**DPS**—Defense Planning Scenario  
**DT&E**—Developmental Test and Evaluation

**EAWG**—Effectiveness Analysis Working Group  
**ECWG**—Employment Concepts Working Group  
**ELINT**—Electronic Intelligence  
**EMD**—Engineering and Manufacturing Development  
**FAA**—Functional Area Analysis  
**FFRDC**—Federally Funded Research and Development Center  
**FISINT**—Foreign Instrumentation Signals Intelligence  
**FM**—Financial Management  
**FNA**—Functional Needs Analysis  
**FOC**—Full Operating Capability  
**FoS**—Family of Systems  
**FRP**—Full-Rate Production  
**FSA**—Functional Solutions Analysis  
**GDIP**—General Defense Intelligence Program  
**GEOINT**—Geospatial Intelligence  
**GI&S**—Geospatial Information and Services  
**GIISR**—Global Integrated Intelligence, Surveillance and Reconnaissance  
**GMI**—General Military Intelligence  
**GMTI**—Ground Moving Target Indicator  
**HAF**—Headquarters Air Force  
**HPT**—High Performance Team  
**HSI**—Human Systems Integration  
**HUMINT**—Human Intelligence  
**IC**—Intelligence Community  
**ICD**—Initial Capabilities Document  
**ICWG**—Intelligence Cost Working Group  
**IHA**—Intelligence Health Assessment  
**IIA**—Independent Intelligence Assessment  
**IMINT**—Imagery Intelligence  
**IOC**—Initial Operating Capability  
**IOT&E**—Initial Operational Test and Evaluation  
**IPS**—Illustrative Planning Scenarios

**IPT**—Integrated Product Team  
**IS**—Intelligence Squadron  
**ISA**—Intelligence Supportability Analysis  
**ISD**—Integrated System Design  
**ISG**—Intelligence Steering Group  
**ISP**—Information Support Plan  
**ISR**—Intelligence, Surveillance, and Reconnaissance  
**ISR CART**—Intelligence, Surveillance, and Reconnaissance Capabilities and Requirements Tool  
**ISR CP&A**—Intelligence, Surveillance, and Reconnaissance Capabilities Planning and Analysis  
**ISS**—Intelligence Sensitivity Survey  
**IST**—Intelligence Sensitivity Tier  
**ISWG**—Intelligence Support Working Group  
**IT**—Information Technology  
**ITR**—Initial Technical Review  
**ITT**—Integrated Test Team  
**ISWG**—Intelligence Support Working Group  
**JCA**—Joint Capability Area  
**JCB**—Joint Capabilities Board  
**JCD**—Joint Capabilities Document  
**JCIDS**—Joint Capabilities Integration and Development System  
**JCTD**—Joint Capability Technology Demonstration  
**JIOC**—Joint Intelligence and Operations Center  
**JP**—Joint Publication  
**JPD**—Joint Potential Designator  
**JOpsC**—Joint Operations Concept  
**JROC**—Joint Requirements Oversight Council  
**JUON**—Joint Urgent Operational Need  
**JWICS**—Joint Worldwide Intelligence Communication System  
**KPP**—Key Performance Parameter  
**LCC**—Life Cycle Cost  
**LCCE**—Life Cycle Cost Estimate  
**LCSP**—Life Cycle Sustainment Plan

**LMDP**—Life Cycle Mission Data Plan  
**LRIP**—Low-Rate Initial Production  
**LSSP**—Life Cycle Signature Support Plan  
**MAJCOM**—Major Command  
**MAICD**—Mission Area Initial Capabilities Document  
**MAIS**—Major Automated Information System  
**MASINT**—Measurement and Signature Intelligence  
**MDA**—Milestone Decision Authority  
**MDAP**—Major Defense Acquisition Program  
**MDD**—Materiel Development Decision  
**Mfg.**—Manufacturing  
**MFR**—Memorandum For Record  
**MIP**—Military Intelligence Program  
**MOE**—Measure of Effectiveness  
**MOP**—Measure of Performance  
**MS**—Milestone  
**MS—A**—Milestone A  
**MS—B**—Milestone B  
**MS—C**—Milestone C  
**M&S**—Modeling and Simulation  
**MSA**—Materiel Solutions Analysis  
**MSFD**—Multi-Service Force Deployment  
**NASIC**—National Air and Space Intelligence Center  
**NCTI**—Non-Cooperative Target Identification  
**NGA**—National Geospatial-Intelligence Agency  
**NIP**—National Intelligence Program  
**NRO**—National Reconnaissance Office  
**NSA**—National Security Agency  
**NSG**—National System for Geospatial Intelligence  
**NSS**—National Security Systems  
**OAS**—Office of Aerospace Studies  
**OMB**—Office of Management and Budget

**OPR**—Office of Primary Responsibility  
**OS**—Operations and Support  
**OSD**—Office of the Secretary of Defense  
**OSINT**—Open Source Intelligence  
**OT&E**—Operational Test and Evaluation  
**P3I**—Pre-Planned Product Improvement  
**PBD**—Program Budget Decision  
**PCPAD**—Planning & Direction, Collection, Processing & Exploitation, Analysis & Production, and Dissemination  
**P&D**—Production and Deployment  
**PDR**—Preliminary Design Review  
**PEO**—Program Executive Officer  
**PFPP**—Planning Force Proposal  
**PM**—Program Manager  
**POC**—Point of Contact  
**POM**—Program Objective Memorandum  
**PoPS**—Probability of Program Success  
**PPBE**—Planning, Programming, Budgeting and Execution  
**PPP**—Program Protection Plan  
**PR**—Production Requirement  
**PRR**—Production Readiness Review  
**PSC**—Preferred Systems Concept  
**PSR**—Program Support Review  
**QRC**—Quick Reaction Capability  
**RAW**—Requirements Analysis Workbook  
**RDT&E**—Research, Development, Test and Evaluation  
**RFI**—Request For Information  
**RMP**—Risk Management Plan  
**ROE**—Rules of Engagement  
**ROM**—Rough Order of Magnitude  
**RTP**—Research and Technology Protection  
**S&TI**—Scientific and Technical Intelligence  
**SAF/AQ**—Assistant Secretary of the Air Force for Acquisition

**SAF/US**—Under Secretary of the Air Force  
**SAMP**—Single Acquisition Management Plan  
**SAP**—Special Access Program  
**SAR**—Special Access Required  
**SAR**—Synthetic Aperture Radar  
**SE**—Systems Engineering  
**SEP**—Systems Engineering Plan  
**SFR**—System Functional Review  
**SIGINT**—Signals Intelligence  
**SIO**—Senior Intelligence Officer  
**SME**—Subject Matter Expert  
**SOIC**—Senior Official of the Intelligence Community  
**SoS**—System of Systems  
**SRR**—Systems Requirements Review  
**SSS**—Staff Summary Sheet  
**S&T**—Science and Technology  
**SSWG**—System Security Working Group  
**STA**—System Threat Assessment  
**STAR**—System Threat Assessment Report  
**STINFO**—Scientific and Technical Information  
**STT**—Strategy-to-Task  
**SVR**—System Verification Review  
**SWarF**—Senior Warfighter’s Forum  
**TAWG**—Technology and Alternatives Working Group  
**TD**—Technology Development  
**acquisition strategy**—Technology Development Strategy  
**T&E**—Test and Evaluation  
**TEM**—Technical Exchange Meeting  
**TEMP**—Test and Evaluation Master Plan  
**TES**—Test and Evaluation Strategy  
**TPP**—Technology Protection Plan  
**TTP**—Tactics, Techniques, and Procedure

**TRA**—Technology Readiness Assessment

**TSG**—Threat Steering Group

**TSWG**—Threats and Scenarios Working Group

**TTE**—Threat / Target / Environment

**TWG**—Threat Working Group

**USAF**—United States Air Force

**USD(AT&L)**—Under Secretary of Defense for Acquisition, Technology and Logistics

**USD(P)**—Under Secretary of Defense for Policy

**WBS**—Work Breakdown Structure

**WG**—Working Group

**WIPT**—Working-level Integrated Product Team

### *Terms*

**Acquisition Document Development & Management (ADDM) SharePoint Site**—The ADDM SharePoint Site was created as an initiative of the Deputy Assistant Secretary of the Air Force (Acquisition Integration) (SAF/AQ). The site serves as a repository for resources to assist acquisition professionals perform their missions. Among these resources is the ADDM application that aids program offices and the organizations that support them in the preparation of the documentation needed to successfully meet the next acquisition milestone (MS) review. It provides program offices with a document roadmap that identifies documents required for each milestone based on ACAT category and supports Interim DoDI 5000.02. In addition to standardizing the process that prepares users to meet the next milestone decision, it also provides authoritative references, guidance and instructions.

**Acquisition Intelligence Life Cycle Cost Estimating Structure (AILCES)**—The AILCES was developed by the Intelligence Cost Working Group as a tool to systematically identify intelligence cost requirements associated with the acquisition of weapons systems throughout the life cycle of a program (to include capabilities development, research & development, testing, fielding, operations and support). It can be referred to as a work breakdown structure for intelligence activities that would be required to support a program/project/initiative. Proper application of AILCES early in the life cycle of an acquisition program will help avoid program delays and additional costs caused by failure to consider all intelligence requirements required to support testing, fielding and sustaining the weapon system.

**Advanced Concept Technology Demonstration**—A demonstration of the military utility of a significant new technology and an assessment to clearly establish operational utility and system integrity.

**Alternative Comparison Working Group (ACWG)**—The ACWG is responsible for reviewing the alternatives' cost, effectiveness, and associated risks and interpreting what it means through comparative analysis. The goal of this process is to identify the most promising candidates for consideration by decision makers. This function might be completed by the WIPT without formally establishing an ACWG.

**Alternative Systems Review**—A multi-disciplined technical review to ensure that requirements agree with the customer’s needs and expectations and that the system under review can proceed into the Technology Development phase. The ASR should be complete prior to MS-A. (Defense Acquisition Guidebook)

**Analysis of Alternatives**—The evaluation of the performance, operational effectiveness, operational suitability, and estimated costs of alternative systems to meet a mission capability. The analysis assesses the advantages and disadvantages of alternatives being considered to satisfy capabilities, including the sensitivity of each alternative to possible changes in key assumptions or variables. The AoA is normally conducted during the Concept Refinement phase of the Defense Acquisition Framework to refine the system concept contained in the Initial Capabilities Document (ICD) approved at the Concept Decision. (DoDI 5000.02 and CJCSI 3170.01H)

**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.

**Asymmetric Threat**—Non-traditional approach (e.g., technical, doctrinal, operational) that an adversary might take, in a given warfare area, in response to actual or perceived US strengths/capabilities; also, a threat seeking to degrade US capabilities without directly confronting the area of US strength with a like capability.

**Authoritative**—An intelligence product that has been published/posted under the auspices of the Defense Intelligence Analysis Program (DIAP). It has been produced by the intelligence element recognized in the DIAP as the authority for that kind of information, vetted and adjudicated within that element, and is based on reliable and trusted analysis tools and processes.

**Capability**—The combined capacity of personnel, materiel, equipment, and information in measured quantities, under specified conditions, that, acting together in a prescribed set of activities can be used to achieve a desired output.

**Capabilities-Based Assessment**—The Joint Capability Integration and Development System analysis process. It answers several key questions for the validation authority prior to his approval: defines the mission; identifies capabilities required; determines attributes/standards of capabilities required; identifies gaps; assesses operational risk associated with gaps; prioritizes gaps; identifies and assesses non-materiel solutions; and provides recommendations for addressing the gaps. (CJCSI 3170.01H)

**Capability Development Document**—A document that captures the information necessary to develop a proposed program(s), normally using an evolutionary acquisition strategy. The CDD outlines an affordable increment of militarily useful, logistically supportable, and technically mature capability. The CDD supports a MS-B decision review. The CDD format is contained in CJCSM 3170.01C, *Operation of the Joint Capabilities Integration and Development System* (DoD 5000.02 and CJCSI 3170.01H)

**Capability Production Document**—A document that addresses the production elements specific to a single increment of an acquisition program. The CPD defines an increment of militarily useful, logistically supportable, and technically mature capability that is ready for a production decision. The CPD must be validated and approved prior to a MS-C decision review.

The CPD format is in the Joint Capabilities Integration and Development System (JCIDS) Manual, available online. (DoD 5000.02 and CJCSI 3170.01H)

**Capability Review and Risk Assessment**—The CRRA process provides oversight to USAF senior leadership with an operational, capabilities-based focus for acquisition program decision making. The CRRA accomplishes this by evaluating the health of existing and future capabilities, and assesses risk in terms of achieving effects. By highlighting priorities and disconnects in relation to how our programs deliver capabilities, the CRRA provides suggested courses of action to deliver capabilities on schedule. (ISA Handbook)

**Capstone Threat Assessment**—CTA is the Department of Defense Intelligence Community's official assessment of the principal threat systems and capabilities within a category of warfare that a potential adversary might reasonably bring to bear in an attempt to defeat or degrade US weapon systems undergoing development. It is the authoritative reference describing the threat environment in which the US systems will operate. (AFI 14-111)

**Center Intelligence Office (CIO)**—The intelligence support office at an Air Force Center, Laboratory site, or other defined area of responsibility, which provides acquisition intelligence support to a program/capability/initiative. It is the focal point at each product or logistics center specifically dedicated to supporting research, development, test, evaluation and sustainment activities with analytical services and intelligence products and information. Multiple CIOs (as OPR/OCRs) can be assigned to support a program/capability/initiative, if needed.

**Communications Intelligence (COMINT)**—COMINT is technical information and intelligence derived from foreign communications by other than the intended recipients. It is a sub-category of SIGINT, with focus on person-to-person and machine-to-machine messages or voice information, derived from the interception of foreign communications.

**Community On-line Intelligence System for End Users and Managers (COLISEUM)**—A DIA automated production/requirements management system designed to support the Intelligence Community for registration, validation, tracking and management of DOD/Joint/Service Production Requirements (PRs), otherwise known as Requests for Information (RFIs). Access is available through the TS//SCI-level Joint Worldwide Intelligence Communication System (JWICS) network.

**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. It is designed to give an overall picture of the operation. It is also called the Commander's Concept. (CJCSI 3170.01H)

**Core Function Master Plan**—Align strategy, concepts, and capability development by core function to provide 20-year constructs for enhancing Global Vigilance, Global Reach, and Global Power across the full range of military operations. Link the AF's Strategic Guidance & Plan to the Annual Planning and Programming Guidance by establishing a baseline of the operational and resourcing health of each core function.

**Cost Analysis Requirements Description**—A description of the salient features of the acquisition program and of the system itself. It is the common description of the technical and programmatic features of the program that is used by the teams preparing the Program Office Estimate (POE), Component Cost Estimate (CCE), and independent Life Cycle Cost Estimates (LCCEs).

**Cost Analysis Working Group**—The CAWG is responsible for estimating the cost of the alternative systems provided by the Technology and Alternatives Working Group (TAWG). The members will be responsible for developing a concise list of Ground Rules and Assumptions (GR&A), a comparable Work Breakdown Structure (WBS), Life Cycle Cost Estimates (LCCEs) for the alternatives, and Rough Order Magnitude (ROM) cost estimates, as appropriate. Additionally, the CAWG may be responsible for conducting a budget analysis for the recommended alternatives. The CAWG shall assist all WGs in the use of the cost data. (Study Plan)

**Counterintelligence (CI)**—Information gathered and activities conducted to identify, deceive, exploit, disrupt, or protect against espionage, other intelligence activities, sabotage, or assassinations conducted for or on behalf of foreign powers, organizations or persons, or their agents, or international terrorist organizations or activities. CI is part of the Intelligence Community's organization and function, but is usually "compartmented" from the IC's foreign intelligence offices/functions in order to protect personal and law enforcement sensitive information IAW federal, DoD and Service intelligence oversight guidance.

**Critical Design Review**—A multi-disciplined technical review to ensure that a system can proceed into fabrication, demonstration, and test and can meet stated performance requirements within cost, schedule, risk, and other system constraints. Generally this review assesses the system final design as captured in product specifications for each configuration item in the system's product baseline, and ensures that each configuration item in the product baseline has been captured in the detailed design documentation. Normally conducted during the Engineering and Manufacturing Development (EMD) phase. (Defense Acquisition Guidebook and DODI 5000.02)

**Critical Intelligence Parameter (CIP)**—A factor which clearly defines the threshold at which the performance of a foreign system/capability will likely compromise the program / mission effectiveness of the US system. If a CIP is breached (i.e., a foreign system has met the CIP threshold): (1) Materiel and/or non-materiel (DOTMLPF) changes must be considered, (2) Program will likely require additional time and funds to adjust ("re-baseline"), (3) Spiral/increment thresholds, objectives, KPPs, KSAs, etc. may require adjustment.

**Critical Program Information**—Elements or components of a program that, if compromised, could cause significant degradation in mission effectiveness; shorten the expected combat-effective life of the system; reduce technological advantage; significantly alter program direction; or enable an adversary to defeat, counter, copy, or reverse engineer the technology or capability. Includes information about technology, applications, capabilities, processes, and end-items. (DODI 5200.39)

**Critical Technology Elements**—New or novel technology that a platform or system depends on to achieve successful development or production or to successfully meet a system operational threshold requirement. (Technology Readiness Assessment Deskbook)

**Cross Program Analysis**—CPA involves an analytical effort designed to "look across" all intelligence-sensitive programs/initiatives and the related intelligence deficiencies. The purpose of CPA is to identify common requirements and achieve synergies within resulting common solutions. Synergies between programs/initiatives and cost savings are realized when solutions are identified that support multiple programs/systems. An additional aspect of CPA is to identify system or program integration issues. In addition, linkage of documented requirements with

multiple customer sets serves to strengthen AF requirements forwarded to the larger Intelligence Community for action. (AFI 14-111)

**Defense Acquisition Guidebook**—Provides staff expectation, notional document formats (e.g., the Test and Evaluation Master Plan (TEMP), best practices, and lessons learned.

**Defense Intelligence Analysis Program (DIAP)**—DIA centrally manages defense intelligence analysis and production using a distributed analytical process known as the DIAP. This program integrates general military intelligence and scientific and technical intelligence production conducted at DIA, Combatant Commands, and Service intelligence centers. The DIAP allows DIA to focus all-source defense intelligence analysis efforts on compelling issues for defense customers while limiting duplication of effort.

**Defense Planning Guidance**—This document, issued by the Secretary of Defense, provides firm guidance in the form of goals, priorities, and objectives, including fiscal constraints, for the development of the Program Objective Memorandums by the Military Departments and Defense agencies. (JP 1-02)

**Defense Planning Scenarios**—The Defense Planning Scenarios (DPS) include problem descriptions, assumptions and variations of key parameters developed by OSD, threat descriptions developed by the intelligence community, and outlines of concepts of operations for U.S. forces developed by a Joint Staff-led team of Service and other subject-matter experts. DOD uses the scenarios, along with their associated databases to study the sufficiency of defense plans and programs.

**Deficiency**—A Derived Intelligence Requirement (DIR) that cannot be supported due to a current lack of capability, capacity, or resources

**Derived Intelligence Requirement (DIR):**—see Requirement

**Development Planning (DP)**—The materiel contribution to Air Force or Air Force led capability planning and as such must span the entire product/system life cycle from pre-concept to disposal. It is a collaborative process bridging warfighter-identified capability needs to planning for acquisition of materiel solutions. DP supports the tradespace evaluation of emerging capability needs, includes system-of-systems assessments, identifies and assesses technology maturity and risk drivers, and incorporates comprehensive life cycle planning contributing to a high-confidence acquisition program launch. DP brings its greatest leverage prior to the Materiel Development Decision (MDD). It includes analytically-based decision-quality assessments, studies, strategies, and options in pursuit of new capabilities. Key aspects of DP include analytic support for identification of needs and development of requirements for potential materiel solutions; initiation of high-confidence acquisition programs via early systems engineering; early test and evaluation strategy development; technology and manufacturing maturity; assessments of life cycle analyses, life cycle cost estimates, and early acquisition intelligence engagement.

**Developmental Test and Evaluation**—Any testing used to assist in the development and maturation of products, product elements, or manufacturing or support processes. Any engineering-type test used to verify status of technical progress, verify that design risks are minimized, substantiate achievement of contract technical performance, and certify readiness for initial Operational Testing (OT). Development tests generally require instrumentation and

measurements and are accomplished by engineers, technicians, or soldier operator-maintainer test personnel in a controlled environment to facilitate failure analysis.

**Doctrine, Organization, Training, Materiel, Leadership & Education, Personnel, Facilities (DOTMLPF)**—An acronym that addresses elements of non-material solutions. DOTMLPF analysis identifies changes in doctrine, organization, training, materiel, leadership and education, personnel, facilities or policy (including all human systems integration domains) to satisfy identified functional capabilities. The materiel portion is restricted to commercial or non-developmental items that may be purchased commercially, or by purchasing more systems from an existing materiel program. (CJCSI 3170.01H)

**DOD 5000 Series**—Refers collectively to DODD 5000.01 and DODI 5000.02.

**Effectiveness Analysis Working Group**—The EAWG is responsible for assessing the effectiveness of each alternative approach based on Mission Tasks (MTs), Measures of Effectiveness (MOEs) and Measures of Performance (MOPs). The MOE/MOPs will be formulated and analysis will be conducted within the context of the defense planning scenarios selected by the Threats and Scenarios Working Group (TSWG). The EAWG will collaborate with the other WGs in the use of the effectiveness data to perform the cost-effectiveness analysis of the alternatives.

**Electronic Intelligence (ELINT)**—ELINT is technical intelligence derived from foreign non-communications electromagnetic radiations emanating from other than nuclear detonations or radioactive sources. It is a sub-category of SIGINT, with focus on non-communications signals.

**Employment Concepts Working Group (ECWG)**—The ECWG is responsible for review of current requirement and operational documents to support development and validation of operational and employment documents for the AoA. The ECWG will develop employment concepts and a Doctrine, Operations, Training, materiel, Logistics, Personnel and Facilities (DOTMLPF) analysis summary for the baseline and alternatives to support the other WGs as required. An alternative name for this group is the Operating Concept WG (OCWG).

**Engineering and Manufacturing Development**—The third phase of the life cycle as defined and established by DoDI 5000.02. This phase consists of two efforts, Integrated System Design (ISD) and System Capability and Manufacturing Process Demonstration, and begins after MS-B. It also contains a Post Critical Design Review (CDR) Assessment at the conclusion of the ISD effort. A program planning to proceed into SC&MPD at the conclusion of ISD will first undergo a Post-CDR Assessment to confirm design maturity and the initial product baseline.

**Family of Systems**—A set of systems that provides similar capabilities through different approaches to achieve similar or complementary effects. For example, the war-fighter may need the capability to track moving targets. The FoS that provides this capability could include unmanned or manned aerial vehicles with appropriate sensors, a space-based platform, or a special operations capability. Each can provide the ability to track moving targets, but with differing characteristics of persistence, accuracy, timeliness, etc. (JCIDS Manual)

**Federally Funded Research and Development Centers (FFRDC)**—A Federally Funded Research and Development Center (FFRDC) is an activity sponsored under a broad charter by a Government agency (or agencies) for the purpose of performing, analyzing, integrating, supporting, and/or managing basic or applied research and/or development, and that receives 70 percent or more of its financial support from the Government.

**Flagship Capability Concepts (FCCs)**—To achieve the AF Science and Technology vision of anticipate, find, fix, track, target, engage, assess, anything, anywhere, and anytime, the AF Material Command and the AF Research Laboratory (AFRL) developed the Flagship Capability Concepts (FCCs) constructs that employ a capability-based planning process to define the investment in future technologies. The FCCs address technology investment in the near, mid and far terms across the air, space and cyber domains.

**Foreign Instrumentation Signals Intelligence (FISINT)**—It is a sub-category of SIGINT, with focus on intelligence from the intercept of foreign electromagnetic emissions associated with the testing and operational deployment of non-US aerospace, surface, and subsurface systems.

**Foreign Intelligence**—Often referred to simply as “intelligence,” foreign intelligence is the information relating to the capabilities, intentions, or activities of foreign governments or elements thereof, foreign organizations, or foreign persons, or international terrorist activities.

**Functional Area Analysis**—The FAA identifies the operational tasks, conditions and standards needed to achieve military objectives. It uses the national strategies, the Family of Joint Future Concepts, UCP-assigned missions, CONOPS, joint tasks, the capabilities list (e.g., Universal Joint Task List), the anticipated range of broad capabilities that an adversary might employ and other sources as input. The FAA identifies the scenarios against which the capabilities and attributes will be assessed. Scenario sources include, but are not limited to, the Defense Planning Scenarios (DPS) published by the Office of the Secretary of Defense (OSD). The FAA produces a prioritized list of capabilities and tasks across all functional areas necessary to achieve the military objectives. The capabilities and their attributes should be traceable to the Family of Joint Future Concepts and any other supporting information used to develop the capabilities. These capabilities form the basis for integrated architectures and will be reviewed in the follow-on Functional Needs Analysis (FNA). (OAS FSA Guidebook)

**Functional Needs Analysis**—The FNA assesses the ability of the current and programmed warfighting systems to deliver the capabilities the FAA identified under the full range of operating conditions and to the designated measures of effectiveness. Using the capabilities and tasks identified in the FAA as primary input, the FNA produces a list of capability gaps that require solutions and indicates the time frame in which those solutions are needed. It may also identify redundancies in capabilities that reflect inefficiencies. The FNA will also provide the relative priority of the gaps identified. The FNA serves to further define and refine the integrated architectures. The FNA must assess the entire range of DOTMLPF and policy as an inherent part of defining capability needs. (OAS FSA Guidebook)

**Functional Solutions Analysis**—The FSA is an operationally based assessment of potential doctrine, organization, training, leadership & education, personnel and facilities (DOTMLPF) or materiel (M) approaches to solving (or mitigating) one or more of the capability gaps identified in the Functional Needs Analysis (FNA). (OAS FSA Guidebook)

**Full Operating Capability**—In general, attained when all units and/or organizations in the force structure scheduled to receive a system 1) have received it and 2) have the ability to employ and maintain it. The specifics for any particular system FOC are defined in that systems Capability Development Document and Capability Production Document.

**Full-Rate Production**—Contracting for economic production quantities following stabilization of the system design and validation of the production process.

**General Defense Intelligence Program (GDIP)**—The broadest based National Intelligence Program in the Defense Department. GDIP's primary mission is to provide timely, usable all-source military intelligence that supports the peacetime and wartime requirements of the warfighters, defense acquisition community, and the national policy makers. GDIP comprises funding for DIA, the Service intelligence centers, the unified combatant commands, the Defense Joint Intelligence Operations Center (D-JIOC), the unified combatant command JIOCs, JIOC US Forces Korea (USFK), JIOC Iraq, and Reserve Intelligence Production Activities. DIA is the program manager for the GDIP.

**Geospatial Information and Services (GI&S)**—The collection, information extraction, storage, dissemination, and exploitation of geodetic, geomagnetic, imagery (both commercial and national source), gravimetric, aeronautical, topographic, hydrographic, littoral, cultural, and toponymic (place names) data accurately referenced to a precise location on the Earth's surface. Geospatial services include tools that enable users to access and manipulate data, and also include instruction, training, laboratory support, and guidance for the use of geospatial data.

**Geospatial Intelligence (GEOINT)**—The exploitation and analysis of imagery and geospatial information to describe, assess, and visually depict physical features and geographically referenced activities on the earth. Geospatial intelligence consists of imagery, imagery intelligence, and geospatial information. GEOINT is used in military planning, training, and operations, including navigation, mission rehearsal, modeling, simulation, and precise targeting.

**High Performance Team (HPT)**—A HPT convenes to capture, articulate, and document the operator's requirements in minimum time, while achieving stakeholder buy-in. Ideally, the HPT will consist of 7-11 core participants, which includes a lead (the sponsor, during a requirements development HPT), a facilitator, Air Force Subject Matter Experts (SMEs) (i.e., operators, systems engineers, acquirers, testers, logisticians, intelligence support managers, etc.), government agencies and other Services (as required), and support team members (not physically present but available via phone or e-mail for reach back).

**Human Intelligence (HUMINT)**—Intelligence gathering by means of interpersonal contact; information collected/provided by human sources.

**Human Systems Integration**—Includes the integrated and comprehensive analysis, design, assessment of requirements, concepts and resources for system manpower, personnel, training, safety and occupational health, habitability, personnel survivability, and human factors engineering. (DoDI 5000.02 and JCIDS Manual) See Human Factors Engineering.

**Imagery Intelligence: Intelligence derived from the exploitation of collection by visual photography, infrared sensors, lasers, electro**—optics, and radar sensors such as synthetic aperture radar wherein images of objects are reproduced optically or electronically on film, electronic display devices, or other media. (Google)

**Implementing Command**—The command or agency designated by the Air Force Acquisition Executive to manage an acquisition program. The intelligence support to the manager of an acquisition program usually resides with the Product Center/Logistics Center/Lab Research Site Directorate of Intelligence.

**Independent Intelligence Assessment:**—IIA is an independent IHA at the MAJCOM level.

**Information Support Plan**—A requirement for all Acquisition Category (ACAT) programs that connect in any way to the communications and information infrastructure including both Information Technology (IT) and National Security System (NSS) programs. The Information Support Plan (ISP) is used by program authorities to document B-80 IT and NSS needs, objectives, and interface requirements in sufficient detail to enable testing and verification of requirements. The ISP also contains interface descriptions, infrastructure and support requirements, standards profiles, measures of performance, and interoperability deficiencies. The ISP is summarized in the Acquisition Strategy and reviewed at Milestones B and C. (DoDI 5000.02 and CJCSI 6212.01E) See Enhanced Information Support Plan (EISP) and Tailored Information Support Plan (TISP).

**Information Technology**—Any equipment or interconnected system or subsystem of equipment, that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the executive agency. IT includes computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources, including National Security Systems (NSSs). It does not include any equipment that is acquired by a federal contractor incidental to a federal contract. (CJCSI 6212.01C)

**Initial Capabilities Document**—Summarizes a Capabilities-Based Assessment (CBA) and recommends materiel or non-materiel approaches or a combination of materiel and non-materiel approaches, to satisfy specific capability gaps. It identifies required capabilities and defines capability gap(s) in terms of the joint capability area, the relevant range of military operations, desired effects, time and doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) and policy implications and constraints. The ICD summarizes the results of DOTMLPF and policy analysis and the DOTMLPF approaches that may deliver the required capability. The outcome of an ICD could be one or more Joint DOTMLPF Change Recommendations (DCRs) or recommendations to pursue materiel solutions. (CJCSI3170.01H and JCIDS Manual)

**Integrated Priority List (IPL)**—Combatant Commanders' prioritized key capability "gaps" that could hinder their performance of assigned missions. IPLs are submitted annually to the Secretary of Defense.

**Initial Operating Capability**—In general, attained when some units and/or organizations in the force structure scheduled to receive a system 1) have received it and 2) have the ability to employ and maintain it. The specifics for any particular system IOC are defined in that system's Capability Development Document (CDD) and Capability Production Document (CPD).

**Initial Technical Review**—A multi-disciplined technical review held early during the Materiel Solution Analysis (MSA) phase to support a program's initial Program Objectives Memorandum (POM) submission. The review ensures that a program's technical baseline is sufficiently rigorous to support a valid cost estimate (with acceptable cost risk), and enable an independent assessment of that estimate by cost, technical, and program management subject matter experts. (Defense Acquisition Guidebook)

**Integrated Product Team**—Team composed of representatives from appropriate functional disciplines working together to build successful programs, identify and resolve issues, and make sound and timely recommendations to facilitate decision making. There are three types of IPTs: Overarching IPTs (OIPTs) that focus on strategic guidance, program assessment, and issue

resolution; Working-level IPTs (WIPTs) that identify and resolve program issues, determine program status, and seek opportunities for acquisition reform; and Program-level IPTs (PIPTs) that focus on program execution and may include representatives from both government and after contract award industry.

**Integrated Test Team**—The central vehicle for conducting all Test and Evaluation (T&E) activities. ITT represents a shift from the traditional testing paradigm which views development/integration testing and operational testing as two discrete events. The ITT views testing as a continuum of events and provides the mechanism to coordinate the efforts.

**Intelligence Certification**—The affirmation that requirements for intelligence support have been completely and adequately declared and identified; adequately assessed for projected supportability; that critical intelligence supportability or threat-related issues identified during coordination of program documents have been addressed; and that any projected shortcomings in intelligence support will be dealt with in an appropriate manner. This certification occurs as a prerequisite for the Joint Capabilities Integration and Development System and defense acquisition processes, and occurs at each acquisition milestone.

**Intelligence Community (IC)**—The federation of executive branch agencies and organizations that conduct foreign and/or counter-intelligence activities necessary for conduct of foreign relations and protection of national security. IC members include the Service intelligence organizations (NGIC, ONI, NASIC, MCIA, and Service intelligence staff/support units), NSA, CIA, FBI, DIA (including MSIC and AFMIC), NRO, and NGA, as well as the intelligence components of the US Coast Guard, Department of Energy, Department of Homeland Security, Department of State, Department of Commerce, and Department of Treasury.

**Intelligence Cost Working Group (ICWG)**—The ICWG is a cross-Air Force organization chartered to help estimate and integrate intelligence data and infrastructure costs into the total Life Cycle Cost (LCC) of programs/concepts being acquired by the United States Air Force (USAF). The ICWG is chaired by the 21 IS's Plans and Resources Flight (21 IS/A2X), which reports to the AF Life Cycle Management Center/IN. Much of the intelligence data and infrastructure required by programs/capabilities/initiatives can be provided at no direct cost to the user; but in those cases where an intelligence requirement/deficiency needs additional funding for resolution, the ICWG helps the Acquisition Intelligence partners to identify, scope and integrate those costs into the appropriate budgets and budget cycles.

**Intelligence Estimate**—An appraisal of available intelligence relating to a specific situation or condition, with a view to determining the courses of action open to an enemy or potential enemy and the probable order of adoption of such courses of action.

**Intelligence Health Assessment**—IHAs use a checklist to scrutinize programs/projects/initiatives, systems, and capabilities deemed to be intelligence-sensitive (i.e., that are either users or producers of intelligence) to identify any potential risks, which left uncorrected might result in program delays, cost over-runs or degraded system capability. During the ISA process, the analyst should be working with and providing risk assessments to the program office. The IHA can be provided to the program manager in the form of a briefing or MFR. The IHA should be incorporated into the program's overall risk assessment and address cost, schedule, and performance.

**Intelligence Infrastructure**—The totality of intelligence support needed to ensure effective operation of a system once operational. This includes intelligence people, products, processes, systems, training, and/ or facilities.

**Intelligence Oversight**—The process of ensuring that all DOD intelligence, counterintelligence, and intelligence-related activities are conducted in accordance with applicable U.S. law, Presidential Executive Orders, and DOD directives. The DOD Intelligence Oversight program is designed to ensure that the DOD can conduct its (foreign) intelligence and counterintelligence missions while protecting the statutory and constitutional rights of U.S. persons. **Note:** The term "U.S. persons" includes U.S. citizens, permanent resident aliens, unincorporated associations substantially composed of U.S. citizens or permanent resident aliens, and corporations incorporated in the U.S. and not directed and controlled by a foreign government.

**Intelligence-Sensitive**—Efforts that require intelligence data during development or to perform their mission, require the direct support of intelligence personnel or infrastructure, or in any way handle intelligence data within the PCPAD cycle. This includes any program or initiative that produces, consumes, processes, or handles intelligence information or requires threat or intelligence infrastructure support. If it is likely that a program or initiative would produce, consume, process, or handle intelligence information at any point in its life cycle, it should be considered intelligence-sensitive.

**Intelligence Support Working Group**—The ISWG brings functional representatives from throughout the intelligence and acquisition communities together to ensure all intelligence considerations for the developing system or capability are addressed. The goal is to derive and develop the intelligence requirements and deficiencies, to research and develop potential solutions to the deficiencies, to create action plans to accomplish those solutions, to estimate solution costs, and to document results in the Weapon Systems Intelligence Support Requirements Database (WSISR).

**Intelligence Supportability Analysis**—ISA is the process by which AF intelligence plans for and documents the requirements and supporting intelligence infrastructure necessary to successfully acquire and employ future Air Force capabilities. ISA should begin as early as possible and continue during all phases of the acquisition life cycle for intelligence-sensitive programs/initiatives. As a minimum, ISA should identify as specifically and completely as possible, projected requirements for intelligence products, information, or services to include required performance, descriptive, or qualitative attributes.

**Intelligence, Surveillance, and Reconnaissance Capabilities, Planning and Analysis (CP&A)**—The ISR CP&A outlines how the AF will create ISR capabilities to meet the demands of today and into the future. It incorporates guidance from the current AF Strategic Plan, AF ISR Strategy and the AF ISR Operational Concept and defines how ISR development will progress, including end to end management for ISR capabilities and weapon systems. The ISR CP&A is a critical input to the GIISR CFMP and is the foundational process to guide execution of the AF ISR Strategy.

**Intelligence, Surveillance, and Reconnaissance–Capabilities Analysis Requirements Tool (ISR-CART)**—An interactive database sponsored by the Air Force ISR Agency (AFISRA) Plans, Programs, Requirements and Assessments (A5/8/9) Directorate. The database allows users to access information needed to make informed capability/modernization planning decisions and meet future technology challenges. The database provides the ability to link or

interrelate all areas from a stated operational need to proposed solutions, actual research/development, to delivery of an operational system. SIPRNET: <http://isr-cart.afisra.af.smil.mil/templates/> or JWICS: <http://isr-cart.afisra.ic.gov/templates/>.

**Intelligence, Surveillance, and Reconnaissance (ISR)**—Term referring to the activity that synchronizes and integrates the planning and operation of sensors, assets, and processing, exploitation, and dissemination systems in direct support of current and future operations. This is an integrated intelligence and operations function.

**Joint Capabilities Board (JCB)**—The JCB functions to assist the JROC in carrying out its duties and responsibilities. The JCB reviews and, if appropriate, endorses all JCIDS and DOTMLPF proposals prior to their submission to the JROC. The JCB is chaired by the Joint Staff, J-8, Director of Force Structure, Resources, and Assessment. It is composed of 2 and 3-Star Flag Officer / General Officer representatives of the Services.

**Joint Capability Technology Demonstration**—A demonstration of the military utility of a significant new technology and an assessment to clearly establish operational utility and system integrity. (CJCSI 3170.01H)

**Joint Capabilities Technology Development (JCTD)**—A pre-acquisition activity, spanning two-to-four years. It provides the user an opportunity to assess innovative technologically mature capabilities and determine the military utility before deciding to acquire additional units.

**Joint Capabilities Document**—Identifies a set of capabilities that support a defined mission area utilizing associated Family of Joint Future Concepts, Concept of Operations (CONOPS), or Unified Command Plan-assigned missions. The JCD will be updated as changes are made to the supported Family of Joint Future Concepts, CONOPS, or assigned missions. (CJCSI 3170.01H)

**Joint Capabilities Integration and Development System**—There are three key processes in the DOD that must work in concert to deliver the capabilities required by the warfighter: the requirements process; the acquisition process; and the Planning, Programming, Budget, and Execution (PPBE) process. JCIDS implements the requirements process. JCIDS supports the Chairman of the Joint Chiefs of Staff (CJCS) and the Joint Requirements Oversight Council (JROC) in identifying, assessing, and prioritizing joint military capability needs as required by law. The capabilities are identified by analyzing what is required across all joint capability areas to accomplish the mission. (CJCSI 3170.01H and JCIDS Manual)

**Joint Operations Concept**—Family of joint future concepts consisting of a Capstone Concept for Joint Operations, Joint Operating Concepts (JOCs), Joint Functional Concepts (JFCs), and Joint Integrating Concepts (JICs). They are a visualization of future operations and describe how a commander, using military art and science, might employ capabilities necessary to successfully meet challenges 8-20 years in the future, and provides the conceptual basis for joint experimentation and capabilities-based assessments (CBAs). (JCIDS Manual)

**Joint Potential Designator (JPD)**—A designation assigned by Vice Director J-8 to specify JCIDS validation, approval, and interoperability expectations.

**Joint Requirements Oversight Council**—Assists the Chairman, Joint Chiefs of Staff (CJCS) in identifying and assessing the priority of joint military requirements (including existing systems and equipment) to meet the National Military Strategy (NMS). The Vice Chairman of the Joint Chiefs of Staff (VCJCS) chairs the Council and decides all matters before the Council. The

permanent members include the Vice Chiefs of the U.S. Army (VCSA) and U.S. Air Force (VCSAF), the Vice Chief of Naval Operations (VCNO), and the Assistant Commandant of the Marine Corps (ACMC). The Council directly supports the Defense Acquisition Board (DAB) through the review, validation, and approval of key cost, schedule, and performance parameters at the start of the acquisition process, prior to each milestone review, or as requested by the Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD(AT&L)).

**Joint Urgent Operational Need (JUON)**—An urgent operational need identified by a combatant commander involved in an ongoing named operation. A JUON's main purpose is to identify and subsequently gain Joint Staff validation and resourcing solution, usually within days or weeks, to meet a specific high-priority combatant commander need. The scope of a combatant commander JUON will be limited to addressing urgent operational needs that: (1) fall outside of the established Service processes; and (2) most importantly, if not addressed immediately, will seriously endanger personnel or pose a major threat to ongoing operations.

**Key Performance Parameter**—Those attributes or characteristics of a system that are considered critical or essential to the development of an effective military capability and that make a significant contribution to the characteristics of the future joint force. A KPP normally has a threshold, representing the minimum acceptable value achievable at low-to-moderate risk, and an objective, representing the desired operational goal but at higher risk in cost, schedule and performance. KPPs are contained in the Capability Development Document (CDD) and the Capability Production Document (CPD) and are included verbatim in the Acquisition Program Baseline (APB). Certain KPPs may be "mandatory" or "selectively applied," depending on the system. See Acquisition Program Baseline, Validation Authority, Capability Development Document, Capability Production Document, Mandatory Key Performance Parameters (KPPs), Selectively Applied KPPs, threshold value, objective value, and Joint Potential Designator.

**Life Cycle**—The span of time associated with a technology, concept, system, subsystem, capability, initiative or end-item that begins with the conception and initial development of the requirement, continues through development, acquisition, fielding, sustainment, until the time it is either consumed in use or disposed of as being excess to all known materiel requirements.

**Life Cycle Cost Estimate**—Attempts to identify all of the costs associated with an acquisition program, from its initiation through disposal of the resulting system at the end of its useful life. LCCEs for DoD systems serve two primary purposes. First, they are used at acquisition program milestone and decision reviews to assess whether the system's cost is affordable, or consistent with the DoD component's and DoD's overall long-range investment and force structure plans. Second, LCCEs form the basis for budget requests to Congress.

**Life Cycle Management Plan**—Concise document that identifies relevant issues and recommends overall acquisition, program management, and life cycle support strategies. Required for all Air Force non-space Acquisition Category (ACAT) I and ACAT II programs. It may also be required for non-space ACAT III programs at the discretion of the Milestone Decision Authority (MDA). (Air Force)

**Life Cycle Mission Data Plan**—The LMDP defines specific IMD requirements for a program, and becomes more detailed as the system progresses toward Initial Operating Capability (IOC). For each required IMD, as much detail as possible should be provided in the LMDP. Intelligence professionals will be asked to assist the PM with the completion/review of the LMDP.

**Life Cycle Signature Support Plan**—The LSSP defines specific signature requirements for a program, and becomes more detailed as the system progresses toward Initial Operating Capability (IOC). For each required signature, as much detail as possible should be provided in the LSSP. Intelligence professionals will be asked to assist the PM with the completion/review of the LSSP.

**Low-Rate Initial Production**—The first effort of the Production and Deployment (P&D) phase. The purpose of this effort is to establish an initial production base for the system, permit an orderly ramp-up sufficient to lead to a smooth transition to Full Rate Production (FRP), and to provide production representative articles for Initial Operational Test and Evaluation (IOT&E) and full-up live fire testing. This effort concludes with a Full Rate Production Decision Review (FRPDR) to authorize the Full Rate Production and Deployment (FRP&D) effort. 2. The minimum number of systems (other than ships and satellites) to provide production representative articles for Operational Test and Evaluation (OT&E), to establish an initial production base, and to permit an orderly increase in the production rate sufficient to lead to Full Rate Production (FRP) upon successful completion of Operational Testing (OT). For Major Defense Acquisition Programs (MDAPs), LRIP quantities in excess of 10 percent of the acquisition objective must be reported in the Selected Acquisition Report. For ships and satellites, the LRIP quantity is the minimum quantity and rate that preserves mobilization.

**Major Automated Information System**—A system of computer hardware, computer software, data or telecommunications that performs functions such as collecting, processing, storing, transmitting, and displaying information.

**Major Defense Acquisition Program**—An acquisition program that is designated by the Under Secretary of Defense (Acquisition, Technology and Logistics) (USD(AT&L)) as an MDAP, or estimated by the USD(AT&L) to require an eventual total expenditure for Research, Development, Test and Evaluation (RDT&E) of more than \$365 million in Fiscal Year (FY) 2000 constant dollars or, for procurement, of more than \$2.19 billion in FY 2000 constant dollars.

**Materiel Development Decision**—A review that is the formal entry point into the acquisition process and is mandatory for all programs. A successful MDD may approve entry into the acquisition management system at any point consistent with phase-specific entrance criteria and statutory requirements but will normally be followed by a Materiel Solution Analysis (MSA) phase. The principal documents at this decision point are the Initial Capabilities Document (ICD) and study guidance for the Analysis of Alternatives (AoA). A successful MDD normally does not mean that a new acquisition program has been initiated. (DoDI 5000.02)

**Materiel Solutions Analysis**—The first phase of the Defense Acquisition Management System as defined and established by DoDI 5000.02. The purpose of this phase is to analyze and recommend materiel solutions for the capability need identified in the Initial Capabilities Document. During this phase, an Analysis of Alternatives (AoA) will be conducted to assess alternative solutions, ultimately leading to a preferred materiel solution to address the capability need, and a Technology Development Strategy (acquisition strategy) will be formulated. A draft Capability Development Document will also normally be formulated during this phase to facilitate the description of contract deliverables during the Technology Development Phase that follows. See Analysis of Alternatives, Initial Capabilities Document and Technology Development Strategy.

**Measure of Effectiveness (MOE)**—A qualitative or quantitative measure of a system's performance or a characteristic that indicates the degree to which it performs the task or meets a requirement under specified conditions. MOEs should be established to measure the system's capability to produce or accomplish the desired result.

**Measure of Performance (MOP)**—A quantitative measure of a system's capability to accomplish a task, typically in the area of physical performance (e.g., range, velocity, throughput).

**Measurement and Signature Intelligence (MASINT)**—MASINT refers to intelligence activities that bring together disparate elements that do not fit within the definitions of the other major Intelligence (INT) disciplines. MASINT is technically derived intelligence that - when collected, processed, and analyzed by dedicated MASINT systems - results in intelligence that detects and classifies targets, and identifies or describes signatures (distinctive characteristics) of fixed or dynamic target sources.

**Milestone (MS)**—Major decision point that separates the phases of an acquisition program under the DODI 5000.02 acquisition management framework.

**Milestone-A**—Technology Development Phase approval.

**Milestone-B**—Engineering and Manufacturing Development Phase approval (normally the initiation of an acquisition program).

**Milestone-C**—Production & Deployment Phase approval.

**Milestone Decision Authority**—Designated individual with overall responsibility for a program. The MDA shall have the authority to approve entry of an acquisition program into the next phase of the acquisition process and shall be accountable for cost, schedule, and performance reporting to higher authority, including congressional reporting. (DoDD 5000.01)

**Military Intelligence Program (MIP)**—Programs, projects, or activities of the military departments to acquire intelligence solely for the planning and conduct of tactical military operations by United States Armed Forces. The MIP is directed and controlled by the Secretary of Defense, with participation from the DNI. The SECDEF delegated MIP authority to USD(I), as the MIP Executive. USD(I) is therefore responsible for directing and overseeing the MIP, its budget development process, and MIP funding. **Note:** In 2005, the DOD combined the Joint Military Intelligence Program (JMIP) and the Tactical Intelligence and Related Activities (TIARA) program to form the MIP.

**Multi-Service Force Deployment**—The MSFD is a digital force projection produced by NASIC that provides details on enemy, friendly, and non-aligned forces in specific geographic areas.

**National Intelligence:**—All intelligence, regardless of the source from which derived, and including information gathered within or outside the United States, that pertains to more than one United States Government agency; and that involves threats to the United States, its people, property, or interests; the development, proliferation, or use of weapons of mass destruction; or any other matter bearing on United States national or homeland security.

**National Intelligence Program (NIP)**—Programs, projects, and activities of the Intelligence Community, as well as any other programs of the Intelligence Community designated jointly by the DNI and the head of a United States department or agency, or by the President. The NIP is the consolidation of funding programs that provide the resources needed to develop and maintain

capabilities to serve the intelligence needs of national policy makers. The NIP funds the national-level intelligence activities of national civilian and defense intelligence agencies, the DNI staff elements, elements of military intelligence with national impact, plus cryptologic, foreign counter-intelligence, reconnaissance activities, and intelligence programs of other federal departments. The NIP does not include programs, projects, or activities of the military departments to acquire intelligence solely for the planning and conduct of tactical military operations by United States Armed Forces. The DNI is responsible for directing and overseeing the NIP, its budget development process, and NIP funding.

**National Security Systems**—Any telecommunications or information system operated by the Department of Defense (DoD), the function, operation, or use of which involves 1) intelligence activities, 2) cryptologic activities related to national security, 3) the command and control of military forces, 4) equipment that is an integral part of a weapons system, or 5) criticality to the direct fulfillment of military or intelligence missions. Subsection 5 in the preceding sentence does not include procurement of automatic data processing equipment or services to be used for routine administrative and business applications (including payroll, finance, logistics, and personnel management applications). (CJSCI 3170.01H)

**National System for Geospatial Intelligence (NSG)**—The NSG is the combination of technology, policies, capabilities, doctrine, activities, people, data, and communities necessary to produce geospatial intelligence (GEOINT) in an integrated multi-intelligence, multi-domain environment. The NSG includes the Intelligence Community (IC), the Joint Staff, the Military Departments (to include the Services), the Combatant Commands (COCOMs), international partners, National Applications Office, Civil Applications Committee members, industry, academia, Defense service providers, and civil community service providers.

**Open Source Intelligence (OSINT)**—A form of intelligence collection management that involves finding, selecting, and acquiring information from publicly available sources and analyzing it to produce actionable intelligence. In the IC, the term "open" refers to overt, publicly available sources (as opposed to covert or classified sources).

**Operating Command**—The command primarily operating a system, subsystem, or item of equipment. Generally applies to those operational commands or organizations that Headquarters USAF designates to conduct or participate in operations or operational testing.

**Operations and Support**—The fifth phase of the life cycle, as defined and established by DoDI 5000.02 after Concept Refinement (CR), Technology Development (TD), System Development and Demonstration (SDD), and Production and Deployment (P&D). This phase consists of two efforts, Sustainment and Disposal. The phase is not initiated by a formal milestone, but instead begins with the deployment of the first system to the field, an act that initiates the Sustainment effort of this phase. The Sustainment effort overlaps the Full-Rate Production and Deployment (FRP&D) effort of the P&D phase.

**Operational Test and Evaluation**—The field test, under realistic conditions, of any item (or key component) of weapons, equipment, or munitions for the purpose of determining the effectiveness and suitability of the weapons, equipment, or munitions for use in combat by typical military users; and the evaluation of the results of such tests.

**Planning and direction, Collection, Processing and exploitation, Analysis and production, and Dissemination (PCPAD)**—PCPAD consists of: (1) planning and direction—the

determination of intelligence requirements, development of appropriate intelligence architecture, preparation of a collection plan, and issuance of orders and requests to information collection agencies, (2) collection—the acquisition of information and the provision of this information to processing elements, (3) processing and exploitation—the conversion of collected information into forms suitable to the production of intelligence, (4) analysis and production—the conversion of processed information into intelligence through the integration, evaluation, analysis, and interpretation of all source data and the preparation of intelligence products in support of known or anticipated user requirements, and (5) dissemination and integration—the delivery of intelligence to users in a suitable form and the application of the intelligence to appropriate missions, tasks, and functions. (JP 2-01)

**Planning, Programming, Budgeting and Execution**—The primary Resource Allocation Process (RAP) of DoD. It is one of three major decision support systems for defense acquisition along with Joint Capabilities Integration and Development System (JCIDS) and the Defense Acquisition System. It is a formal, systematic structure for making decisions on policy, strategy, and the development of forces and capabilities to accomplish anticipated missions. PPBE is a biennial process wherein the On-Year produces a Strategic Planning Guidance (SPG), Joint Programming Guidance (JPG), approved Program Objectives Memoranda (POMs) for the Military Departments and Defense Agencies covering six years, and the DoD portion of the President's Budget (PB) covering two years. In the Off-Year, adjustments are made to the Future Years Defense Program (FYDP) to take into account “fact of life changes,” inflation, new programmatic initiatives, and the result of congressional enactment of the previously submitted PB based on guidance from the Under Secretary of Defense (Comptroller) and the Director, Program Analysis and Evaluation. See On-Year and Off-Year.

**Preferred System Concept**—The selected concept that is preferred after a comprehensive analysis of system alternatives within a defined trade space. The preferred system concept should strike the best balance in providing the needed capabilities within the constraints on the program and achieves a level suitable for low risk entry into Engineering and Manufacturing Development. (DAG)

**Preliminary Design Review**—A multi-disciplined technical review to ensure that a system is ready to proceed into detailed design and can meet stated performance requirements within cost (program budget), schedule (program schedule), risk, and other system constraints. Generally, this review assesses the system preliminary design as captured in performance specifications for each configuration item in the system (allocated baseline), and ensures that each function in the functional baseline has been allocated to one or more system configuration items. Normally conducted during the System Development and Demonstration (SDD) phase. (Defense Acquisition Guidebook)

**Probability of Program Success**—The probability of program success initiative is designed to improve the ability to accurately assess a program's probability of success (ability to succeed), and clearly/concisely represent that success probability to leadership. To that end, each program spiral (including software spirals) will be evaluated independently utilizing the probability of program success criteria.

**Production and Deployment**—The fourth phase of the life cycle as defined and established by DoDI 5000.02. This phase consists of two efforts: Low Rate Initial Production (LRIP) and Full Rate Production and Deployment (FRP&D) separated by a Full Rate Production Decision

Review (FRPDR). It begins after a successful MS-C review. The purpose of this phase is to achieve an operational capability that satisfies the mission need.

**Production Readiness Review**—A formal examination of a program to determine if the design is ready for production and if the producer has accomplished adequate production planning. PRRs are normally performed as a series of reviews toward the end of System Development and Demonstration (SDD) phase. Under some circumstances a PRR may also be appropriate in the Production and Deployment (P&D) phase. (Defense Acquisition Guidebook)

**Production Requirement**—An established intelligence need considered in the allocation of intelligence resources to fulfill the essential elements of information and other intelligence needs of a commander. (AFI 14-111)

**Program Executive Officer**—A military or civilian official who has responsibility for directing several Major Defense Acquisition Programs (MDAPs) and for assigned major system and non-major system acquisition programs. A PEO has no other command or staff responsibilities within the component, and only reports to and receives guidance and direction from the DoD Component Acquisition Executive (CAE).

**Program Manager**—Designated individual with responsibility for and authority to accomplish program objectives for development, production, and sustainment to meet the user's operational needs. The PM shall be accountable for credible cost, schedule, and performance reporting to the Milestone Decision Authority (MDA). (DoDD 5000.01)

**Program Objective Memorandum**—An annual memorandum in prescribed format submitted to the Secretary of Defense (SECDEF) by the DoD component heads, which recommends the total resource requirements and programs within the parameters of SECDEF's fiscal guidance. The POM is a major document in the Planning, Programming, Budgeting and Execution (PPBE) process, and the basis for the component budget estimates. The POM is the principal programming document that details how a component proposes to respond to assignments in the Strategic Planning Guidance (SPG) and Joint Programming Guidance (JPG) and satisfy its assigned functions over the Future Years Defense Program (FYDP). The POM shows programmed needs six years hence (i.e., in FY 2004, POM 2006-2011 was submitted).

**Program Protection Plan**—The safeguarding of defense systems and Technical Data (TD) anywhere in the acquisition process, to include the technologies being developed, the support systems (e.g., test and simulation equipment), and research data with military applications.

**Requirement (also referred to as Intelligence Requirements, Derived Intelligence Requirement, or DIR)**—The need for a product, function, infrastructure, or service provided by the Intelligence Community (IC) that is integral to a program at a point within its life cycle. Intelligence requirements can come from any part of the DOTMLPF construct. Program intelligence requirements should be documented to support both current and future acquisition and intelligence requirements. Documentation should include information on the availability of the needed IC capabilities. Requirements which cannot be met with current IC capabilities are identified as gaps, shortfalls or deficiencies. Intelligence requirements are derived directly from program/initiative baseline documents (CBA, CONOPS, OPLAN, AoA, JCIDS documents, etc.) that are developed as part of the requirements and acquisition processes. In other words, for intelligence requirements to be valid, they must be traceable to such documents.

**Requirements Analysis Workbook**—A RAW is a tool used to conduct intelligence supportability analysis (ISA). The RAW is a strategy-to-task “drill-down” through a list of questions to identify the intelligence supportability needs for a weapon system/program/project (called Derived Intelligence Requirements (DIRs)). It can be conducted at any phase of the acquisition life cycle. The RAW should be completed or updated multiple times throughout the life cycle to ensure intelligence supportability needs are identified and current. Every intelligence supportability task starts with identifying the program/project’s intelligence supportability requirements by completion of the RAW.

**Requirements Strategy**—A plan or document that maps the details necessary for developing a requirements document, and describes the resources and communities necessary to support the process.

**Research and Technology Protection**—Procedures for protecting specified critical research technology (CRT) and critical program information (CPI) throughout the DoD as well as for dual-use and leading edge military technology being developed under the auspices of the DoD.

**Resource Management Decision**—The Secretary of Defense (SECDEF) decision documents that affirm or change dollar amounts or manpower allowances in the Services’ Budget Estimate Submissions (BESs) or resolve Change Proposals that are accepted for Office of the Secretary of Defense (OSD) review.

**Risk Management**—All plans and actions taken to identify, assess, mitigate, and continuously track, control, and document program risks.

**Risk Management Plan**—A document that records the results of the risk planning process.

**Science and Technology**—Consists of projects in basic research, applied research, and Advanced Technology Development (ATD).

**Scientific and Technical Information**—The collected set of facts, analyses, and conclusions resulting from scientific, technical, and related engineering research and development efforts, both basic and applied.

**Senior Official of the Intelligence Community (SOIC)**—The head of an IC agency, office, bureau, or other intelligence element (such as CIA, NSA, DIA, etc.), as identified in the National Security Act of 1947, Title 50 U.S. Code, and/or Executive Order 12333, as amended.

**Signals Intelligence**—A form of Intelligence that refers to the information derived from foreign communications and electronic transmission; additionally, it is the collection and processing of foreign communications passed by electromagnetic means and foreign non-communications electromagnetic radiation. Signals Intelligence is information comprised either individually or in combination with all Communications Intelligence (COMINT), Foreign Instrumentation Signals Intelligence (FISINT) or Electronic Intelligence (ELINT) and weapons related Command and Control Signals (PROFORMA).

**Special Access Program**—Any program imposing need-to-know or access controls beyond those normally provided for access to Confidential, Secret, or Top Secret information. Examples of such controls include, but are not limited to, special clearance, adjudication, or investigative requirements; special designation of officials authorized to determine need to know; or special lists of persons determined to have a need-to-know. (DoD 5200.1-M)

**Special Access Required**—Any data imposing need-to-know or access controls beyond those normally provided for access to Confidential, Secret, or Top Secret information. Examples of such controls include, but are not limited to, special clearance, adjudication, or investigative requirements; special designation of officials authorized to determine need to know; or special lists of persons determined to have a need-to-know. (DoD 5200.1-M)

**Strategy-to-Task**—The Strategy-to-Task method of analysis provides a framework for establishing a hierarchy, starting from objectives down to specific tasks. Below these tasks, performance standards can be used for estimating the utility of a given task. This hierarchical approach helps decision-makers understand these important linkages. It could also serve as a framework for prioritizing the different tasks and contribute to better resource allocation, by analyzing different alternatives. STT should be used by ISWGs as they derive intelligence requirements and identify intelligence deficiencies. (AFI 14-111)

**Systems Engineering**—The overarching process that a program team applies to transition from a stated capability to an operationally effective and suitable system. SE encompasses the application of SE processes across the acquisition life cycle (adapted to each and every phase) and is intended to be the integrating mechanism for balanced solutions addressing capability needs, design considerations and constraints, as well as limitations imposed by technology, budget, and schedule. The SE processes are applied early in concept definition, and then continuously throughout the total life cycle. (Defense Acquisition Guidebook)

**Systems Engineering Plan**—A description of the program's overall technical approach including processes, resources, metrics, applicable performance incentives, and the timing, conduct, and success criteria of technical reviews.

**System Functional Review**—A multi-disciplined technical review to ensure that a system can proceed into preliminary design, and that all system requirements and functional performance requirements derived from the Capability Development Document are defined and are consistent with program budget, schedule, risk, and other system constraints. The system functional baseline is established at the conclusion of this review. Typically accomplished during the System Development and Demonstration (SDD) phase. (Defense Acquisition Guidebook)

**System of Systems**—A set or arrangement of interdependent systems that are related or connected to provide a given capability. The loss of any part of the system will significantly degrade the performance or capabilities of the whole. (CJCSI 3170.01H)

**Systems Requirements Review**—A review conducted to ascertain progress in defining system technical requirements. This review determines the direction and progress of the systems engineering effort and the degree of convergence upon a balanced and complete configuration. It is normally held during the Technology Development phase, but may be repeated after the start of Engineering and Manufacturing Development phase to clarify the contractor's understanding of redefined or new user requirements. (Defense Acquisition Guidebook)

**System Threat Assessment**—Describes the threat to be countered and the projected threat environment. The threat information must be validated by the Defense Intelligence Agency (DIA) for programs reviewed by the Defense Acquisition Board (DAB).

**System Threat Assessment Report**—Describes the threat to be countered and the projected threat environment. The threat information must be validated by the Defense Intelligence Agency (DIA) for programs reviewed by the Defense Acquisition Board (DAB).

**System Verification Review**—A multi-disciplined technical review to ensure that the system is ready to proceed into Low-Rate Initial Production and Full-Rate Production within cost (program budget), schedule (program schedule), risk, and other system constraints. Generally this review provides an audit trail from the Critical Design Review. It is synonymous with Functional Configuration Audit. (Defense Acquisition Guidebook)

**Technology and Alternatives Working Group**—The TAWG is responsible for all aspects of the AoA process with respect to the initial identifying, screening and documenting potential solutions and their associated technologies in support of the Effectiveness Analysis (EAWG) activities. The function of the TAWG is to collect the data on a broad range of potential solutions and initially screen them for further assessment within the AoA process.

**Technical Exchange Meeting (TEM)**—A TEM is a meeting of technical experts to clarify and assess specific program issues. A TEM can be held as a subtask to ISWGs to support the derivation, development and documentation of intelligence requirements and deficiencies associated with a proposed program.

**Technology Development**—The second phase of the Defense Acquisition Management Framework as defined and established by DoDI 5000.02. It is initiated by a successful MS-A decision. The purpose of this phase is to reduce technology risk and to determine the appropriate set of technologies to be integrated into the full system. This effort is normally funded only for advanced development work and does not mean that a new acquisition program has been initiated. See Program Initiation.

**Technology Development Strategy (acquisition strategy)**—acquisition strategy describes the acquisition approach that will be undertaken to mature key technologies and maturation efforts to Initial Operational Capability (IOC). This approach discusses business strategies, developmental strategies, support strategies and Critical Program Information (CPI) to manage program risks and meet program objectives while balancing cost, schedule and performance. The acquisition strategy should include proposed exit criteria for the Technology Development Phase and plans to support the entry criteria for the Engineering and Manufacturing Development (EMD) Phase. The acquisition strategy is the predecessor for the program's Acquisition Strategy required at Milestone B. The acquisition strategy guides the efforts of the TD Phase and serve as a baseline for efforts that continually evolve throughout a program. The acquisition strategy allows the program manager to track program goals against a baseline. This tracking will alert the program manager to any potential problems that might arise and to perform corrective actions to keep a program within its cost, schedule and performance goals

**Technology Protection Plan (TPP)**—Similar to the PPP developed in the acquisition cycle, a TPP is developed by research organizations to identify critical information and resources that require increased protection.

**Technology Readiness Assessment**—A regulatory information requirement for all acquisition programs. It is a systematic; metrics based process that establishes the maturity of critical technology elements. The TRA should be conducted concurrently with other technical reviews such as the Alternative Systems Review, System Requirements Review, or the Production Readiness Review. (Defense Acquisition Guidebook)

**Technology Targeting Risk Assessment (TTRA)**—A country-by-country assessment, conducted by the Defense Intelligence Community, that quantifies risks to CPI and related

enabling technologies for weapons systems, advanced technologies or programs, and facilities such as laboratories, factories, research and development sites (test ranges, etc.), and military installations. The TTRA evaluates five independent risk factors, each of which contributes to an overall risk factor. The five areas evaluated are: (1) Technology Competence, (2) National Level of Interest, (3) Risk of Technology Diversion, (4) Ability to Assimilate, and (5) Technology Protection Risk. The TTRA and CI Assessment provide laboratory/technical directors and program managers with information required to establish a comprehensive security program for the protection of identified CPI.

**Test and Evaluation**—Process by which a system or components are exercised and results analyzed to provide performance-related information. The information has many uses including risk identification and risk mitigation and empirical data to validate models and simulations. T&E enables an assessment of the attainment of technical performance, specifications, and system maturity to determine whether systems are operationally effective, suitable and survivable for intended use, and/or lethal. There are three distinct types of T&E defined in statute or regulation: Developmental Test and Evaluation (DT&E), Operational Test and Evaluation (OT&E), and Live Fire Test and Evaluation (LFT&E). See Operational Test and Evaluation, Initial Operational Test and Evaluation (IOT&E), Developmental Test and Evaluation, and Live Fire Test and Evaluation.

**Test and Evaluation Master Plan**—Documents the overall structure and objectives of the Test and Evaluation (T&E) program. It provides a framework within which to generate detailed T&E plans and documents schedule and resource implications associated with the T&E program. The TEMP identifies the necessary Developmental Test and Evaluation (DT&E), Operational Test and Evaluation (OT&E), and Live Fire Test and Evaluation (LFT&E) activities. It relates program schedule, test management strategy and structure, and required resources to: Critical Operational Issues (COIs), Critical Technical Parameters (CTPs), objectives and thresholds documented in the Capability Development Document (CDD), evaluation criteria, and milestone decision points. For multi-Service or joint programs, a single integrated TEMP is required. component-unique content requirements, particularly evaluation criteria associated with COIs, can be addressed in a component-prepared annex to the basic TEMP.

**Test and Evaluation Strategy**—An early test and evaluation planning document that describes test and evaluation activities starting with Technology Development and continuing through System Development and Demonstration into Production and Deployment. The TES describes how component technologies being developed will be demonstrated in a relevant environment to support the program's transition into the System Development and Demonstration Phase. Over time, the scope of this document will expand and evolve into the Test and Evaluation Master Plan (TEMP) due at MS-B. (Defense Acquisition Guidebook)

**Test Readiness Review**—A multi-disciplined technical review to ensure that a subsystem or system is ready to proceed into formal test. The TRR assesses test objectives, test methods and procedures, scope of tests, and safety, and confirms that required test resources have been properly identified and coordinated to support planned tests. (Defense Acquisition Guidebook)

**Threat Steering Group**—The TSG draws on the expertise of intelligence and acquisition representatives who are stakeholders in the acquisition process and acts as the advisory body on all threat matters related to the specific program. The TSG determines the nature and level of

documentation and other required activities to ensure consistent, efficient cradle-to-grave threat support. (OAS)

**Threats and Scenarios Working Group**—The TSWG will identify threats, impacts and environments with the potential to impact the projected mission of the system under study. Through the use of the approved DoD Analytic Agenda, the TSWG will develop suitable and representative mission scenarios. The TSWG will provide a matrix that maps the stressors against system attributes, rates the importance of each stressor, and rates the value of the stressor against selected scenarios. The TSWG shall assist all WGs in the use of the threat and scenario data.

**Threat Working Group**—TWGs are working-level IPTs, with similar membership as that of TSGs, that are held as required to discuss threat issues and ensure consistent threat support to acquisition programs throughout their life cycle. (OAS)

**Verification**—The process of determining that a model or simulation implementation and its associated data accurately represent the developer’s conceptual description and specifications.

**Validation**—In the context of M&S, validation is the process of determining the degree to which a model or simulation and its associated data are an accurate representation of the real world from the perspective of the intended uses of the model. In the context of intelligence (threat) data and reports, validation is the substantiation of threat documentation for appropriateness and completeness of intelligence, consistency with existing intelligence positions, and use of accepted tradecraft in developing assessments.

**Work Breakdown Structure**—An organized method to break down a project into logical subdivisions or subprojects at lower and lower levels of details. It is very useful in organizing a project. See Military Handbook (MIL-HDBK) 881 for examples of WBSs.

**Working-level Integrated Product Team**—Team of representatives from all appropriate functional disciplines working together to build successful and balanced programs, identify and resolve issues, and make sound and timely decisions. WIPTs are usually chaired by the Program Manager (PM) or the PM’s representative. Acquisition Category (ACAT) I programs normally establish, at a minimum, a Cost Performance Integrated Product Team (CPIPT) and a Test and Evaluation (T&E) WIPT. Industry representation on WIPTs, consistent with statute and at the appropriate time, may also be considered.

Attachment 2  
RISK MATRIX



Classification

Risk Reporting Matrix

Probability	5	Green	Yellow	Red	Red	Red
	4	Green	Yellow	Yellow	Red	Red
	3	Green	Green	Yellow	Yellow	Red
	2	Green	Green	Green	Yellow	Yellow
	1	Green	Green	Green	Green	Yellow
			1	2	3	4
		Consequence				

Classification

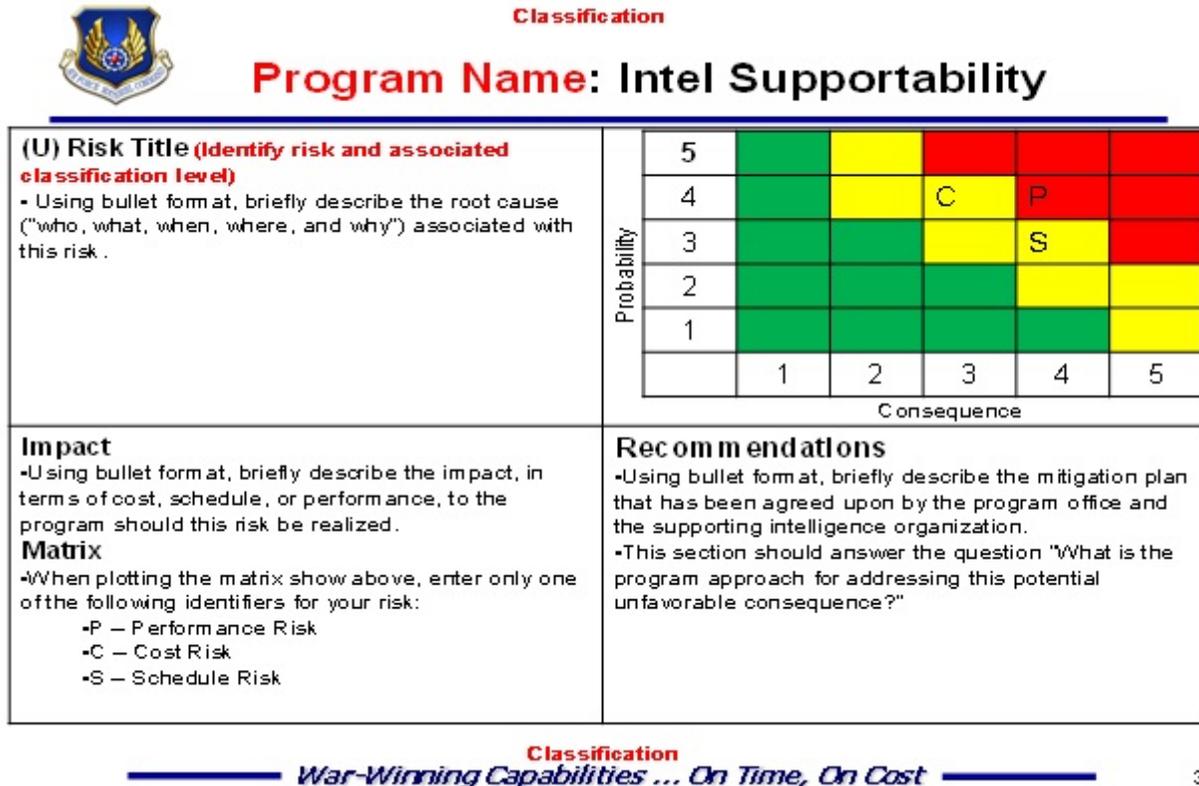
**War-Winning Capabilities ... On Time, On Cost**

Attachment 3

INTELLIGENCE HEALTH ASSESSMENT QUAD CHART TEMPLATE

A3.1. The quad chart template depicted in Figure A3.1 is the standardized means of displaying the results of IHA to senior leaders and decision-makers. It allows the assessment team to present each identified risk, its associated causes, the potential risk to the required capability, and mitigation strategies in a concise, easy-to-read, visual format.

Figure A3.1. Intelligence Health Assessment Quad Chart



A3.2. Figure A3.2 shows a close-up of the graphic portion of the IHA quad chart. It combines information about the assessed likelihood that the risk factor would come into play with the level of mission impact if the risk factor were to occur.

Figure A3.2. Risk Probability and Consequence Graphic



Classification

**Program Name: Assessment Summary**

•In bullet format, list the risks that have been identified for the program, and assign them a designator to be plotted in matrix to the right as shown by the example below:

- Program X currently has no Intelligence support (P<sub>2</sub>)

•If there are too many risks identified for the program to be listed here, determine which are most critical to the program and which risks need to be addressed immediately, and list them here.

Probability	5					
	4			C <sub>1</sub>	P <sub>2</sub>	
	3				S <sub>2</sub>	
	2					
	1					
		1	2	3	4	5
	Consequence					

•Provide an overall assessment statement here for the Program Manager (e.g., Failing regarding Intelligence Support and could affect the “X” portion of the program)

Classification

## Attachment 4

## SAMPLE INTELLIGENCE HEALTH ASSESSMENT MEMORANDUM FOR RECORD

Figure A4.1. Sample Intelligence Health Assessment Memorandum for Record.

*MFR CLASSIFICATION*

1 Nov 13

## MEMORANDUM FOR RECORD

FROM: 21st Intelligence Squadron  
Building 20, Area B  
2450 D Street  
Wright-Patterson AFB, OH 45433

SUBJECT: Program X ICD

1. ISA for the Program X ICD (GREEN) 21<sup>st</sup> IS, ASC/XR2 and ACC/A2XZ have been involved in both the CBA and ICD staffing process for Program X. Primary ISA for the effort has been provided by ASC/XR2 and SIO for Program Z through the TSGs, TWGs, and ISWGs for programs Y and Z. As a result, Intelligence Supportability issues have been reflected within the ICD.
2. While many of the intelligence requirements for Program X have been highlighted, the ability of the intelligence community to fully support the platform is (YELLOW). The following intelligence-related deficiencies have been highlighted.
  - a. (YELLOW) Robust ISR collection, analysis, and dissemination to support reprogramming, mission planning and combat ID (detailed discussion available in F-35 IHA, F-22 and F-35 LSSP, and F-22 Increment 3 ISP on SIPRNET).
  - b. (YELLOW) Intelligence community's capability to fuse disparate sources of information into actionable intelligence (CBA DOTMLPF improvement suggestion).
  - c. (YELLOW) Intelligence training at Joint, Service and Unit levels to address data fusion (CBA DOTMLPF improvement suggestion).
3. Questions can be addressed to the undersigned, DSN 986-7628, [best.analvst@wpafb.af.mil](mailto:best.analvst@wpafb.af.mil).

//Signed/jpa/1 Nov 13//  
Joe P. Analyst, GG-13  
Acquisition Intelligence Analyst

*MFR CLASSIFICATION*

## Attachment 5

### ISP FORMAT

Air Force Program Manager's Guide for Developing, Processing, and Approving Information Support Plans (ISP) Version 2.02:

<https://www.d.mil.af.mil/afknprod/ASPs/CoP/OpenCoP.asp?Filter=OO-AQ-AF-18>

#### Figure A5.1. Recommended format of the Intelligence Appendix.

##### Information Support Plan (ISP) Intelligence Appendix for the [insert Effort Name here]

1. **Effort Office & Intelligence Support POC Information:** Provide the name, title, phone number, and email address of the effort office person(s) responsible for developing the ISP and the person(s) responsible for developing the intelligence annex and coordinating intelligence support for the effort. Include primary intelligence community POCs as well.
2. **Overview of Intelligence Supportability Requirements:** List intelligence supportability requirements (GEOINT, Signatures, RF, C&P, Order of Battle, PCPAD, intelligence dependent DOTMLPF and infrastructure needs, etc.) needed across the whole acquisition life cycle and note the plan for fulfilling the requirement (standard GI&S product, EWIR, 453<sup>rd</sup> EWS, DoD Signatures Pool, training, resources, etc.). If the effort has initiated production with any agency, organization or contractor, then provide a brief description of each including any related tracking or Production Requirement numbers. **Note:** If other plans have been developed (i.e., Lifecycle Mission Data Plan (LMDP), etc.) that identify intelligence supportability needs and resolution plans, include the link to the plan(s) rather than restating those needs. In that case, only state the additional intelligence supportability needs in this document).

##### **Intelligence Supportability Requirements Example:**

Intelligence Supportability Analysis (ISA) was conducted on Effort X on DD/MON/YYYY. The following intelligence supportability requirements were identified:

- a.) GEOINT:
  - i. Elevation data with a resolution of X feet post spacing and accuracy of X feet is needed to support targeting. The data needs to be no more than X years old.
  - ii. Vertical obstruction is required to support low-flying missions. Features with elevation above X meters must be identified. Format of the data must be in X.
- b.) Signatures:
  - i. Signatures data in the X band, with a resolution of X is required for target identification.
3. **Intelligence Supportability Gaps:** Describe each gap associated with the intelligence supportability requirements including the details of why the requirement cannot be supported (resource constraints, access for collection, collection priority, technology deficiencies, etc.). Outline the impacts to the effort if the intelligence supportability gaps cannot be filled. The impacts should be quantified and highlight the impact throughout the life cycle including development, test, and operations. State the costs associated with satisfying the requirement. Cite any related JCIDS KSAs/KPPs affected by the intelligence supportability requirement and any related COCOM/OPLAN requirements affected.
4. **Intelligence Supportability Gap Resolution Plan:** Provide a proposed solution for resolving each intelligence supportability gap or note the decision to accept the Risk posed by the gap. The gap resolution plan must be developed in concert with the effort office and appropriate IC representatives. Include action items with required completion dates and POCs required to implement the resolution.

## Attachment 6

**INTELLIGENCE SENSITIVITY SURVEY/INTELLIGENCE SENSITIVITY TIER  
MATRIX**

**This survey is intended to help action officers identify key roles and responsibilities associated with the acquisition effort while, at the same time, highlighting sensitive or proprietary information that must be protected.**

<b>Intelligence Sensitivity Survey</b>		
<p><b>Note:</b> The intelligence sensitivity survey is the initial tool to determine how intelligence-sensitive (if at all) an effort is compared to other portfolio efforts and whether ISA should be continued on the effort. This is a high-level review; RAWs should be used when it has been determined to continue ISA on the effort. Make sure to mark responses with the appropriate classification</p>		
<b>Programmatic Information</b>		<b>Comments</b>
Program Name and ACAT or TRL:		JUON or QRC, TRL, ACAT I, II or III, Major or Minor Modifications, Sustainment
Center/Office Symbol:		
Milestone Proximity / Suspense:		Within 6 months, 6 months to 1 year, 1 to 2 years or More than 2 years
Program Description:		Provide sufficient detail to help understand potential intelligence issues
Gov Program Manager or Technical Lead:		(Name, Off Sym, Phone, E-mail)
Link to Project Info:		(Integrated Project Portfolio Management (IPPM), Sharepoint, etc.)
Related Projects:		(AFRL, other Acquisition Centers, MAJCOM efforts, QRCs, other services NASA, IARPA, NRO, DARPA, other DoD labs)
Potential Transition Programs/Organizations or other organizations involved with the program to include any logistics organizations:		(MQ-9, RQ-4, Big Safari, Sustainment Center, US Navy, NRO, etc.)
Potential users:		(ACC, AFSOC, USMC, etc.)

Associated Contractors/Universities and Contract Numbers:						
ACAT Level						
MS- A date						
MS-B date						
MS-C Date						
IOC Date						
FOC Date						
1067 Completion Date						
Source of funding				MIP, NIP		
Joint Potential Designator (JPD)				Programs with a JPD of “JROC Interest” or “Joint Integration” require intel certification		
Other				Limited rate Initial Production (LRIP); Full Rate Production (FRP); IOC Date		
<b>N u m b e r</b>	<b>Question</b>	<b>Y e s</b>	<b>N o</b>	<b>Option</b>	<b>Action</b>	<b>Comment (provide any clarification to your answer)</b>
<b>Security Considerations</b>						
1	Does this program/project/technology have a Technology/Program Protection Plan (T/PPP)?			If No, contact security office. If yes and Counter Intelligence information used, include reference link in section 9.2e of requirements document and see comment box.	IF yes, review CPIs. Continue to next question	If yes, provide reference/link and write the title, date of PPP and date of ITA in this box.
2	Does this program/project fall under a Security Classification Guide (SCG)?			If No, contact security office. If yes, include SCG reference in section 9.2e of requirements document and see comment box.	Continue to next question	If yes, provide reference/link and write the title and date of SCG in this box.
3	Does this program/project fall under Special Access or			If Yes, consult with security manager or	Ensure DD254	

	other security restrictions?			program manager before proceeding further.	reflects this.	
4	Does this program/project fall under STINFO or ITAR distribution restrictions?			If Yes, include restriction references in section 9.2e of requirements document	Ensure DD254 reflects this.	If yes, provide link to specific distribution statement
<b>Is this Program/Project/Technology considered Intelligence-sensitive?</b>						
5	Does this program/project require access to data produced by the Intelligence Community?				Continue to next question	
6	Will this program/project require data to flow from the Intelligence Community to support full scale development, operations, or sustainment?				Continue to next question	
7	Will this program/project produce data that will flow to the Intelligence Community for Planning and Direction, Collections, Processing and Exploitation, Analysis, and Dissemination (PCPAD) during full scale development, operations or sustainment?				Continue to next question	
				If the answer to all three of these questions is no, stop. The program/project is not intelligence-sensitive and in the Intelligence Sensitivity Tier Spreadsheet put "NONE". If the answer to any of these questions is yes or unknown, then proceed to answer the remaining questions.		
<b>Intelligence Data for R&amp;D, Operations or Sustainment</b>						
Identify products/services needed for the specific program/research project but also consider long lead items (e.g. signature databases) that may be required to support full scale development, operations, or sustainment						
8	Does it require access to Imagery Intelligence (IMINT) signatures or databases? (Optical, SAR IR, Hyperspectral, Overhead			If yes and it is determined that ISA will be continued on the effort, use RAWS	Provide as much detail as possible about required	Provide file/reference to RAWS used

	Persistent IR (OPIR), video, etc.)		to identify specific product-series. If current products are not acceptable, describe deficiencies or gaps in ISP section 3 and Appendix E and requirements document section 9.3, or Technology Transition Plan Section 3.6	precision, accuracy, timeliness, update periodicity, formats, etc. Work with SIO to document intelligence requirements in Coliseum (for a PR or DIR	
9	Does the required Intelligence database support to the level of detail needed to satisfy the system requirements? If no, what type and level of fidelity of database is required to support fielding of system? (Example: Databases of models to support Auto Targeting Recognition [ATR])		If yes and it is determined that ISA will be continued on the effort, use RAWS to identify specific product-series. If current products are not acceptable, describe deficiencies or gaps in ISP section 3 and Appendix E and requirements document section 9.3, or Technology Transition Plan Section 3.6	deficiencies into Intelligence Requirements Needs Database.	Provide file/reference to RAWS used
10	Does it require access to Electronic Intelligence (ELINT) signatures or databases? (EWIRDB, Kiltling, etc.)		If yes and it is determined that ISA will be continued on the effort, use RAWS to identify specific product-series. If current products are not acceptable, describe deficiencies or gaps in ISP section 3 and Appendix E and requirements document section		Provide file/reference to RAWS used & Options documents.

			9.3, or Technology Transition Plan Section 3.6		
1 1	Does it require access to Measurements & Signatures Intelligence (MASINT) or databases? (OTH/LOS Radar, Non-cooperative Target ID (NCTI), Space Object ID (SOI), etc.)		If yes and it is determined that ISA will be continued on the effort, use RAWs to identify product-series. If current products are not acceptable, write deficiencies or gaps in ISP section 3 and Appendix E and requirements document section 9.3, or Tech Transition Plan Section 3.6		Provide file/reference to RAWs used & Options documents.
1 2	Does it require access to Communication Intelligence (COMINT) signals or databases?		If yes and it is determined that ISA will be continued on the effort, identify specific product-series. If current products are not acceptable, describe deficiencies or gaps in ISP section 3 and Appendix E and requirements document section 9.3		Provide file/reference to RAWs used & Options documents.
1 3	Does it require access to Foreign Instrumentation Signals Intelligence (FISINT) or PROFORMA products or databases?		If yes and it is determined that ISA will be continued on the effort, use RAWs to identify specific product-series. If current products are not acceptable, describe deficiencies or gaps		Provide file/reference to RAWs used & Options documents.

				in ISP section 3 and Appendix E and requirements document section 9.3, or Technology Transition Plan Section 3.6		
8-13	Has the program/project investigated the need for or prepared a LMDP?			If yes to questions 8-13, provide information to PMO for inclusion in LMDP.		Provide reference/link to LMDP
14	Does it require standard or new GI&S products or databases (Include mission planning and targeteering considerations)? (i.e., navigation maps, Vector Data, Terrain Elevation Data such as Digital Terrain Elevation Data (DTED) or Shuttle Radar Topography Mission (SRTM), and orthorectified imagery based geospatial products (i.e., Controlled Image Base (CIB) or Digital Point Positioning Data Base (DPPDB))			If yes and it is determined that ISA will be continued on the effort, use RAWS to identify specific product-series. If current products are not acceptable, describe deficiencies or gaps in ISP section 3 and Appendix E and requirements document section 9.3, or Technology Transition Plan Section 3.6		Provide file/reference to RAWS used & Options documents.
15	Does it require access to Human Intelligence (HUMINT) products or databases?					Provide file/reference to RAWS used & Options documents.
16	Does it require access to Open Source Intelligence (OSINT) products or databases?					Provide file/reference to RAWS used & Options documents.
17	Does it require access to Modeling & Simulation (M&S) products or databases? (TMAP, etc.)					Provide file/reference to RAWS used & Options documents.
18	Does it require access to Order-of Battle products or					Provide file/reference to

	databases?					RAWS used & Options documents.
19	Does it require access to finished/all-source intelligence reporting/databases for target performance & characteristics? Will the current databases support system requirements?					Provide file/reference to RAWS used & Options documents.
20	Does it require access to finished/all-source intelligence reporting/databases for threat projections and foreign disruptive technologies against your program/project (include timeframe for projections)?					Provide file/reference to RAWS used & Options documents.
21	Any additional intelligence data or databasing requirements not identified above?					
<b>Intelligence Processes for R&amp;D, Operations or Sustainment</b>						
<b>Identify data outputs for the specific program/research project but also consider long lead items that may be required to support full scale development, operations, or sustainment</b>						
22	Is there a CONOPS/CONEMP, Ops View (OV-1) or similar document available that describes how the system will be used?					If yes, provide reference/link.
23	Are there KPP, KSA or similar performance requirements for this project that are directly related to intelligence support? (e.g. navigation accuracy, targeteering, BDA)					If yes, provide reference/link.
24	Does the program/project comply with existing mission planning, targeting/weaponeering or collection management			If unknown and it is determined that ISA will be continued on the effort, use RAWS		Provide file/reference to RAWS used & Options documents.

	systems/processes? (e.g. Falconview, JMPS)			to work through mission planning needs. Provide link to RAWs used on comments. If currently not compatible, describe deficiencies or gaps in ISP section 3 and Appendix E and requirements document section 9.3, or Technology Transition Plan Section 3.6		
IF an ISR or Non Traditional ISR (NTISR) asset, consider the following, if not skip to question 29						
25	Is the program/project developing new PCPAD tools (Software or Hardware) that will integrate/interface with existing systems/networks? (e.g DCGS, AOC)			If no, skip to question 28. If yes, answer the following to ensure that tools will integrate/ interface with existing systems/networks	Provide as much detail as possible about effects on user/analyst training, personnel, comm/computer networks and facilities.	Provide file/reference to RAWs used & Options documents
26	Has the program/project identified data storage/archiving requirements for forward deployed or CONUS PED?			If no and it is determined that ISA will be continued on the effort, use RAWs to identify types and paths. If current nodes are not compatible, describe deficiencies or gaps in ISP section 3 and Appendix E and requirements document section 9.3, or Technology	Provide as much detail as possible about precision, accuracy, timeliness, update periodicity, formats, data rates, bandwidth, etc.	Provide file/reference to RAWs used & Options documents.
27	Has the program/project identified data storage/archiving requirements associated with the tools required for PCPAD?					
28	What type of data (type, volume, etc.) will be passed to the PCPAD architecture of the IC or other users (e.g. national agencies, service					

	intelligence centers, tactical units)?			Transition Plan Section 3.6		
<p><b>IF data is sent to the program/project, or sent out of the program/project consider the following, if not skip to question 31</b></p>						
29	Does the program/project/data use the existing communication systems? (LOS, BLOS) Have communication links and nodes been defined & characterized? (LOS, BLOS)			If no and it is determined that ISA will be continued on the effort, use RAWs to identify types and paths. If current nodes are not compatible, describe deficiencies or gaps in ISP section 3 and Appendix E and requirements document section 9.3, or Technology Transition Plan Section 3.6		Provide file/reference to RAWs used & Options documents.
30	Does the data comply with existing IC or interoperability standards? (e.g., formats, metadata, databases, etc.) This includes determining security required during communication			If current data is not compatible, describe deficiencies or gaps in ISP section 3 and Appendix E and requirements document section 9.3, or Technology Transition Plan Section 3.6		Provide file/reference to RAWs used & Options documents.
<p><b>Other Intelligence Considerations for R&amp;D, Operations or Sustainment</b></p>						
31	Has the project considered all other impacts to non-materiel issues? (DOTMLPF - Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities) (if applicable)			If unknown and it is determined that ISA will be continued on the effort, use DOTMLPF-P RAW to assist in determining additional		Provide file/reference to RAWs used & Options documents.

				requirements		
3 2	Any additional intelligence output requirements not identified above?					
<b>Intelligence Oversight</b>						
3 3	Will the program/project involve domestic data collection (during developmental testing) over US territory other than military facilities and test ranges?			If yes, a Proper Use Memorandum (PUM) maybe required; contact the Intelligence Oversight Monitor.	Intelligence Oversight for domestic collection is required by AFI 14-104 and other guidance.	
Date	ACAT	Primary Effort Name				
Date	ACAT	Secondary Effort/Subsystem Name				
<b>Intelligence Sensitivity Tier Matrix</b>						
<b>Note: ONLY COMPLETE THE APPLICABLE CRITERIA</b>						
<b>Effort Name</b>		<b>High= 15pts</b>	<b>Medium= 10pts</b>	<b>Low= 5pts</b>	<b>None= 0pts</b>	<b>T o t a l</b>
Crite ria 1a	ACAT	I	II	III	Service	
Crite ria 1b	Visibility/ Urgency	JUON/QRC/FCC	ACTD/ATD/HVP/ CE; Programmed Modification	Funded; Un- programmed Modification	Unfunded; Normal Operations/ Sustainmen t	
Crite ria 2 (Lab )	Technolog y Readiness Level	TRL 6+	TRL 4-5	TRL 2-3	TRL 1	
Crite ria 3 (Lab )	Proximity to Transition	Within 6 months	6-12 months	1-3 years	3+ years or no transition partner identified	
Crite ria 4	Impact of AF, ISR, or	<b>Significant</b> – AF capability, <b>Primary</b>	<b>Moderate</b> – Upgrade to existing program/system	<b>Minimal</b> – Minor improvement	None or undefined	

	Intelligence (PCPAD) Infrastructure	Intelligence Source; new capability added to program of record (e.g. new sensor suite); major impacts to PCPAD or DOTMLPF issues	(e.g. new software tool, improved algorithm); minor impacts to PCPAD or DOTMLPF issues	to subsystem (e.g. SWAP); but minimal PCPAD or DOTMLPF issues		
Criteria 5	Development Threat Support	<b>Significant</b> – STA/TA written by MAJCOM <b>Intelligence</b> , Support to test and M&S; major new collection, analysis or M&S required by IC; multiple new PRs to support R&D efforts	<b>Moderate</b> – STAR written by NASIC, Support to test and M&S; limited new IC production or minor updates to existing finished Intel; limited RFIs to support R&D	<b>Minimal</b>	No Support or Undefined	
Criteria 6	Sustainment Threat Support	<b>Significant</b> – major new collection, analysis or databases required by IC to support Ops & sustainment; joint or multinational users	<b>Moderate</b> – limited new IC production or minor updates to existing finished Intel; RFI; multiple AF or IC users	<b>Minimal</b> – existing IC products are acceptable; single user	No Support or Undefined	
Criteria 7	Intelligence Dependency	<b>Significant</b> dependency on Intelligence to perform missions, <b>Significant</b> Intelligence requirements, <b>Multiple</b> intelligence agencies involved	<b>Moderate</b> dependency on intelligence to perform missions, <b>Moderate</b> Intelligence requirements, <b>Some</b> intelligence agencies involved	<b>Minimal</b> dependency on intelligence to perform missions, <b>Minor</b> Intelligence requirements, <b>Single</b> intelligence agencies involved	Not Dependent on Intelligence or Undefined	
Criteria 8	Milestone Proximity	Within 6 months	6 months to 1 year	1 to 2 years	More than 2 years	

	(Circle A, B, C)					
Criteria 9	JDP = JROC Interest or Joint Integration			Yes		
					<b>Total</b>	<b>0</b>

Figure A6.1. Sample Initial Intelligence Sensitivity Assessment.

*CLASSIFICATION*

31 Oct 12

MEMORANDUM FOR EFFORT X PROGRAM MANAGER

FROM: Supporting Acquisition Intelligence Analyst's Organization

SUBJECT: Effort X Initial Intelligence Sensitivity Assessment

1. PURPOSE: Inform X Effort Office of the assessed intelligence sensitivity assigned by {Supporting Acquisition Intelligence Analyst's Organization} IAW AFI 63-101 and AFI 14-111. Intelligence sensitivity rating and specific emphasis areas support the effort manager to control intelligence related risk.
2. Effort X Intelligence Sensitivity is: Tier 3 or Low.
3. Refer to Attachment for the Intelligence Sensitivity Tier Matrix containing analysis leading to this determination.
4. Intelligence sensitivity rating should be reviewed annually or upon major changes to an effort. Please contact {Supporting Acquisition Intelligence Analyst's Organization} for future assessments.
5. Questions can be addressed to the undersigned, DSN 986-XXXX, best.analyst@wpafb.af.mil.

//SIGNED/jpa/31 Oct 13//  
 Joe P. Analyst, GG-13  
 Acquisitions Intelligence Analyst

Attachment:  
 Intelligence Sensitivity Tier Matrix for Effort X

*CLASSIFICATION*

**Attachment 7****ORIENTATION GUIDE FOR THE AFMC SIPRNET AI DATABASE**

This guide depicts the site map for the Air Force Materiel Command's acquisition intelligence database.

Figure A7.1. AFMC Acquisition Intelligence Database on SIPRNET

The screenshot shows a web browser displaying the AFMC Acquisition Intelligence Database. The browser address bar shows the URL: <http://www.milink.siprnet.gov/sites/acqintel/default.aspx>. The page features a navigation menu with options like 'Home', 'AFRL', 'AEDC', 'AFMTC', 'ASC', 'AAC', 'AWIC', 'ESC', 'OC-ALC', and 'WR'. A search bar is present at the top right. The main content area displays a table of 'ISA Products' with columns for 'Type', 'Name', 'Modified', and 'Actions'. Below the table, there are several menu items including 'Derived Intelligence Requirements', 'Create New Initial Requirement', 'View All Requirements', 'View Deficiencies Only', 'RAWS', 'RAWS Tutorial', 'RAWS Workbook', 'ACD Initial Policy & Guidance', 'ISA Process', 'Program Documentation', 'ISA Products', 'Sites', and 'Site Collection Admins'. A secondary window in the background shows a list of documents with classification levels like 'UNCLASSIFIED'.

**URL to SIPR Acquisition Intelligence Webpage**

**DIRs** – Database of all effort Derived Intelligence Requirements. Documents specific to an individual DIR can be attached directly to the DIR (i.e. minutes, notes, cost data, action plans, advocacy details, etc.)

**RAWs** – RAW Workbook for identifying effort intelligence needs (read-only template (store completed RAW on effort ISA Products page))

**Post Effort Documents under specific categories:**  
**Cost Data** – Lifecycle Cost Estimate (LCCE)  
**Requirements Documents** – Initial Capabilities Document (ICD), Capability Development Document (CDD), Capability Production Document (CPD), Risk Management Plan (RMP), Life-Cycle Management Plan (LCMP)  
**Information Support Plan** – ISP and Intelligence Annex  
**Lifecycle Signature Support Plan/Lifecycle Mission Data Plan**  
**Test Data** – Test and Evaluation Management Plan (TEMP), Test and Evaluation Strategy (TES)  
**Threat** – System Threat Assessment Report (STAR), System Threat Assessment (STA), Threat Report, Threat Roadmaps

**Post ISA Products under specific categories:**  
**Background Data** – System description, white papers, briefings, etc.  
**Intelligence Sensitivity Survey/Intelligence Supportability Tier Matrix**  
**RAWs** – Complete RAW spreadsheets  
**Production Requirements** – listing of COLISEUM requirements, NSA Intelligence Need requests, NGA product requests, etc.  
**Cost Documents** – Cost Reports  
**Intelligence Health Assessments** – the “snapshot in time” view of ISA results