

**Center for
Earned Value Management**

*To make Naval Acquisition the Standard of
Excellence in Government*

**Integrated
Baseline
Review (IBR)
Toolkit**



Director, Center for
Earned Value
Management (CEVM)

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Notice: The U.S. Navy intends to apply for patents on aspects of the business methods, processes and practices we are providing to you in this document.

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INTRODUCTION

An IBR is a formal review conducted by the government program manager and technical staff, jointly with their contractor counterparts, following contract award to verify the technical content of the performance measurement baseline (PMB) and the accuracy of the related resource (budgets) and schedules. An IBR will also be performed when work on a production option of a development contract begins or, at the discretion of the program manager, when a major modification to an existing contract significantly changes the existing PMB. When major events occur within the life of a program, e.g. PDR, CDR, etc., and a significant shift in the content and/or time-phasing of the PMB occurs, the PM may conduct a review of those areas affected by the change with the associated resources and schedules. The intent is for the IBR to be a continuous part of the process of program management by both the government and the contractor.

In accordance with DFAR 252.242-7001, the Government will conduct an IBR when an EVMS is required. Refer to the CEVM EVM Contract Requirements Toolkit for more guidance on meeting FAR requirements for pre-award IBR, post-award IBR and contract threshold amounts.

The purpose of the IBR is to verify the technical content and the realism of the related performance budgets, resources, and schedules. It should provide a mutual understanding of the inherent risks in contractors' performance plans and the underlying management control systems, and it should formulate a plan to handle these risks.

1.1 IBR Objectives

- Assess the adequacy of the Performance Measurement Baseline (PMB) (scope, schedule, budget, resources and management processes) including identification of associated risks
- Achieve a mutual understanding of the PMB and its relationship to the underlying Earned Value Management System (EVMS)

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- Insure all tasks are planned and can be measured objectively, relative to technical progress; and that managers have appropriately implemented required management processes.
- Attain agreement on a plan of action to evaluate the identified risks
- Quantify the identified risks and incorporate in an updated Estimate At Completion (EAC)

The following Appendices provide work samples of standard IBR documents used during the IBR process. .

Appendix A: Sample IBR Notification Letter
Appendix B: Sample IBR Team Handbook
Appendix C: IBR Out-brief Template
Appendix D: Sample IBR Letter of Findings
Appendix E: Sample IBR Closeout Letter

Additional IBR resources:

Appendix F: IBR Lessons Learned
Appendix G: List of Acronyms
Appendix H: IBR Training Materials
Appendix I: Kick-off Meeting Checklist
Appendix J: IBR/SRA POA&M

2 IBR PREPARATION

2.1 General

IBR Preparation is the foundation for a successful IBR and is the most important part of the entire process. Thorough and unambiguous planning will pay off when the team goes on location to the contractor or government activity. Preparation includes planning that identifies: key responsibilities, required technical expertise, training, review dates, review scope, risk evaluation criteria, documentation needs, disposition of findings, and procedures for risk identification, documentation, and incorporation into project risk management planning.

The Program Office should ensure up-front involvement of all analysts, technical support personnel, and Defense Contract Management Agency (DCMA) representatives early in the IBR planning process. Also, cost estimators should compare the funding profile of the cost estimate, if applicable, to the PMB prior to going on-site. Cost estimators can also help to identify differences in the

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contractor's estimate and the government's estimate, which will help identify risk areas prior to the review.

IBR preparation includes identification of:

- Key responsibilities
- Required technical expertise
- Training
- Review dates
- Review scope
- Risk evaluation criteria
- Documentation needs
- Disposition of findings
- Procedures for risk identification, documentation, and incorporation into project risk management planning

2.2 Determination of Need for an IBR

Prior to contract award, the EVM analyst should ensure that the EVM Defense Federal Acquisition Regulation (DFAR) clauses are used for contracts requiring compliance with the ANSI/EIA-748. These clauses are 252.242-7001 (Solicitation) and 252.242-7002 (Contract). Also ensure that the Statement of Work (SOW) includes the IBR requirement. Use the SOW paragraph to tailor program requirements of the IBR. The EVM analyst needs to be involved up front and early to ensure that the appropriate requirements are put on contract.

An IBR should be planned if the contract contains the EVMS requirement, as prescribed in DFAR 252.242-7002. The initial IBR should be initiated within six months after contract award or when authorization to proceed has been given by the Contracting Officer. However, because the IBR is a continual process, an IBR may be conducted at various points in the project. It is important to note that the IBR goals and objectives are the same regardless of when the IBR is conducted.

Throughout the life cycle of the project, there will be changes to the PMB. In some instances an external factor may induce a change. At other times nominal management activities or events may drive a change. Examples of such program dynamics include: contract award, authorization to proceed, contract modification, funding changes, changes to project scope and/or schedule, the assignment of a new Program Manager (PM), revision of the acquisition plan or strategy, or an executive decision. Such changes would require the preparation of a revised PMB, and the requirement for another IBR should be considered.

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Examples of When to Conduct An IBR:

- The PMB has changed
- Contract Modification
- Funding Changes
- Scope Changes
- Schedule Changes
- New Program Manager
- Revised Acquisition Plan
- Executive Decision

For more information on Contracts, refer to the CEVM Contract Cost Requirements Toolkit as a guide for preparing earned value data collection and reporting requirements and for incorporating these requirements into a Procurement Initiation Document (PID) and/or contract.

2.3 IBR Planning

After determining the need for an IBR, preparation should begin as soon as practical. To ensure that the IBR can be successfully prepared for and executed in a timely manner a POA&M should be developed. This will indicate a logical sequence of activities that will need to be performed to prepare and execute an IBR. An example POA&M is shown in Appendix J.

When required by policy, contract, or an obvious degree of project complexity, preparation for the IBR occurs concurrently with development of the PMB (PMB assessment is discussed in Section 3.2 of this Toolkit). Ideally, the IBR is conducted 3-6 months after contract award once the contractor has established the baseline. However, the earlier the IBR is held, the more valuable it will be in providing information on schedule, resources, management processes, and risks.

Once the contractor has established the baseline, the EVM analyst assigned to the project works with the IPT lead to begin planning the IBR Kick-off Meeting. Appendix I is a sample Kick-off Meeting Checklist. The EVM analyst ensures the Government team understands the objectives of the review and that the contractor has details of the baseline planned far enough in advance (at least one year) to permit an adequate assessment

The first step in planning the IBR is to determine the Control/Cost Accounts (CA) to be discussed at the IBR. To do this, request a Responsibility Assignment Matrix (RAM) from the contractor showing the budget for each CA. The IPT uses the RAM to select high-risk focus areas to discuss during the IBR. Typically, 85% of the contract dollar value and all of the high-risk areas are examined. Sources of risks are categorized into the following five related areas: technical, schedule, cost, resource, and management processes.

2.3.1 Sources of Risk:

Technical risk - The degree to which the technical plan successfully meets the objectives of the statement of work. Technical risk includes lack of work on similar projects, difficulty meeting complexity of requirements, degree of difference from available technology, software development capability, and design maturity.

Schedule risk - The adequacy of the time allocated for performing the defined tasks to successfully achieve the project schedule objectives. Schedule risk includes the effects on the schedule of the interdependency of scheduled activities to achieve project milestones and support the PM's' ability to identify and maintain the critical path.

Cost risk - The ability of the PMB to successfully execute the project and attain cost objectives, recognizing the relationship between budget, resources, funding, schedule, and scope of work. The quality of the estimates affects the cost risk, which includes the assumptions used for both estimates and resource allocation on the budgets for work items.

Resource risk - The availability of personnel, facilities, and equipment, when required, to perform the defined tasks needed to execute the program successfully. Resource risk includes the effect of external factors such as loss of availability to competing programs or unexpected downtime that could preclude or otherwise limit the availability of the resources needed to complete planned work.

Management Process risk - The degree to which the management process provides effective and integrated technical/schedule/cost planning and baseline change control. Management process risk includes the ability to establish and maintain valid, accurate, and timely performance data, including data from subcontractors, for early visibility into risks.

Prior to the IBR, the team should schedule a discussion with the contractor/supplier PM to discuss overall program risk and the use of Management Reserve. Level of Effort (LOE) accounts should be reviewed for appropriateness of this EV method, and at least one material account (provide example) should be included to provide insight into various aspects of the program. Once the IBR team selects the CA's for the IBR, the contractor is notified of the selection.

IBR Team composition and assignments are based on the CA's selected. Participants are identified based on their programmatic or technical expertise including program management, business management, and technical management (e.g., system engineering, software engineering, manufacturing, integration and test engineering, and integrated logistics support). There may be several government sub-teams with discussions scheduled concurrently, or one

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team can interview every Control Account Manager (CAM). To be effective, the discussion group should remain small and focused. A sample team may consist of an EVMS analyst, a PM, and one or two technical experts in the area of the CA to be discussed. Depending on the risk associated with a CA, a good rule of thumb is to allow two hours to conduct the CAM discussion and one hour for completing documentation.

2.4 Team Roles and Responsibilities

Team Members: Team members may include technical experts, EVM analysts, Schedule analysts, Cost Analysts, Contracts representatives, or DCMA, as well as other personnel who may be of benefit during the review. Duties of team members include:

- Attend IBR training prior to the start of the IBR
- Review contract documentation prior to baseline discussions with the CAM
- Conduct CAM and senior manager discussions
- Assist in completing all applicable documentation
- Provide an assessment of risk, based on the prescribed risk evaluation criteria
- Assist in preparation of the IBR out-brief

Program Manager (PM): The PM either acts as or assigns the Team Leader for the IBR. PM's are jointly responsible for the IBR process and for the following:

- Plan and perform the IBR
- Monitor progress on required actions until issues are resolved
- Provide an adequate number of qualified personnel to serve as IBR team members
- Specify evaluation criteria for risk areas
- Document risk issues identified during an IBR
- Present the IBR out-brief

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Performance Measurement Deputy Team Leader: The Performance Measurement Deputy Team Leader is a role filled by an EVM analyst, a Branch Head or the EVM Team Lead. The responsibilities of the Performance Measurement Deputy Team Leader include:

- Provide overall facilitation for the IBR
- Provide pre-IBR training
- Review contract documentation prior to baseline discussions with the CAM
- Conduct CAM and senior manager discussions
- Provide policy and interpretation of EVMS Guidance
- Assist in the preparation of the IBR out-brief
- Provide technical direction and leadership emphasizing the importance of thorough cost, schedule, and technical integration of contract work
- Ensure all Concern Area Reports are being tracked
- Provide an assessment of project risk

Earned Value Management (EVM) Analyst: The responsibilities of the EVM analyst include:

- Work with the IBR Team Leader to define risk evaluation guidelines
- In conjunction with the IBR Team Leader, identify the risk areas that will be reviewed during CAM discussions
- Prepare and provide IBR and EVMS training to the IBR team
- Prepare IBR Team Handbook, IBR Announcement letter, Letter of Findings, and IBR Close-out Letter
- Review contract documentation prior to baseline discussions with the CAM
- Conduct CAM and senior manager discussions
- Provide an assessment of risk
- Assist in the preparation of the IBR out-brief
- Assist in completing all applicable IBR documentation

Sub-team Technical Lead: The Sub-team Technical Lead is normally a technical expert who specializes in the area that is being addressed during the CAM discussion. The responsibilities of the Sub-team Technical Lead include:

- Attend pre-IBR training
- Review contract documentation prior to baseline discussions with the CAM
- Conduct CAM and senior manager discussions
- Establish the strategy for conducting the CAM discussions, e.g., designate a single person to lead the discussion
- Ensure all applicable documentation is properly completed

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- Provide daily out-briefs to keep the IBR team informed
- Provide an assessment of risk
- Assist in the preparation of the IBR out-brief

Management Systems Analyst: The responsibilities of the Management Systems analyst include (Note: This position may be filled by DCMA or SUPSHIP if resources are not available in the Program Office.):

- Attend pre-IBR training
- Review contract documentation prior to baseline discussions with the CAM
- Conduct CAM and senior manager discussions
- Review the contractor's EVM Systems Description (or C/SSR procedures if the criteria is not required and the contractor is not using or has tailored the System Description for contracts not requiring the criteria) to understand the processes and procedures by which the contractor manages the program
- Evaluate the ability of the management processes to provide accurate and timely performance data
- For EVMS contracts, evaluate management processes ensuring compliance with the company's System Description
- Provide an assessment of program risk
- Assist in completing all IBR documentation
- Assist in the preparation of the IBR out-brief

Schedule Analyst: The duties of the Schedule analyst include:

- Attend pre-IBR training
- Review contract documentation prior to baseline discussions with the CAM
- Conduct CAM and senior manager discussions
- Review the contractor's EVM Systems Description to understand the processes and procedures by which the contractor creates and maintains an Integrated Master Schedule
- Provide an assessment of all program risk
- Assist in completing all IBR documentation
- Assist in the preparation of the IBR out-brief

Cost Analyst: The responsibilities of the Cost analyst include:

- Attend pre-IBR training
- Review contract documentation prior to baseline discussions with the CAM
- Provide insight into the reasonableness of the Basis Of Estimate

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- Inform the team of any areas where the Government estimate differs from the contract target cost
- Conduct CAM and senior manager discussions
- Provide an assessment of all program risk
- Assist in completing all IBR documentation
- Assist in the preparation of the IBR out-brief

2.5 IBR Notification Letter/Documentation

An IBR Announcement Letter will be sent to the contractor after contract award. This letter will explain to the contractor the purpose of the review, the time frame of the review, team composition, and team requirements. The announcement letter will also explain who from the Program Office is leading the review, and points of contact for follow-up. One of the main functions of the announcement letter is to request documentation from the contractor for use prior to the review to prepare the team and for use on site. Appendix A provides a sample IBR Notification Letter from the Government's Contracting Officer to the contractor's Contracts lead. The IBR Notification Letter may also be sent from the Government's PM to the contractor's PM. In addition the local DCMA organization should be informed of the review.

Documentation will be used to identify risk areas and generate questions for the on-site review, and should be received two to four weeks prior to the IBR. It should be noted that the contractor may have the information available in different documents, which is acceptable as long as the necessary information is received. Only data pertinent to this specific review should be requested. Should you get what you requested and find it does not meet your requirements, the EVM analyst should work with the contractor EVM contact and ensure that the data requested will satisfy the team's needs. The following is a listing of some of the documentation that may be requested:

Recommended list of requested information:

- Organizational chart(s)
- Control Account Plans (CAP): Basis of Estimates (BOE), Assumptions, and Risk
- Work Authorization Documents
- Performance Measurement Reports (internal cost/schedule reports)
- Variance Analysis Reports (VARs) *
- Estimate at Completion (EAC)/Budget Change Requests (BCR):
- CA/Work Package (WP) summary containing:
 - Number of work packages by type of EVM method
 - Longest CA, shortest CA, mean and median duration, total value of account
 - Largest CA, smallest CA, mean and median values

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- Baseline Control Logs (Management Reserve, Undistributed Budget, Contract Budget Base)
- SOW with Work Breakdown Structure (WBS) (or IPT) Matrix *
- Schedules (Master, Intermediate, and Detailed) *
- System Description and program unique directives/procedures *
- Contract Funds Status Report (CFSR) *
- All cost performance reports submitted to date (CPR, C/SSR) *
- Responsibility Assignment Matrix (RAM)
- Contract Line Item Number (CLIN) to WBS cross-reference matrix *
- WBS/IPT Index and Dictionary *
- Subcontractor listing and value of subcontracts
- All contract changes
- Status of any out-standing Concern Area Reports (CARs) from previous IBRs or Discrepancy Reports (DRs) from Validation Reviews
- Last Surveillance Report

* Only request this information if it has not already been received.

2.6 Responsibility Assignment Matrix (RAM)

The RAM correlates the work required by a Contract Work Breakdown Structure (CWBS) element to the functional organization responsible for accomplishing the assigned tasks. The RAM results from the intersection of the CWBS with the program organization. This intersection identifies the CA. The RAM includes the functional organization and the individual responsible for the CA, known as the CAM.

2.6.1 Work Authorization Documents

All work within a program, regardless of origin, is described and authorized through the work authorization system. Work authorization assures that performing organizations are specifically informed regarding their work scope, schedules for performance, and budget for that work.

Work authorization is a formal process related to various levels of the organization. Agreement is reached to each level of authorization so that there is no question as to what is required. The contractor PM (or Functional Manager) prepares a document authorizing the CAM to perform work. This CA authorization is in essence a mini-contract between the CAM and the authorizing party. The documents involved in work authorization, at each level, are maintained in a current status throughout the life of the contract as revisions take place.

2.6.2 Cost/Control Account Plans (CAP)

The CA is the focus for planning, monitoring, and controlling because it represents work within a single CWBS element, and it is the responsibility of a

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single organizational unit or work team. Virtually all aspects of a program come together at the CA level, including budgets, schedules, work assignments, cost collection, progress assessment, problem identification, corrective actions, and EAC development.

2.6.3 Work Packages (WP)

A Work package (WP) is a detailed task or set of tasks that is established by the CAM for accomplishing work within a CA. A WP can be characterized by the following:

- The WP represents units of work at the levels where the work is performed
- A WP is clearly distinct from all other WP's, and is the responsibility of a single organization element
- A WP has scheduled start and completion dates (with interim milestones, if applicable), which are representative of physical accomplishment
- A WP has a budget or assigned value expressed in terms of dollars, labor hours, or other measurable units
- Duration of a WP is relatively short, unless it is subdivided into discrete value milestones that permit objective measurement of work performed
- The WP schedule is integrated with all other schedules
- The WP has a unique earned value technique for determining the value of completed in-process work

If a CA cannot be subdivided into detailed WPs, far-term effort may be identified in Planning Packages (PPs) for baseline control purposes. The budget for a PP is identified specifically for the work that is intended, is time-phased to the extent possible, and has controls that prevent its use in performance of other work. Eventually, all work in PPs will be planned to the appropriate level of detail in WPs.

2.7 Program Schedules

Various schedules are essential for the Government IPT to review before IBR discussions begin. The primary requirement is an integrated schedule containing the networked, detailed tasks necessary to ensure successful program execution. integrated (for additional details see Data Item Description—Integrated Master Schedule (IMS- DI-MGMT-81650)The contractor should provide to the IPT, at a minimum, the following:

Program Master Schedule

The Program Master Schedule is the controlling schedule for the entire program. It is a top-level schedule that which contains contractual as well as program

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tasks, milestones, and activities. It shall be an integrated roll up of the intermediate and detailed schedules

Intermediate Schedule(s)

Intermediate Schedules are the integrating schedules for a contract. There may be a single or multiple levels of intermediate schedules which may be oriented to either CWBS elements or to functional organizations. In either case, the purpose is to form a bridge between the Program Master Schedule and CA schedules. The term “integrating” is used since the purpose is to coordinate the effort of a number of CAs that are related in one way or another to the scope of the intermediate schedule. Intermediate schedules are often the primary tool for identifying key program interfaces through network logic.

Electronic versions are necessary for the Schedule analysts to develop schedule metrics.

Cost/Control Account (Detail) Schedules

These are the lowest level of contract tasks/activities that form the integration, as a minimum, at the work package and planning package level. The detailed schedules shall include all tasks/activities, work packages, and planning packages identified in the contract Performance Measurement Baseline (PMB). Every discrete task/activity, work package, and planning package shall be clearly identified and directly related to a control account. See Control Account Plans.

Note: Most schedules today include all three levels (PM, Intermediate and Cost/Control Account) in a single file format. If there are separate schedules for each level, they must be reviewed for consistency and vertical integration.

2.8 Cost Reports

As part of the documentation review process, it is important for the Government EVM analyst to review the program’s latest cost report deliverables, i.e. CPR, C/SSR, and CFSR. The EVM analyst should discuss with the Government IPT how the use of the CPR, C/SSR, and CFSR would provide insight into the status of risk areas.

2.9 Contract Work Breakdown Structure (CWBS) and Dictionary:

The CWBS is the basis for further extension to lower levels that represent how the contractor plans to accomplish the entire contract work scope and is consistent with internal organizations and processes. This extended CWBS serves as the framework for reporting of contract planning, budgeting, and cost and schedule status to the Government. The contractor uses the CWBS

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Dictionary to describe the effort and tasks associated with CWBS elements as indicated in the CWBS Contract Data Requirements List (CDRL).

Once the documentation is received the next step is for the team to evaluate this documentation and determine risk areas. Questions may be held for discussion at the IBR or can be provided to the contractor prior to the IBR, allowing time to respond prior to the Government team arriving at the facility. If the documentation review uncovers new risk areas, those CA's should be added to the review schedule.

2.10 Training

Team training will occur in conjunction with the documentation review. In most cases the EVM analyst provides this training, with help from the contractor or government activity as needed. The three components of the training are basic EVM training, IBR training, and an overview by the contractor on how the baseline was established as well as sample documentation. The purpose of the contractor overview is for the Government IPT to gain an understanding of the contractor's management processes. This includes how the contractor developed and maintains the program's PMB and schedules, Risk Management Plan (RMP), and business processes (including EVM processes such as Estimates to Complete, (ETC)).

If possible, it is also recommended that the contractor IPT lead attend this training session. It has been found in past reviews that conducting this training with the combined Government/contractor IPT team results in more successful IBR discussions. This will also help to resolve any terminology differences that may be used between the Government and the contractor. If the training is combined with the documentation review, contractor personnel can be a great help in understanding the documentation and its uses and limitations. The team should also review the IBR Handbook during the training to gain an understanding of the various forms and assessments used to document interview findings.

When possible, the training and documentation review should occur prior to going on-site to the contractor or government facility, thereby allowing for a more efficient review. If the team does not have ample time for training and preparation prior to the on-site Review, sufficient on-site time needs to be allocated to accomplish these efforts. Conducting the training and documentation review at the contractor's facility immediately followed by the on-site discussions may also be done. If this is done, adequate time must be allowed for the team members to complete a review of the documentation prior to the start of the IBR discussions.

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The essential elements of training include the following:

- **PM's' Expectations**
 - IBR objectives
 - IBR approach and expectations
 - Risk identification and documentation

- **Management Processes**
 - Baseline maintenance
 - Risk management
 - Business processes (including EVM)

- **Project Management Aspects**
 - SOW/Statement Of Objectives
 - WBS Dictionary/matrix
 - Work authorization documents
 - CAPs
 - Terms and acronyms
 - Budget and schedule baselines
 - Subcontractor management
 - Management Reserve

2.11 Subcontractor Management

Subcontracts comprise procurement of material, parts, components, assemblies, services, subsystems or systems which are procured, reworked or repaired to design requirements and usually involve design and development.

Identification of major/critical subcontractors should be made with consideration of total subcontract dollar value, development risk and criticality to the program. All subcontracted effort must be identified in the CWBS dictionary. Cost reimbursable and fixed price incentive research and development subcontracts greater than \$20M must have contractual EVM flowdown requirements. Ideally, all other subcontracted efforts not requiring compliance with EVM flowdown requirement should be identified as separate control accounts and the appropriate control account documentation developed to provide the appropriate parameters. Preferably, a control account should contain only on subcontractor.

For subcontractors submitting flowdown requirements, special attention must be given to the prime's procedures for ensuring the adequacy of the subs management systems. The prime contractor is responsible for conducting an IBR on the subcontractor's baseline. Subcontractor schedules must be integrated with the prime's scheduling system through the identification of subcontractor milestones on both subcontractor and prime's schedules. All subcontractor schedule milestones must be coordinated with and directly traceable to identified milestones on the prime's master, intermediate and detail level as applicable.

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The organization responsible for statusing subcontractor schedules as well as the corresponding update of subcontractor data on the prime's schedule must be identified. This organization(s) should assure that schedule variances visible on the subcontractor CPR data are accurately indicated in both subcontractor and prime schedules.

2.12 IBR Team Handbook

The IBR Team Handbook will assist the team members conducting the review. The handbook provides a program background, sample discussion questions, team assignments and roles, documentation guidelines, sample documentation, risk evaluation criteria, and a glossary of EVMS terms. The review agenda and team assignments should also be included in the handbook. See Appendix B for a sample IBR Team Handbook

2.13 Travel Arrangements/IBR Logistics

Team members should be informed as early as possible of the travel plans, the review schedule and agenda, and their team assignments. Additionally, team members should know the name and number of the contractor point(s) of contact (POCs) for the IBR, and security arrangements should be made for each team member visiting the facility (i.e. Visit Requests need to be sent to the contractor Security Office). IBR team members should also be provided with: area maps, directions to the contractor facility, directions to visitor check-in and specific directions to the building, and the room where the initial meeting or IBR in-brief will be held. Again, provide everyone with the contractor IBR POCs and phone numbers.

3 IBR Execution

3.1 General

As discussed earlier, the primary purpose of the IBR is for the Government and contractor PM's to gain a mutual understanding of the risks inherent in the PMB and management processes. Anything that does not support this purpose should be discussed outside of the IBR. Do not try to resolve technical issues during the IBR. Should technical issues arise, make note of them and move on. It is very important to have the Program Office take control of the review at this point. The Program Office representative should take ownership of the PMB the contractor has developed. If the team has been broken down into sub teams this also holds true for the sub team leaders.

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The IBR Execution section of this toolkit is divided into five sections (Government PM In-Brief, On-Site Discussions, CAM Discussion Techniques, IBR Documentation and Forms, and Out-Brief). The intent is to provide sample tools/documentation for each of these areas. While each IBR may be tailored, these tools will provide a starting point for analysts to prepare for a review.

3.2 Government PM In-brief

In some cases the Government team may want to provide an in-brief to the contractor at the outset of the IBR. The main theme of the in-brief is to re-emphasize why the Government team is at the contractor facility and what the team is trying to accomplish. At this point, both the Government and contractor teams must understand that the Government team is evaluating the adequacy of the PMB and identifying concerns, not looking for problems to solve.

3.3 On-Site Discussions

The team may want to conduct an on-site Government team meeting before the CAM discussions begin. This meeting is the final opportunity to focus the Government team on the objectives.

Thorough preparation by the Government IPT in reviewing the contractor provided documentation is essential for successful IBR discussions. Study the contractor's documents before going into the discussions in order to have an understanding of how the contractor planned the work and to understand the initial cost proposal. Each individual should be especially familiar with the areas they will specifically discuss since time will be limited.

CAM discussions are the key events of the IBR. These discussions focus on risk areas and management processes. Normally, the contractor is asked to have a full set of CAPs and other pertinent documentation available. This documentation should show the scope, budget, time phasing of the effort, schedule, milestones (if appropriate), and earned value methods. The review should be focused on effort that affects the scope and schedule of the current contract requirements.

To evaluate project PMB risks, the IBR team should assess the degree to which the following statements about the project are true:

- The technical scope of work is fully included and consistent with authorizing documents
- Key schedule milestones are identified
- Supporting schedules reflect a logical flow to accomplish the technical work scope
- Resources (budgets, facilities, personnel, skills, etc.) are adequate and available for the assigned tasks

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- Tasks are planned and can be measured objectively, relative to technical progress
- Underlying PMB rationales are reasonable
- Management processes support successful execution of the project

Additionally, the IBR team should assess the MR with respect to project risk not accounted for in the PMB.

Refer to the IBR Team Handbook (Appendix B of this Toolkit) for samples of detailed questions for use during the CAM discussions.

3.4 CAM Discussion Techniques

Overall success of the IBR is largely dependent on productive CAM discussions. Below is a list of suggested techniques for all team members to consider before and during the CAM discussions.

Ensure the discussions:

- Start on time
- Follow a logical flow *and* have no interruptions
- Have limited attendance size

Ensure the Government team:

- Is well prepared (such as system familiarity, plan of action regarding discussions)
- Honors any ground rules agreed to with the contractor
- Allocates time *after each discussion* to complete the discussion forms (listed in Section 3.5)
- Asks open-ended questions
- Does not limit themselves to a predetermined list of questions
- Does not allow the discussion to stray from the objective
- Does not ignore the documentation
- Does not word questions negatively or make derogatory comments

For the contractor, ensure each CAM:

- Is well prepared (documentation available, understands documentation content, can support answers)

Encourage the Team/Sub Team members to keep the CAM discussions professional. This will help the CAM feel more comfortable and facilitate a smooth flowing discussion. If there is an issue which cannot be resolved in the discussion, **do not get into an argument with the CAM**. If it appears resolution of the issue in question will not be accomplished, promptly and courteously end the discussion and inform the IBR Team Leader.

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After each CAM discussion, the Team/Sub Team should review what was discussed. This is an opportune time to collect documentation to better prepare for the out-brief presentation.

3.5 IBR Documentation and Forms

Each Team/Sub Team Leader is responsible for documenting the team's assessments and findings. The Team Leader uses the documentation to support overall team assessments and required corrective actions.

The following forms have been developed to facilitate review documentation. Sample IBR forms are provided in the IBR Team Handbook in Appendix B.

3.5.1 Discussion Assessment Form

The Team/Sub Team should complete one of these forms after each discussion. The Team/Sub Team Leader is responsible for reviewing this form and submitting it to the Team Leader or his/her review facilitator. Concerns noted should be documented in the Concern Area Report (CAR). Note that the Discussion Assessment Form can be tailored based on risks associated with the program.

3.5.2 Concern Area Report (CAR)

A CAR should be completed for each concern noted. Generally, concerns noted are items that require follow-up action. Information on this form should be clear and as specific as possible because it will be provided to the contractor to obtain a response and resolution. Abbreviations should be spelled out and acronyms defined. These forms should be submitted immediately to the Team Leader, and as soon as practical to the contractor. Contractor responses should be provided to the team as soon as possible. Again, the Team/Sub Team Leader is responsible for reviewing this form and submitting it to the Team Leader or their review facilitator. All forms will be compiled and logged by the Performance Measurement Deputy Team Leader or by someone he/she designates.

3.5.3 Documentation Request Form

During CAM discussions, it may be found that additional documentation is required to gain a better understanding of the issue in question. The documentation request form should be completed to obtain required documentation. Submit the completed form to the Team Leader and/or review facilitator. All forms will be tracked in order to reduce redundancies and ensure receipt of all the requested material.

3.5.4 Risk Assessment Form

A risk assessment form should be completed after each discussion. The risks are rated based on risk evaluation criteria established by the Government PM prior to the IBR. The ultimate goal of the Risk Assessment portion of the IBR is an updated EAC, which incorporates quantified risks. The Team/Sub Team Leader is responsible for reviewing this form and submitting it to the Team Leader or his/her review facilitator. All forms will be compiled and logged.

Each Government Team/Sub Team Leader is responsible for documenting the IPTs results and findings. The Team Leader uses the documentation to substantiate his/her decision as to whether the contractor has properly baselined the contract in accordance with the contract SOW.

At the end of each day, the Government team should conduct a daily wrap-up where each team/sub team reports findings from the CAM discussions. This will ensure the entire team is aware of issues that have been raised by other teams, allowing further investigation during future CAM discussions.

3.6 Out-brief

The IBR Program Risk Assessment Checklist (Appendix C) should be used to determine the color rating for presentation in the IBR out-brief. In preparation of the IBR out-brief, the EVM analyst should assist the Government IPT in quantifying resource shortfalls identified during the CAM discussions, as well as consolidating, summarizing, and documenting all concerns and action items from each team/sub team. Prior to the out-brief the Government team members need to make certain they have a clear understanding of the concerns and of any actions they want the contractor to take. Prior to presenting the out-brief to the contractor, it is important for the Government team to have a "Government only" meeting to discuss the brief and concerns. When finalizing the agenda for the IBR, the EVM analyst should ensure ample time is made available to prepare the out-brief presentation.

Responsibility for conducting the IBR out-brief should rest with either the **Government PM or technical lead**. The brief should include assessments of each area's PMB discussed (pros and cons) as well as all concerns and action items. It is important that the brief given by the IBR Team Leader relays the Program Office's commitment to managing the effort using EVM. If specific EVM concerns are found, it may be appropriate to have the lead EVM team member brief these concerns. The IBR Team Leader may also want to have the Sub Team Leaders brief their portion(s) of the program, followed immediately by an assessment from their contractor counterparts. In addition, the analyst should make the team aware of any concerns or issues related to the contractor's management processes.

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Schedule, technical, cost, resource, and management process risks identified at the IBR should be reviewed. Items identified as *action risks* require PM attention and should be immediately included in risk management planning. Items identified as *watch risks* represent concerns that may require future attention and future planning should they elevate to become action risks. The EVM analyst should work with the Government IPT and contractor to develop the Risk Management Plan (RMP). Communication between the EVM analyst and DCMA and/or SUPSHIP is essential in monitoring not only risk areas brought out during the IBR, but for program status in general. If requested, or if program status warrants, the EVM analyst (or Cost Team) should update the estimate to reflect information gathered at the on-site review. These results should be presented to the Government PM/IPT.

The IBR team should document the risk areas identified and provide the PM's with an overall project summary. In preparing the table, the team would assign a rating to each risk area (high, medium, or low) indicated by either words or stoplight colors (red, yellow, or green). Each risk area should be documented using evaluation criteria, which includes schedule and cost rough order of magnitude impacts. The risk evaluation criteria described below include definitions for technical, schedule, cost, resources, and management processes. Appendix C is provided as a sample template for the out-brief presentation.

3.7 IBR RISK AREA CRITERIA

Technical, Schedule, and Cost Risk – Evaluation Criteria (Example):

Recall the five types of risk previously discussed in Section 2.3, IBR Planning:

Technical Risk - Ability of project's technical plan to achieve objectives of the SOW. Includes effects of available technology, software development capability, design maturity, etc.

Schedule Risk - Adequacy of time allocated for performing defined tasks to (i.e., duration estimates) successfully achieve the project schedule objectives. Includes effects on schedule of interdependency of scheduled activities to achieve project milestones and supports PM's ability to identify critical path.

Cost Risk - Ability of contractor to successfully execute project cost objectives recognizing relationships of budget, resources, funding, schedule, and scope of work as demonstrated in the PMB. Includes effects of assumptions used, for both estimates and resource allocation, on budgets for work items.

Resource Risk - Availability of personnel, facilities, and equipment when required, for performing defined tasks to execute program successfully. Includes the effects of external factors and skill level of personnel.

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Management Processes Risk - Degree to which management processes provides effective integrated cost/schedule/technical planning and baseline change control. Includes ability of processes to establish and maintain valid, accurate, and timely performance data, including data from subcontractors, for early visibility and tracking risks.

The following paragraphs are a guide that can be used for evaluating the five risk types described above.

Technical Risk – Evaluation Criteria

Low (Green) – Contractor has developed a comprehensive technical baseline plan which covers all efforts within the SOW, is consistent with contract requirements, and has adequate definition and identification of tasks in the baseline. Work scope responsibility is properly allocated to the performing organization that controls budget and schedule. Technical plan considers the effect of available technology, software development capability, human systems design options, design maturity, rework, etc. Presented plan has identified opportunities to mitigate all medium and high-risk areas. Has little potential to cause disruption of schedule, increase costs, or degradation of performance. Normal contractor effort and normal Government monitoring will probably be able to overcome difficulties.

Medium (Yellow) – Technical plan does not cover some effort within the SOW, but is consistent with most contract requirements, and has adequate definition and identification of tasks in the baseline. Any omitted tasks have no material effect on Key Performance Parameters (KPPs) or (Technical Performance Measurements (TPMs)). All significant work scope responsibility is properly allocated to the performing organization that controls budget and schedule. Technical plan does not fully consider the effects of available technology, software development capability, human systems design options, design maturity, rework, etc. Few identified opportunities are available to mitigate potential risk areas. Special contractor emphasis and close Government monitoring will probably be able to overcome difficulties.

High (Red) - Technical plan does not include significant efforts within the SOW, is not consistent with contract requirements, lacks adequate definition and identification of tasks in the baseline, or will not meet KPPs/TPMs as currently planned. Work scope responsibility, in many cases, is not properly allocated to the performing organization which controls budget and schedule. Technical plan does not consider the effects of available technology, software development capability, human systems design options, design maturity, rework, etc. The approach does not identify risk mitigation plans to bring program within acceptable risk and is likely to cause a significant disruption to schedule, increased cost, or degradation of performance. Risk may be unacceptable even with contractor emphasis and close Government monitoring.

Schedule Risk

Program Critical Path definition:

The program critical path is the sequence of discrete tasks/activities, WPs, and PPs in the network that has the longest total duration through the entirety of the contract or project. The program critical path, through the schedule integration process, will result in those associated critical path program milestones, key tasks/activities, and Integrated Master Plan (IMP) events to be represented in addition to the discrete tasks/activities, WPs, and PPs. Once established, the critical path will demonstrate a continuous timeline from project start (or status date) to contract completion date with all time periods being represented, at the minimum, by the lowest level/tier of discrete tasks/activities, WPs, and PPs in which performance will be taken.

‘Technical Approach’ definition (in relation to critical path):

The term ‘technical approach’ to critical path refers to the methodology in which the demonstrated critical path was constructed. Proper ‘technical approach’ for a critical path would be represented by:

- Representation of all time periods throughout the path by the lowest level of discrete tasks/ activities (i.e., no gaps and the proper level of task is present)
- Proper demonstration within the program critical path of horizontal and vertical integration from discrete tasks/activities, WPs, and PPs up to the highest level/tier IMS schedule (program milestones, key tasks/activities, IMP events etc...)
- The text description for each of the discrete tasks/activities, WPs, and PPs on the path represents an appropriate level of visibility into what the task entails
- No evidence of improper use of lead/lag influencing the ability to produce an accurate program critical path
- No evidence of improper use of constraints influencing the ability to produce an accurate program critical path

Schedule Risk - Evaluation Criteria

Low (Green) – Low risk in adequacy of time allocated for performing defined tasks to successfully achieve the project schedule objectives. All required contract work scope is represented in the baseline schedule. Proper technical approach is demonstrated in the construction of the program critical path.

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Virtually all work task plans within planning window are of appropriate (shortest) duration. Virtually all work task plans beyond the planning window are of appropriate duration. Virtually all work task plans demonstrate logical float with minimized values, follow a logical sequence of work, and support intermediate/master schedules and contractual milestones. Use of constraints and lead/lag are minimized in order to assess risk/opportunities to the critical path. Discrete task interdependencies, including major critical subcontract work, clearly identifies the program critical path to completion of contract and are able to demonstrate critical paths to all major program milestones and/or IMP events. Normal contractor effort and Government monitoring are expected to resolve documented difficulties.

Medium (Yellow) – Medium risk in adequacy of time allocated for performing defined tasks to successfully achieve the project schedule objectives. Most required contract work scope is represented in the baseline schedule. Proper technical approach is demonstrated in the construction of the program critical path. Greater than or equal to 80% of work task plans within the planning window are of short duration. Greater than or equal to 80% of work task plans beyond the planning window are of appropriate duration. Greater than or equal to 80% of work task plans demonstrate logical float with minimized values, follow a logical sequence of work, and support intermediate/master schedules and contractual milestones. Use of constraints and lead/lag is apparent but minimized in order to assess risk/opportunities to the critical path. The schedule is capable of forecasting downstream impacts to the demonstrated program critical path and/or most of the major critical subcontract work, program milestones and/or IMP events. Special contractor emphasis and close Government monitoring are expected to resolve documented difficulties.

High (Red) – Inadequate time allocated for performing defined tasks to successfully achieve the project schedule objectives. Much of the required contract work scope is not represented in the baseline schedule. Proper technical approach to critical path is not evident. Less than 80% of tasks are of short duration within the planning window. Less than 80% of work task plans beyond the planning window are of appropriate duration. Less than 80% of work task plans beyond the planning window are of appropriate duration. Less than 80% of work task plans are logically sequenced to support minimal float values, and support intermediate/master schedules and contractual milestones. Use of constraints and lead/lag are not minimized. Proper technical approach to critical path is not evident. Program lacks a valid critical path in which to assess schedule risk and the ability to forecast impacts to major critical subcontract work, downstream program milestones, and/or IMP events. Risk is unacceptable even with contractor emphasis and close Government monitoring.

Cost Risk - Evaluation Criteria:

Low (Green) – PMB is executable within the project cost objectives for the authorized work scope. Baseline is derived from a sound BOE using historical

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data or similar programs and fully aligns with the project schedule. Values have been adjusted using documented assumptions/complexity factors. Budget values, time phasing, and breakout between labor/material/other direct cost assigned are reasonable.

Medium (Yellow) – PMB is marginally executable within the project cost objectives for the authorized work scope. Baseline is derived from a sound BOE using historical data or similar programs and mostly aligns with the project schedule. Values have been adjusted using documented assumptions/complexity factors. Budget values, time phasing, and breakout between labor/material/other direct cost assigned are optimistic. May cause a moderate increase in cost. Special contractor emphasis and close Government monitoring will probably be able to overcome difficulties.

(Red) - PMB does not fully address program requirements and is not executable within the project cost objectives for the authorized work scope. Baseline is not derived from a sound BOE using historical data or similar programs and does not align with the project schedule. Adjusted values do not have documented assumptions/complexity factors. Budget values, time phasing, and breakout between labor/material/other direct cost assigned are inadequate given funding, schedule, and resource constraints, and is likely to cause a significant increase in cost. Risk may be unacceptable even with contractor emphasis and close Government monitoring.

Resource Risk - Evaluation Criteria:

Low (Green) – Resources (facilities, personnel, skills, etc.) to support task planning within the project schedule are adequate, taking into consideration any/all resource availabilities, constraints, and their limitations. Has little potential to cause disruption of schedule, increased cost, or degradation of performance. Normal contractor effort and normal Government monitoring will probably be able to overcome difficulties.

Medium (Yellow) – Resources (facilities, personnel, skills, etc.) to support task planning within the project schedule are inadequate; availabilities and constraints were not fully considered. Can potentially cause some disruption of schedule, increased cost, or degradation of performance. Special contractor emphasis and close Government monitoring will probably be able to overcome difficulties.

High (Red) – Resources (facilities, personnel, skills, etc.) to support task planning within the project schedule are inadequate; availabilities and constraints were not fully considered and likely to cause a significant disruption of schedule, increased cost, or degradation of performance. Risk may be unacceptable even with contractor emphasis and close Government monitoring.

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Management Processes Risk - Evaluation Criteria:

Low (Green) – Management processes provide timely and accurate performance data. Processes are in place for Baseline Maintenance, Risk Management, Scheduling, EAC updates, Subcontract Management, Managerial Analysis, and revisions. All Management processes are being implemented in accordance with the System Description and internal operating instructions and provide effective integrated cost/ schedule/ technical planning and baseline change control. Has little potential to cause disruption of schedule, increased cost, or degradation of performance. The schedule is 100% traceable to the cost system, resource plans, contract WBS, and SOW paragraphs. Demonstrates effective, proactive use of EVM to manage the critical path, predict and mitigate cost and schedule risks, and execute the program successfully meeting all program requirements. Maintains timely and realistic EAC assessments including potential risks, opportunities, and cost containment measures. Earned value methods are appropriate, provide objective determination of progress, and correlate with technical achievement. These processes are formally documented and are being used to manage the program. Few issues have been identified with the processes or how they are being applied. Management processes will provide timely and accurate performance data. Has little potential to cause disruption of schedule, increased cost, or degradation of performance. Normal contractor effort and normal government monitoring will probably be able to overcome difficulties.

Medium (Yellow) – There are concerns the management processes may hinder timely and accurate performance data. Most, but not all, processes are in place for Baseline Maintenance, Risk Management, Scheduling, EAC updates, Subcontract Management, Managerial Analysis, and revisions. Most Management processes are being implemented in accordance with the System Description and internal operating instructions and provide integrated cost/ schedule/ technical planning and baseline change control. Can potentially cause some disruption of schedule, increased cost, or degradation of performance. The schedule is generally traceable to the cost system, resource plans, contract WBS, and SOW paragraphs with few discrepancies. Conducts periodic EAC assessments, but does not capture all high/moderate risk items. Earned value methods could be more objective and correlate more closely with technical achievement. Some processes are not fully documented. Discussions indicate that the CAM area is not correctly using the management processes. There are concerns that the management processes may hinder timely and accurate performance data. Can potentially cause some disruption of schedule, increased cost or degradation of performance. Special contractor emphasis and close Government monitoring are expected to resolve documented difficulties.

(Red) – There are concerns the management processes will prevent accurate and timely performance data. Few management processes are in place for Baseline Maintenance, Risk Management, Scheduling, EAC updates, Subcontract Management, Managerial Analysis, and revisions. Few Management processes are being implemented in accordance with the System

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Description and internal operating instructions and provide integrated cost/ schedule/ technical planning and baseline change control. The approach is likely to cause a significant disruption of schedule, increased cost, or degradation of performance. The schedule is not clearly traceable to the cost system, resource plans, contract WBS, and SOW paragraphs. There is inadequate integration between cost and scheduling systems. Maintains an unrealistic EAC. Earned value methods are subjective and do not correlate with technical achievement. Processes are not documented. Discussions indicate that the CAMs are not using the management processes. There are concerns that the management processes may hinder timely and accurate performance data. Can potentially cause some disruption of schedule, increased cost or degradation of performance. Risk is unacceptable even with contractor emphasis and close Government monitoring.

3.8 IBR Ratings

The team should base the ratings on the specific evaluation criteria established by the PM's during the IBR Preparation. The following provides a sample format for summarizing the areas of risk related to the project WBS.

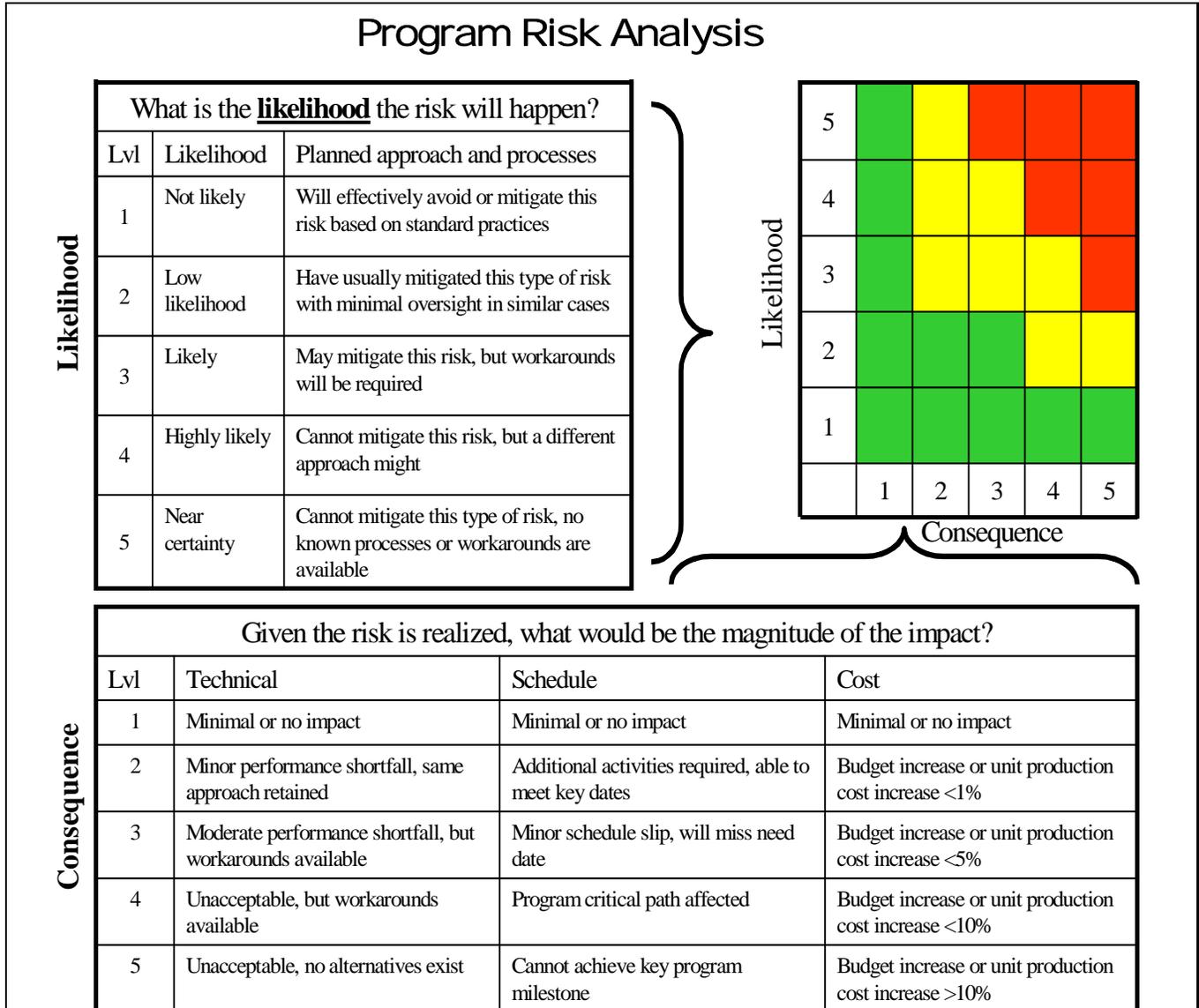
WBS	Technical Risks	Schedule Risks	Cost Risks	Resource Risks	Management Process Risks
1A					
1B					
2A					
2B					
2C					
3					

A sample IBR out-brief can be found in Appendix C.

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The Program Risk Cube, shown below, is to be used to make a preliminary assessment of new risks identified during IBR. Any new risk will be brought before the Program’s Formal Risk Council for review and resolution.

Technical, Schedule, and Cost Risk – Evaluation Criteria (Example):



4 IBR CLOSEOUT

4.1 General

Once the IBR out-brief is completed, the closeout portion of the IBR process begins with the IPT review of all corrective actions identified during the IBR and the establishment of a plan to formally close-out the IBR.

At this point, the PM's assesses whether IBR objectives have been met:

Has the government and contractor agreed on a plan of action to handle the identified risks?

Has the government and contractor achieved a mutual understanding of the baseline plan and its relationship to the underlying Earned Value Management System (EVMS)

Has the adequacy of the performance measurement baseline (scope, schedule, budget, resources and management processes) been assessed?

Will the identified risks be quantified and incorporated in an updated Estimate At Completion (EAC)?

The PM's should agree on the closure plan of action and identify the individual(s) responsible for all identified risks.

4.2 Letter of Findings

After the IBR, a Letter of Findings is sent to the contractor by the Procuring Contracting Officer (PCO). The EVM analyst works with the Government IPT generating the Letter of Findings. The purpose of the letter is to summarize all Government concerns found during the IBR and to request a corrective action plan from the contractor. The corrective action plan should identify proposed corrective/preventative actions, responsibility assignments, and projected completion dates. The IBR CARs or a Concern Area summary spreadsheet would typically be acceptable attachments to the Letter of Findings. See Appendix D for a sample Letter of Findings.

As an alternative, the Government and contractor could agree on a corrective action plan immediately after the IBR out-brief to ensure more timely resolution of issues. This will make certain that the contractor understands the concerns and that the government agrees with the corresponding corrective action plan. This can speed resolution of the CARs and closeout of the IBR.

4.3 Tracking Concerns

Tracking of the contractor's progress in resolving each Government concern rests with the Government IPT, including the DCMA team representatives located at the contractor's facility. The EVM analyst works closely with the IBR team ensuring all actions are closed. All CARs must be entered into the EVM Risk Database and tracked through to resolution. It is the responsibility of the Performance Measurement Deputy Team Lead to ensure that the CARs are entered into the Database and followed through closure.

If there are major action items resulting from the review, the status needs to be given, as well as how they are being addressed. Program Management Reviews are also another good place to have the Government/contractor activity follow-up on any actions that resulted from the review. Approval of corrective actions rests with the Government IPT, and most likely would be an iterative process. Additionally, identified risks need to be quantified and used as a basis to update the program Estimate At Completion (EAC).

4.4 IBR Closeout Letter

The Government PM approves close out of the IBR by acknowledging that all CARs have been closed and are acceptable to the Government IPT. An IBR Closeout Letter is also sent to the contractor indicating closeout of the IBR. See sample IBR Closeout Letter in Appendix E.

4.5 Follow-up IBR

Once the IBR is completed, emphasis shifts to the management action. Management action can indicate the correlation of actual performance with the PMB and enable a continuous, mutual understanding of project risks. Failures to adequately achieve PMB estimates indicate existing or impending problems or deviations and possible program failure. Deviations from the PMB will point out potential areas of risk requiring immediate and decisive management attention, action and resolution. When assessment reveals a potential or actual deviation, managers should assess their awareness and understanding of the risks associated with the variance to the PMB.

Risks may change with contract modifications, funding changes, replanning, scope/schedule changes, changes to the acquisition plan, or higher-level authority direction. Also, a new PM may raise the question "Is another IBR necessary?" Such changes would require the preparation of a revised PMB and subsequent PMB assessment, but would not necessarily require an IBR. Decision as to whether to conduct a follow-up IBR is at the discretion of the Government PM and IPT. The objectives and outcomes of a follow-up IBR are the same as those for an initial IBR. The PM's use of the management processes provides the source of ongoing mutual understanding that can reduce or eliminate the need for future IBRs. The intent is for the IBR to be a continuous

part of the process of program management by both the Government and the contractor.

5 MANAGEMENT PROCESSES

Management processes that supplement the IBR Process include the following:

5.1 Baseline Maintenance Process

This process maintains the PMB as a current depiction of the plan for accomplishing the remaining work. This process should readily accept changes to the PMB caused by the program dynamics discussed earlier.

5.2 Risk Management Process

The risk management process documents and classifies risks associated with the PMB. The PM's should document action risks from the IBR in risk management planning. Each action risk addressed in risk management planning should be classified as to its probability of occurrence, consequences, handling, and identification of the individuals responsible for mitigation.

5.3 Business Processes

Other business processes include scheduling, ETC, earned value methodology, and managerial analysis. Each of these processes supports the management of the project. Inappropriate or inadequate use of these processes may not only fail to identify project risks, but may actually add risk to the project.

APPENDICES

6 APPENDIX A: SAMPLE IBR NOTIFICATION LETTER



<Company Name>
<Company Address>

Ref: (a) Contract <Contract Number>

Dear <Company Contracting Officer>:

The < PMA Name> Integrated Product Team (IPT) plans to conduct an Integrated Baseline Review (IBR) on the <Program Name> in <Company City and State> <Review Dates>.

The purpose of the IBR is to achieve a mutual understanding of the Performance Measurement Baseline and its relationship to the underlying Earned Value Management (EVM) systems and processes. The objectives are to gain insight into cost and schedule risk areas associated with the remaining effort, as well as develop confidence in the program's operating plans. This will be accomplished by evaluating the performance measurement baseline to ensure it captures the entire remaining technical scope of work, is consistent with contract schedule requirements, and has adequate resources assigned.

Enclosed is a list of administrative and documentation requirements that need to be submitted electronically for government review prior to <Date Documentation Required>. Forward all electronic submissions to <POC email address>. Please note the IBR team requires non-escort badges, a working area with tables, access to a fax machine, printers, and telephones.

IBR team training is scheduled for <Training Dates>. <Company Name> personnel are invited. The location of the training, tentative agenda and the list of proposed team members will be provided under SEPCOR.

<Government IPT Lead's Name> will be the IBR Team Leader for this review. Questions concerning the IBR may be directed to <Government IPT Lead's Name> <Government IPT Lead's Phone Number>, or <EVMS Analyst's Name> <EVMS Analyst's Phone Number>.

If you have any questions pertaining to this notification, contact <Contracts Specialist's Name>, at <contracts Specialist's Phone Number>.

Sincerely,

<PCO'S Name>
Procuring Contracting Officer

Encl: Review Requirements

Copy to: PEO <>
DCMA HQ
DCMAC-C
DCAA Resident Office

REVIEW REQUIREMENTS

- Organizational chart(s)
- Responsibility Assignment Matrix (RAM)
- Control Account Plans (CAP): A plan of all effort to be performed in a Control Account. The CAP provides a means to identify and display detail subdivisions of the effort into Work Packages and Planning Packages, each with a definitive statement of work, schedule, and time-phased budget.
- Basis of Estimates (BOE), Assumptions, and Risk
- Work Authorization Documents: A form to formally authorize and budget work to the CAM.
- Schedules
- Performance Measurement Reports (internal cost/schedule reports)
- Variance analysis reports (VAR): An internal document, within an earned value management system, for the analysis and reporting of variances which breach the established thresholds.
- Estimate at Completion (EAC)/Budget Change Requests (BCR): Formal, internal documents establishing a change to the existing baseline and/or EAC.
- Control Account (CA)/Work Package (WP) summary containing:
 - Number of work packages by type of EVM method
 - Longest CA, shortest CA, mean and median duration, total value of account
 - Largest CA, smallest CA, mean and median values
 - Baseline Control Logs (Management Reserve, Undistributed Budget, Contract Budget Base)
 - Statement of Work (SOW) with Work Breakdown Structure (WBS) (or IPT) Matrix
 - Schedules (Master, Intermediate, and Detailed)
 - System Descriptions and program unique directives/procedures
- Contract Funds Status Report (CFSR)
 - All Cost Performance Reports submitted to date
 - CLIN to WBS cross-reference matrix
 - WBS/IPT Index and Dictionary
- Subcontractor listing and value of subcontracts
- All contract changes

7 APPENDIX B: SAMPLE IBR HANDBOOK

INTEGRATED BASELINE REVIEW
TEAM HANDBOOK

<PROGRAM NAME>

<CONTRACT NUMBER>

<COMPANY NAME>

<COMPANY CITY, STATE>

<IBR DATE>

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PURPOSE

The purpose of the IBR is to achieve a mutual understanding of the baseline plan and its relationship to the underlying Earned Value Management (EVM) systems and processes that will operate during contract execution. The objectives are to gain insight into cost and schedule risk areas associated with subject contract, as well as develop confidence in the program's operating plans. This will be accomplished by evaluating the performance measurement baseline to ensure it captures the entire technical scope of work, is consistent with contract schedule requirements, and has adequate resources assigned.

PROGRAM BACKGROUND

<short description of the program/product and the contractor's role>

REVIEW METHODOLOGY

<EVMS analyst's name> will serve as the IBR Focal Point and will have overall responsibility for the review. Requests for discussions, meetings, or data should be channeled through <name of analyst>.

The IBR process will include the activities listed below.

a. A review of the documentation that establishes the contractor's current and baseline plan for the contract will occur prior to and during the IBR. This will include technical scope, cost estimate to complete (ETCs), basis of estimates, budgets, resource plans, schedules, and earned value methods. Concern area reports will be submitted to the contractor as a result of pre-IBR and IBR reviews.

b. IBR training to familiarize the review team with the IBR process, purpose, and contractor's documentation.

c. Discussions with selected managers at the plant to verify the adequacy and risk related to work authorizations, budgets, ETCs, current and baseline schedules.

e. Subteam evaluations, risk assessments, and preparation of concern area reports required. Team meetings to discuss results of the control account manager discussions.

f. An exit briefing by the Team Leader covering the results and findings of the review. The Subteam Leaders will also be available at the exit brief for questions and comments.

SAMPLE REVIEW AGENDA

Tuesday, May 14, 2007

8:00- 10:00 IBR Inbriefing, Administrative Details
10:00- 11:30 Documentation Review
11:30-12:30 Lunch
12:30- 2:30 Discussion Period 1
2:30- 3:30 Period 1 Wrap up
3:30- 5:00 Team Caucus and Day 1 Closure

Wednesday, May 15, 2007

8:30-10:30 Discussion Period 2
10:30-11:30 Period 2 Wrap up
11:30-12:30 Lunch
12:30-2:30 Discussion Period 3
2:30-3:30 Period 3 Wrap up
3:30-5:00 Team Caucus and Day 2 Closure

Thursday, May 16, 2007

8:00 -10:00 Discussion Period 4
10:00-10:30 Period 4 Wrap up
10:30-11:30 Caucus/Outbrief Preparation
11:30-12:30 Lunch
12:30-3:00 IBR Outbrief & Closing Statements

SAMPLE IBR INTERVIEW QUESTIONS (USE AS GUIDELINE FOR INTERVIEW PREPARATION)

ORGANIZATION

As an introduction to the IBR team, identify (graphically is preferred) where the IPT is located in the program (OBS) relative to other IPTs. Similarly, identify the cost/schedule account(s) assigned to the IPT and which one(s) the IPT will discuss in answering the remaining questions. This response should include your area(s) of responsibility on the program, to who you report, your responsibilities to this person and the means you use to keep this person informed of status and progress.

What is the manager's scope?

The manager should be able to refer to a Statement of Work (SOW) paragraph, a Contract Work Breakdown Structure (CWBS) narrative, a work authorization document

How many people work for you and what do they do?

How do they report to you (how do you know the performance status of their work)?

How did the manager plan the work into control accounts?

a. The SOW defines the effort. The CWBS provides specifics, such as work definition. The work authorization and change documentation should show information such as the dollars/hours, period of performance, and description of the scope of work and any changes.

How did the manager ensure that all elements of the scope are planned?

The manager should be able to show the scope of work broken down into work packages and the budgets and ETC's associated with each of the work packages and planning packages. The sum of the work packages and planning packages should equal the cost account budget. The actual costs plus the ETC's should equal the Estimate at Completion.

How did the manager obtain the resources for assigned work?

Baseline resources should be identified in the work authorization document and changes in scope, cost or schedule requirements should be reflected in change request documentation.

What process did the manager use to develop the resources required to accomplish the current plan and how does this differ from the original plan?

Review the basis of estimate for reasonableness.

Does the manager believe that the budget or ETC is sufficient to perform the work? Ask the Manager to describe the resource requirement development process.

a. What is the current EAC?

How was the EAC developed?

Who reviews updates to the EAC?

Does the EAC require program manager approval?

How does the EAC compare to the BAC?

Note: IAW the EVMS System Description, the cost estimate to complete (ETC) is reviewed monthly by the cost the CAM.

b. Elicit a range of possibilities (low and high) that represents as clearly as possible the complete judgement of the CAM as follows:

-Ask the CAM the basis for his estimate (i.e., results from previous programs, etc.). Does the estimate consider past performance and does the EAC reflect the current cost performance trend?

-Identify risks/opportunities that is included/not included in the baseline. What are the major risks or challenges remaining to accomplish the CAM's or subcontractor's responsibilities?

-Ask the CAM to describe why it is a risk or opportunity.

-Exchange ideas about risks or opportunities.

-Establish the likelihood of the risk/opportunity event.

-Ask the CAM to explain the risk mitigation plan emphasizing risk mitigation milestones and associated risk performance measurement.

-Determine the impact (cost/schedule) for medium and high risks.

-Ask the CAM to consider extreme values for his effort (optimistic/pessimistic).

-Document results on the Risk Assessment Form

AUTHORIZATION

How are you authorized to begin work? (Provide an example of work authorization documentation.)

Show me your work authorization document(s), which define the work you must accomplish and relate these requirements to the work remaining within your team/WBS element at the time the cost to complete, was analyzed/developed.

BUDGET

What role did you play in formulating the budget?

How did you arrive at your budget figures? Do you have the backup or worksheets from which you arrived at your estimates?

Was there a negotiation process for your budgets after contract award? Is your budget adequate?

How were you advised of budget? Of tasks? Of schedule? Of changes?

CONTROL ACCOUNT

How many control accounts are you responsible for and what is the total dollar value of your accounts? May we see a control account plan?

How are your budgets time-phased, and is this reflected in your control account plan?

How do you status your accounts? How does the performance status of your accounts get into the system?

Do you have any LOE accounts? Please describe the tasks of these accounts.

Do you have any control accounts that contain a mixture of LOE and discrete effort? What is the highest percentage of LOE within an account that also contains discrete effort?

How do you open a control account?

How do you close a control account?

What does your computer run show when a control account is opened or closed?

What reports do you receive that give you cost and schedule progress of your control accounts?

WORK PACKAGE

What percent of your work is measured or discrete effort? What percent is Level of Effort (LOE)?

How does your work package structure (or template) relate to the Contract Work Breakdown Structure (CWBS)? Please discuss with actual examples.

How are your work package activities related to the Master Program Schedule or underlying intermediate supporting schedules? Actual examples will support this discussion.

How was the budget time-phased for each work package, i.e., what was the basis for the spread? Is the time-phased budget related to planned activities of the work package?

For the example control account, what is your total (IPT) budget amount? Of this total budget amount, how much is distributed to work packages and how much is retained in planning packages? Do you have an undistributed budget and management reserve account?

Do you use interim milestones on any of your work packages to measure BCWP?

How do you define a work package? What is the difference between a work package and a planning package?

How many work packages do you have responsibility for?

What options does your EVM system provide for taking BCWP?

Do your control account plans indicate the method used in taking BCWP?

How do you know when a work package is opened or closed?

Have you ever opened work packages earlier than the scheduled start date? If so, how can this be accomplished?

Who prepares the budgets for your work packages?

Demonstrate how you earn BCWP in the same way that BCWS was planned?

Can you provide examples of how you measure BCWP or earned value for work-in-process?

Does anyone review labor hours charged to your work packages?

Do you ever have discharges to your work packages? How are these corrected?

PLANNING PACKAGE

What is the procedure and time frame for discretely developing work packages from the planning packages?

Are your planning packages time-phased?

SCHEDULE

What are your schedule responsibilities?

What schedule milestones did the manager use in planning the cost account(s)? Ask the Manager to show the team the schedule milestones used in the planning of the cost accounts. How does the current schedule compare with the baseline schedule?

The manager should discuss:

- Relationships of work packages to milestones.
- Schedule interfaces and constraints.
- Manning levels to support schedule milestones.
- Relationships to other organizations/IPTs.
- Schedule impacts related to other work/organizations.
- Level of Effort tasks that support the schedule.

How did the manager time-phase the work to achieve the schedule?

All work should be logically planned in compliance with the SOW and schedule.

Has the manager considered risks in developing the plan?

Has the manager adequately planned and time-phased resources to meet the plan?

Do you directly support any major master or intermediate schedule milestones?

Do you have detailed schedules below the work package?

How do detailed schedules below the work package support the work package schedules?

How are you informed by other organizations or IPTs of changes in their output that may affect your control accounts schedules? (Horizontal Trace)

Demonstrate that the progress reflected on the Master program Schedule or underlying intermediate schedules correlates to the relative progress reflected in the EVM system.

CHANGE CONTROL

Have you had retroactive changes and/or replanning efforts to the budget baseline?

Have you had any changes to your accounts? (Provide example of how these are handled.)

Are budget transfers between your accounts and management reserve and undistributed budget traceable? How?

Do you have any work originally planned for in-house that was off-loaded? How was this accomplished?

For off-loaded work, was the budget transferred directly, returned to management reserve, or to undistributed budget?

EARNED VALUE

Is progress toward accomplishing identified and planned activities used to determine earned value? If yes, describe the process. If no, how is earned value assessed?

What type(s) of earned value measurement indicators have been assigned by the manager?

Is the earned value method chosen appropriate for the type of work being performed?

Does the method chosen objectively measure performance?

Does the earned value assessment correlate with technical achievement?

What methods and tools does the manager use in administering the plan?

Some examples are weekly or monthly earned value reports; master, intermediate, and detail schedules; periodic meetings; independent assessments of technical progress, etc. Determine how changes are incorporated. Evaluate the effect of changes on performance measurement information. Assess whether changes are done in accordance with the EVM system description.

What formal training have you had in EVM?

Do you feel you have had adequate training or do you need more?

ESTIMATE AT COMPLETION (EAC) / COST-TO-COMPLETE (CTC)

What does Estimate at Completion (EAC) mean to you? How do you arrive at an EAC?

How often is your EAC revised?

What guidance or instructions did you receive from management in order to develop your EAC?

If written instructions were provided, what were these and who authored them?

Define the work remaining within your IPT/WBS element at the time the cost to complete was analyzed/developed. Identify effort to be performed by major subcontractors.

How did you determine the effort or resource amounts required to complete the remaining work?

- a. Outline the steps you took to arrive at your estimate.
- b. What program/performance risks have been considered in your estimate?
- c. What performance level was assumed and why?
- d. How does the projected performance level compare to your experienced level of performance?
- e. How are EACs calculated for material?

Demonstrate that your EAC is segregated by labor, material, and other direct charge categories.

What current and future events and performance factors have been included in your current cost to complete? Examples: task changes, make-buy decisions, performance factors, etc.

Describe and demonstrate how you projected the cost to complete over the time remaining on the contract.

Discuss your management's involvement in developing the estimate of the cost remaining to complete your program tasks.

SUBCONTRACTOR

Are you responsible for any subcontracts? How do you monitor performance on these? How do you take BCWP?

How are subcontracts managed? Ask the Subcontracts Manager to describe the process for managing subcontractor earned value.

- a) What subcontracts are your responsibility? What criteria determines whether a subcontract or a Purchase Order is used? What type of subcontracts exist or plan to be negotiated (fixed price vs. cost plus)?
- b) What are the major challenges or risks to the subcontractor in accomplishing program responsibilities?
- c) Are these items tracked by the Program Management Office or Functional Manager in a risk register or plan?
- d) What subcontractor technical, schedule and cost reports are required to be submitted to you or your team?
- e) What is your total budget (for each subcontract and the corresponding control accounts)? How is profit or fee included in your budget?
- f) How was the budget established? Does it reflect an achievable value for the resources to fully accomplish the control account scope of effort?
- g) What rationale was used to time phase the budget resources into monthly or weekly planning packages, tasks, work packages or summary activities?
- h) Are the time phased budget resources consistent with your program master schedule? Show the trace from your control account to intermediate or master schedules.
- i) When are you required to detail plan planning packages or summary activities? What schedule document or system is used to develop detail planning for your control account?
- j) How do you know that the work within your control accounts to be performed by subcontractor has been properly planned?
- k) How do you check the status and performance of work on your control account by a subcontractor?
- l) How are actual costs recorded against your cost account?
- m) What is Earned Value (or BCWP)?
- n) What techniques are available for determining Earned Value? Explain the application of each technique.

- o) How and when is risk assessment or risk management plan updated for technical/schedule/cost risk items affecting your control account?
- p) How and when is the actual and forecast schedule update provided for your control account effort?
- q) Are variance analysis thresholds or requirements established for reporting technical, schedule or cost variances to planned goals established for your control accounts? Do you informally/formally report the cause of variance, impact or corrective action for these variances?
- r) What is your current Estimated Cost at Completion (EAC)? How often is it updated? Does your EAC reflect current cost performance trend?
- s) What document authorizes you to begin work on a subcontract?
- t) For these selected work packages, what specific outputs, products, or objectives are to be accomplished?
- u) What is specifically needed by you from other control account managers to generate subcontractor outputs or products? How do you monitor its progress?
- v) Who specifically needs the subcontractor outputs or products to perform their program functions? How do you status others on the progress of your outputs to them?
- w) Specifically, what technical items are currently producing the greatest risk to achieving technical, schedule or cost goals? Are these items reviewed as part of a risk assessment, management plan or other reporting tool to your boss or the program management office?
- x) How do you determine whether the reported cost variance is due to subcontractor effort or an company overhead rate?

How are material budgets planned?

How do you track material prior to delivery?

How do you track material when deliveries are late?

When is BCWP or earned value taken on material?

How much BCWP is earned when material is withdrawn from inventory or received?

ANALYSIS

Do you have any variance thresholds of your control accounts?

What are the variance thresholds of your control accounts?

How do you know when you have exceeded a threshold?

How do rate changes affect your control accounts?

Who is responsible for rate variance analysis?

Will an account accept BCWP or ACWP if there is no BCWS?

How do you know when you must prepare a variance report?

Do you have samples of any variance analysis reports? (Do these show a statement of problem, the variance, cause, impact and proposed corrective action?)

Who receives your variance reports? What action is taken on the reports?

Which reports do you use most frequently? Why?

NOT CATEGORIZED

How are you reporting labor, material, and other direct costs?

Has your IPT effort been impacted by any directed contractual change? When did you receive authorization to proceed with the change and how did your IPT incorporate the change in its planning (schedule and budget time phasing)?

Demonstrate that the current planning for your IPT's product delivery/services provided supports program IPTs and contract delivery commitments.

What changes have been made to the control account planning (technical definition of scope, schedule, budget resources, ETCs)?

- a) What documents are involved in a change to the control accounts' scope of work, schedule, budget, or ETC?
- b) Did the CAM rephase or replan work? In process work? Completed work? Unopened work packages? Make current period or retroactive changes?
- c) Did the CAM transfer budget between control accounts?
- d) How have contract changes or other changes been incorporated into the control account?
- e) If one of the control accounts had an unfavorable cost or schedule variance did the CAM replan or request management reserve to reduce or eliminate the variance?

DISCUSSION GUIDELINES

Location of the Discussion

The Contractor will provide conference rooms.

Structuring the Discussion

- a. Have an objective. What is the purpose for speaking with this particular manager? What do you expect to gain from the discussion?
- b. What questions will you ask to achieve the objective?
- c. Prepare a tentative list of basic questions to serve as a framework for the discussion. This will open the way for spontaneous in-depth conversation and follow-up questions.

The Discussion Process

- a. Introduce yourselves and explain the purpose of the review.
- b. Be well prepared and maintain a tempo that keeps the discussion moving toward the satisfaction of your objective. Be friendly and non-confrontational. Put the manager at ease. If there appears to be confusion, restate your question. Clarify any misunderstandings between you and the manager.
- c. Take notes. Your notes will assist subteam members in comparing and confirming information for completing subteam discussion assessments and concern area reports following the discussions.
- d. Request copies of documents only if necessary to accomplish the objective of the discussion. If documentation is not readily available, fill out a documentation request and get a commitment of where and when the documents will be available.
- e. Watch the time. Managers are busy people. But take the time that you need, and do not leave until you are satisfied that the discussion is complete.
- f. If disagreements arise, do not argue with the contractor's personnel. Write a description of the disagreement in a Concern Area Report to the IBR Focal Point, and let her handle any continuing discussion with the contractor.

After the Discussion

Complete the written discussion assessment form directly after the discussion. Use this as a reference during the daily Government team meetings. Submit the forms and all concern area reports to the IBR Focal Point.

Be sure to follow up on any outstanding issues or questions, especially if you address them in your discussion assessment forms, or if you have committed to obtaining additional information in support of your assessments. Do not leave any loose ends.

Team Assessments:

The following provides additional guidance for assessing the adequacy of the contractor's scope, schedules, resource plans, and earned value methods.

- a. **Technical Scope:** Evaluate the technical content described by the CAM and compare that to the definitions provided in the Contract Work Breakdown Structure (CWBS) Dictionary, control accounts, and work packages. Ensure that the work scope described is consistent with the Statement of Work, CDRLs, and specifications and that it is clear, sufficiently detailed, well understood, and complete. Ask the Control Account Manager if there is any planned effort that is not included or fully identified in the documentation.
- b. **Schedules:** Examine the detailed, intermediate, and master schedules. The scheduled milestones and activities reflected in the work packages and cost account plans should be consistent with intermediate schedules and contract milestones. The sequence of planned activities/events should be logical. Time frames allocated to accomplish these schedules should be reasonable. To the extent practicable, schedules should identify the significant task interdependencies needed to meet the requirements of the contract. Significant decision points, constraints, and interfaces should be identified as key milestones. Ask the Cost Account Manager to identify any known risks or barriers in meeting the schedules.
- c. **Resource Plan:** Determine the adequacy of the amount and time-phasing of hours, materials, and other required resources planned to accomplish the work identified in control accounts, work packages, and planning packages is adequate. The basis of estimate should be reasonable. Determine whether the contractor has or anticipates potential difficulties in obtaining or using the required resources to accomplish the work. Ask the Control Account Manager to identify any known risks in meeting the plan.
- d. **Earned Value Methods:** Be familiar with the contractor's earned value methods. Ask the Cost Account Manager why a particular type of earned value method was chosen. Determine whether the contractor is using the best method for the identified type of work. There should be a meaningful

correlation between technical achievement and cost and schedule control. Ask the Control Account Managers how they ensure that measurable earned value assessments correlate with technical achievement. Ensure that earned value methods and assessments are as objective as possible, that the assessments represent actual technical progress, and that a reasonable quantitative approach exists to assess technical status.

DOCUMENTATION GUIDELINES

Each Sub-Team Leader is responsible for documenting the subteam's assessments and findings. The Team Leader uses the documentation to support overall team assessments and required corrective actions.

The following forms have been developed to facilitate review documentation.

a. Discussion Assessment Form: The subteam should complete one of these forms (page #24) after each interview/discussion. The Subteam Leader is responsible for reviewing this form, and submitting it to the Team Leader or his/her review facilitator. Concerns noted should be documented in the Concern Area Report.

b. Concern Area Report: A report (page #26) should be completed for each concern noted. Generally, concerns noted are items that require follow-up action. One of these forms should be completed for each concern noted. Information on this form should be clear and as specific as possible because it will be provided to the contractor to obtain a response and resolution. Spell out abbreviations. These forms should be submitted immediately to the Team Leader, and as soon as practical to the contractor. Contractor responses should be provided to the team as soon as possible. Again, the Sub-Team Leader is responsible for reviewing this form, and submitting it to the Team Leader or his/her review facilitator. All forms will be compiled and logged.

c. Documentation Request Form: During your interviews/discussions, you may find that you require additional documentation to gain a better understanding of the issue in question. Use the form (page #25) to obtain required documentation. Please submit the completed form to the Team Leader and/or review facilitator. All forms will be tracked in order to reduce redundancies and ensure receipt of all the requested material.

d. Sample Risk Assessment Form: A designated team member should complete one of these forms (pages #27-30) for each control account after each interview/discussion. The Sub team Leader is responsible for reviewing the form, and submitting it to the Team Leader or his/her review facilitator. All forms should be compiled and logged.

IBR DISCUSSION ASSESSMENT FORM

LOG# _____ Team _____ Date: _____

1. Manager: _____ Area of Responsibility: _____

2. TECHNICAL SCOPE (Statement of Work):

- _____ Is there adequate identification, definition, and flow down?
- _____ Consistent with contract requirements?
- _____ Adequate assignment of responsibility, authority & accountability?

3. SCHEDULES Period of Performance: _____

- _____ Realistic planned durations?
- _____ Logical sequence of work planned?
- _____ Consistent with intermediate/master schedule?
- _____ Significant interdependencies, interfaces, & constraints?
- _____ Support contract milestones?

4. COST AND RESOURCE RISK

- _____ Sound basis of estimate?
- _____ Budget reasonableness (time phasing, levels, mix, type)?
- _____ Budget adequacy (time phasing, levels, mix, type)?
- _____ Resource availability?
- _____ Adequate budget/etc values assigned?
- _____ Provisions for scrap, rework, retest or repair?

5. MANAGEMENT PROCESS RISK

- _____ Integrated cost/schedule/technical planning?
- _____ Baseline change control?
- _____ Accurate and timely management/performance data?
- _____ Adequate determination and maintenance of EAC's?
- _____ Adequate subcontract management?
- _____ Appropriate planned earned value methods?
- _____ Objective determination of progress?
- _____ Methods correlate with technical achievement?

6. Brief Summary of Discussion

4. Concern Area Report (CAR) prepared?

DOCUMENTATION REQUEST FORM

Log #: _____ Sub-Team _____ Date: _____

Submitted by:

1. Manager Interviewed:

Control Account(s):

Area(s) of Responsibility:

2. Document Description or Type.

3. Reason for Request:

4. Remarks/Comments:

Sub-team Leader Signature: _____

Team Leader Signature: _____

IBR CONCERN AREA REPORT

WBS / CA _____ Log # _____ Date: _____

Submitted by: _____

Subject of Finding:

Discussion (Explain root problem and cause. Provide impact assessment. Quantify problem and impacts where possible. Provide recommended actions and exit criteria for resolution. Attach exhibits if applicable. Provide reference to cost account or work package number).

Contractor's response (Address root cause of the problem, impact, corrective/preventative action plan; identify dates and POC. Identify exit criteria for corrective action).

Sub-team leader signature : _____

Team leader signature: _____

RISK EVALUATION CRITERIA

The IBR Discussion Evaluation Summary form and Rollup charts need all 5 types of risks for an IBR:

Technical Risk - Ability of project's technical plan to achieve objectives of scope of work. Includes effects of available technology, software development capability, design maturity, etc.

Schedule Risk - Adequacy of time allocated for performing defined tasks to successfully achieve the project schedule objectives. Includes effects on schedule of interdependency of scheduled activities to achieve project milestones and supports PMs ability to identify critical path.

Cost Risk - Ability of PMB to successfully execute project cost objectives recognizing relationships of budget, resources, funding, schedule, and scope of work. Includes effects of assumptions used, for both estimates and resource allocation, on budgets for work items.

Resource Risk - Availability of personnel and facilities when required for performing defined tasks to execute program successfully.

Management Processes Risk - Degree to which management processes provides effective integrated cost/schedule/technical planning and baseline change control. Includes ability of processes to establish and maintain valid, accurate, and timely performance data, including that from subcontractors, for early visibility and tracking risks.

The following paragraphs and one chart explain the criteria for evaluating the five risks described above.

Resource Risk - Evaluation Criteria:

Excellent (Green) – Has little potential to cause disruption of schedule, increased cost, or degradation of performance. Normal contractor effort and normal Government monitoring will probably be able to overcome difficulties.

Adequate (Yellow) – Can potentially cause some disruption of schedule, increased cost, or degradation of performance. Special contractor emphasis and close Government monitoring will probably be able to overcome difficulties.

Poor (Red) – Likely to cause a significant disruption of schedule, increased cost, or degradation of performance. Risk may be

unacceptable even with contractor emphasis and close Government monitoring.

Management Processes Risk - Evaluation Criteria:

Excellent (Green) - Processes are in place for Baseline Maintenance, Risk Management, Scheduling, Estimate At Completion updates, Subcontract Management and Managerial Analysis. Earned value methods are appropriate, provide objective determination of progress, and correlate with technical achievement. These processes are formally documented and are being used to manage the program. Few issues have been identified with the processes or how they are being applied. Management processes will provide timely and accurate performance data. Has little potential to cause disruption of schedule, increased cost, or degradation of performance. Normal contractor effort and normal Government monitoring will probably be able to overcome difficulties.

Adequate (Yellow) – Most, but not all, processes are in place for Baseline Maintenance, Risk Management, Scheduling, Estimate At Completion updates, Subcontract Management and Managerial Analysis. Earned value methods could be more objective and correlate more closely with technical achievement. Some processes are not fully documented. Discussions indicate that the Control Account Managers area not correctly using the management processes. There are concerns that the management processes may hinder timely and accurate performance data. Can potentially cause some disruption of schedule, increased cost, or degradation of performance. Special contractor emphasis and close Government monitoring will probably be able to overcome difficulties.

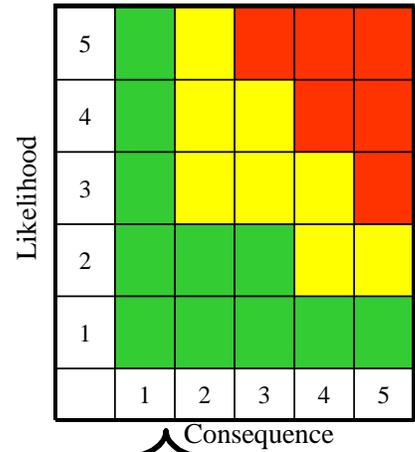
Poor (Red) – Few management processes are in place for Baseline Maintenance, Risk Management, Scheduling, Estimate At Completion updates, Subcontract Management, and Managerial Analysis. Earned value methods are subjective and do not correlate with technical achievement. Processes are not documented. Discussions indicate that the Control Account Managers are not using the management processes There are concerns that the management processes will prevent accurate and timely performance data. Likely to cause a significant disruption of schedule, increased cost, or degradation of performance. Risk may be unacceptable even with contractor emphasis and close Government

Technical, Schedule, and Cost Risk – Evaluation Criteria:

Program Risk Analysis

What is the likelihood the risk will happen?

Lvl	Likelihood	Planned approach and processes
1	Not likely	Will effectively avoid or mitigate this risk based on standard practices
2	Low likelihood	Have usually mitigated this type of risk with minimal oversight in similar cases
3	Likely	May mitigate this risk, but workarounds will be required
4	Highly likely	Cannot mitigate this risk, but a different approach might
5	Near certainty	Cannot mitigate this type of risk, no known processes or workarounds are available



Given the risk is realized, what would be the magnitude of the impact?

Lvl	Technical	Schedule	Cost
1	Minimal or no impact	Minimal or no impact	Minimal or no impact
2	Minor performance shortfall, same approach retained	Additional activities required, able to meet key dates	Budget increase or unit production cost increase <1%
3	Moderate performance shortfall, but workarounds available	Minor schedule slip, will miss need date	Budget increase or unit production cost increase <5%
4	Unacceptable, but workarounds available	Program critical path affected	Budget increase or unit production cost increase <10%
5	Unacceptable, no alternatives exist	Cannot achieve key program milestone	Budget increase or unit production cost increase >10%

(Sample) Risk Assessment Form (Sample)

WBS #	Control Acc't #	Title	CAM
1.3.1.1	1311-651	Avionic SW mod	Haupt
BAC (Hrs or \$)	EAC (Hrs or \$)	EV Method	
\$2.132M	\$2.132M	Milestone	
Risk Evaluation			
Technical	High	Moderate	Low
Schedule	High	Moderate	Low
Cost	High	Moderate	Low
Resources	Poor	Adequate	Excellent
Mgt Processes	Poor	Adequate	Excellent
Remarks Technical risk is moderate based on heavy reliance on existing code. Additionally, contractor has had limited experience with F-X A/C avionics, partially offset by the hiring of SW experts from the original vendor. Refer to Risk Item #25 in the formal risk plan. Schedule has only two weeks of float in a critical area. Schedule is achievable, but leaves little room for rework. Mgt challenges forced CAM to offset labor rate cost of high priced software eng. W/ reduced hours. Although only six months into the project control account is already experiencing a 15% cost variance, primarily due to hours. Availability of labor skills needed are readily available from prior vendor. New hires are trained and fully productive within a time span sufficient to support emergent tasks. Detailed planning of milestones is not consistent, and is not likely to accurately reflect performance. Work definition in planning packages is too vague with regard to scope and budget. Rolling wave process is not adhered to. Integration of handoffs from subcontractors is unclear. Measureable work is improperly classified as LOE.			

Glossary of Earned Value Management Terms

Actual Cost of Work Performed (ACWP). The costs actually incurred and recorded in accomplishing the work performed within a given time period. (Actual costs include the direct cost plus the related indirect cost such as overhead, G&A, etc. allocated to the activity.)

Administrative Contracting Officer (ACO). The individual within the Contract Administration Office (CAO) responsible for ensuring that the functions described in DFARS 242.302 are completed by the contractor in accordance with the terms and conditions of the contract.

Applied Direct Costs. The actual direct costs recognized in the time period associated with the consumption of labor, material, and other direct resources, without regard to the date of commitment or the date of payment. These amounts are to be charged to work in-process when any of the following takes place:

- When labor, material and other direct resources are actually consumed.
- When material resources are withdrawn from inventory for use.
- When material resources are received that are uniquely identified to the contract and scheduled for use within sixty days.
- When major components or assemblies that are specifically and uniquely identified to a single, serially numbered end-item are received on a line-flow basis.

Apportioned Effort. Effort which by itself is not readily divisible into short-span work packages but which is related in direct proportion to some other measured effort.

Authorized Unpriced Work. Contractual effort for which written authorization has been received by the contractor but for which costs have not been agreed upon and definitized into the contract.

Authorized Work. Effort which has been definitized and is on contract, plus that effort for which definitized contract costs have not been agreed to but for which written authorization has been received.

Baseline. See "Performance Measurement Baseline."

Bill Of Material (BOM). A listing of material items required to complete the production of a single unit. When actual or expected prices are applied, it becomes the Priced Bill of Material (PBOM).

Bottoms -Up Cost Estimate. An estimate derived by summing detailed cost estimates of the individual work packages and adding estimated level of effort plus appropriate indirect cost estimates. Frequently accomplished as an independent analysis by Industrial Engineering, Price Analysis and Cost Accounting.

Budget. A plan of operations for a fiscal period in terms of estimated costs or hours.

Budget At Completion (BAC). The sum of all budgets established for the contract. (See Total Allocated Budget.)

Budgeted Cost For Work Performed (BCWP) (or Earned Value). The sum of the budgets for completed work packages and completed portions of open work packages, plus the applicable portion of the budgets for level of effort and apportioned effort.

Budgeted Cost For Work Scheduled (BCWS) (or Planned Value) The sum of the budgets for all work packages, planning packages, etc., scheduled to be accomplished (including in-process work packages), plus the amount of level of effort and apportioned effort scheduled to be accomplished within a given time period.

Budgeting. The process of translating approved resource requirements into a time-phased plan for accomplishing work.

Burden. See "Indirect Expense" and "Overhead."

Burdened Cost. The sum of direct cost plus all applicable indirect cost.

Contract Budget Base (CBB). The negotiated contract cost plus the estimated cost of authorized but unpriced work.

Contract Change Order. A formal revision or change to a contract which may impact the scope of work, schedule, cost, price, and/or other contractual requirements.

Contract Data Requirements List (CDRL). A compilation of all data requirements (DD Form 1423) which the contractor is obligated to submit to the government.

Contract Funds Status Report (CFSR). A contractually required recurring report designed to provide information on contract funding availability, expenditures, projected requirements, and termination liability (DID DI-MGMT-81468).

Contract Line Item Number (CLIN). The number used within a contract to identify a specific deliverable item.

Contract Master Schedule (CMS). The highest summary level schedule for a contract, depicting overall contract phasing and all major interfaces, contractual milestones, and contract elements (sometimes called Integrated Master Schedule).

Contract Schedules. Schedules which are initiated at the direction of the customer or management to reflect program plans for development or production of deliverable items. The highest level schedule is the Contract Master Schedule supported by Intermediate Level Schedules and by lowest level detail schedules.

Contract Work Breakdown Structure (CWBS). See part (b) of Work Breakdown Structure definition.

Control Account (CA). A management control point at which budgets (resource plans) and actual costs can be accumulated and compared to the earned value, for management control purposes. A control account is a natural measurement point for planning and control since it represents the work assigned to one responsible organizational element on one Contract Work Breakdown Structure (CWBS) element.

Control Account Manager (CAM). A manager responsible for task performance of a Control Account and for planning and managing the resources authorized to accomplish such task.

Control Account Plan (CAP). A plan of all effort to be performed in a Control Account. The CAP provides a means to identify and display detail subdivisions of the effort into Work Packages and Planning Packages, each with a definitive statement of work, schedule, and time-phased budget. The CAP is sometimes used to status and display progress towards completion of these tasks and to provide forecasts of variations from original planning. Separate CAPs are used for Level of Effort work (unless actual costs are accumulated separately for work packages).

Cost-At-Completion (CAC). Actual direct costs, plus indirect costs allocable to the contract, plus the estimate of costs (direct and indirect) for authorized work remaining. The CAC is sometimes referred to as Estimate-at-Completion (EAC) or Latest Revised Estimate (LRE).

Cost Element. Typical elements of cost are: direct labor, direct material, other direct costs, and indirect cost (overhead).

Cost Incurred. A cost identified through the use of the accrual method of accounting and reporting or otherwise actually paid. Cost of direct labor, direct materials, and direct services identified to and necessary for the performance of a contract, and all properly allocated and

allowable indirect costs as shown by the contractor's books of record. (See Actual Direct Cost and Applied Direct Cost.)

Cost Performance Index (CPI). An indicator of the cost efficiency of the work accomplished for the current period(s) or cumulative-to-date as derived by the formula: CPI equals BCWP divided by ACWP, i.e., Earned Value divided by Actual Cost Incurred.

Cost Performance Report (CPR). A contractually required recurring report designed to provide information on contract cost performance status, problems, and corrective actions (DID DDMGMT-81466).

Cost Plus Award Fee/Fixed Fee/Incentive Fee. Cost reimbursement contract types where the fee is based upon: (a) the accomplishment of pre-negotiated goals (Award Fee); (b) a negotiated fixed fee amount (Fixed Fee); or (c) a risk sharing ratio within a pre-determined range based upon the contractor's ability to meet technical, cost, and/or schedule targets (Incentive Fee).

Cost Reimbursement Contracts. A category of contracts whose use is based upon payment by the government to a contractor of allowable cost as prescribed by the contract. Normally only the "best efforts" of the contractor are required. The basis for payment negotiated may be: (a) cost (no fee); (b) cost sharing; (c) cost-plus-fixed fee; (d) cost plus award fee; and/or (e) cost-plus incentive fee.

Cost/Schedule Control Systems Criteria (C/SCSC). Replaced by the Earned Value Management System (EVMS) Criteria.

Cost/Schedule Status Report (C/SSR). A contractually required report containing earned value performance information on smaller contracts. Provides status of progress on the contract.

Cost-To-Complete (CTC) Forecast. A contractor's estimate of the cost to complete the remaining tasks on a contract. Synonymous with Estimate to Complete.

Cost Variance (CV). A metric for the cost performance on a contractor program. It is the algebraic difference between the earned value (BCWP) and the actual cost incurred (ACWP). Therefore, Cost Variance equals Earned Value minus Actual Cost. A positive value indicates a favorable position and a negative value indicates an unfavorable position.

Critical Path. A sequential path of activities in a network schedule which represents the longest duration of a task or a contract. Any slippage of the tasks in the critical path will increase the duration of the task or contract.

Critical Subcontractor. A contractor performing a large or complex portion of a contract which requires a flow-down of earned value management and reporting (e.g., CPR or C/SSR)

requirements, and the integration, reviews, acceptance and control of subcontractor system and reporting by the prime contractor. Critical subcontractors are designated as a result of customer negotiation or by management or by government direction.

Defense Contract Management Agency (DCMA), Plant Representative Office (DPRO).

Government (DCMA) offices located at contractor facilities or geographic locations throughout the United States. Their primary function is contract administration. (Instead of calling these offices DPROs, DCMA now simply refers to "DCMA (city or plant)").

Defense Contract Audit Agency (DCAA). The organization tasked with monitoring a contractor's design and implementation of an acceptable accounting system.

Definitized. A contract, contract amendment, or contract supplemental agreement is considered definitized when the final contractual documents are unconditionally executed by both parties to the agreement.

Direct Cost. Any costs that may be identified specifically with a particular cost objective. That is, the portion of labor, material or other cost incurred or expended to meet contractual specifications for an end product, tool or other related service specifically identifiable to the contractually authorized task. It consists of those costs which can be reasonably and consistently related directly and finally to the contract, without distribution through an overhead unit or account.

Direct Labor. That portion of labor expended in the actual design, tooling, testing and the physical application of labor (including proofing) to material altering its shape, form, nature, or fulfilling a contractual requirement for service.

Discrete Effort. Tasks which have a specific end product or end result, and which through planning: (1) can be specifically defined and assigned a budget for accomplishment; (2) can be scheduled with clearly definable start and completion dates; and (3) contain criteria against which performance can be measured.

Discrete Milestone. A milestone which has a definite, scheduled occurrence in time signaling the finish of an activity, such as "release drawing," "pipe inspection complete," and/or signaling the start of a new activity. A type of "objective indicator."

Earned Hours. The time in standard or budgeted hours credited to a worker or group of workers as a result of their completion of a given task or group of tasks.

Earned Value (EV). The budgeted value of work accomplished. The value of completed work expressed in terms of the budget assigned to that work. It is the sum of budgets for completed

work packages and completed portions of open work packages, plus the appropriate portion of the budgets for level of effort and apportioned effort. Also known as Budgeted Cost of Work Performed (BCWP).

Earned Value Management (EVM). A management technique for measuring performance (work progress) objectively by determining the budgeted cost for work performed (EV) and comparing it to the actual cost of work performed.

Earned Value Management System (EVMS). A management system and related sub-systems implemented to establish a relationship between cost, schedule and technical aspects of a contract or project, measure progress, accumulate actual costs, analyze deviations from plans, forecast completion of contract events, and incorporate changes to the contract in a timely manner.

Earned Value Management System (EVMS) Criteria. The set of 32 statements established by DoD 5000.2-R, which define the parameters within which the contractor's integrated cost/schedule management system must fit.

Engineering Change Proposal (ECP). A proposed change, addition, or deletion to the basic contract, initiated by the contractor or customer.

Engineering Release. A procedure or method for the formal issuance of initial or updated engineering data, instructions and drawings of detail parts, assemblies and components of a new or modified product.

Estimate At Completion (EAC). Actual direct costs, plus indirect costs allocable to the contract, plus the estimate of costs (direct and indirect) for authorized work remaining.

Estimate To Complete (ETC). That portion of the EAC that addresses total expected costs for all work remaining on the contract.

Expenditure. A charge against available funds. It is evidenced by a voucher, claim, or other document approved by competent authority. Expenditure represents the actual payment of funds.

Fiscal Year. For the United States government, it is the 12 month period: 1 October through 30 September. For industry, it may be any formally selected annual accounting period including a calendar year.

Fixed Price Contracts. A category of contracts based on the establishment of a price to accomplish the required work. Types are: (a) firm fixed price; (b) fixed price with escalation; (c) fixed price redeterminable; and (d) fixed price with incentive provisions.

Front Loading. An action by a contractor to provide adequate or generous budget in the near-term budget baseline at the expense of the far-term effort. This practice delays acknowledgment of potential overrun conditions, frequently in the expectation that the contractor can recover through subsequent changes in the contract statement of work. Front loading often results from an inadequate or unrealistic negotiated contract target cost and/or unrealistically optimistic planning of far-term effort.

Functional Organization. An organization or group of organizations with a common operational orientation such as Engineering, Manufacturing, (Fabrication, Assembly), Tooling, Quality Control, Material, Finance, Contracts, etc. See Organization Breakdown Structure (OBS).

Functional Manager. A line manager or supervisor of a functional organization.

Funding Profile. A display of program funding requirements normally presented on a cumulative basis by months or quarters. Plotting of the requirements is displayed as a “stair step” chart.

Gantt Chart. A horizontal bar chart. A graphic representation used as an aid to effective scheduling and control, showing graphically on a time scale when certain events are to take place or where deadlines occur. Status is displayed by either filling the bar or adding a filled-in status bar below it.

General & Administrative Expense (G&A). Expense incurred in the overall Corporate and Division offices, i.e., their cost of staff services such as, finance, legal, contract administration, sales, marketing and independent research and development (IR&D) effort. These expenses are allocated to organizational elements on the basis of total direct and indirect cost.

Indirect Budget. The target value established for costs to be incurred by persons and/or organizational elements for tasks or expenses which do not have a direct relationship to the design, testing and/or production of the end product or contractually specified task.

Indirect Cost. Costs which, because of their incurrence for common or joint objectives, are not readily subject to treatment as direct costs. This term is further defined in FAR.

Indirect Cost Pools. A grouping of indirect costs identified with two or more cost objectives but not separately identified with any final cost objective. Such separate pools are normally established for indirect costs associated with Engineering, Manufacturing, Procurement, and/or Material, etc.

Integrated Baseline Review (IBR). A joint review by government and contractor program managers and their technical staff personnel, following contract award, to confirm that the contractor's performance measurement baseline covers the entire scope of work, that the work is realistically and accurately scheduled, that the proper amount and mix of resources have been assigned to tasks, and that proper objective indicators have been selected for measurement of task accomplishment.

Integrated Surveillance Team (IST). Collectively the representatives of those organizations working together on the acquisition and administration of a contract or contracts. This could include the PMO, DCMC, DCAA, the procuring activity integrated support components and the contractor.

Inter Divisional Work Authorization (IDWA). The document or procedure for "subcontracting" work between divisions of a company. Cost for authorized work by the performing division is transferred to the prime contracting division without G&A overhead and fee to preclude double charging on the prime contract. It is sometimes referred to as an Inter Group Work Authorization (IGWA) or as Inter Organizational Transfer (IOT).

Interim Budget. Furnished to departments on an interim basis for contractually authorized tasks for which a firm bid or estimate may not yet have been completed and negotiated. It is also used for task transfers between departments or elements of cost pending formal budget transfer. Interim budget is discontinued after budget values are formalized.

Internal Replanning. Replanning actions performed by the contractor for remaining effort within the recognized total allocated budget.

Joint Surveillance. Continual observation, by a team of Government and contractor representatives, of a contractor's earned value management system to monitor its compliance with the DoD EVMS Criteria and its proper use as a management tool.

Level Of Effort (LOE). Effort of a general or supportive nature which does not produce definite end products.

Management Reserve (MR). An amount of the total allocated budget withheld for management control purposes rather than designated for the accomplishment of a specific task or set of tasks. It is not a part of the Performance Measurement Baseline.

Master Planning Schedule (MPS). The highest summary level schedule for a contract depicting overall contract phasing and all major interfaces, contractual milestones, and program elements. (See Contract Master Schedule.)

Material. Property which may be incorporated into or attached to an end item to be delivered under a contract, or which may be consumed or expended in the performance of a contract. It includes, but is not limited to, raw and processed material, parts, components, assemblies, fuels and lubricants, and small tools and supplies.

Milestones. Events of particular significance. Finitely defined events that constitute the start or completion of a task or occurrence of an objective criterion for accomplishment. Milestones should be discretely identifiable; the passage of time alone is not sufficient to constitute a milestone. However, milestones should be associated with schedule data to document when the milestone is to occur. (See Objective Indicator.)

Negotiated Contract Cost (NCC). The estimated cost negotiated in a cost-plus-fixed-fee contract or the negotiated contract target cost in either a fixed-price incentive contract or a cost-plus-incentive-fee (or award fee) contract.

Network Schedule. A schedule format in which the activities and milestones are represented along with the interdependencies between activities. It expresses the logic as to how the program will be accomplished. Network schedules are the basis for critical path analysis, a method for identification and assessment of schedule priorities and impacts.

Non-Recurring Cost. Expenditures for specific tasks that are expected to occur only once, or very infrequently, on a given program. Examples are such costs as those for preliminary design effort, qualification testing, initial tooling, testing, planning, etc.

Objective Indicator. A finite event or accomplishment which can be used to definitively establish the degree of completion of a specific task.

Organizational Breakdown Structure (OBS). A family-tree breakdown of the contractor's organization showing the organizational elements involved in performing the contract work.

Other Direct Cost (ODC). A group of accounting elements, other than direct labor and material, which can be isolated to specific tasks. ODC includes such items as travel, computer time, aviation fuel, etc.

Overhead. (See Indirect Costs.)

Overrun. Costs incurred in excess of the allocated budget for a task, group of tasks, or a contract. For work in process, the overrun is the cost incurred in excess of earned value.

Over Target Baseline. A performance measurement baseline where the total allocated budget is in excess of the contract value (contract budget base). It may involve replanning in-process work, and/or adjusting variances.

Performance Measurement Baseline (PMB). The time-phased budget plan against which contract performance is measured. It is formed by the budgets assigned to scheduled control account and the applicable indirect budgets. For future effort, not planned to the control account level, the performance measurement baseline also includes budgets assigned to higher level CWBS elements and undistributed budgets. It equals the total allocated budget less management reserve.

Performing Organization. A defined unit within the contractor's organization structure, which applies resources to perform the work.

Planned Value. Same as Budgeted Cost for Work Scheduled.

Planning Package (PP). A logical aggregation of work within a control account, normally the far-term effort, that can be identified and budgeted in early baseline planning, but is not yet defined into work packages.

Post Acceptance Review. A government review performed on a specific element or elements of a contractor's EVMS system that display(s) a lack of discipline or no longer meet(s) the intent of the EVMS Criteria.

Priced Bill-Of-Material System. An automated requirement generation system for material and parts, which lists all items, quantities, sources, descriptions and prices in an indented listing, which relates a part of component to a higher or using assembly. Such a system may be used for pricing material costs for proposals.

Price Variance (PV). The portion of a material cost variance due to price change. The difference between the planned unit cost of materials and the actual unit cost of material. PV is derived by subtracting the planned unit price times the quantity used from the actual unit price times the quantity used.

Problem Analysis Report (PAR). A report made by the responsible manager to explain a significant cost or schedule variance, its probable impact on the program, and the corrective action(s) taken or required to resolve the problem (Same as Variance Analysis Report).

Procuring Activity. The subordinate command in which the Procuring Contracting Office (PCO) is located. It may include the Program Office and other related functional support activities.

Program (or Project or Product) Manager (PM). The person assigned the prime responsibility for overall management of a program (or project, or product).

Program Master Schedule. The highest summary level schedule for a major program depicting overall program phasing and interfaces, contractual milestones, and major events which support specific program objectives.

Program Work Breakdown Structure (PWBS). See part (a) of Work Breakdown Structure definition.

Progress Payments. Payments made to a contractor or subcontractor during the life of a fixed price type (firm fixed price and fixed price incentive) contract on the basis of a percentage of total incurred cost.

Purchase Order. An order issued by a functional organization (usually material or purchasing) to purchase parts, supplies or services from an outside source.

Purchase Request (PR). A contractor's authorizing procurement document that results in the issuance of a Purchase Order. Also referred to as a Purchase Order Request (POR).

Purchased Labor. A type of labor used on a contract basis to relieve an engineering or shop overload and/or to take advantage of special processing or technical skills or of special facilities possessed by a supplier.

Purchased Parts. Detail parts or small subassemblies that are purchased from or subcontracted to an outside source. Such parts or subassemblies are purchased to relieve a shop overload or because they are not within the prime contractor's normal capability to make.

Quantity Variance (QV). (See Usage Variance).

Risk Analysis. The system that provides a continuous analysis of identified risks with respect to their impact on program cost, schedule, and technical performance.

Realization Factor. The ratio of actual performance time to standard performance time, usually expressed as a decimal number.

Recurring Costs. Expenditures against specific tasks that occur on a repetitive basis. Examples are costs of sustaining engineering support, repeated fabrication or assembly of parts or products, tool maintenance, etc.

Replanning. A change in the original plan for accomplishing authorized contractual requirements, involving the redistribution of budget for remaining work. Traceability is required to previous baselines, and funding requirements need to be considered in any replanning effort. There are two types of replanning effort:

(a) **Internal Replanning.** Replanning actions performed by the contractor for remaining effort within the recognized contract budget. It is caused by a contractor's need to

accommodate cost, schedule, or technical problems which may have made the original plan unrealistic. Internal replanning is restricted to remaining effort and if significant, the customer must be advised of the action.

(b) **Contract Change Replanning.** A change necessitated by government direction which may be in the form of either a definitized or a no cost contract change order that calls for a change in the original plan. It most often results from a change in the contract affecting cost, schedule, technical parameter or a combination thereof

Reprogramming. Replanning of the effort remaining in the contract, resulting in a new budget allocation which exceeds the contract budget base.

Responsible Organization. A defined unit within the contractor's organization structure which is assigned responsibility for accomplishing specific tasks. (See Performing Organization for comparison.)

Responsibility Assignment Matrix (RAM). A depiction of the relationship between the Contract Work Breakdown Structure elements and the organizations assigned the responsibility for ensuring their accomplishment. A two axis matrix (sometimes a chart is used) with CWBS elements displayed on one axis and the Organization Breakdown Structure (OBS) elements on the other axis with indicators at appropriate intersections to identify planned Control Accounts. The boxes of the matrix usually show the Control Account dollars or hours.

Rolling Wave Planning. The progressive refinement of work definition as time goes on by continuous subdivision of downstream activities into detailed tasks.

Rubber Baselineing. Actions by a contractor to advance far-term budgets into the current or early periods to mask current cost problems. The action involves moving budget without a corresponding amount of task, to cover current cost difficulties. It is an indication of likely overrun condition.

Schedule. A plan which defines when specified work must be started, worked on, and finished, to accomplish program objectives on time.

Schedule Performance Index (SPI). An indicator of the schedule efficiency at which work has been performed to date. $SPI = \frac{BCWP}{BCWS}$, i.e., Earned Value divided by Planned (Budgeted) Value.

Schedule Variance (SV). A metric for the schedule performance on a program. The algebraic difference between the earned value (BCWP) and the budget plan (BCWS). (Schedule Variance

equals Earned Value minus Budget.) A positive value indicates a favorable position while a negative value is unfavorable. Equivalent to “Accomplishment Variance.”

Significant Variance. Those differences between planned and actual performance which require further review, analysis, and/or action.

Statement Of Work (SOW). The document that defines the work scope requirements on a program or contract.

Subcontract. A contract for services, data, parts, components, assemblies, other hardware, or software which a company commits to perform for or provide to the prime contractor. A subcontract normally involves the design or production of a component by the supplier to the prime contractor’s specifications. “See Purchased Parts.”

Summary Level Planning Package (SLPP). An aggregation of work for far-term efforts, not able to be identified at the control account level, but which can be assigned to higher level WBS elements (and is therefore not “undistributed budget”).

Surveillance. A term used in earned value management to mean the monitoring of continued proper use of a management control system which had been previously accepted as meeting the requirements of the EVMS Criteria.

Surveillance Plan. A document which establishes the procedures for accomplishing earned value management system surveillance. Usually prepared as an attachment or supplement to a Memorandum of Agreement between a PM and an ACO.

Task. A piece or portion of discrete, apportioned, or level-of-effort work. Also called an activity; something that takes place over a period of time and generally consumes resources.

Task Authorization. A document used in some contractor systems in conjunction with a Resource Authorization Document (RAD) to provide detailed work instructions and other technical information.

Thresholds. Boundaries or limits (monetary, time, or other values) which, if breached, result in some type of management review and action.

To-Complete Performance Index (TCPI). An indicator of the future efficiency at which the remaining work must be performed to arrive at the EAC. $TCPI = (BAC - BCWP_{cum}) / (EAC - ACWP_{cum})$ i.e., Budget for Remaining Work divided by Estimated Cost of Remaining Work.

Total Allocated Budget (TAB). The sum of all budgets allocated to a contract. Total allocated budget consists of the Performance Measurement Baseline and all Management Reserve. The

total allocated budget should reconcile directly to the contract budget base. Any differences will be documented as to quantity and cause.

Touch Labor. Production labor which can be reasonably and consistently related to a unit of work being manufactured, processed or tested. Also referred to as “Hands On” labor.

Undistributed Budget (UB). Budget applicable to contract effort which has not yet been identified to CWBS elements at or below the lowest level of reporting to the government.

Unit Cost. Total labor, material, and overhead cost for one unit of product, i.e., one part, one end item etc.

Unpriced Changes. Authorized contract changes which are not yet priced.

Usage. The number of units or dollar value of material or items used over a period of time.

Usage Rate. A percentage, based on historical records, applied to the Priced Bill of Material to accurately budget for scrap, breakage, lost in shop, rework design, error and surplus material consumed on a project or contract.

Usage Variance (UV). The portion of material cost variance due to a change in quantity of material used. The difference between planned quantity of materials and the actual quantity used, expressed in dollars. UV is derived by subtracting from planned quantity times planned unit cost, the actual quantity times planned unit cost. (Same as Quantity Variance.)

Variance Analysis Report (VAR). An internal document, within an earned value management system, for the analysis and reporting of variances which breach the established thresholds. It requires the reason or cause of the variance; the impact on cost or schedule; and the corrective action required, or accomplished, on significant variances.

Variance At Completion (VAC). The difference between the total budget assigned to a contract, WBS element, organizational entity or control account and the estimate at completion. It represents the amount of expected overrun or underrun. (VAC equals BAC minus EAC, i.e., total allocated budget minus the related estimated final cost).

Variance Threshold. Internal and external tolerances (or thresholds), which are established by management direction, or negotiation with the customer and which, when exceeded, require investigation, analysis, reporting and corrective action.

Work Breakdown Structure (WBS). A product-oriented family tree composed of hardware, software, services, and other work tasks which organizes, displays, and defines the product to be developed and/or produced and relates the elements of the work to be accomplished to each other and the end product(s).

(a) **Program Work Breakdown Structure (PWBS).** The work breakdown structure (WBS) a specific defense materiel item, is related to the contractual effort, and includes all applicable elements consisting of at least the first three levels which are then extended by the DoD component (program manager) and or contractor(s).

(b) **Contract Work Breakdown Structure (CWBS).** The complete WBS for a contract. The CWBS includes the work breakdown structure established on the contract for reporting purposes and its discretionary extension to the lower levels by the contractor in accordance with the contract statement of work. It includes all elements for the hardware, software, data, and services which are the responsibility of the contractor.

Work Breakdown Structure Dictionary. A document which describes the tasks-associated with each WBS element, in product-oriented terms, and relates each element to the respective, progressively higher levels of the structure as well as to the contract Statement of Work. May or may not be a contractual requirement.

Work Breakdown Structure Element. A single discrete portion of a WBS. May be an identifiable product, a set of data, or a service..

Work Package (WP). Detailed jobs, or material items, identified by the contractor for accomplishing work required to complete the contract. A work package has the following characteristics:

(a) It represents units of work at levels where work is performed.

(b) It is clearly distinguished from all other work packages.

(c) It is assigned to a single organizational element.

(d) It has scheduled start and completion dates and, as applicable, interim milestones, which are representative of physical accomplishment.

(e) It has a budget or assigned value expressed in terms of dollars, man-hours, or other measurable units.

(f) Its duration is limited to a relatively short span of time or it is subdivided by discrete value milestones to facilitate the objective measurement of work performed or it is level-of-effort.

(g) It is integrated with detailed engineering, manufacturing, or other schedules.

Work Package Budgets. Resources which are formally assigned by the contractor to accomplish a work package, expressed in dollars, hours, standards or other definitive units

8 APPENDIX C: SAMPLE IBR OUTBRIEF TEMPLATE

Program Name:

Integrated Baseline Review

IBR Date:



IBR Goals



- **Achieve a mutual understanding of the baseline plan and its relationship to the underlying Earned Value Management System (EVMS)**
- **Attain agreement on a plan of action to evaluate the identified risks.**
- **Quantify the risks and incorporate in an updated Estimate At Completion (EAC)**
- **Assess the adequacy of the performance measurement baseline (scope, schedule, budget, resources, and management processes)**



SCOPE of IBR



- Evaluate the current contract baseline and the associated risks



AREAS ASSESSED (Example)



- **Program Management**
- **Subcontract Management**
- **System Test**
- **Systems Engineering**
- **Software Development**
- **Developer Support**



Program Management (Example)



Risk	Evaluation	Remarks
Technical	Low	
Schedule	Low	
Cost	Low	
Resources	Excellent	
Mgt Processes	Excellent	

- Concerns: None



Subcontract Management (Example)



Risk	Evaluation	Remarks
Technical	Low	
Schedule	Low	
Cost	Low	
Resources	Excellent	
Mgt Processes	Excellent	

- Concerns:
- Recommendation:



System Test (Example)



Risk	Evaluation	Remarks
Technical	Low	
Schedule	Low	
Cost	Low	
Resources	Adequate	Potential Staffing issues
Mgt Processes	Excellent	

- Concerns:
- Action:



System Engineering (Example)



Risk	Evaluation	Remarks
Technical	Low	
Schedule	Low	
Cost	Low	
Resources	Excellent	
Mgt Processes	Excellent	

- Concerns:
- Action:



Software Development (Example)



Risk	Evaluation	Remarks
Technical	Low	
Schedule	Moderate	
Cost	Low	
Resources	Excellent	
Mgt Processes	Excellent	

- Concerns: None



Developer Support (Example)



Risk	Evaluation	Remarks
Technical	Low	
Schedule	Moderate	
Cost	Moderate	
Resources	Excellent	
Mgt Processes	Excellent	

- Concerns:
- Action:



Program Level Risks (Example)



- **Risks (Examples)**

- Shared resources with XYZ Program
- Compressed schedule
- Program run as “Cost as an Independent Variable” (CAIV)



Actions/Recommendation (Examples)

- **Govt EVM analyst to monitor MR usage for remainder of contract**
- **Contractor to evaluate appropriateness of EVM methods**
- **Gov't to send Contractor a request for an impact proposal**
 - Schedule review after contract modification to address the change to the Baseline



IBR Assessment (Example)



- **Strengths**

- CAM's knowledge
- Cost, Schedule and Performance
- IBR preparation/baseline

- **Weaknesses**

- No significant weaknesses identified

**OVERALL
ASSESSMENT**

GREEN

9 APPENDIX D: SAMPLE IBR LETTER OF FINDINGS

<Date>
<PMA-XXX>

<Contractor POC>
<Contractor Address>

Dear <Contractor POC>:

The <Program Name> IPT team conducted an Integrated Baseline Review (IBR) of contract <Contract Number> at your facility in <Contractor Address> during <Date Of IBR>.

Minutes from the IBR, summarizing the discussions conducted, are attached as enclosure (1). The team identified areas of concern, requests for documents and provided risk assessment as contained in enclosure (2).

Please follow up Action Items, where noted in Concern Area Reports, to <IBR Team Leader> at <IBR Team Leader Phone Number>. Documentation requested should be delivered electronically to <Performance Measurement Deputy Team Leader>. Action Items and Documentation requests should be completed by <Date>, unless other arrangements are made with <IBR Team Leader>.

Any contractual questions should be directed to <Contracting Officer> at <Contracting Officer Phone Number> and earned value management question should be directed to <Performance Measurement Deputy Team Leader> at <Performance Measurement Deputy Team Leader Phone Number>.

<Contracting Officer Name>
Contracting Officer

10 APPENDIX E: SAMPLE IBR CLOSEOUT LETTER

<Date>
<PMA-XXX>

<Contractor POC>
<Contractor Address>

Dear <Contractor POC>:

The <Program Name> IPT team conducted an Integrated Baseline Review (IBR) of contract <Contract Number> at your facility in <Contractor Address> during <IBR Date>.

All actions resulting from Concern Area Reports are closed.

Any contractual questions should be directed to <Contracting Officer> at <Contracting Officer Phone Number> and earned value management question should be directed to <IBR Performance Measurement Team Leader> at <IBR Performance Measurement Team Leader Phone Number>.

<Contracting Officer>
Contracting Officer
xxx Command

11 APPENDIX F: SAMPLE IBR LESSONS LEARNED

Appendix F: Sample Integrated Baseline Review (IBR) Lessons Learned

Before The Review:

The overall team should be broken into subteams. It is more effective to have small groups of people talking to the managers. By breaking into teams, groups can be concentrated on their focus areas and cover more material in a limited amount of time.

Team size is an important consideration to the effectiveness of the review. Subteams should have a maximum of 3-4 members to make the review go smoothly.

Ensure up-front involvement of Systems and Schedule Analysts prior to the review.

Use the critical path of the contract to identify schedule/technical risk areas. When using the critical path it should be ensured that all links are established and conflicts resolved.

Use DCMA to every extent possible. They may have a lot of program knowledge, and they could also reduce the number of other people needed to attend the review.

Have a good plan prior to going on-site for the review. The on-site review will not be as beneficial if people are not prepared. Most of the work should occur prior to going on-site.

Baseline documentation should be received 2-4 weeks prior to going on-site to allow team members adequate time for preparation. If this is not possible, it may be necessary to allow additional time on-site for documentation review.

Focus on what the overall objective of the review is, i.e., addressing all of the issues on the IBR Discussion Assessment Form. The IBR is not intended to be a design review.

The depth of the on-site review is very important. It may not make sense to look down to the work package level in every instance. This type of guidance to the team will help them focus on what they are trying to accomplish.

Work with the technical team to identify risk areas prior to the IBR, and tailor the IBR to focus discussions on the risk areas identified.

Picking the right leaders for the review is very important. The leaders must understand the objectives of the review and focus their teams. Typically, the

CEVM IBR Toolkit Appendix F: Sample IBR Lessons Learned

government technical lead will conduct the interview, but they must be heavily supported by the EVM analyst.

Identify technical, cost, and schedule risk areas as early as possible. By doing this it will allow the team members to become more prepared for the on-site review.

It may be beneficial to send an advance party to the contractor. These people could make sure the contractor is ready for the review and also pull together documentation for the team. Each team member could then have documentation to review prior to the on-site portion of the review.

Ensure that the contractor has detail planned far enough in advance to permit an adequate assessment of the baseline. In general, look for detail planning for six months to one year.

Review the contractor's data for summary level planning. This high level planning limits the team's ability to assess baseline adequacy. Summary level planning should be limited.

Work with the contractor to make the review a success. This review should benefit the contractor as well as the government. By keeping the contractor informed of review findings/concerns it will allow them to clear up possible misunderstandings or find answers to questions early.

It is important to get the contractor involved in the IBR training. This will allow the contractor to get a better understanding of what an IBR is and also get the team acquainted with specific documentation they will encounter.

During the training it is important for the contractor to show actual examples of how their system works. An example of this would be walking the team through schedules.

The cost estimating work should be tailored to what makes sense. If there is not a cost estimate it may not make sense to do a bottoms up estimate for the review.

The cost estimators should compare the funding profile of the cost estimate to the performance measurement baseline prior to going on-site. This comparison will help identify concern areas prior to the review.

Cost estimators need to work to get the baseline broken out the way that the estimate has been formulated at least one month prior to the on-site review.

CEVM IBR Toolkit Appendix F: Sample IBR Lessons Learned

An assessment of the Management Reserve (MR) needs to be made. This assessment should look at MR usage and also the amount of MR compared to similar programs.

During the Review:

Sit down after each discussion and discuss the results. It is important to make sure that each person on the team saw the same things. This should be done while it is fresh in everyone's memory.

Collect documentation after each discussion. Make sure that documentation does not become a bottleneck for the review. By getting drafts back to the teams early, the team will have good documentation leaving the review.

Have separate areas for the subteams to meet. The teams will need areas to review documentation, prepare for discussions, and write up findings.

Do not try to solve technical issues during the IBR. There is a limited amount of time available for each discussion so use the time wisely. If an issue arises, make note of it and move on.

It is important to conduct an on-site government team meeting. This meeting will serve as the final opportunity to focus the team on the objectives of the review.

At the end of each day, the team should get together to discuss and consolidate findings from the CAM discussions.

Make sure that the team remains flexible. It will not be unusual to have some last minute adjustments to the team. Make sure that the team members are where they will be most beneficial.

Keep the discussions friendly. The manager will be very nervous and the team should try to make them more comfortable.

If there is an issue that can not be resolved in the discussion do not get into an argument with the manager. If an instance like this make note of the issue and move on.

If the review is focused properly it is possible to conduct the review in 2-3 days. This will vary based on the risk areas identified.

Try to conduct no more than three CAM interviews each day.

Allow sufficient time for the teams to fill out all forms after each interview.

CEVM IBR Toolkit Appendix F: Sample IBR Lessons Learned

Before each discussion it may be beneficial to remind the team/contractor that any statements made during the discussion should not be construed as constructive changes. The purpose of the meeting is to understand the plan, not make changes to it.

The review can not be accomplished until the contractor is ready. A major factor in the contractor being ready will be the timetable for the contractor to set the baseline.

After the Review:

A good focus time for open concern areas may be at program reviews. By using these reviews for follow up it will make sure that these items do get looked at again.

Discuss the Concern Area Reports with the contractor after the IBR outbrief to ensure understanding of the issues. If possible, discuss a corrective action plan and follow-up immediately after the IBR.

Identify a person to track the Corrective Action Plan to make certain that all issues are resolved.

Pass all Concern Area Reports formally through the Procurement Contracting Officer (PCO).

Miscellaneous:

Work closely with the prime contractor to ensure that all of your IBR expectations are met at subcontractor IBRs.

12 APPENDIX G: LIST OF ACRONYMS

List of Acronyms

BCR	Budget Change Request
BOE	Basis Of Estimate
CA	Control (or Cost) Account
CAM	Control (or Cost) Account Manager
CAP	Control (or Cost) Account Plan
CAR	Concern Area Report
CDRL	Contract Data Requirements List
CFSR	Contract Funds Status Report
CLIN	Contract Line Item Number
CPR	Cost Performance Report
C/SSR	Cost/Schedule Status Report
CWBS	Contract Work Breakdown Structure
DCAA	Defense Contract Audit Agency
DCMA	Defense Contract Management Agency
DFARS	Defense Federal Acquisition Regulations Supplement
EAC	Estimate At Completion
ETC	Estimate To Complete
EVM	Earned Value Management
EVMS	Earned Value Management System
IBR	Integrated Baseline Review
IPT	Integrated Product Team
LOE	Level Of Effort
MR	Management Reserve
PCO	Procuring Contracting Officer
PEO	Program Executive Office
POC	Point Of Contact
PID	Procurement Initiation Document
PM	Program Manager
PMB	Performance Measurement Baseline
POC	Point Of Contact
PP	Planning Package
RAM	Responsibility Assignment Matrix
RMP	Risk Management Plan
SOW	Statement Of Work
UB	Undistributed Budget
VAR	Variance Analysis Report
WBS	Work Breakdown Structure
WP	Work Package

Note: A Glossary of Terms is included in the Sample IBR Team Handbook

13 APPENDIX H: SAMPLE IBR KICKOFF MEETING CHECK LIST

IBR Kickoff Meeting Checklist

- Background Info
- POA&M
- RAM
- Notification Letter / Documentation Request
- Training Requirement
- Team Composition
- Team Handbook (*Preliminary*)
- Tentative Agenda
- Concerns / Issues
- Go/ No-Go Decision

Note: While some of the above items may not be completed at the time of the review, plans for completing should be discussed.

14 APPENDIX I: SAMPLE IBR/SRA POA&M

Program IBR Preparation Plan (Draft)

ID	Task Name	RAA	Start	Finish	2004															
					Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May				
41	Travel to SYSCOM Location	EV & Sched Team	Fri 11/12/04	Fri 11/12/04																
42	Prime Contractor: Preps for IBR Readiness Review (Sept SOW CAM books)	Prime Contractor	Mon 10/11/04	Fri 11/5/04																
43	Prepare and Provide September Contractor CAM Books	Prime Contractor	Mon 10/11/04	Thu 11/4/04																
44	Send September Contractor CAM Books to SYSCOM	Prime Contractor	Fri 11/5/04	Fri 11/5/04																
45	Prime Contractor (Prime) SRR Conducted	SYSCOM PMA	Tue 9/28/04	Thu 9/30/04																
46	Prime Contractor Major Subcontractor SRRs Conducted	Prime Contractor	Wed 11/10/04	Wed 12/15/04																
47	Subcontractor # 1 to Prime Contractor		Tue 12/14/04	Wed 12/15/04																
48	Subcontractor # 2 to Prime Contractor (Tied To IBR In-Brief)		Tue 11/30/04	Wed 12/1/04																
49	Subcontractor # 3 to Prime Contractor		Wed 11/10/04	Thu 11/11/04																
50	Subcontractor # 4 to Prime Contractor		Wed 12/8/04	Thu 12/9/04																
51	IBR Go/No Go decision		Fri 11/12/04	Mon 11/15/04																
52	Prepare IBR Go/No Go Decision Presentation	SYSCOM EV Analyst	Fri 11/12/04	Fri 11/12/04																
53	IBR Go/No Go Decision	SYSCOM <Project Name> Leads	Mon 11/15/04	Mon 11/15/04																
54	<Project Name> IBR Training	SYSCOM EV Analyst	Mon 11/15/04	Thu 11/18/04																
55	Prepare material for IBR training at SYSCOM Site	IPTs for Selected Review Areas	Mon 11/15/04	Mon 11/15/04																
56	EV Refresher, IBR Basics, Review, Review Focus Areas with Govt IPT	IPTs for Selected Review Areas	Tue 11/16/04	Thu 11/18/04																
57	Prime Contractor CAM Refresher Training	Site Core EVM	Mon 11/1/04	Thu 11/18/04																

Project: IBR Date: Mon 10/1/07	Task		Progress		Summary		External Tasks		Deadline	
	Split		Milestone		Project Summary		External Milestone			

Program IBR Preparation Plan (Draft)

ID	Task Name	RAA	Start	Finish	2004													
					Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May		
81	Dollarized EVMS RAM	Prime Contractor	Wed 9/15/04	Wed 11/17/04														
82	Preliminary (Used to Establish CAM Interviews)		Wed 9/15/04	Wed 9/15/04														
83	Final (Reflecting SOW Month IBR Docs will be based on)		Wed 11/17/04	Wed 11/17/04														
84	Subcontract Management Plan	Prime Contractor	Fri 11/12/04	Fri 11/12/04														
85	Hardware Authorization Document (HAD)	Prime Contractor	Fri 11/12/04	Fri 11/12/04														
86	Hardware Authorization Schedule (HAS)	Prime Contractor	Fri 11/12/04	Fri 11/12/04														
87	GFE Document	Prime Contractor	Fri 11/12/04	Fri 11/12/04														
88	Risk Management Plan	Prime Contractor RAA	Fri 11/12/04	Fri 11/12/04														
89	Control Account Work Authorizations	IPT CM Reps	Fri 11/5/04	Fri 11/5/04														
90	Labor CAAs	IPT CM Reps	Fri 11/5/04	Fri 11/5/04														
91	ESSRs	IPT CM Reps	Fri 11/5/04	Fri 11/5/04														
92	CWAs	IPT CM Reps	Fri 11/5/04	Fri 11/5/04														
93	IWAs	IPT CM Reps	Fri 11/5/04	Fri 11/5/04														
94	Prime's Internal group (branch of Prime) Purchase Agreement	Prime Contractor	Fri 11/5/04	Fri 11/5/04														
95	Request For Procurement (RFPs)	Prime Contractor	Fri 11/5/04	Fri 11/5/04														
96	Major Subcontractor Purchase Contracts	Prime Contractor	Fri 11/5/04	Fri 11/5/04														
97	Program Schedules (October 2004 SOW)	Prime Contractor	Fri 11/5/04	Fri 11/5/04														
98	Tier 0, I and II With SCRs	Prime Contractor	Fri 11/5/04	Fri 11/5/04														
99	Tier III & IV With SCRs	IPT PIng Reps	Fri 11/5/04	Fri 11/5/04														
100	Schedule Status Report (Delinq/Aheads)	Prime Contractor	Fri 11/5/04	Fri 11/5/04														
101	Budget Allocation Authorization	Prime Contractor	Fri 11/5/04	Fri 11/5/04														
102	Program Manager to Prime IPT Leaders	Prime Contractor	Fri 11/5/04	Fri 11/5/04														
103	IPT Leaders to CAMs	IPT CM Reps	Fri 11/5/04	Fri 11/5/04														

Project: IBR Date: Mon 10/1/07	Task		Progress		Summary		External Tasks		Deadline	
	Split		Milestone		Project Summary		External Milestone			

Program IBR Preparation Plan (Draft)

ID	Task Name	RAA	Start	Finish	2004																	
					Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May						
127	Prepare CAM Books (Checklist will be developed)	Prime Contractor/ IPT CM & Ping Reps	Fri 7/23/04	Fri 7/23/04																		
128	CAM Books - Oct SOW data		Fri 11/12/04	Mon 11/15/04																		
129	Prepare CAM Books using Oct SOW data (See Excel Checklist)	CM Prog Rep -	Fri 11/12/04	Fri 11/12/04																		
130	Send Oct SOW CAM Books to NAVAIR (See Excel Checklist)	CM Prog Rep -	Mon 11/15/04	Mon 11/15/04																		
131	CAM Book Refresher Reviews/Mock Interviews	Prime Contractor/ Site Core EVM	Fri 10/29/04	Wed 11/24/04																		
132	Establish & Distribute Mock Interview Schedule	Prime Contractor/Prog CM Rep	Fri 11/5/04	Fri 11/5/04																		
133	Conduct Interviews	Site Core EVM/CAMs	Mon 11/15/04	Tue 11/23/04																		
134	Provide Daily Assessments to <Project Name> Program Mgmt	Site Core EVM	Tue 11/16/04	Wed 11/24/04																		
135	IBR Export Requirements	Prime Contractor	Fri 10/29/04	Fri 10/29/04																		
136	Prepare Prime Contractor Inbriefing Presentation	Prime Contractor	Fri 11/5/04	Thu 12/16/04																		
137	In-Brief Presentation Planning Meeting	Prime Contractor	Fri 11/5/04	Fri 11/5/04																		
138	Program Overview	Prime Contractor	Mon 11/8/04	Tue 11/16/04																		
139	Contract/Financing Arrangements	Prime Contractor	Mon 11/8/04	Tue 11/16/04																		
140	Major Subcontractor IBR Status/SDRL Process	Prime Contractor	Mon 11/8/04	Tue 11/16/04																		
141	Subcontractor Management Plan	Prime Contractor	Wed 12/8/04	Thu 12/16/04																		
142	Risk Management Process Overview	Prime Contractor RAA	Mon 11/8/04	Tue 11/16/04																		
143	EVMS Overview (Integ. Proc./Single Thread)	Prime Contractor	Mon 11/8/04	Tue 11/16/04																		
144	Cost/Schedule Reporting Web Site Demo	Prime Contractor	Wed 11/17/04	Wed 11/17/04																		
145	Dry Run with Program Management	All Presentors	Thu 11/18/04	Thu 11/18/04																		
146	Update Briefing Charts	All Presentors	Mon 11/22/04	Mon 11/22/04																		
147	Consolidate Inbrief Package	Prime Contractor RAA	Tue 11/23/04	Wed 11/24/04																		
148	Export Review of In-Briefing Package	Prime Contractor	Mon 11/29/04	Tue 11/30/04																		
149	Arrange IBR Team Visitor Passes	Prime Contractor RAA	Fri 11/12/04	Wed 11/24/04																		

Project: IBR Date: Mon 10/1/07	Task		Progress		Summary		External Tasks		Deadline	
	Split		Milestone		Project Summary		External Milestone			

