

**BALLISTIC MISSILE DEFENSE SYSTEM (BMDS)  
ACCOUNTABILITY REPORT (BAR) for 2013**

The Missile Defense Agency (MDA) presents the 2013 BMDS Accountability Report (BAR) to Congress.



J.D. SYRING  
Vice Admiral, USN  
Director

5/2/13

DATE

The estimated cost of report or study for the Department of Defense is approximately \$600,000 for the 2013 Fiscal Year. This includes \$389,000 in expenses and \$212,000 in DoD labor.  
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# Missile Defense Agency

## Ballistic Missile Defense System (BMDS) Accountability Report (BAR) For 2013



**April 24, 2013**

~~This document contains information exempt from mandatory disclosure  
under the Freedom of Information Act.~~

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## 1.0 Introduction

In its annual BMDS Accountability Report (BAR), the Missile Defense Agency (MDA) presents the BMDS component program baselines used to guide and track development of ballistic missile defense capabilities. Unless noted, information in this report is through February 28, 2013<sup>1</sup>. This report presents program baselines for BMDS component elements in MDA's Product Development, Initial Production, and Production acquisition lifecycle phases and significant changes from last year's report. The BAR also summarizes resource, schedule, and technical above-threshold variances from the each BMDS component element's current program to the initially reported baselines and previously reported baselines from the 2012 BAR. This report is in response to Sections 231 and 232 of the National Defense Authorization Act (NDAA) for fiscal year (FY) 2012, Public Law (P.L.) 112-81.

The 2013 BAR continues to incorporate suggestions provided by the Government Accountability Office (GAO) in 2011 to include: 1) addition of information to explain the major changes experienced by each program over the past year; 2) addition of buy/delivery information for each program that has advanced to Product Development, Initial Production, or Production; and 3) a description of cost items not included in program Resource Baselines. In addition, Appendix A includes Earned Value Management (EVM) data for the BMDS component element programs to show trends in cost and schedule performance on current work under contract and Appendix B summarizes the activities of the Missile Defense Executive Board (MDEB).

BMDS component element baselines are aligned with the President's Budget (PB) submission for FY 2014 (PB14). MDA continues to work with the operational test and evaluation community to update the Test baselines and produce the Integrated Master Test Plan (IMTP). The test baselines for each BMDS component element program are based on the newest IMTP version 13.1.

PB14 directed budget reductions to the BMDS across the Future Years Defense Program (FYDP) of approximately \$1.3 billion. This reduction impacted MDA's ability to execute program plans and resulted in changes to BMDS program content and schedule. This report presents the program baselines with these changes incorporated. The baselines described in this report do not account for the effects sequestration in FY 2013.

Previous BARs reported program plans for Precision Tracking and Space Surveillance and Standard Missile (SM)-3 Block IIB. PB14 eliminated program funding for these Technology Development programs and they are not reported in this BAR. This report will not include the (b)(5)

(b)(5)

This BAR will report the Targets and Countermeasures programs differently from previous BARs. The Targets and Countermeasures programs do not have acquisition program

<sup>1</sup> This report assumes completion of programmatic events (e.g., Knowledge Points on the Technical Baselines) that were planned to occur during the preparation but before the publication of this report.

baselines, are not components of the fielded BMDS, are not destined for traditional production runs, and are not in the equivalent of engineering and manufacturing development. Rather than acquisition program baselines, these programs have dynamic program plans that are dependent on many factors. As the BMDS test program adjusts to support all of the BMDS component programs develop capability to counter a dynamic threat, MDA continuously reviews the projected threat and adjusts the Targets and Countermeasures plans, to include target quantities and configurations, to maintain alignment with the BMDS IMTP. Because the Targets and Countermeasures programs are such a major part of MDA activity, the MDA BAR will continue to present the Targets and Countermeasures program plans in the familiar baseline format (see Section 5.6), but since these programs do not have true acquisition baselines, this report will not present baseline variances.

MDA established a formal process in 2010 that includes conducting Developmental Baseline Reviews (DBRs) to baseline BMDS component programs. All programs in product development were reviewed and given initial baselines at that time. Subsequently, additional programs have been formally established with an initial baseline. Additionally, two programs have established revised initial baselines when they transitioned to a new acquisition phase or revised initial baselines due to program scope changes. Developmental Decision Memorandums (DDMs) document the initial or revised initial baselines. DDMs approved during 2012 are included in Section 6.0 with the corresponding program. All of the DDMs have been signed by MDA; however, DDMs for Terminal High Altitude Area Defense (THAAD) 2.0, Upgraded Early Warning Radar (UEWR), and Aegis Weapon System (AWS) 4.0.1/4.0.2 and SM-3 IB are still in coordination with the Lead Service at the time of publication of this BAR.

This BAR will compare the current baseline estimate for each BMDS component program in Product Development, Initial Production, and Production phases to last year's 2012 BAR as well as to each program's latest initial baseline (established in a DBR and documented with a DDM). Programs that were established after February 2012 will not be compared to last year's BAR.

The following table lists each BMDS component program in this report, the MDA acquisition phase the program is in, the date the program was initially baselined, and the date the program received a revised initial baseline (if applicable).

(b)(5)



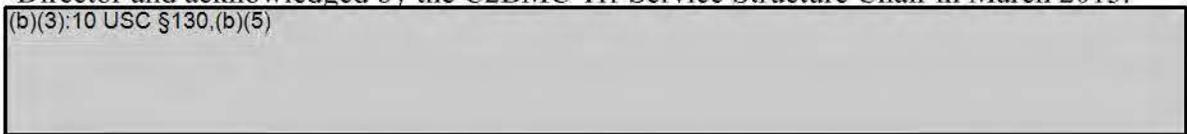
(b)(5)



The following is additional information for the BMDS component programs and Targets and Countermeasures programs listed in Table 1 above:

- C2BMC Spiral 6.4 completed product development, is in sustainment, and has deployed the capability to the Warfighter. With the completion of this development baseline, MDA will not report Spiral 6.4 in subsequent BARs.
- C2BMC Spiral 8.2 was established in August 2012 with initial baselines approved by MDA Director and acknowledged by the C2BMC Tri-Service Structure Chair in March 2013.

(b)(3):10 USC §130,(b)(5)



- THAAD Increment 1.0 and AN/TPY-2 received an incremental production decision and Acquisition Decision Memorandum (ADM) from the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) in October 2012 for (b)(5)

(b)(5)



- Upgraded Early Warning Radar (UEWR) established baselines in June 2012 (b)(5) (b)(5) These initial baselines were approved by MDA and acknowledged by the Air Force in April 2013.
- Aegis Weapon System version 4.0.1 and next increment 4.0.2 includes the SM-3 Block IB program. AWS 4.0.1/4.0.2 program and the SM-3 Block IB entered the Initial Production phase in July 2012 as designated in an USD(AT&L) updated ADM which provided guidance for (b)(5) (b)(5) (b)(5) were approved in January 2013 by MDA and are under review by the Navy.
- Aegis Ashore program baselines were revised in July 2012 to include the increment that will (b)(5) The revised Aegis Ashore baselines incorporating (b)(5) were approved by MDA and the Navy in November 2012.
- The Aegis AWS 5.0 program is redesignated in this BAR as the Aegis Modernization program to account for the program scope changes for the (b)(5) as described in the 2012 BAR.

- (b)(5) (b)(5) progress toward demonstrating an intercept with the Capability Enhancement (CE) II Ground Based Interceptor (GBI). (b)(5) (b)(5)

## 2.0 Definitions of Baselines

MDA's baselines are expected outcomes that serve as parameters to guide development of ballistic missile defense capabilities. Their implementation enhances the Agency's transparency, accountability, and oversight. The six BMDS program baselines are:

- *Schedule baseline* - a timeline for key product development milestones and tasks, such as key decision points and product deliveries.
- *Technical baseline* - an engineering management tool used by MDA to control the technical aspects of BMDS product development. Each product baseline is comprised of a listing of capability needs derived from the Warfighters' Prioritized Capabilities List (PCL)<sup>1</sup>, enduring capabilities, current and future capabilities, and knowledge points. Together these elements form a product functionality trace and define the way points the program must achieve to proceed successfully through development.
- *Test baseline* - a schedule of major flight and ground tests, key modeling and simulation events, and the primary goals associated with those tests and events.
- *Operational capacity baseline (OCB)* - an engineering management database containing the MDA-approved operational configuration of BMDS hardware and software versions fielded for Warfighter use. OCBs present information on the fielding plans, capabilities and limitations, and supporting activities for operational capability deliveries.
- *Resource baseline* is the expected investment in the delivery of a BMDS product. Resource baselines are represented as Program Acquisition Unit Cost (PAUC), Average Procurement Unit Cost (APUC), Program Acquisition Cost (PAC) and/or Average Unit Cost (AUC). (A detailed discussion of the resource baseline methodology is presented in Appendix C.)
- *Contract baseline* is a timeline for a set of MDA contracts designed to deliver integrated BMDS capabilities. The timeline highlights the steps in the contracting process from Request for Proposals through Proposal Receipt, Negotiations Complete, Contract Award, and Contract Execution.

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<sup>1</sup> The United States Strategic Command (USSTRATCOM) published the Air and Missile Defense PCL for Program Objective Memorandum (POM) FY 2014 on October 11, 2011 (known as the 2011 PCL) which provides additional Warfighter priorities to the 2009 PCL. The 2013 BAR provides Technical Baselines which trace capability requirements to both the 2009 and 2011 PCL where applicable. The 2009 PCL captured "Needs" and "Enduring Capabilities", whereas the 2011 PCL identifies "Priorities" which are found in Appendix B, Table B-10 of the 2011 PCL.

### 3.0 Variance Reporting

Variations (or changes) are defined as updates or adjustments to BMDS component programs. Variations may be changes due to program scope modifications from an updated Warfighter requirement or from an unanticipated budget adjustment. Variations may also be program execution deviations (expected or actual) from established BMDS schedule, technical, and resource baselines. Variations are tracked and managed because they reflect directly on how well the Agency is delivering BMDS capabilities to the Warfighter. Previous BARs separated "changes" from program execution deviations or "variations." This BAR reports all above threshold changes as variations, and does not distinguish based on the cause.

Because this BAR reports variations of the Programs' current baseline estimates to last year's BAR as well as to the Programs' latest initial baselines (initial or revised initial baselines are identified in Table 1 above), threshold values have been updated. These thresholds are:



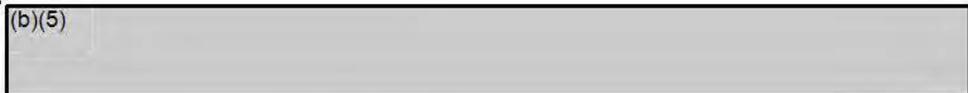
Section 4.0 summarizes above-threshold variations of the BMDS component programs' current baseline estimates in Product Development, Initial Production, and Production compared to their latest initial baselines (initial or revised initial baselines are identified in Table 1 above) and Section 4.0 also summarizes above-threshold variations of the BMDS component programs' current baseline estimates compared to their previously reported baselines from the 2012 BAR (as applicable). Section 5.0 reports all programs' current baseline estimates, summarizes significant changes from the previously reported baselines in the 2012 BAR, and describes the resultant program impacts. Appendix F reports the classified baselines as applicable for the BMDS component programs.

### 4.0 Variance Descriptions

Section 4.0 summarizes above-threshold variations from the latest initial BMDS component baselines (initial or revised initial baselines are identified in Table 1 above) as well as the above-threshold variations from the 2012 BAR.

#### 4.1 Schedule:

##### 4.1.1



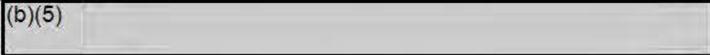
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FOIA EXEMPTION (b)(5)

(b)(5)



4.3 Technical: (b)(5)



## **5.0 Updated Baselines for BMDS Product Development Programs, Initial Production Programs, and Production Programs**

Section 5.0 includes the unclassified program baseline charts. Classified program baseline charts are provided in Appendix F (a separate classified annex). See Appendix D for a list of acronyms used in this report.



# C2BMC Spiral 6.4 and 8.2

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FOIA EXEMPTION (b)(5)



# C2BMC Program

2013 BMDS Accountability Report (BAR)

Significant Change Summary

Significant Change	Impact to Baseline
(b)(5)	(b)(5)
(b)(5)	(b)(5)

~~UNCLASSIFIED//FOUO~~

Approved Original Signed Date 8 Apr 2013

John M. Bier  
Program Director C2BMC

Approved Original Signed Date 8 Apr 2013

Richard A. Ritter  
Program Executive for C4ISR



# C2BMC Spiral 6.4 and 8.2

2013 BMDS Accountability Report (BAR)

Schedule Baseline

(b)(5)

Approved Original Signed Date 6 Mar 2013

John M. Bier  
Program Director C2BMC

Approved Original Signed Date 7 Mar 2013

Richard A. Ritter  
Program Executive for C4ISR

Approved Original Signed Date 8 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration



# C2BMC Spiral 6.4 and 8.2

2013 BMDS Accountability Report (BAR)

Technical Baseline

## See Classified Annex F



# C2BMC Spiral 6.4

(b)(5)

Approved Original Signed Date 3 Apr 2013  
John M. Bier  
Program Director C2BMC

Approved Original Signed Date 5 Apr 2013  
Richard A. Ritter  
Program Executive for C4ISR

Approved Original Signed Date 12 Apr 2013  
Keith L. Englander  
Director for Engineering

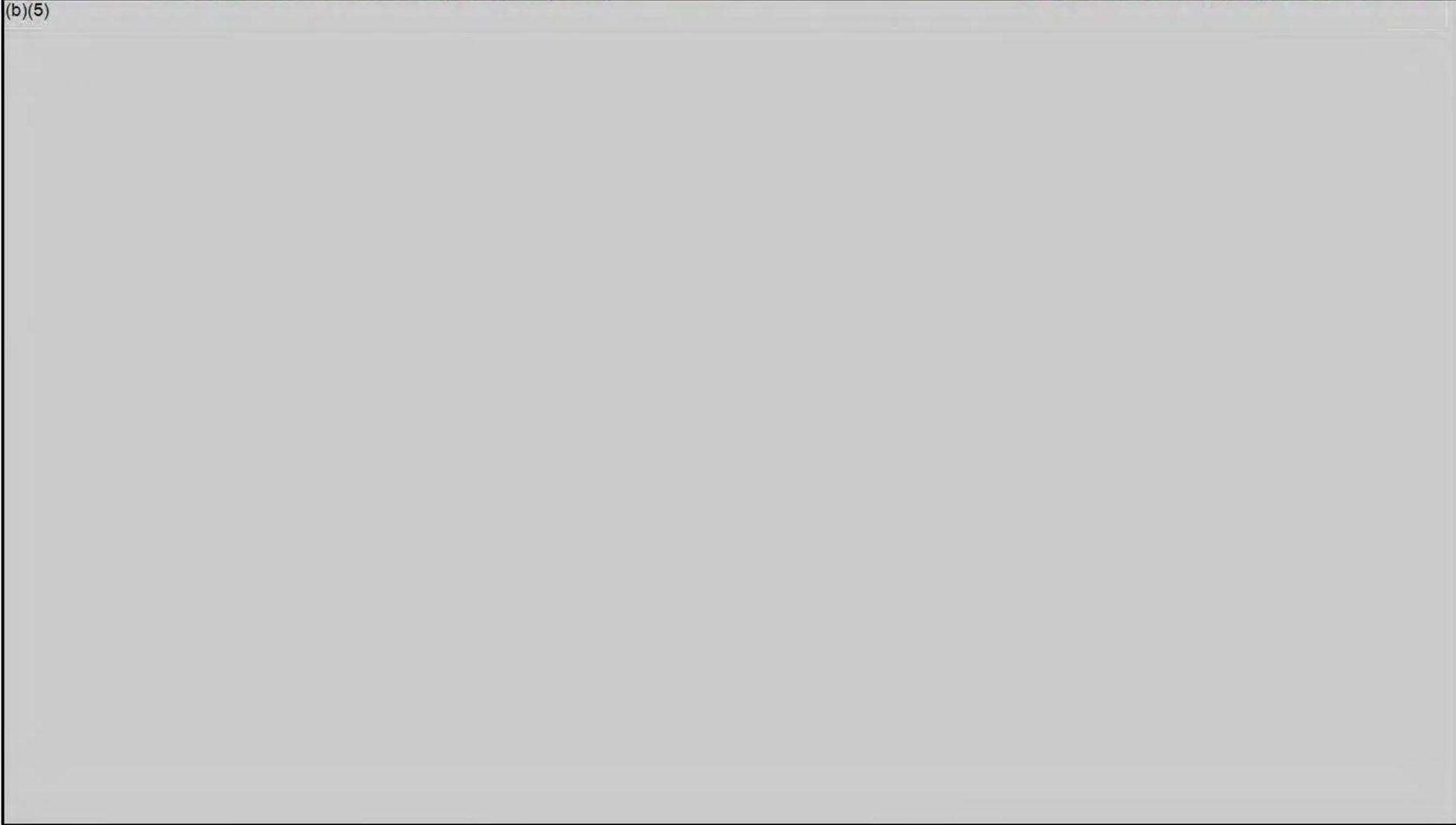


# C2BMC Spiral 8.2

2013 BMDS Accountability Report (BAR)

Operational Capacity Baseline

(b)(5)



Approved Original Signed Date 3 Apr 2013

John M. Bier  
Program Director C2BMC

Approved Original Signed Date 5 Apr 2013

Richard A. Ritter  
Program Executive for C4ISR

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Keith L. Englander  
Director for Engineering

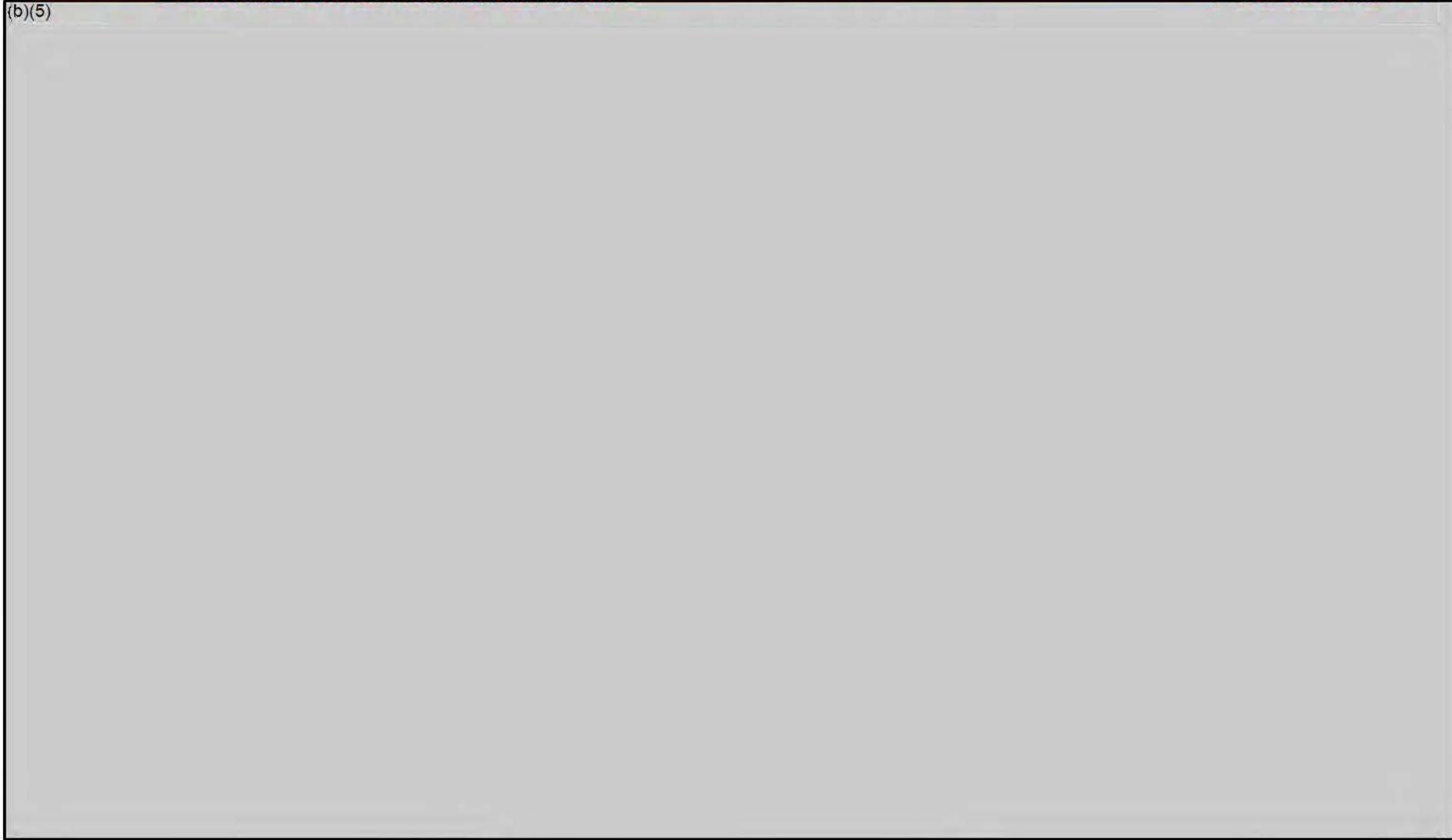


# C2BMC Spiral 6.4

2013 BMDS Accountability Report (BAR)

Test Baseline

(b)(5)



Approved Original Signed Date 6 Mar 2013

John M. Bier  
Program Director C2BMC

Approved Original Signed Date 7 Mar 2013

Richard A. Ritter  
Program Executive for C4ISR

Approved Original Signed Date 10 Apr 2013

MG Heidi V. Brown  
Director for Test



# C2BMC Spiral 8.2

2013 BMDS Accountability Report (BAR)

Test Baseline

(b)(5)



Approved Original Signed Date 6 Mar 2013

John M. Bier  
Program Director C2BMC

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Richard A. Ritter  
Program Executive for C4ISR

Approved Original Signed Date 10 Apr 2013

MG Heidi V. Brown  
Director for Test

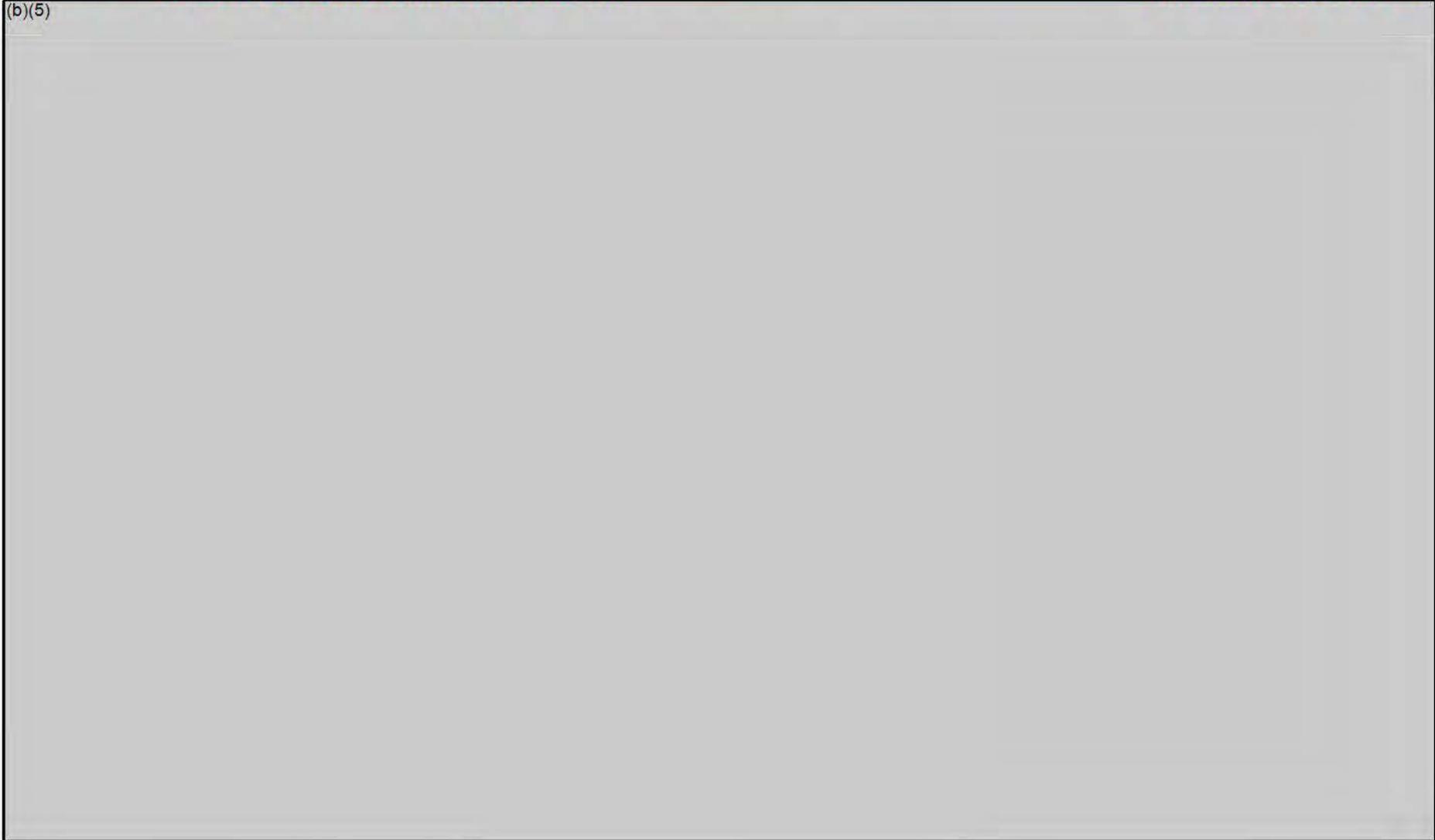


# C2BMC Spiral 6.4

2013 BMDS Accountability Report (BAR)

Resource Baseline

(b)(5)



Approved Original Signed Date 6 Mar 2013

John M. Bier  
Program Director C2BMC

Approved Original Signed Date 7 Mar 2013

Richard A. Ritter  
Program Executive for C4ISR

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J. Gary Pennett  
Director for Operations

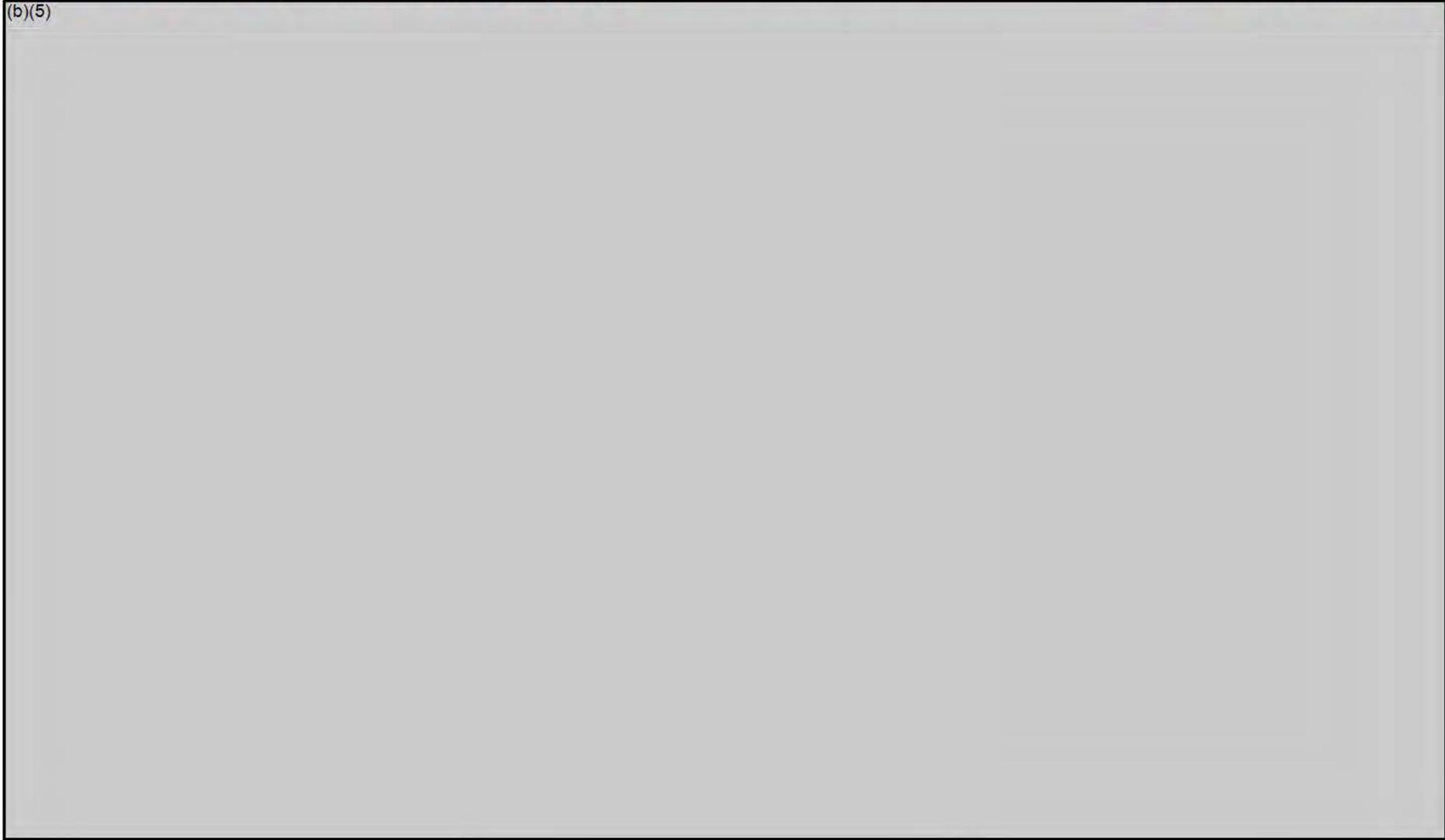


# C2BMC Spiral 8.2

2013 BMDS Accountability Report (BAR)

Resource Baseline

(b)(5)



Approved Original Signed Date 6 Mar 2013

John M. Bier  
Program Director C2BMC

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Richard A. Ritter  
Program Executive for C4ISR

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J. Gary Pennett  
Director for Operations

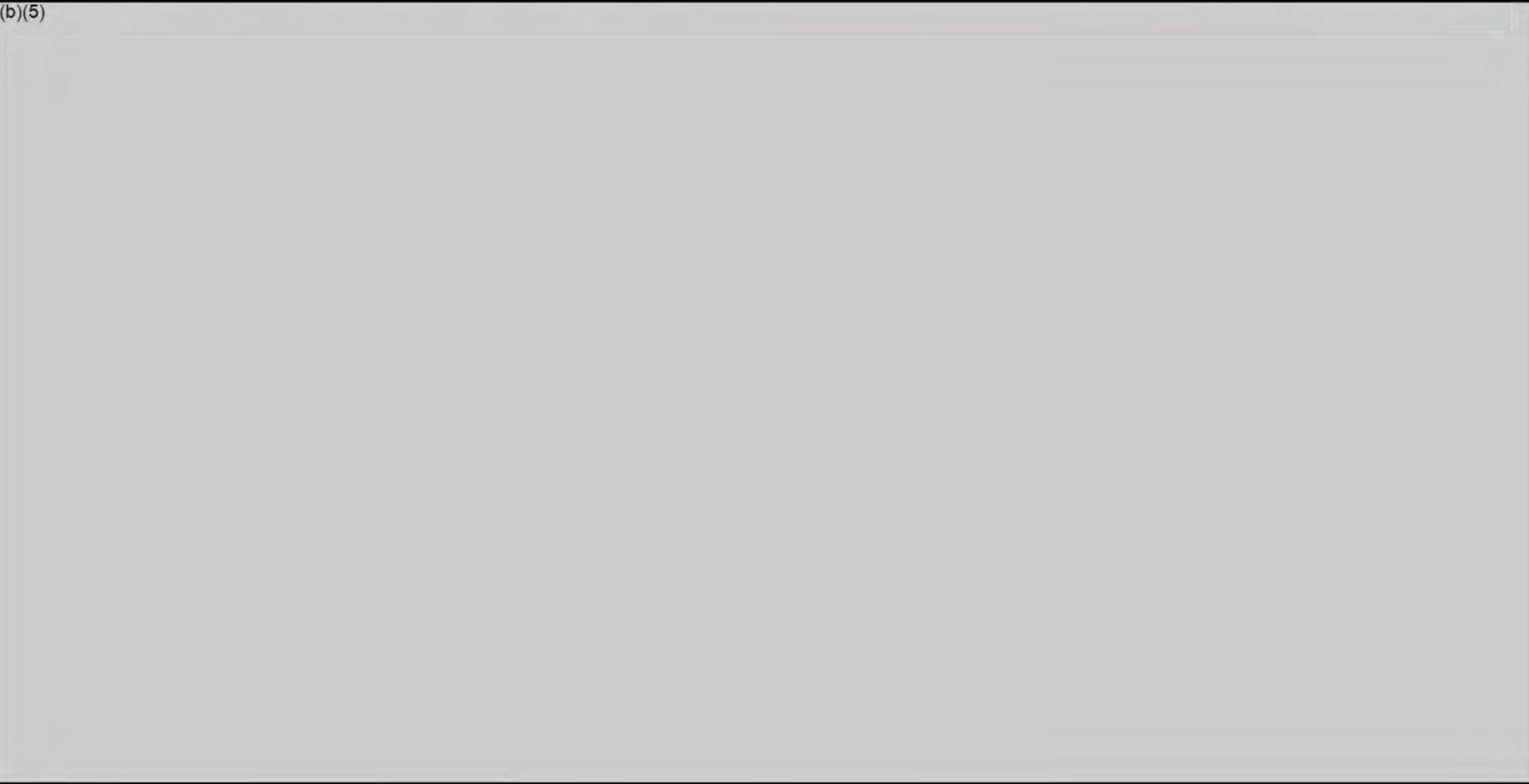


# C2BMC Spiral 6.4 and 8.2

2013 BMDS Accountability Report (BAR)

Contract Baseline

(b)(5)



Approved Original Signed Date 3 Apr 2013

John M. Bier  
Program Director C2BMC

Approved Original Signed Date 5 Apr 2013

Richard A. Ritter  
Program Executive for C4ISR

Approved Original Signed Date 9 Apr 2013

Barney Klehman  
Director for Acquisition



# THAAD 1.0/2.0

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FOIA EXEMPTION (b)(5)



# THAAD Program

2013 BMDS Accountability Report (BAR)

Significant Change Summary

Significant Change	Impact to Baseline
(b)(5)	(b)(5)
Program office costs, training aids and post-deployment software support for FY13 and beyond reallocated from TH 1.0 to TH 2.0.	(b)(5)
(b)(5)	<b>Technical/Schedule/Test:</b> Delays demonstration of (b)(5)
(b)(5)	(b)(5)

~~UNCLASSIFIED//FOUO~~

Approved Original Signed Date 8 Apr 2013

COL Anthony T. Brown  
THAAD Project Manager

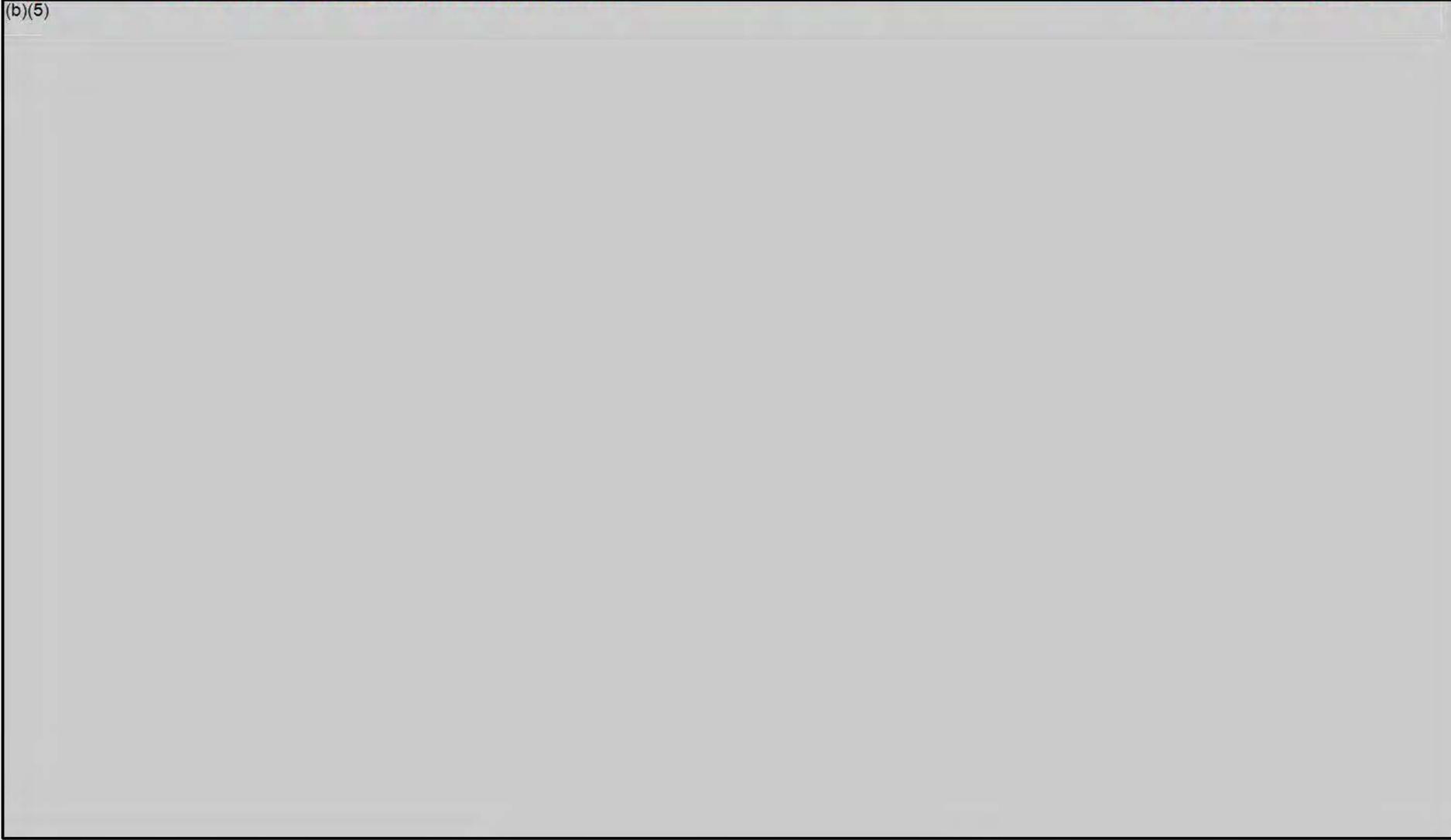
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BG Ole Knudson  
Program Executive for Programs & Integration



# THAAD 1.0/2.0

(b)(5)



Approved Original Signed Date 8 Apr 2013

COL Anthony T. Brown  
THAAD Project Manager

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BG Ole Knudson  
Program Executive for Programs & Integration

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Program Executive for Programs & Integration



# THAAD 1.0/2.0

**See Classified Annex F**



# THAAD 1.0/2.0

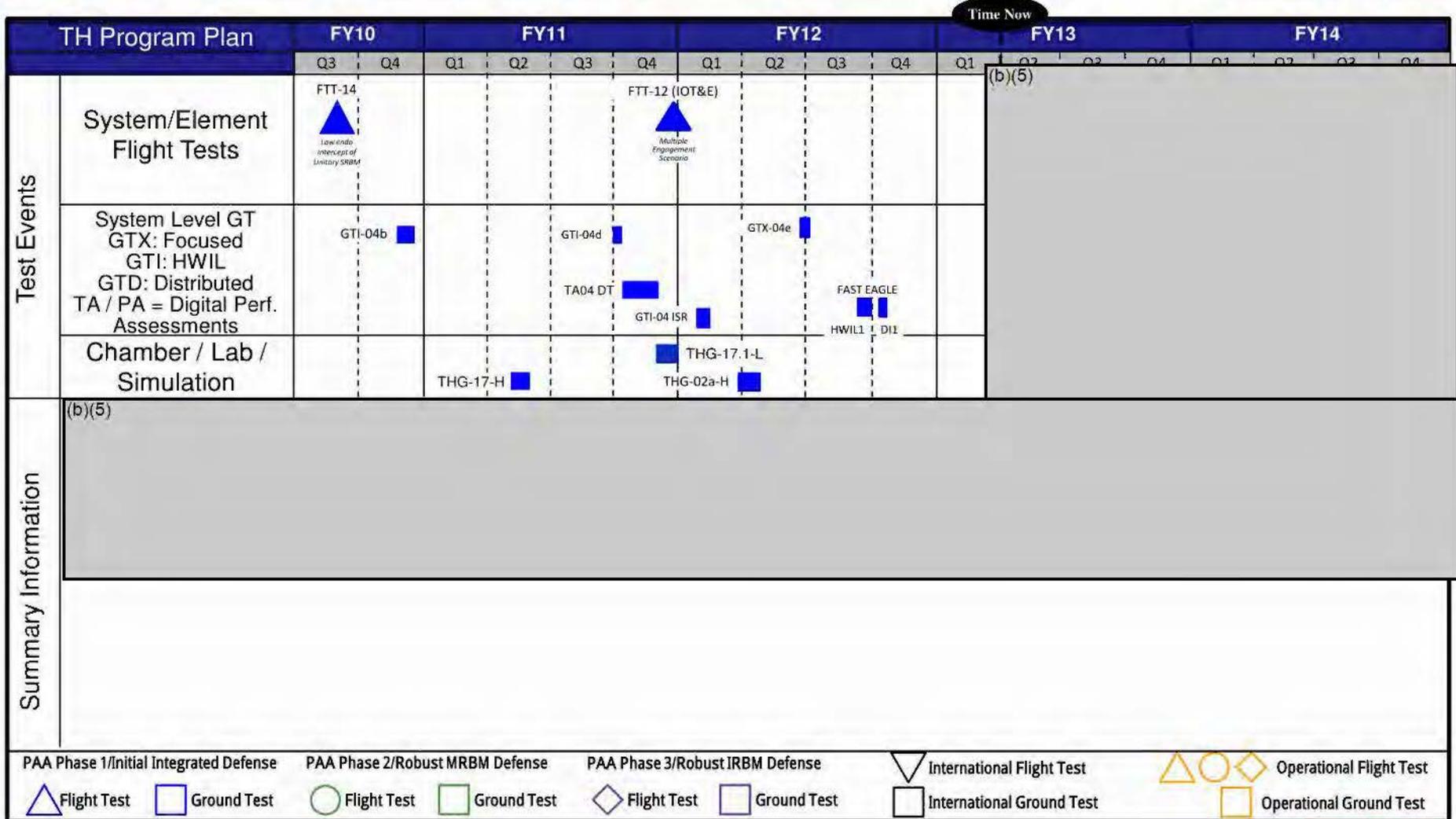
**See Classified Annex F**



# THAAD 1.0

2013 BMDS Accountability Report (BAR)

Test Baseline



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Approved Original Signed Date 8 Apr 2013  
COL Anthony T. Brown  
THAAD Project Manager

Approved Original Signed Date 8 Apr 2013  
BG Ole Knudson  
Program Executive for Programs & Integration

Approved Original Signed Date 10 Apr 2013  
MG Heidi V. Brown  
Director for Test



# THAAD 2.0

2013 BMDS Accountability Report (BAR)

Test Baseline

As of 28 Feb 2013

TH Program Plan		FY12			Time Now (b)(5)
		Q3	Q4	Q1	
Test Events	System/Element Flight Tests			▲ FTI-01	[Redacted]
	System Level GT GTX: Focused GTI: HWIL GTD: Distributed TA / PA = Digital Perf. Assessments			■ G □ FAST EAGLE Inc 2 ■	
Summary Information	(b)(5)				[Redacted]

▲ Flight Test    □ Ground Test    ○ Flight Test    □ Ground Test    ◆ Flight Test    □ Ground Test    ▽ International Flight Test    □ International Ground Test    
 △ Operational Flight Test    ○ Operational Flight Test    ◇ Operational Flight Test    □ Operational Ground Test

Approved Original Signed Date 8 Apr 2013  
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 THAAD Project Manager

Approved Original Signed Date 8 Apr 2013  
 BG Ole Knudson  
 Program Executive for Programs & Integration

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 MG Heidi V. Brown  
 Director for Test



# THAAD 1.0

(b)(5)

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COL Anthony T. Brown  
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Program Executive for Programs & Integration

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J. Gary Pennett  
Director for Operations



# THAAD 2.0

(b)(5)



Approved Original Signed Date 8 Apr 2013

COL Anthony T. Brown  
THAAD Project Manager

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J. Gary Pennett  
Director for Operations



# THAAD 1.0/2.0

(b)(5)

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COL Anthony T. Brown  
THAAD Project Manager

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BG Ole Knudson  
Program Executive for Programs & Integration

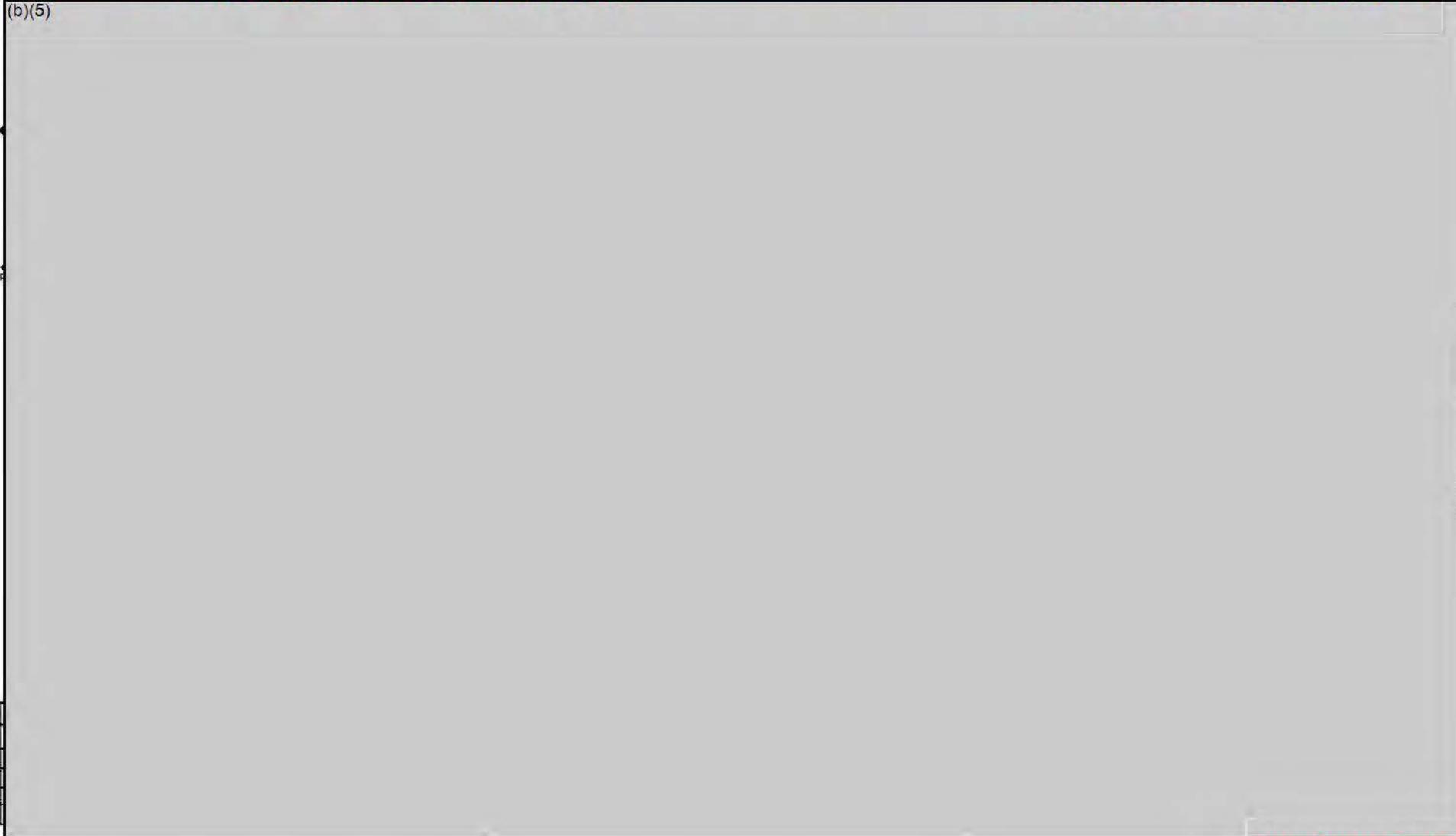
Approved Original Signed Date 11 Apr 2013

Barney Klehman  
Director for Acquisition



# THAAD 1.0

(b)(5)



Approved Original Signed Date 8 Apr 2013

COL Anthony T. Brown  
THAAD Project Manager

Approved Original Signed Date 8 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration

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Note: Total US acquisition objective is still pending and will be achieved outside of FYDP



# AN/TPY-2 Increment 1



# AN/TPY-2 Increment 1

2013 BMDS Accountability Report (BAR)

Significant Change Summary

Significant Change	Impact to Baseline
(b)(5)	(b)(5)
(b)(5)	(b)(5)
<p>IMTP v13.1 modified flight and ground test events.</p>	<p><b>Schedule/Test:</b> Aligned with IMTP 13.1  <b>Technical:</b> (b)(5)</p>
<p>Achieved agreement with the Army for O&amp;S cost sharing responsibilities.</p>	<p><b>Resource:</b> (b)(5)</p>

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Approved Original Signed Date 8 Apr 2013  
 Tim R. McKaig  
 Program Director, BMDS Sensors

Approved Original Signed Date 9 Apr 2013  
 Richard A. Ritter  
 Program Executive for C4ISR



# AN/TPY-2 Increment 1

2013 BMDS Accountability Report (BAR)

Schedule Baseline

(b)(5)

Approved Original Signed Date 8 Apr 2013

Tim R. McKaig  
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Approved Original Signed Date 9 Apr 2013

Richard A. Ritter  
Program Executive for C4ISR

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Program Executive for Programs & Integration



# AN/TPY-2 Increment 1

2013 BMDS Accountability Report (BAR)

Technical Baseline

# See Classified Annex F



# AN/TPY-2 Increment 1

2013 BMDS Accountability Report (BAR)

Operational Capacity Baseline

# See Classified Annex F

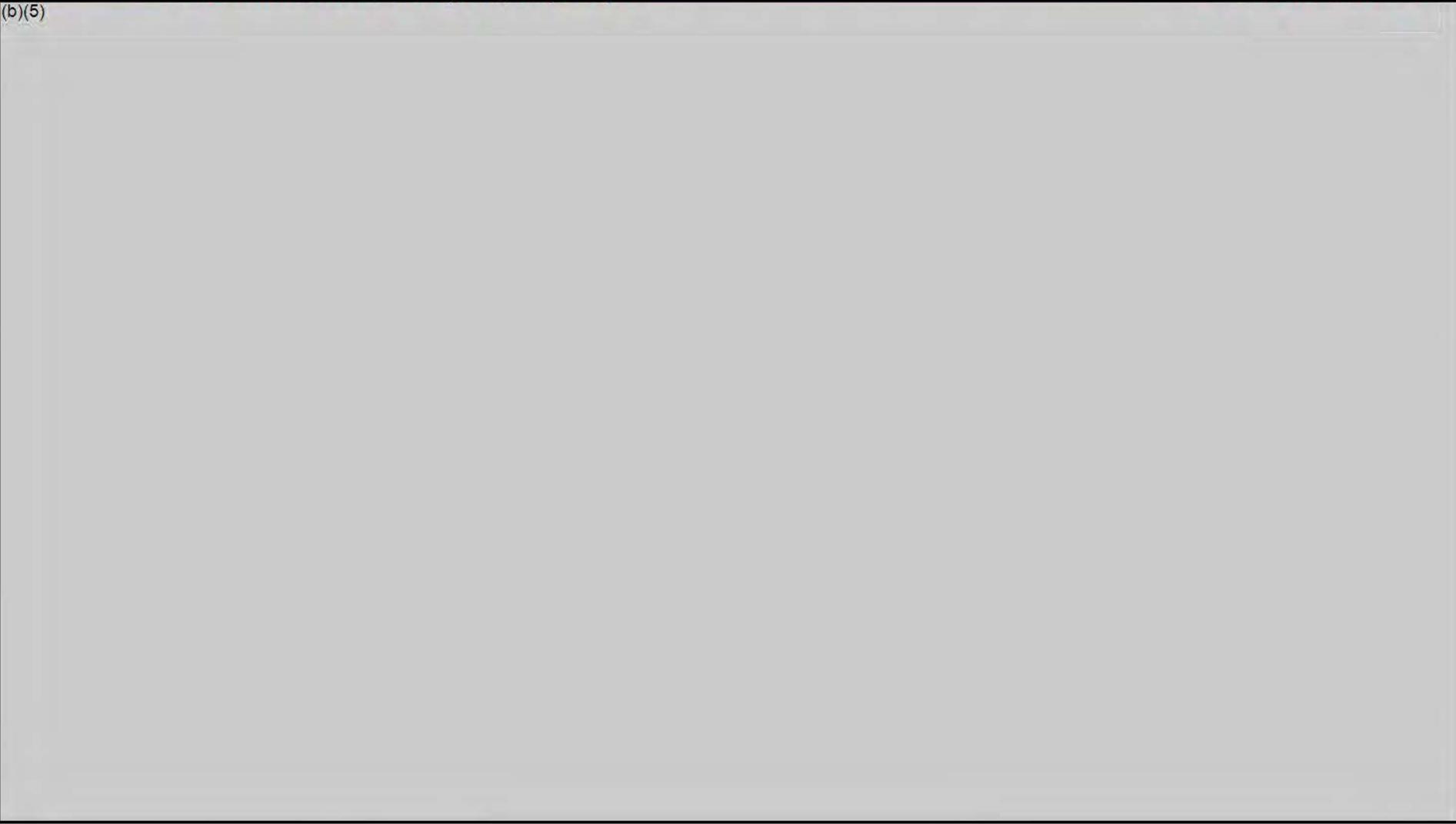


# AN/TPY-2 Increment 1

2013 BMDS Accountability Report (BAR)

Test Baseline

(b)(5)



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Tim R. McKaig  
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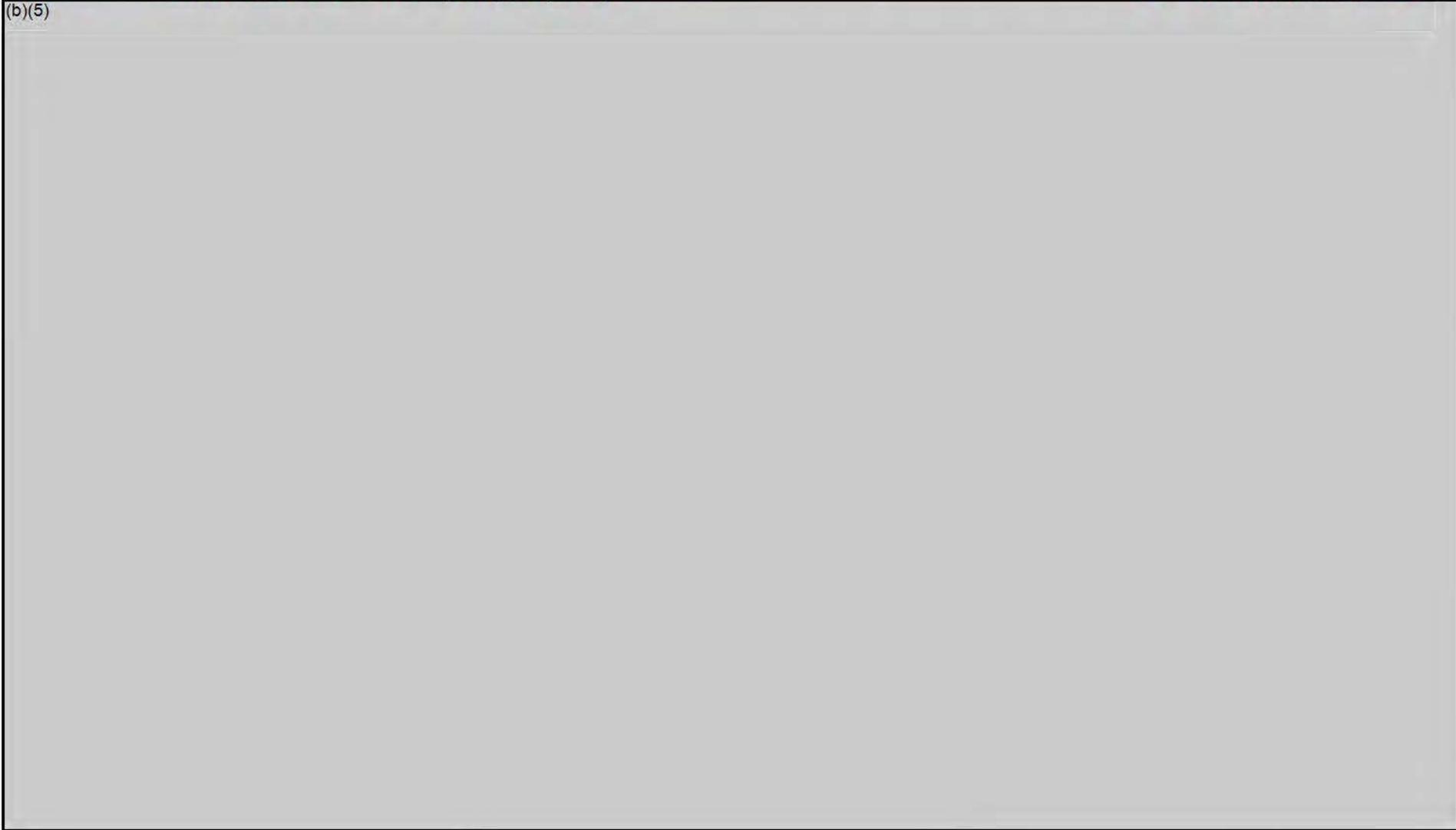


# AN/TPY-2 Increment 1

2013 BMDS Accountability Report (BAR)

Resource Baseline

(b)(5)



Approved Original Signed Date 8 Apr 2013

Tim R. McKaig  
Program Director, BMDS Sensors

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Director for Operations

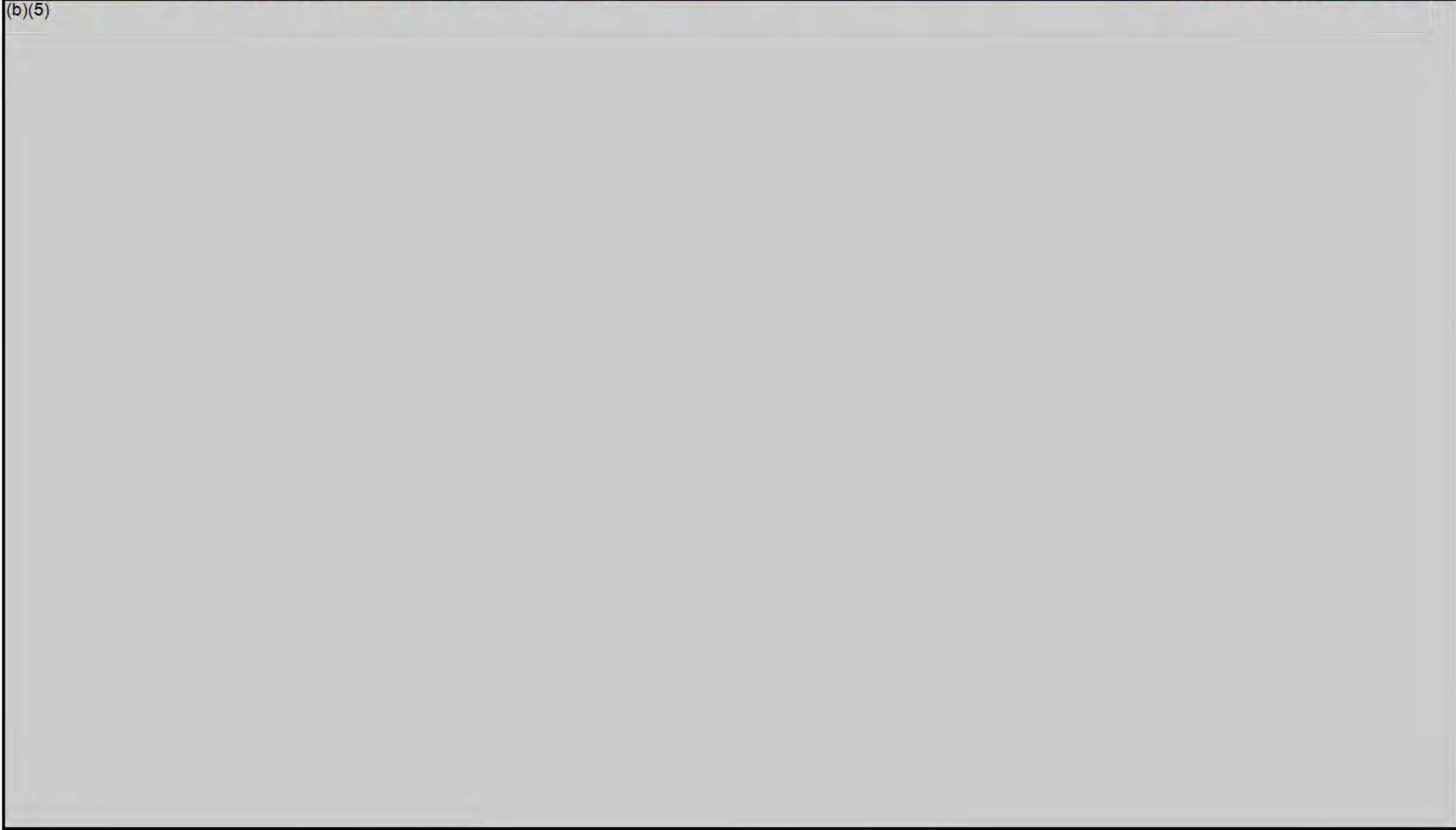


# AN/TPY-2 Increment 1

2013 BMDS Accountability Report (BAR)

Contract Baseline

(b)(5)



Approved Original Signed Date 8 Apr 2013

Tim R. McKaig  
Program Director, BMDS Sensors

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Richard A. Ritter  
Program Executive for C4ISR

Approved Original Signed Date 12 Apr 2013

Barney Klehman  
Director for Acquisition



# AN/TPY-2 Increment 1

2013 BMDS Accountability Report (BAR)

Buy/Delivery/Inventory Summary

(b)(5)



Approved Original Signed Date 9 Apr 2013

Tim R. McKaig  
Program Director, BMDS Sensors

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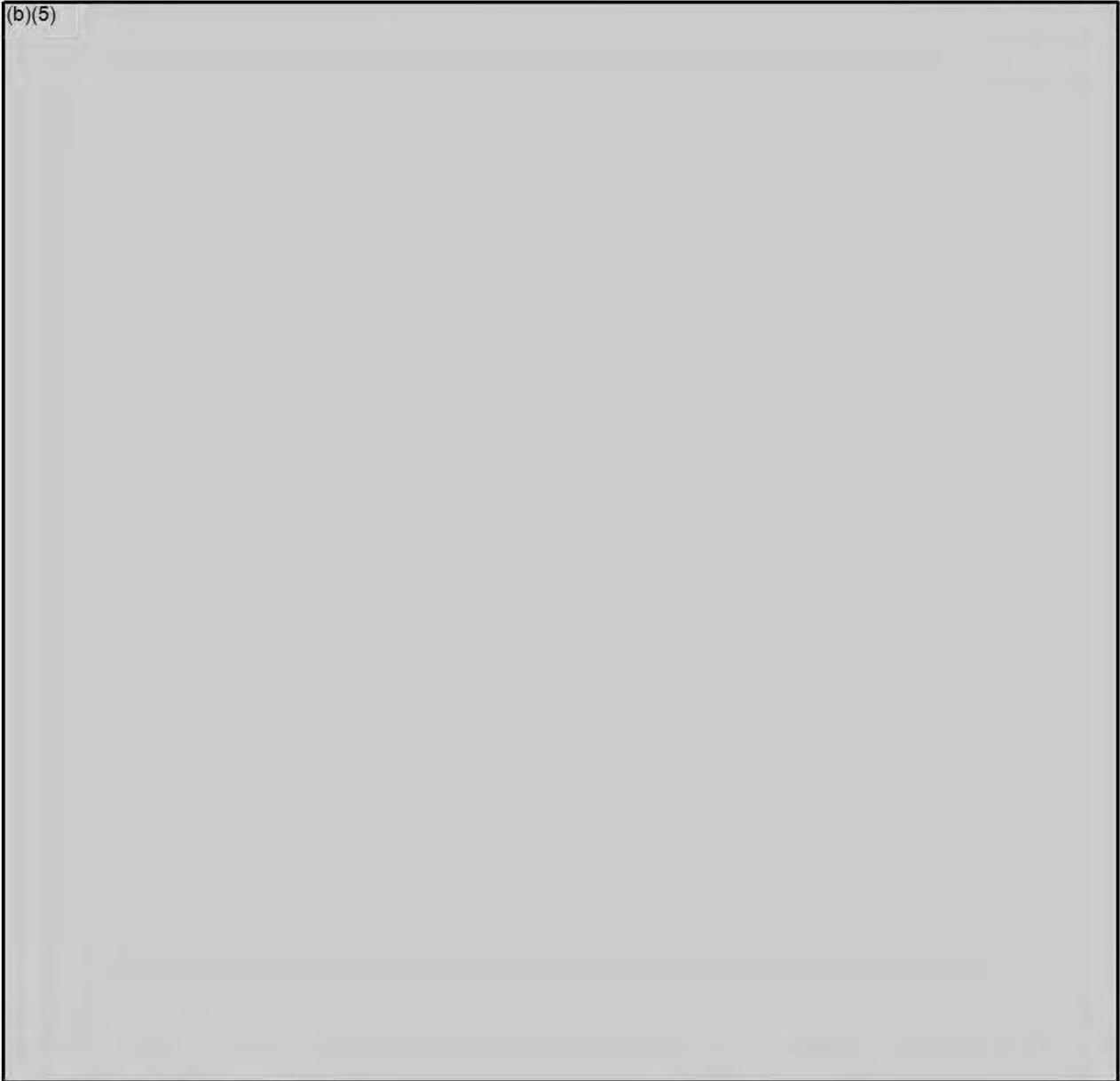
Richard A. Ritter  
Program Executive for C4ISR

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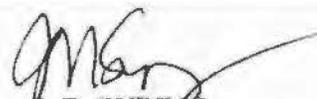


# Upgraded Early Warning Radar (UEWR) Increment 2

(b)(5)



  
CHARLES R. DAVIS, Lt Gen, USAF  
Military Deputy, Assistant Secretary of the  
Air Force (Acquisition)

  
J. D. SYRING  
Vice Admiral, USN  
Director

~~SECRET~~

Attachments:

As stated

cc:

MDA/DX/DE/DO/DA/DP/DT/CR/DS/DDW/SN

SAF/AQ/AQS

HQ AFSPC/A3/A4/7/A5

~~SECRET~~

~~This memo UNCLASSIFIED when separated from classified attachments~~



# UEWR Increment 2

2013 BMDS Accountability Report (BAR)

Significant Change Summary

Significant Change	Impact to Baseline
Awarded UEWR Clear/Cod contract on 24 July 2012 and achieved cost sharing agreements with USAF	<b>Resource:</b> (b)(5) (b)(5)
MDA implemented BMDS Integrated Master Test Plan (IMTP) v13.1	<b>Schedule/Test:</b> Aligned with IMTP 13.1

~~UNCLASSIFIED//FOUO~~

Approved Original Signed Date 8 Apr 2013

Tim R. McKaig  
Program Director, BMDS Sensors

Approved Original Signed Date 9 Apr 2013

Richard A. Ritter  
Program Executive for C4ISR



# UEWR Increment 2

2013 BMDS Accountability Report (BAR)

Schedule Baseline

(b)(5)

Approved Original Signed Date 8 Apr 2013

Tim R. McKaig  
Program Director, BMDS Sensors

Approved Original Signed Date 9 Apr 2013

Richard A. Ritter  
Program Executive for C4ISR

Approved Original Signed Date 10 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration



# UEWR Increment 2

2013 BMDS Accountability Report (BAR)

Technical Baseline

# See Classified Annex F



# UEWR Increment 2

2013 BMDS Accountability Report (BAR)

Operational Capacity Baseline

# See Classified Annex F

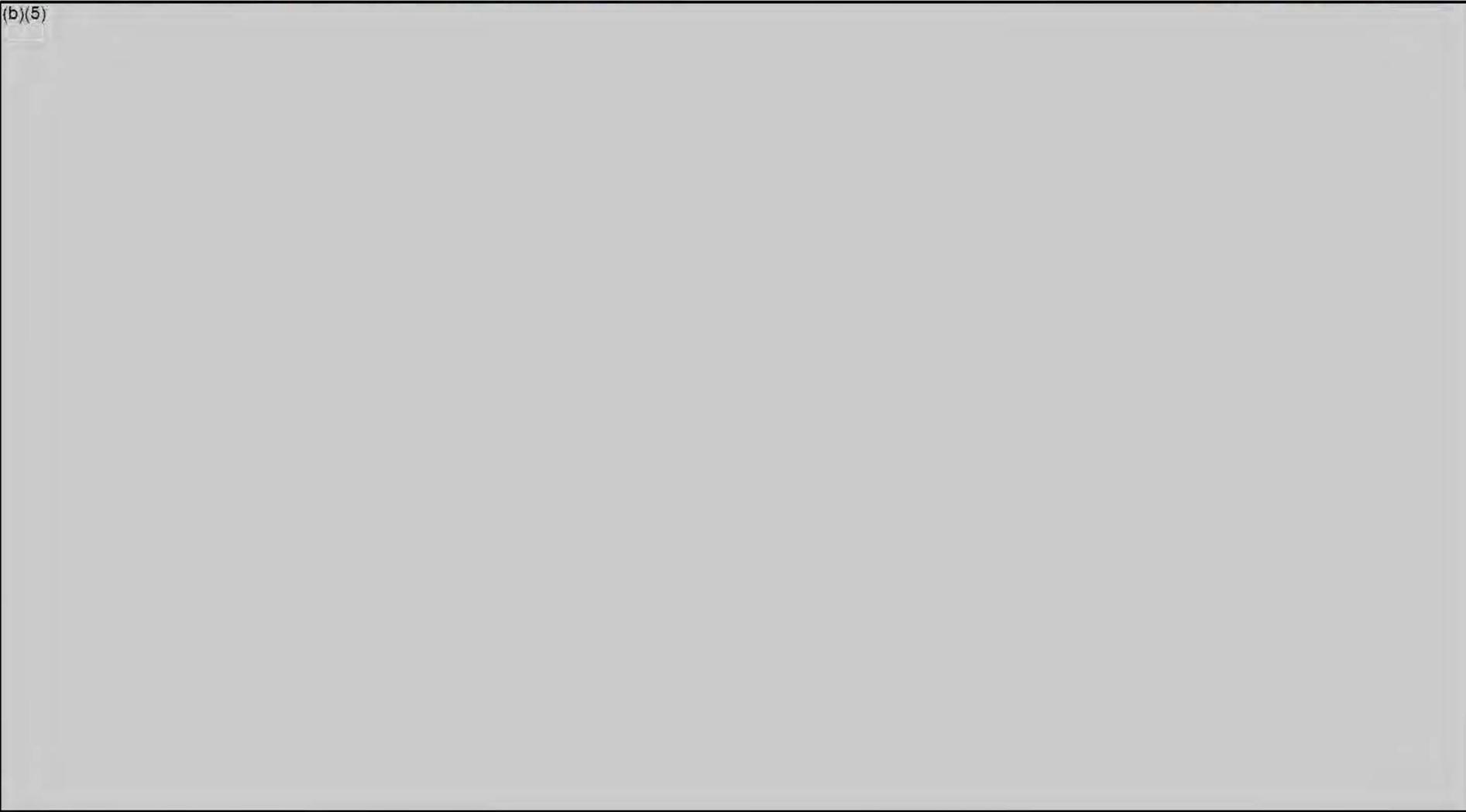


# UEWR Increment 2

2013 BMDS Accountability Report (BAR)

Test Baseline

(b)(5)



Approved Original Signed Date 8 Apr 2013

Tim R. McKaig  
Program Director, BMDS Sensors

Approved Original Signed Date 9 Apr 2013

Richard A. Ritter  
Program Executive for C4ISR

Approved Original Signed Date 10 Apr 2013

MG Heidi V. Brown  
Director for Test



# UEWR Increment 2

2013 BMDS Accountability Report (BAR)

Resource Baseline

(b)(5)



Approved Original Signed Date 8 Apr 2013

Tim R. McKaig  
Program Director, BMDS Sensors

Approved Original Signed Date 9 Apr 2013

Richard A. Ritter  
Program Executive for C4ISR

Approved Original Signed Date 12 Apr 2013

J. Gary Pennett  
Director for Operations

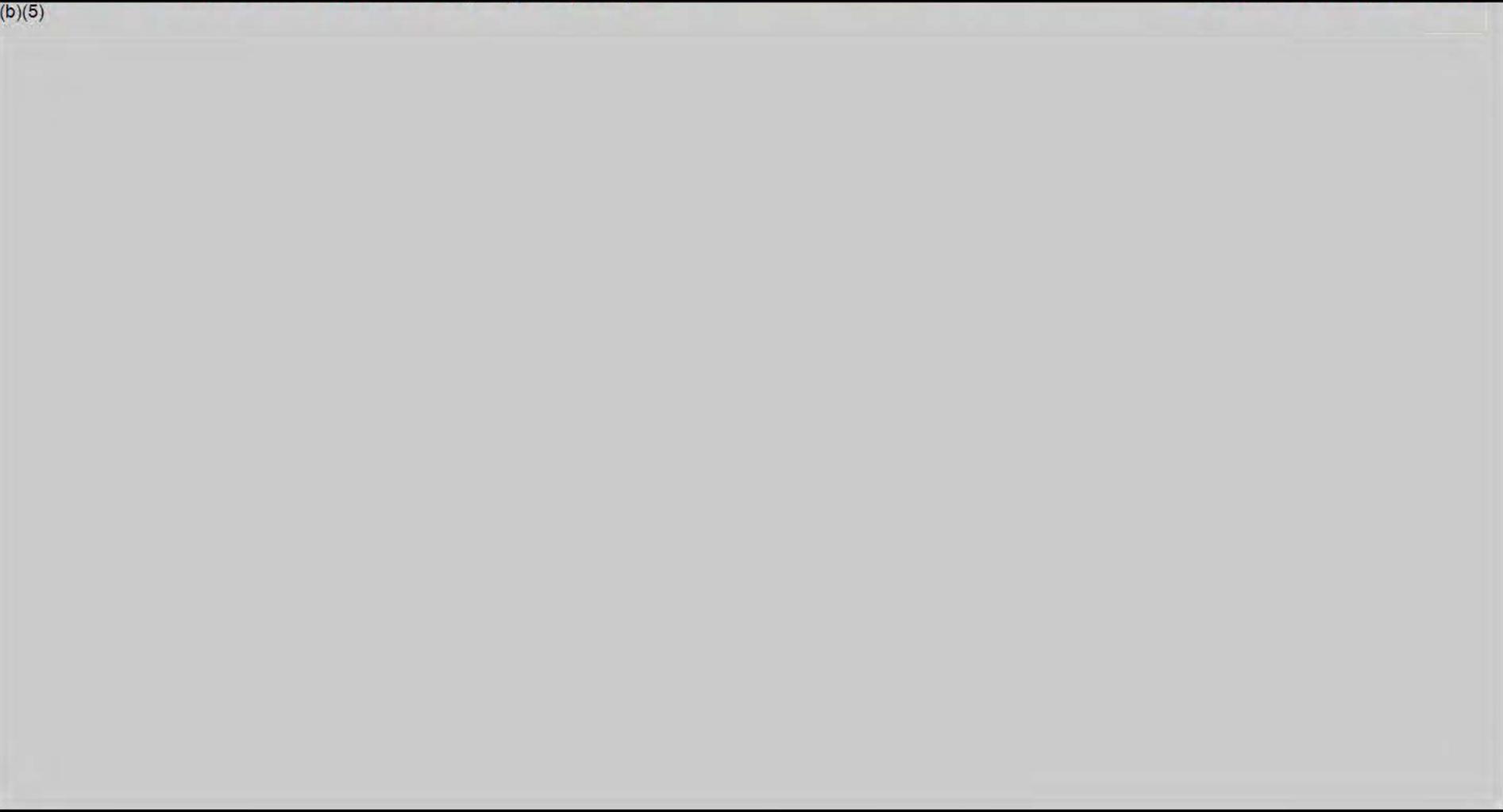


# UEWR Increment 2

2013 BMDS Accountability Report (BAR)

Contract Baseline

(b)(5)



Approved Original Signed Date 8 Apr 2013

Tim R. McKaig  
Program Director, BMDS Sensors

Approved Original Signed Date 9 Apr 2013

Richard A. Ritter  
Program Executive for C4ISR

Approved Original Signed Date 11 Apr 2013

Barney Klehman  
Director for Acquisition



# UEWR Increment 2

2013 BMDS Accountability Report (BAR)

Buy/Delivery/Inventory Summary ■

(b)(5)

Approved Original Signed Date 8 Apr 2013

Tim R. McKaig  
Program Director, BMDS Sensors

Approved Original Signed Date 9 Apr 2013

Richard A. Ritter  
Program Executive for C4ISR



# **Aegis BMD 4.0.1 / 4.0.2 / SM-3 Block 1B**

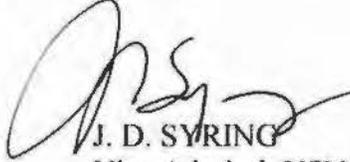
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FOIA EXEMPTION (b)(5)

(b)(5)

(U) This memorandum supersedes Reference (a) above.

SEAN J. STACKLEY  
Assistant Secretary of the Navy  
Research, Development & Acquisition



J. D. SYRING  
Vice Admiral, USN  
Director

Attachments:

1. (U) Aegis BMD 4.0.1/SM-3 Block IB Schedule Baseline. ~~Attachment is FOUO.~~
2. (U) Aegis BMD 4.0.1/SM-3 Block IB Technical Baseline. ~~Attachment is SECRET.~~
3. (U) Aegis BMD 4.0.1/SM-3 Block IB Test Baseline. ~~Attachment is FOUO.~~
4. (U) Aegis BMD 4.0.1/SM-3 Block IB Operational Capacity Baseline. ~~Attachment is SECRET.~~
5. (U) Aegis BMD 4.0.1/SM-3 Block IB Resource Baseline. ~~Attachment is FOUO.~~
6. (U) Aegis BMD 4.0.1/SM-3 Block IB Contract Baseline. ~~Attachment is FOUO.~~
7. (U) Aegis BMD 4.0.1/SM-3 Block IB Exit Criteria. ~~Attachment is FOUO.~~

cc:

DASN (Ships)  
MDA/DX  
MDA/DE  
MDA/DO  
MDA/DA  
MDA/DP  
MDA/DT  
MDA/DS  
MDA/AB  
IWS/1.0  
IWS/3.0  
OPNAV N86

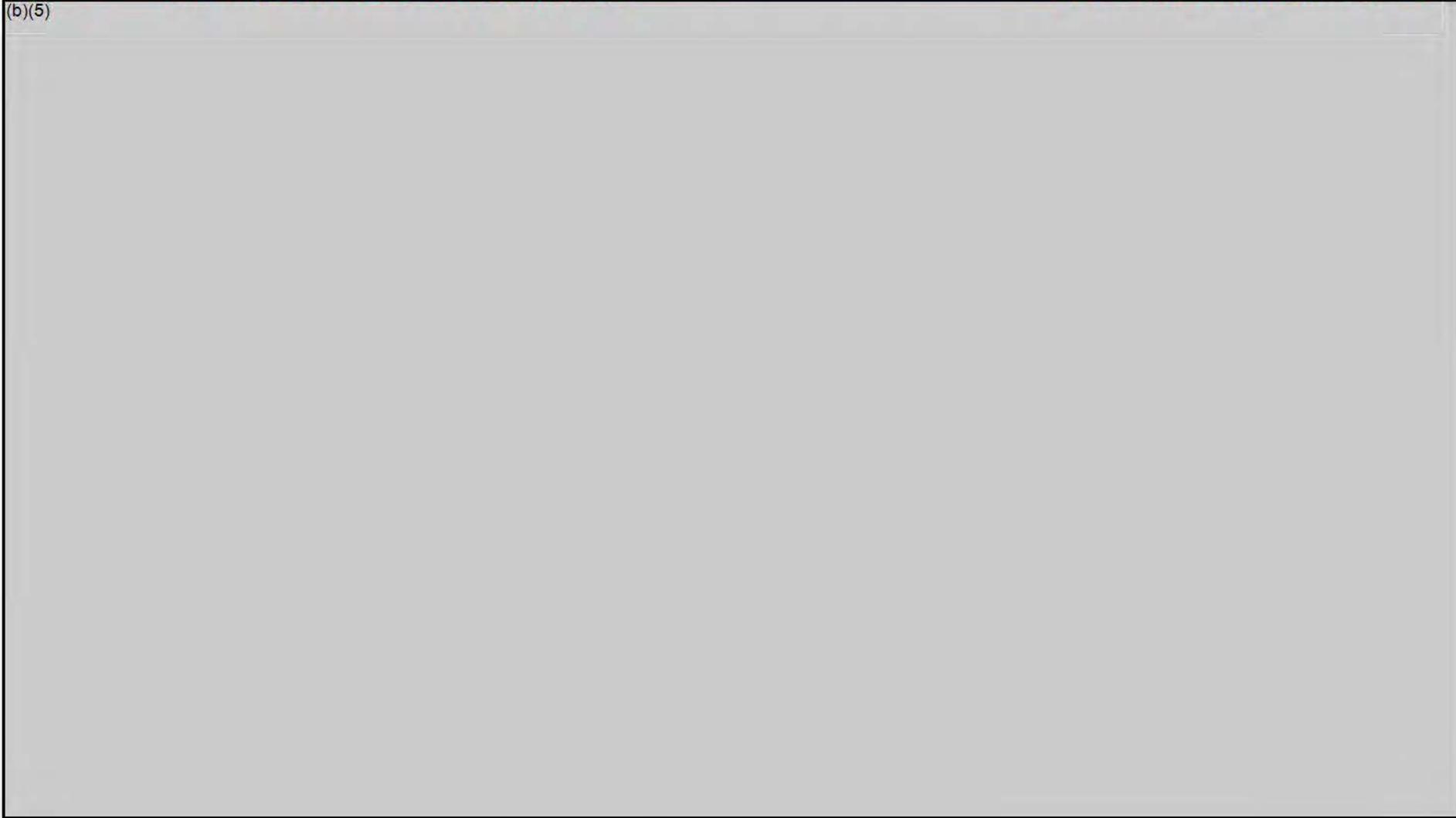


# Aegis BMD 4.0.1/4.0.2/SM-3 BIK 1B

2013 BMDS Accountability Report (BAR)

Significant Change Summary

(b)(5)



Approved Original Signed Date 15 Apr 2013

Robert C. Shevock  
Program Manager for Aegis BMD 4.0.1

Approved Original Signed Date 17 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

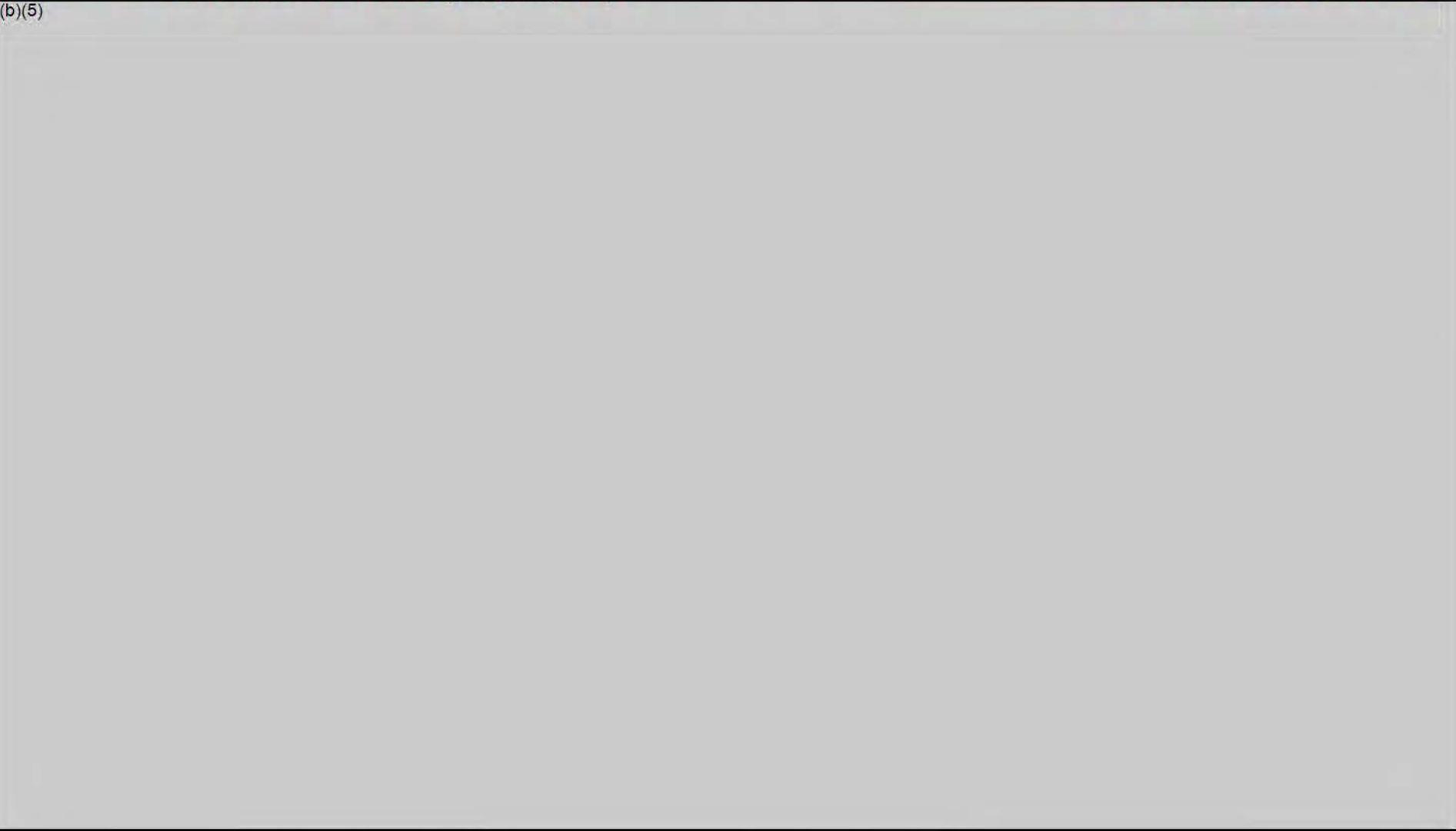


# Aegis BMD 4.0.1/4.0.2/SM-3 BIK 1B

2013 BMDS Accountability Report (BAR)

Schedule Baseline

(b)(5)



Approved Original Signed Date 15 Apr 2013

Robert C. Shevock  
Program Manager for Aegis BMD 4.0.1

Approved Original Signed Date 12 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

Approved Original Signed Date 17 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration



# Aegis BMD 4.0.1/4.0.2/SM-3 Blk 1B

2013 BMDS Accountability Report (BAR)

Technical Baseline

## See Classified Annex F



# Aegis BMD 4.0.1/4.0.2/SM-3 Blk 1B

2013 BMDS Accountability Report (BAR)

Operational Capacity Baseline

## See Classified Annex F



# Aegis BMD 4.0.1/4.0.2/SM-3 Blk 1B

2013 BMDS Accountability Report (BAR)

Test Baseline

4.0.1/IB Program Plan		FY12						FY13	FY14
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	(b)(5)
(U) Test Events	System/Element Flight Tests	FTM-16 E2		FTM-16 E2a	FTM-18				
	System Level GT GTX-Focused GTI= HWIL GTD= Distributed		GTX-04e			GTI-04e Part 1			GTI

(b)(5)

Approved Original Signed Date 15 Apr 2013  
 Robert C. Shevock  
 Program Manager for Aegis BMD 4.0.1

Approved Original Signed Date 17 Apr 2013  
 Rear Admiral Randall M. Hendrickson  
 Program Executive for Aegis BMD

Approved Original Signed Date 18 Apr 2013  
 MG Heidi V. Brown  
 Director for Test



# Aegis BMD 4.0.1/4.0.2/SM-3 Blk 1B

2013 BMDS Accountability Report (BAR)

Resource Baseline

(b)(5)



Approved Original Signed Date 15 Apr 2013

Robert C. Shevock  
Program Manager for Aegis BMD 4.0.1

Approved Original Signed Date 17 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

Approved Original Signed Date 12 Apr 2013

J. Gary Pennett  
Director for Operations



# Aegis BMD 4.0.1/4.0.2/SM-3 Blk 1B

2013 BMDS Accountability Report (BAR)

Contract Baseline

(b)(5)



Approved Original Signed Date 15 Apr 2013

Robert C. Shevock  
Program Manager for Aegis BMD 4.0.1

Approved Original Signed Date 17 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

Approved Original Signed Date 19 Apr 2013

Barney Klehman  
Director for Acquisition

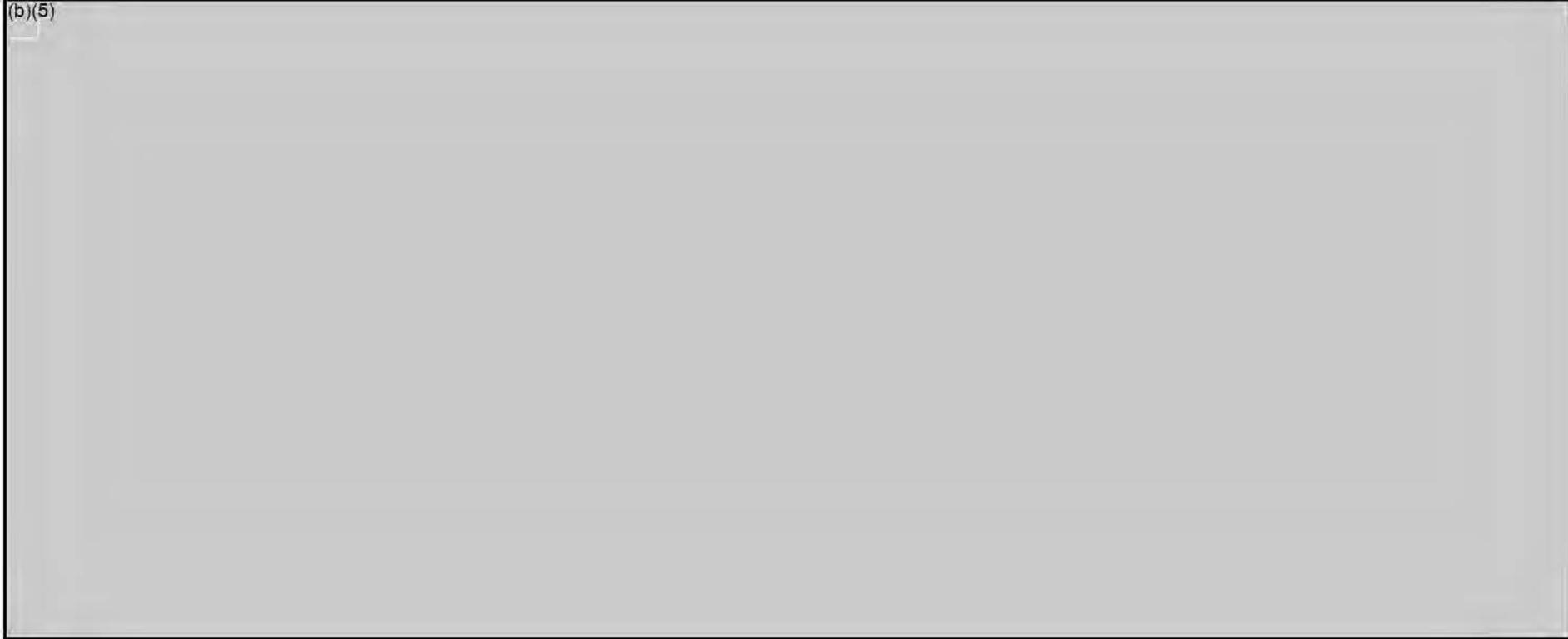


# Aegis BMD 4.0.1/4.0.2/SM-3 Blk 1B

2013 BMDS Accountability Report (BAR)

Buy/Delivery/Inventory Summary ■

(b)(5)



Approved Original Signed Date 15 Apr 2013

Robert C. Shevock  
Program Manager for Aegis BMD 4.0.1

Approved Original Signed Date 12 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD



# Aegis Ashore

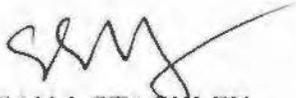
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FOIA EXEMPTION (b)(5)

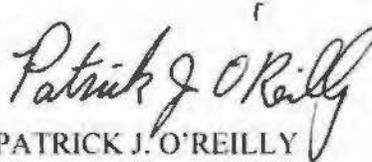
(U) The attached criteria to exit the Product Development Phase are also approved. The Director of the (b)(5)

(b)(5)

(b)(5)



SEAN J. STACKLEY  
Assistant Secretary of the Navy  
Research, Development & Acquisition



PATRICK J. O'REILLY  
Lieutenant General, USA  
Director, Missile Defense Agency

Attachments:

1. (U) AA Schedule Baselines (~~These documents are FOUO~~)
2. (U) AA Technical Baseline (~~This document is SECRET~~)
3. (U) AA Test Baseline (~~This document is FOUO~~)
4. (U) AA Operational Capacity Baseline (~~This document is FOUO~~)
5. (U) AA Resource Baselines (~~These documents are FOUO~~)
6. (U) AA Contract Baselines (~~These documents are FOUO~~)
7. (U) AA Exit Criteria (~~This document is FOUO~~)

cc:

ASN RDA  
MDA/DX  
MDA/DE  
MDA/DO  
MDA/DA  
MDA/DP  
MDA/DT  
MDA/DS  
MDA/AB  
IWS/1.0  
OPNAV N86

Classified by: (b)(6) MDA/AB/AA  
Derived from: STRATCOM issued Air & Missile Defense  
Prioritized Capabilities List 2009 dates 18 March 2012  
Declassify on: May 2034



# Aegis Ashore

Significant Change	Impacts to Baseline
<p>Established a revised initial program baseline for Aegis Ashore that includes all Aegis Ashore program content and (b)(5)</p>	<p>Previous initial program baseline established in June 2010 did not include military construction, site activation, non-tactical communications, and on-site systems engineering. In 2012 BAR, these additions were annotated to the program baselines. The re-baseline initiated in June 2012 and approved in November 2012, re-establishes the initial program baseline to include this content and the (b)(5)</p>
<p>(b)(5)</p>	<p><b>Resource:</b> (b)(5)</p>
<p>IMTP v13.1 modified flight test events of Aegis Weapon System.</p>	<p><b>Schedule/Test:</b> (b)(5)</p>

Approved Original Signed Date 15 Apr 2013  
 CAPT Jeffrey D. Weston  
 Program Manager for Aegis Ashore

Approved Original Signed Date 15 Apr 2013  
 Rear Admiral Randall M. Hendrickson  
 Program Executive for Aegis BMD

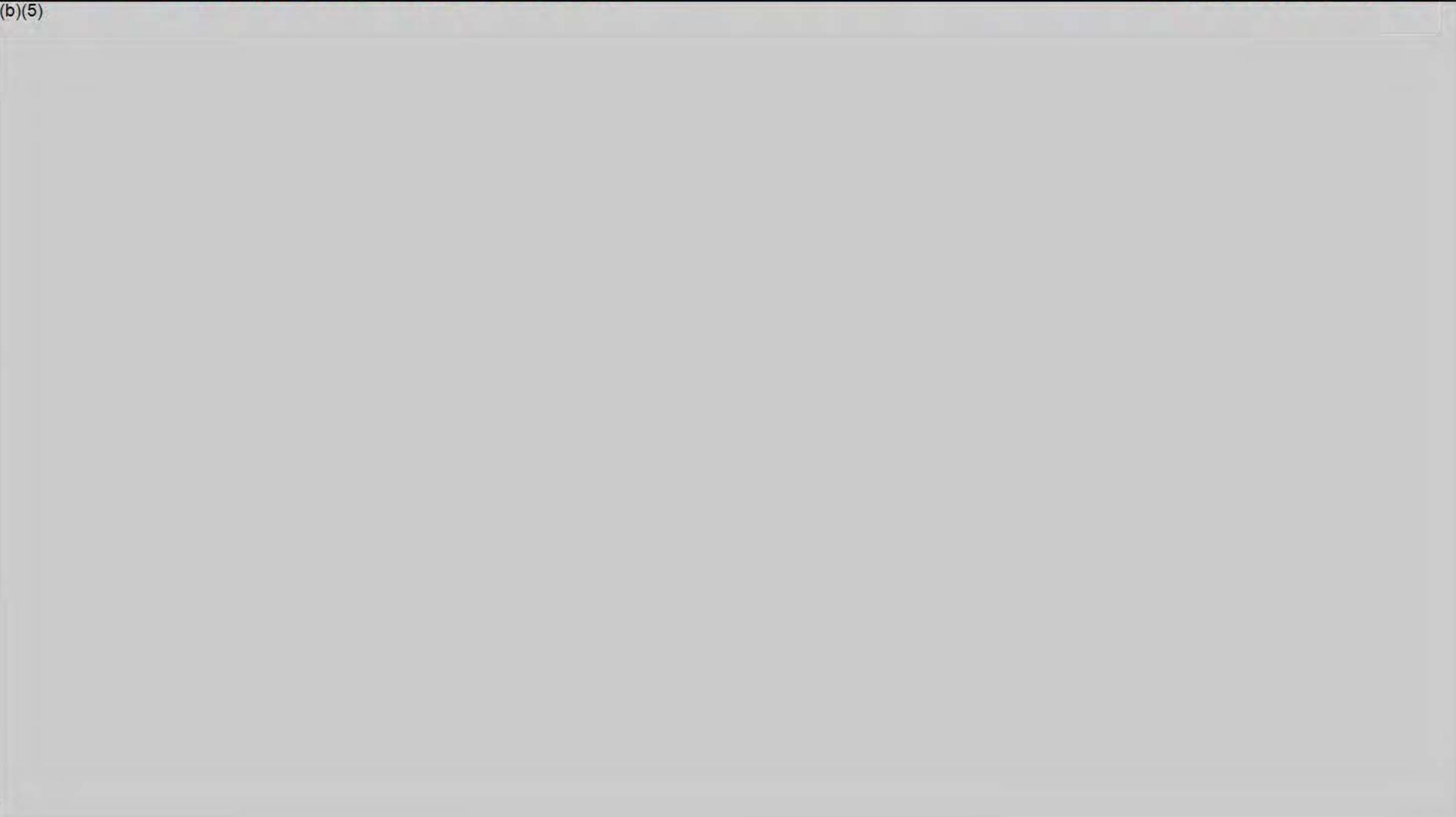


# Aegis Ashore- PMRF/Romania

2013 BMDS Accountability Report (BAR)

Schedule Baseline

(b)(5)



Approved Original Signed Date 9 Apr 2013

CAPT Jeffrey D. Weston  
Program Manager for Aegis Ashore

Approved Original Signed Date 10 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

Approved Original Signed Date 16 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration



# Aegis Ashore- Poland

2013 BMDS Accountability Report (BAR)

Schedule Baseline

(b)(5)

Approved Original Signed Date 9 Apr 2013

CAPT Jeffrey D. Weston  
Program Manager for Aegis Ashore

Approved Original Signed Date 10 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

Approved Original Signed Date 16 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration



# Aegis Ashore

2013 BMDS Accountability Report (BAR)

Technical Baseline

# See Classified Annex F



# Aegis Ashore

2013 BMDS Accountability Report (BAR)

Operational Capacity Baseline

# See Classified Annex F



# Aegis Ashore

2013 BMDS Accountability Report (BAR)

Test Baseline

(b)(5)



Approved Original Signed Date 9 Apr 2013

CAPT Jeffrey D. Weston  
Program Manager for Aegis Ashore

Approved Original Signed Date 10 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

Approved Original Signed Date 16 Apr 2013

MG Heidi V. Brown  
Director for Test

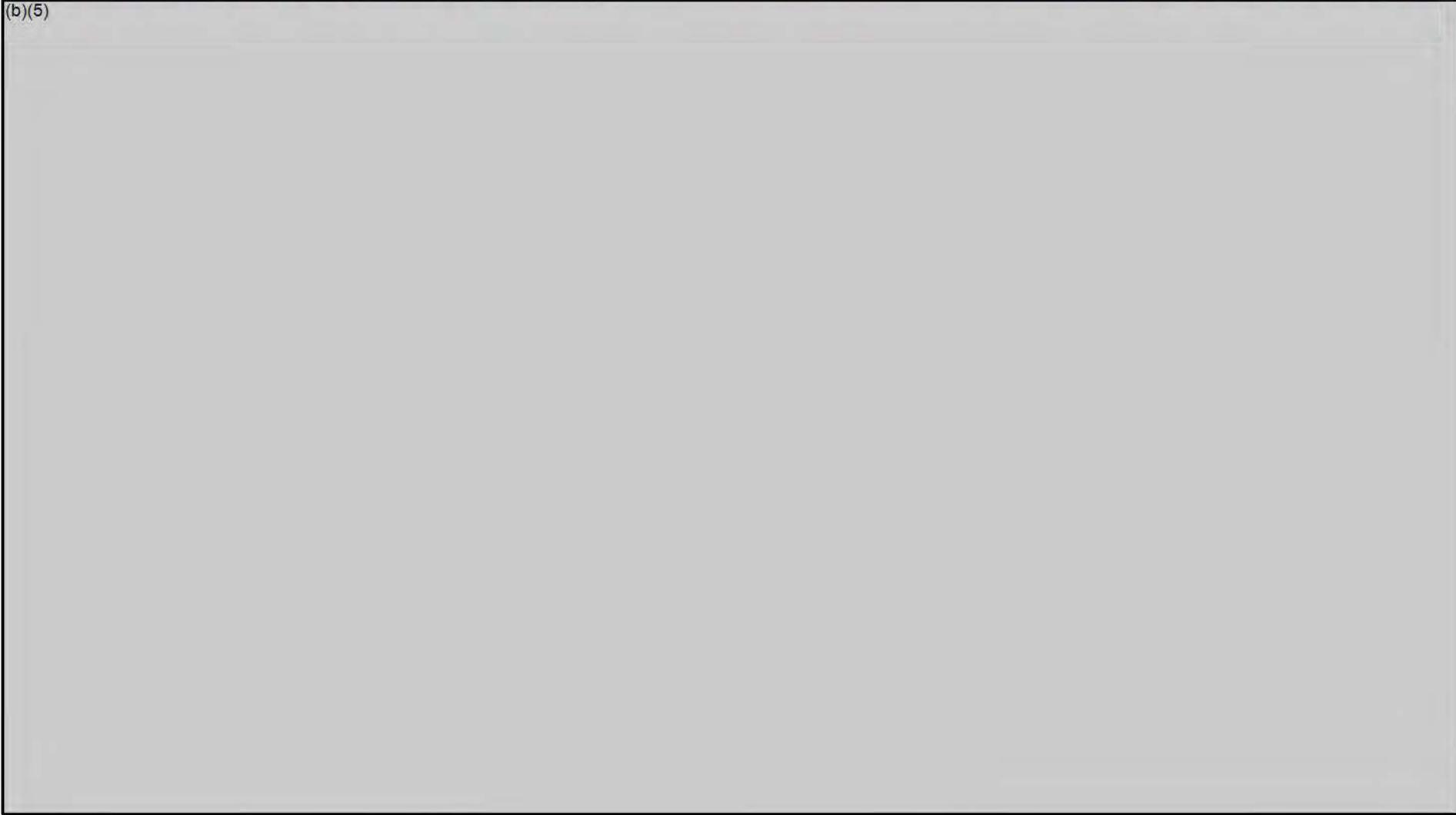


# Aegis Ashore- PMRF/Romania

2013 BMDS Accountability Report (BAR)

Resource Baseline

(b)(5)



Approved Original Signed Date 9 Apr 2013

CAPT Jeffrey D. Weston  
Program Manager for Aegis Ashore

Approved Original Signed Date 12 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

Approved Original Signed Date 16 Apr 2013

J. Gary Pennett  
Director for Operations



# Aegis Ashore- Poland

2013 BMDS Accountability Report (BAR)

Resource Baseline

(b)(5)



Approved Original Signed Date 9 Apr 2013  
CAPT Jeffrey D. Weston  
Program Manager for Aegis Ashore

Approved Original Signed Date 10 Apr 2013  
Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

Approved Original Signed Date 17 Apr 2013  
J. Gary Pennett  
Director for Operations

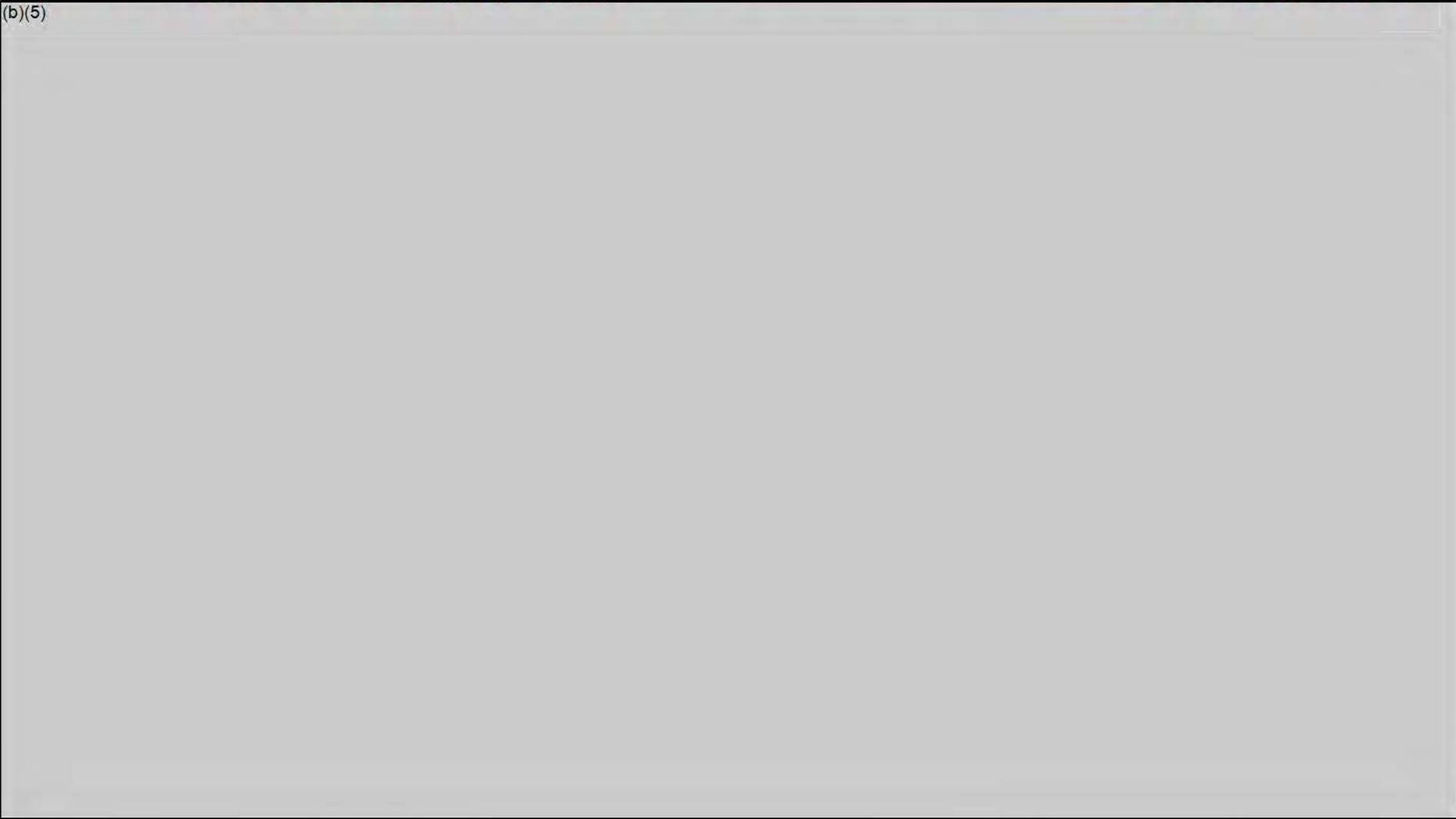


# Aegis Ashore- PMRF/Romania

2013 BMDS Accountability Report (BAR)

Contract Baseline

(b)(5)



Approved Original Signed Date 9 Apr 2013

CAPT Jeffrey D. Weston  
Program Manager for Aegis Ashore

Approved Original Signed Date 10 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

Approved Original Signed Date 19 Apr 2013

Barney Klehman  
Director for Acquisition



# Aegis Ashore- Poland

2013 BMDS Accountability Report (BAR)

Contract Baseline

(b)(5)



Approved Original Signed Date 9 Apr 2013

CAPT Jeffrey D. Weston  
Program Manager for Aegis Ashore

Approved Original Signed Date 12 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

Approved Original Signed Date 19 Apr 2013

Barney Klehman  
Director for Acquisition



# Aegis Ashore

(b)(5)



Approved Original Signed Date 9 Apr 2013

CAPT Jeffrey D. Weston  
Program Manager for Aegis Ashore

Approved Original Signed Date 10 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD



# Aegis BMD 5.0



# Aegis BMD 5.0

2013 BMDS Accountability Report (BAR)

Significant Change Summary

(b)(5)



Approved Original Signed Date 12 Apr 2013

CAPT Michael D. Anderson  
Program Manager for Aegis Modernization

Approved Original Signed Date 12 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD



# Aegis BMD 5.0

2013 BMDS Accountability Report (BAR)

Schedule Baseline

(b)(5)



Approved Original Signed Date 11 Apr 2013

CAPT Michael D. Anderson  
Program Manager for Aegis Modernization

Approved Original Signed Date 10 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

Approved Original Signed Date 16 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration



# Aegis BMD 5.0

**See Classified Annex F**



# Aegis BMD 5.0

**See Classified Annex F**

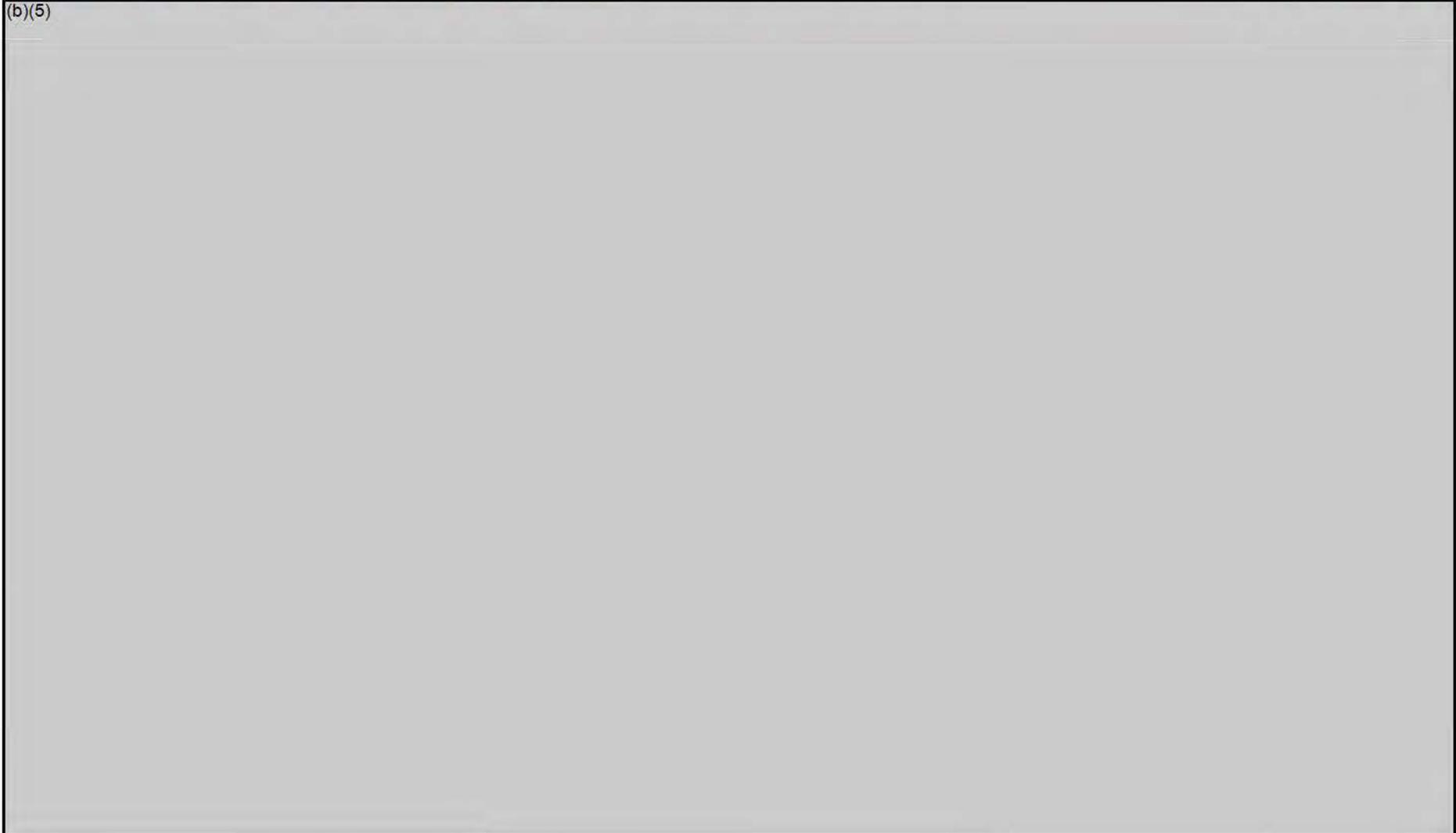


# Aegis BMD 5.0

2013 BMDS Accountability Report (BAR)

Test Baseline

(b)(5)



Approved Original Signed Date 11 Apr 2013

CAPT Michael D. Anderson  
Program Manager for Aegis Modernization

Approved Original Signed Date 10 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

Approved Original Signed Date 16 Apr 2013

MG Heidi V. Brown  
Director for Test

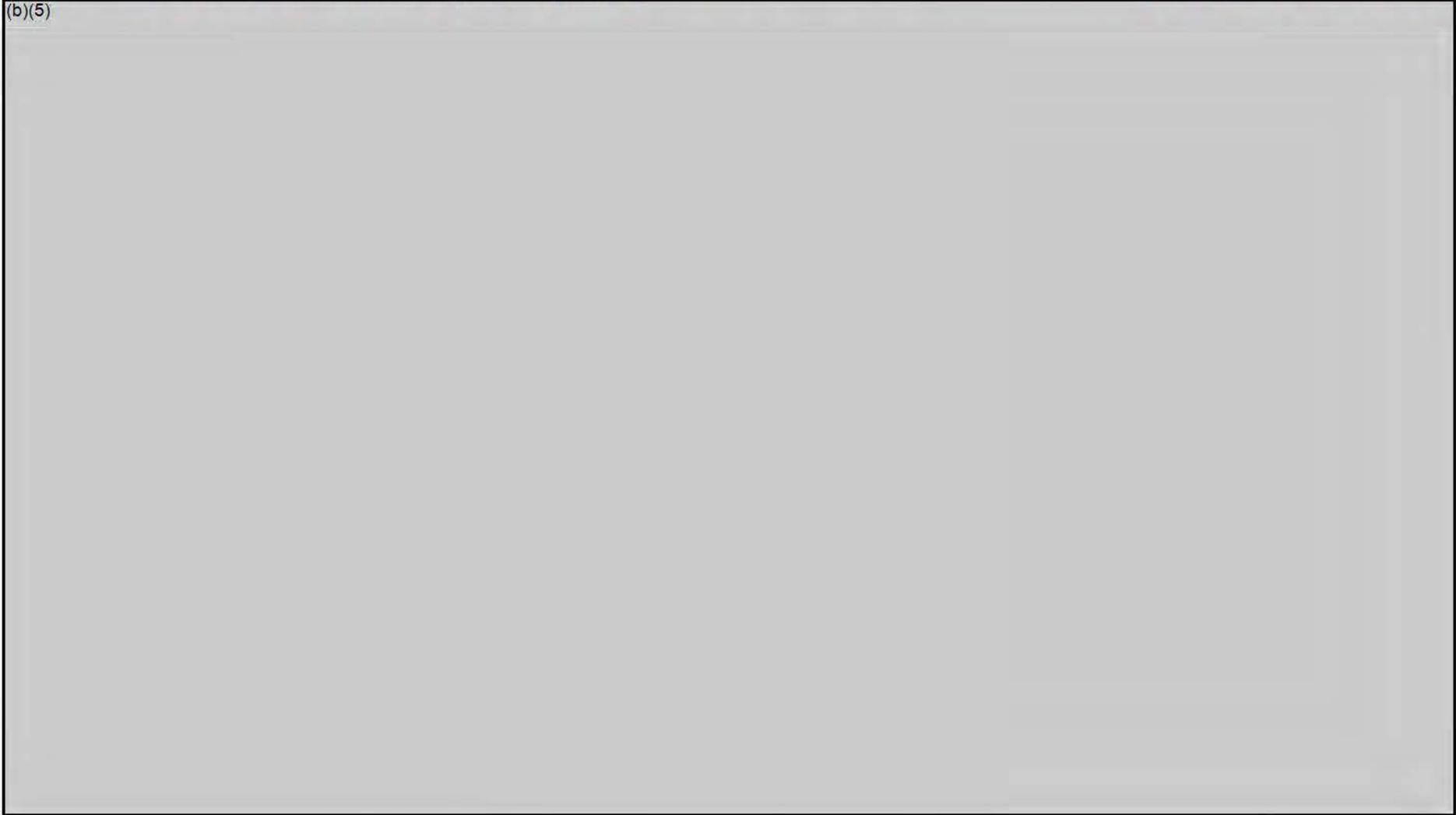


# Aegis BMD 5.0

2013 BMDS Accountability Report (BAR)

Resource Baseline

(b)(5)



Approved Original Signed Date 12 Apr 2013

CAPT Michael D. Anderson  
Program Manager for Aegis Modernization

Approved Original Signed Date 12 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

Approved Original Signed Date 16 Apr 2013

J. Gary Pennett  
Director for Operations

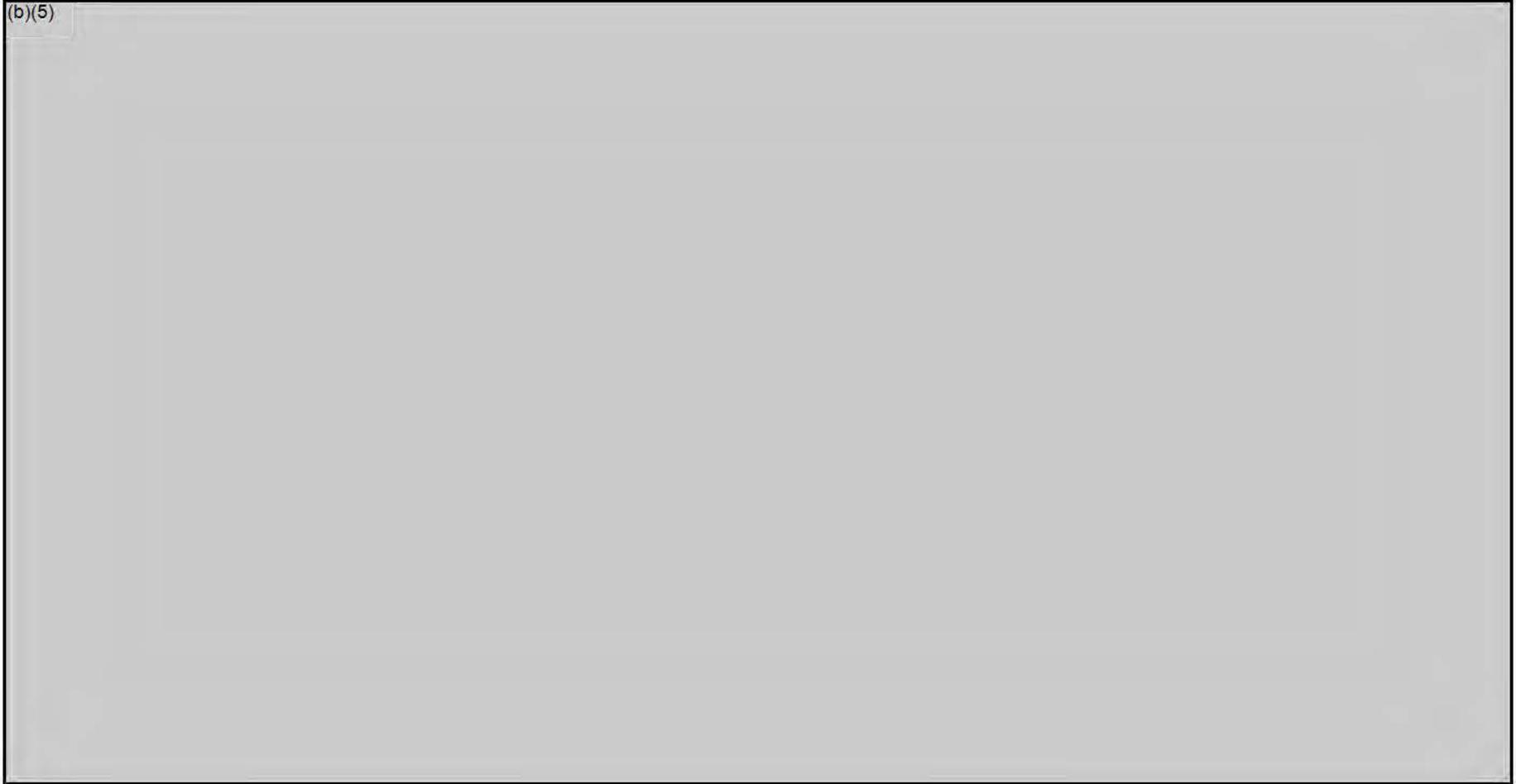


# Aegis BMD 5.0

2013 BMDS Accountability Report (BAR)

Contract Baseline

(b)(5)



Approved Original Signed Date 11 Apr 2013

CAPT Michael D. Anderson  
Program Manager for Aegis Modernization

Approved Original Signed Date 10 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD

Approved Original Signed Date 19 Apr 2013

Barney Klehman  
Director for Acquisition

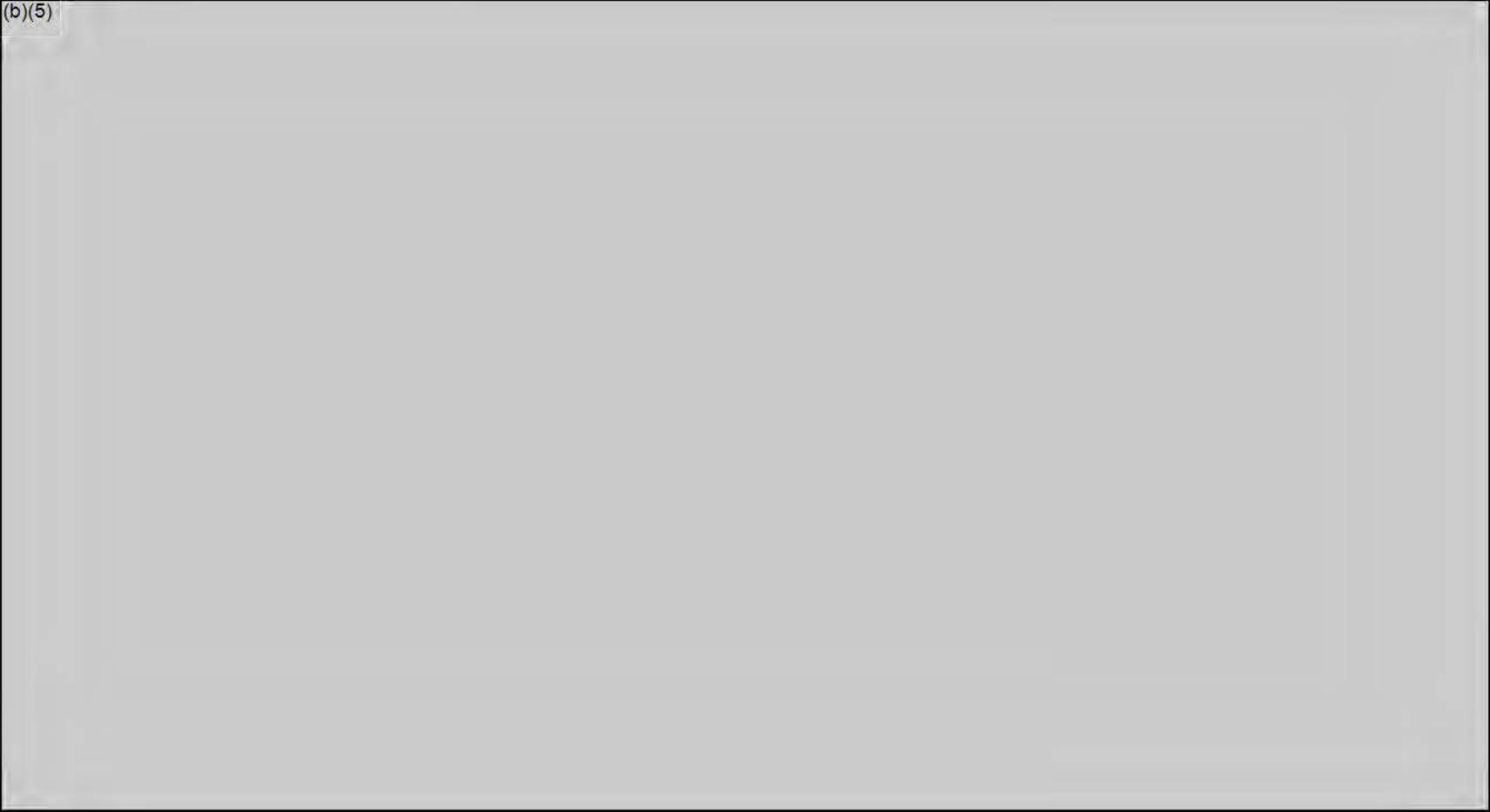


# Aegis BMD 5.0

2013 BMDS Accountability Report (BAR)

Buy/Delivery/Inventory Summary ■

(b)(5)



Approved Original Signed Date 12 Apr 2013

CAPT Michael D. Anderson  
Program Manager for Aegis Modernization

Approved Original Signed Date 12 Apr 2013

Rear Admiral Randall M. Hendrickson  
Program Executive for Aegis BMD



# GMD Initial Homeland Defense (IHD)



# GMD Initial Homeland Defense (IHD)

2013 BMDS Accountability Report (BAR)

Significant Change Summary

Significant Change	Impact to Baseline
(b)(5)	<p><b>Schedule/Test:</b></p> <p>(b)(5)</p>
<p>Added a (b)(5)</p> <p>(b)(5)</p>	<p><b>Schedule/Test:</b></p> <p>(b)(5)</p>
(b)(5)	(b)(5)

~~UNCLASSIFIED//FOUO~~

Approved Original Signed Date 8 Apr 2013  
 Carlos B. Kingston  
 Program Director Ground-based Midcourse Defense

Approved Original Signed Date 10 Apr 2013  
 BG Ole Knudson  
 Program Executive for Programs & Integration

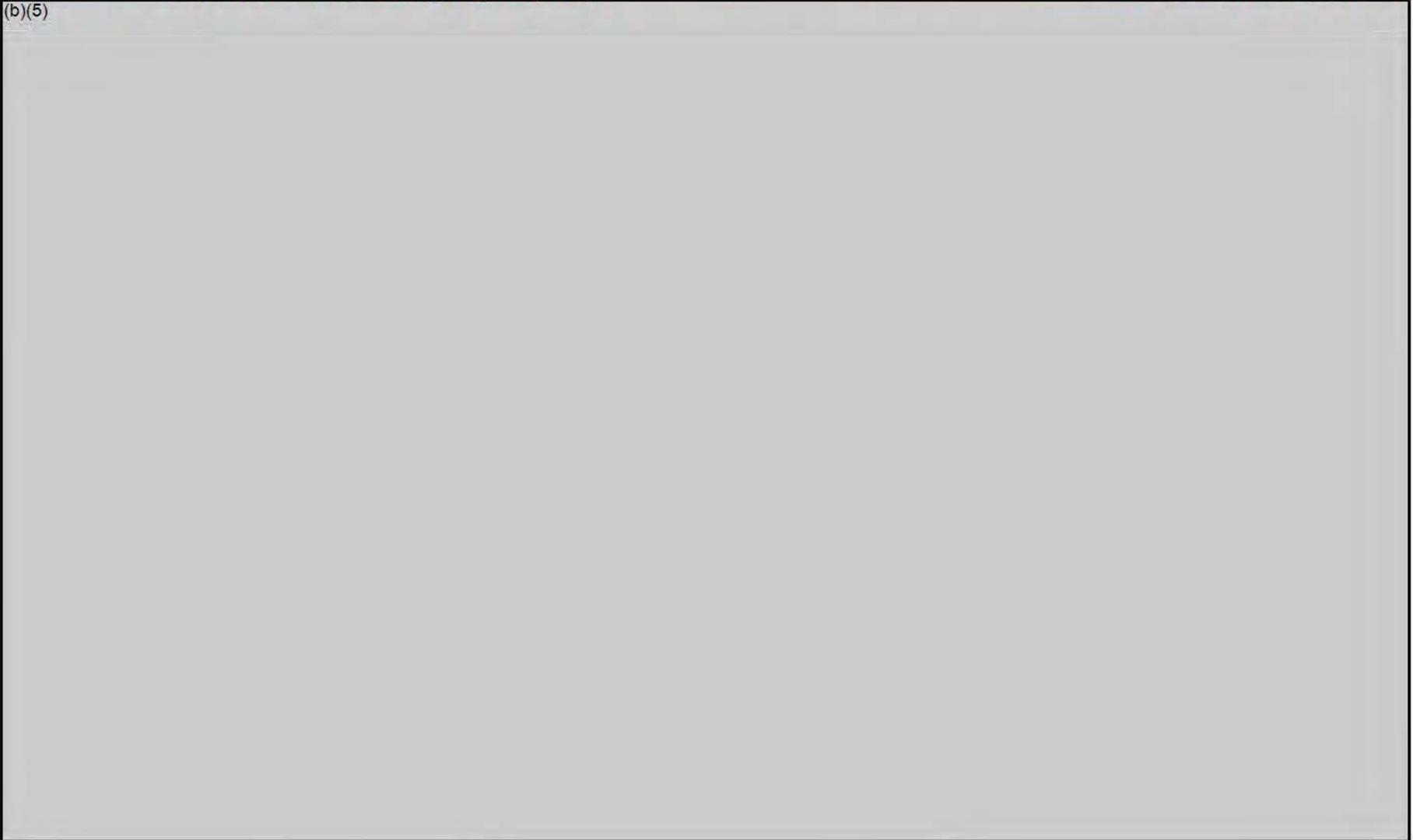


# GMD Initial Homeland Defense (IHD)

2013 BMDS Accountability Report (BAR)

Schedule Baseline

(b)(5)



Approved Original Signed Date 8 Apr 2013

Carlos B. Kingston  
Program Director Ground-based Midcourse Defense

Approved Original Signed Date 8 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration

Approved Original Signed Date 8 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration



# GMD Initial Homeland Defense (IHD)

2013 BMDS Accountability Report (BAR)

Technical Baseline

## See Classified Annex F



# GMD Initial Homeland Defense (IHD)

2013 BMDS Accountability Report (BAR)

Operational Capacity Baseline

## See Classified Annex F



# GMD Initial Homeland Defense (IHD)

2013 BMDS Accountability Report (BAR)

Test Baseline

(b)(5)

Approved Original Signed Date 8 Apr 2013  
Carlos B. Kingston  
Program Director Ground-based Midcourse Defense

Approved Original Signed Date 8 Apr 2013  
BG Ole Knudson  
Program Executive for Programs & Integration

Approved Original Signed Date 10 Apr 2013  
MG Heidi V. Brown  
Director for Test

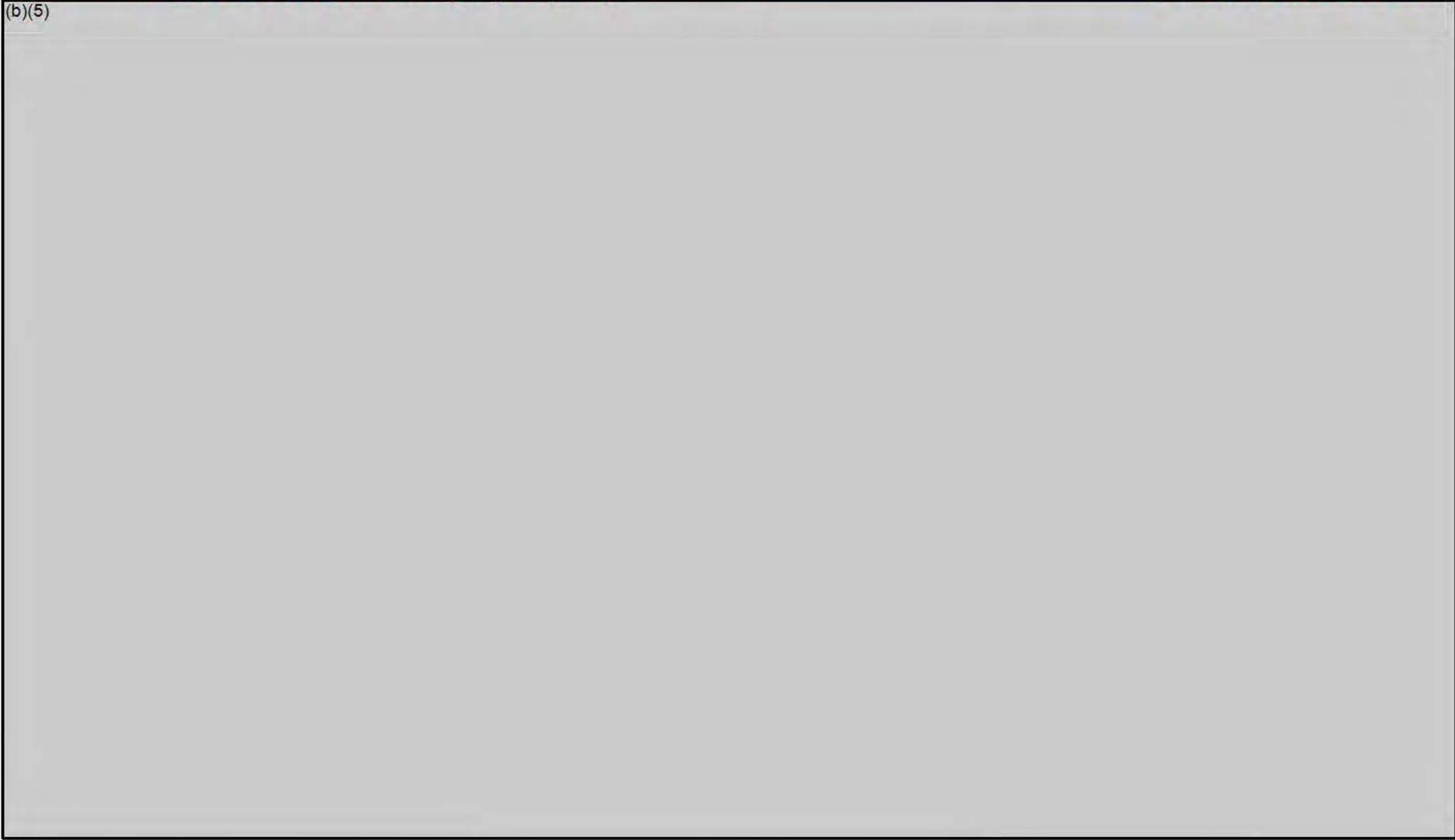


# GMD Initial Homeland Defense (IHD)

2013 BMDS Accountability Report (BAR)

Resource Baseline

(b)(5)



Approved Original Signed Date 8 Apr 2013

Carlos B. Kingston  
Program Director Ground-based Midcourse Defense

Approved Original Signed Date 8 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration

Approved Original Signed Date 11 Apr 2013

J. Gary Pennett  
Director for Operations



# GMD Initial Homeland Defense (IHD)

2013 BMDS Accountability Report (BAR)

Contract Baseline

Status Date  
28 Feb 13

FY12				FY13				FY14				FY15		FY16		FY17		FY18	
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	1 <sup>ST</sup>	2 <sup>ND</sup>						

<b>Prime Contract (CPAF)</b> Awarded: 1 Jan 01 PoP : 29 Nov 15	[Callout: a, e, f]				[Redacted: (b)(5)]															
	HQ0006-01-C-0001																			
	[Redacted: (b)(5)]																			
	[Redacted: (b)(5)]																			
<b>Operations &amp; Sustainment (CPFF)</b> Awarded: 1 Jan 09 PoP : 15 Apr 12	[Callout: g]				[Redacted: (b)(5)]															
	HQ0147-09-C-0007																			
<b>Core Completion Contract</b> (CPFF: 1 Jan 09 - 10 Mar 10 CPAF: 11 Mar 10 - 30 Apr 13) Awarded: 30 Dec 08 PoP End: 30 Apr 13	[Callout: b, c, d, h]				[Redacted: (b)(5)]															
	HQ0147-09-C-0008																			
<b>(DSC) Development and Sustainment Contract</b> (C Contract with Multiple Fee Structures) Awarded: 30 Dec 11 PoP: 29 Dec 2018	[Callout: a, b, c, d, g]				[Redacted: (b)(5)]															
	[Redacted: (b)(5)]																			

(b)(5)

(b)(5)

Approved Original Signed Date 8 Apr 2013  
 Carlos B. Kingston  
 Program Director Ground-based Midcourse Defense

Approved Original Signed Date 8 Apr 2013  
 BG Ole Knudson  
 Program Executive for Programs & Integration

Approved Original Signed Date 11 Apr 2013  
 Barney Klehman  
 Director for Acquisition



# GMD Initial Homeland Defense (IHD)

2013 BMDS Accountability Report (BAR)

Buy/Delivery/Inventory Summary ■

Status Date 28 Feb 13



(b)(5)

Approved Original Signed Date 9 Apr 2013

Carlos B. Kingston  
Program Director Ground-based Midcourse Defense

Approved Original Signed Date 10 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration



# Intermediate Range Ballistic Missile (IRBM)



# IRBM

Significant Change	Impact to Plan
<p>IMTP 13.1 modified BETD dates which impacts target delivery.</p> <p>(b)(5)</p>	<p><b>Schedule:</b> Adjusted pre-mission deliverables and target deliveries.</p> <p>(b)(5)</p>
<p>(b)(5)</p>	<p><b>Schedule:</b> (b)(5)</p> <p>(b)(5)</p>
<p>(b)(5)</p>	<p>(b)(5)</p>

Approved Original Signed Date 8 Apr 2013  
 Chester A. DeCesaris  
 Program Director, Targets and Countermeasures

Approved Original Signed Date 10 Apr 2013  
 BG Ole Knudson  
 Program Executive for Programs & Integration



# IRBM

2013 BMDS Accountability Report (BAR)

Schedule Plan

(b)(5)



Approved Original Signed Date 8 Apr 2013

Chester A. DeCesaris  
Program Director, Targets and Countermeasures

Approved Original Signed Date 10 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration

Approved Original Signed Date 10 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration



# IRBM

**See Classified Annex F**

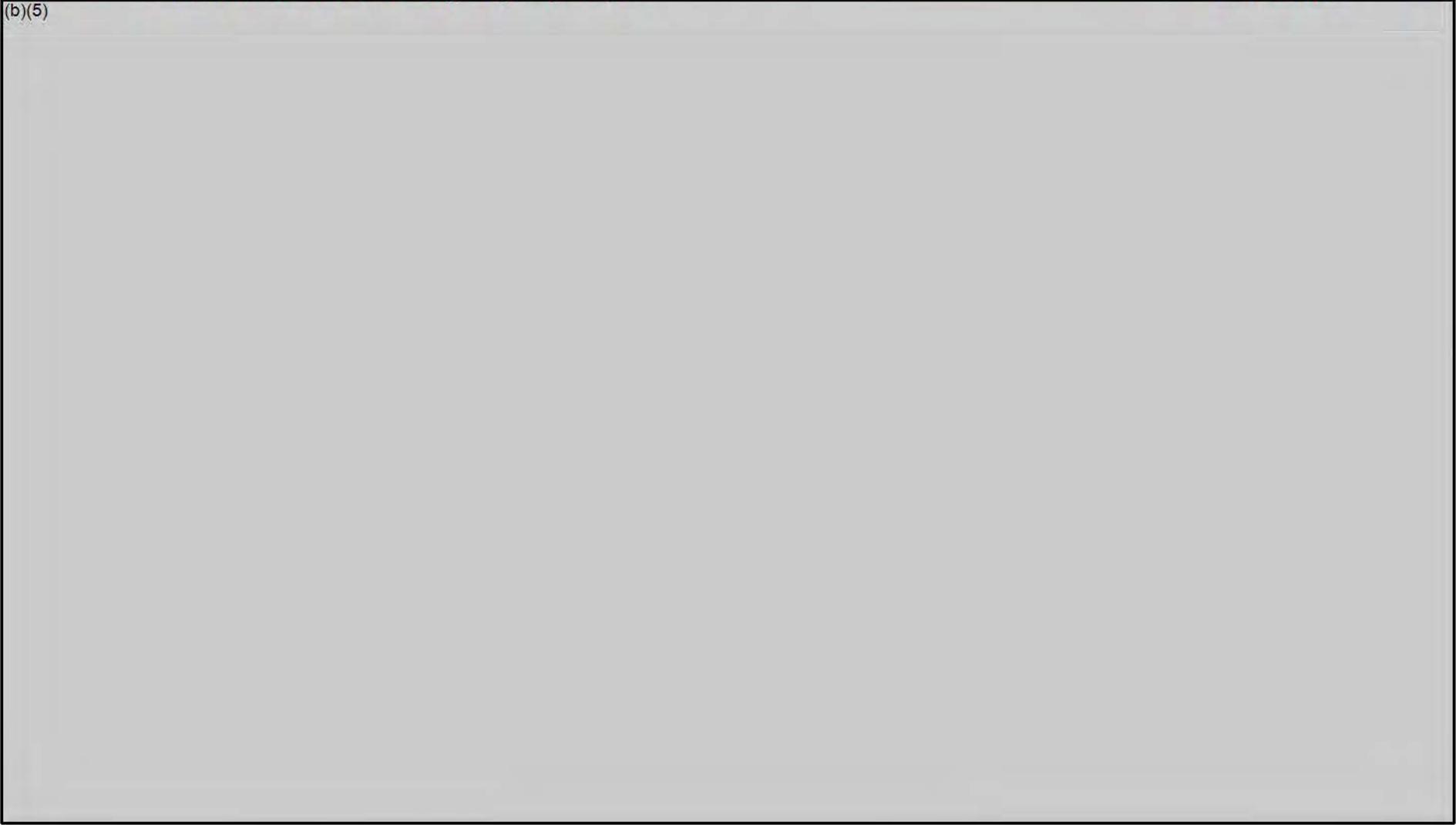


# IRBM

2013 BMDS Accountability Report (BAR)

Test Plan

(b)(5)



Approved Original Signed Date 8 Apr 2013

Chester A. DeCesaris  
Program Director, Targets and Countermeasures

Approved Original Signed Date 10 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration

Approved Original Signed Date 15 Apr 2013

MG Heidi V. Brown  
Director for Test

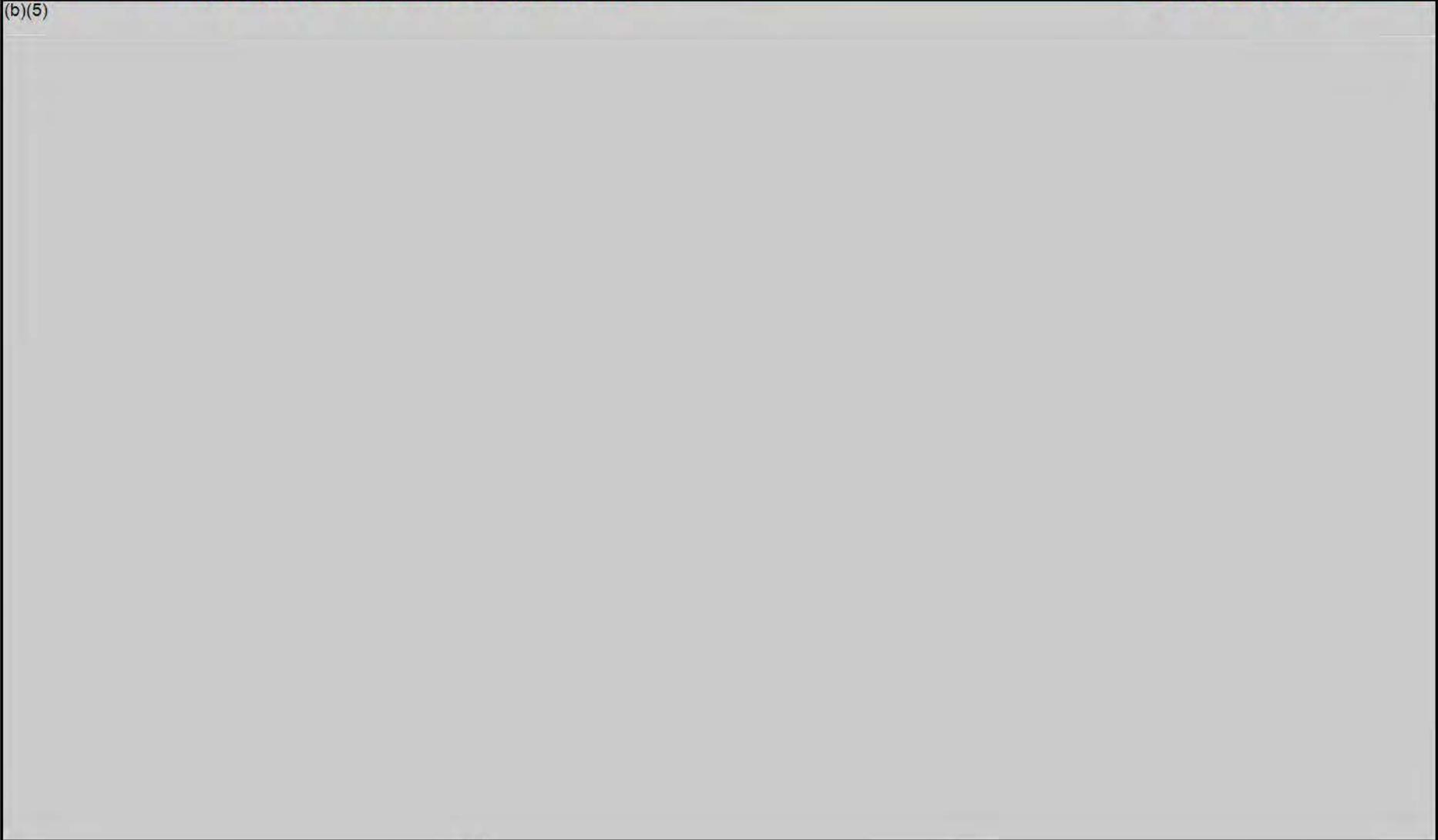


# IRBM

2013 BMDS Accountability Report (BAR)

Resource Plan

(b)(5)



Approved Original Signed Date 17 Apr 2013

Chester A. DeCesaris  
Program Director, Targets and Countermeasures

Approved Original Signed Date 17 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration

Approved Original Signed Date 18 Apr 2013

J. Gary Pennett,  
Director for Operations



# IRBM

**2013 BMDS Accountability Report (BAR)**

**Contract Plan**

(b)(5)

LM Prime Contract [a, b, c, d, e] (CPAF) HQ0006-04-D-0006 Awarded: 9 Dec 2003 PoP: 8 Dec 2013	FY 2012					T
	Q1	Q2	Q3	Q4	Q1	
Hardware Delivery Order (CPAF) Awarded: 15 Oct 08 PoP: 8 Dec 13						
Data Analysis Delivery Order (CPAF) Awarded: 6 Nov 09 PoP: 8 Dec 2013						
OSC HQ0147-11-C-0006 [k, m] (FFP, FPAF, FPIF, CPAF, CPFF, CPIF) Award: 08 Mar 11 PoP: 28 Feb 18						
ICBM HQ0147-11-C-0006 Award: 26 Oct 12 PoP: 31 Aug 18			●	●	●	
<b>New Acquisition [a]</b> (FFP, CPAF, CPFF, FPAF) Award: 4QFY17 PoP: TBD						
<b>New Acquisition [b]</b> (FFP, CPAF, CPFF, FPAF) Award: 4QFY16 PoP: TBD						



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Approved Original Signed Date 10 Apr 2013

BG Ole Knudson  
Program Executive for Programs & Integration

Approved Original Signed Date 11 Apr 2013

Barney Klehman  
Director for Acquisition

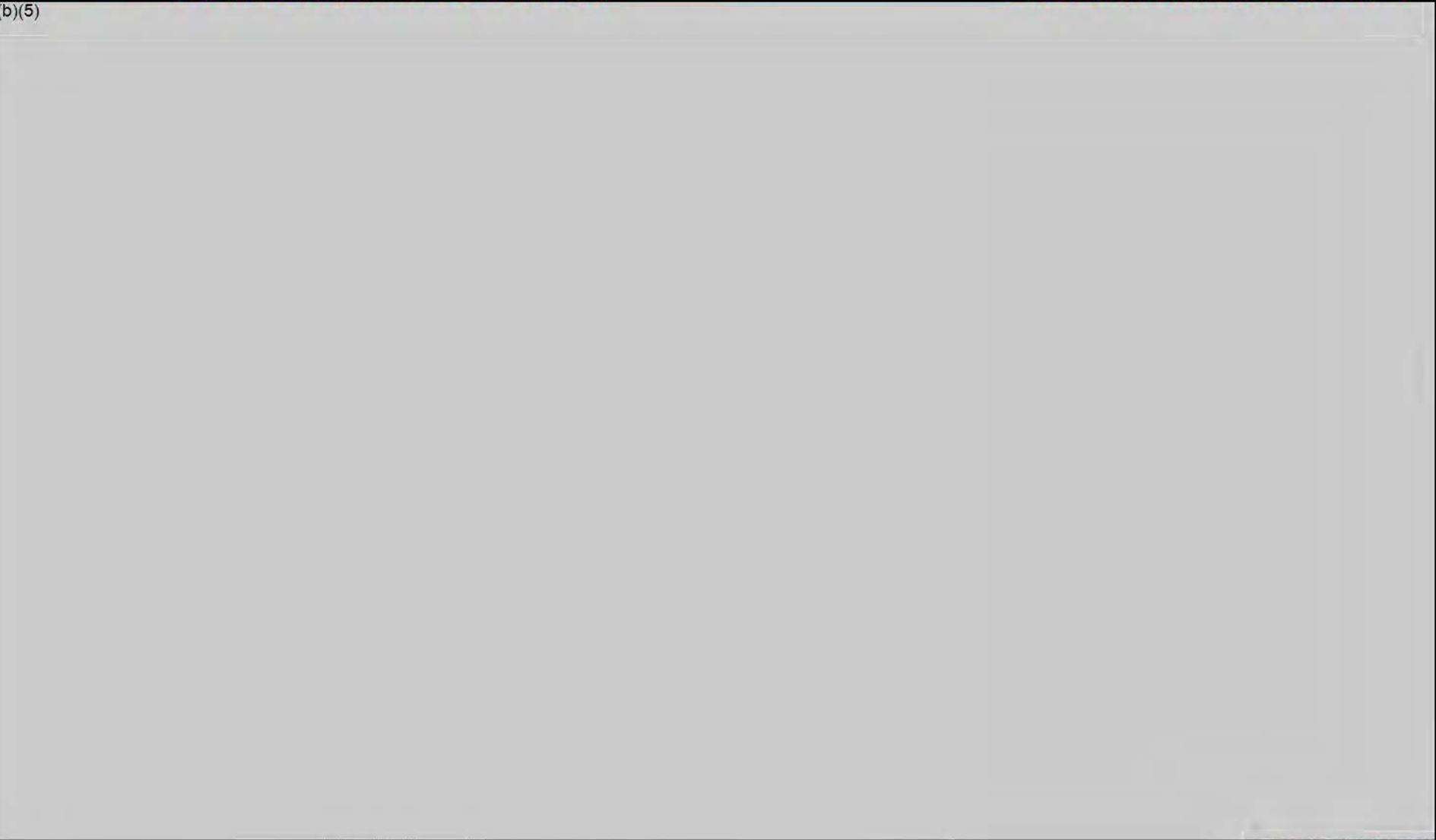


# IRBM

2013 BMDS Accountability Report (BAR)

Buy/Delivery/Inventory Summary

(b)(5)



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# Medium Range Ballistic Missile (MRBM)



# MRBM

Significant Change	Impact to Plan
(b)(5)	(b)(5)
(b)(5)	(b)(5)
(b)(5)	(b)(5)

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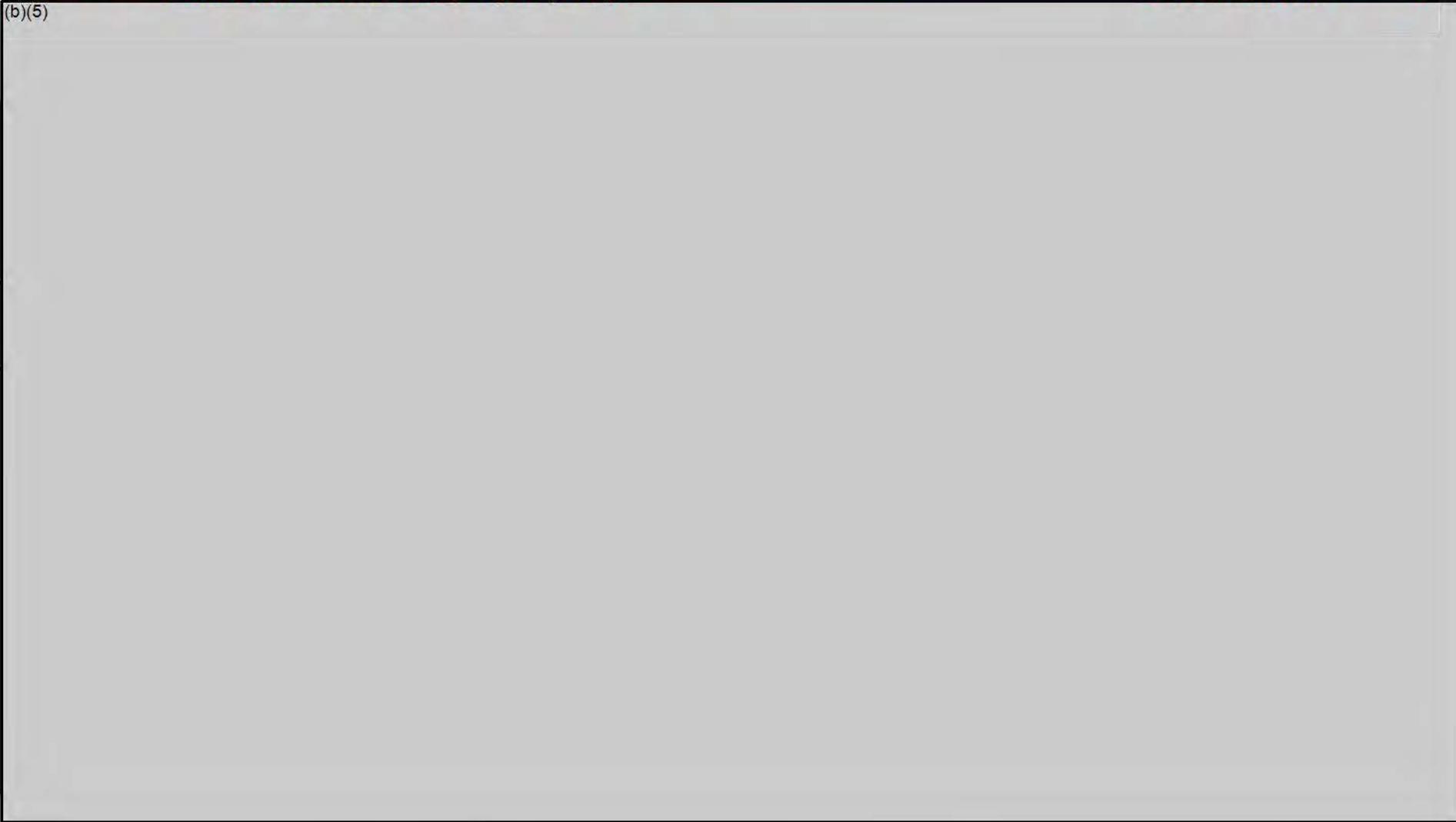


# MRBM

2013 BMDS Accountability Report (BAR)

Schedule Plan

(b)(5)



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Program Executive for Programs & Integration

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BG Ole Knudson  
Program Executive for Programs & Integration



# MRBM

2013 BMDS Accountability Report (BAR)

Technical Plan

# See Classified Annex F



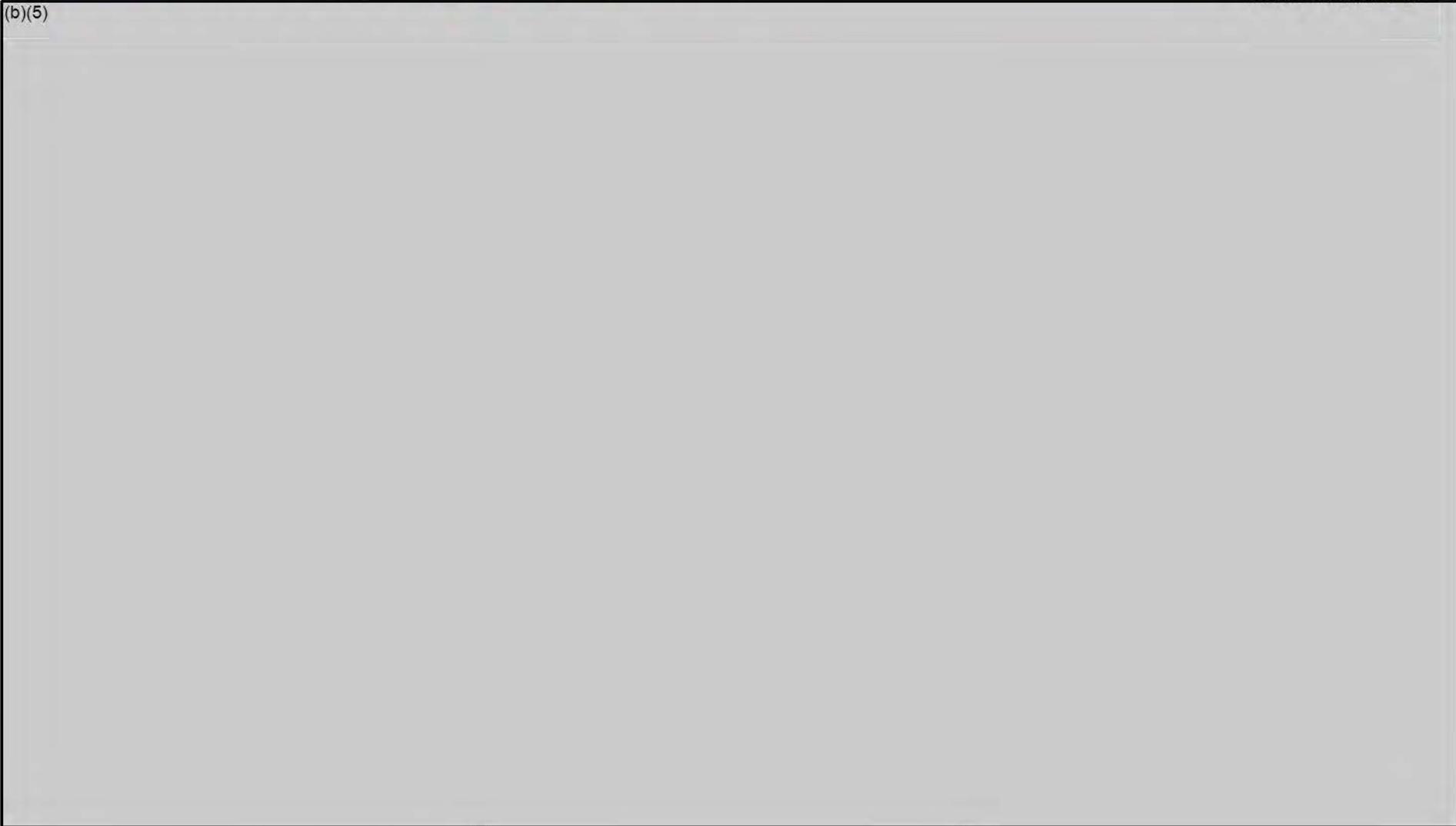
# MRBM

2013 BMDS Accountability Report (BAR)

Test Plan

Status as of 28 Feb 13

(b)(5)



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Approved Original Signed Date 15 Apr 2013

MG Heidi V. Brown  
Director for Test

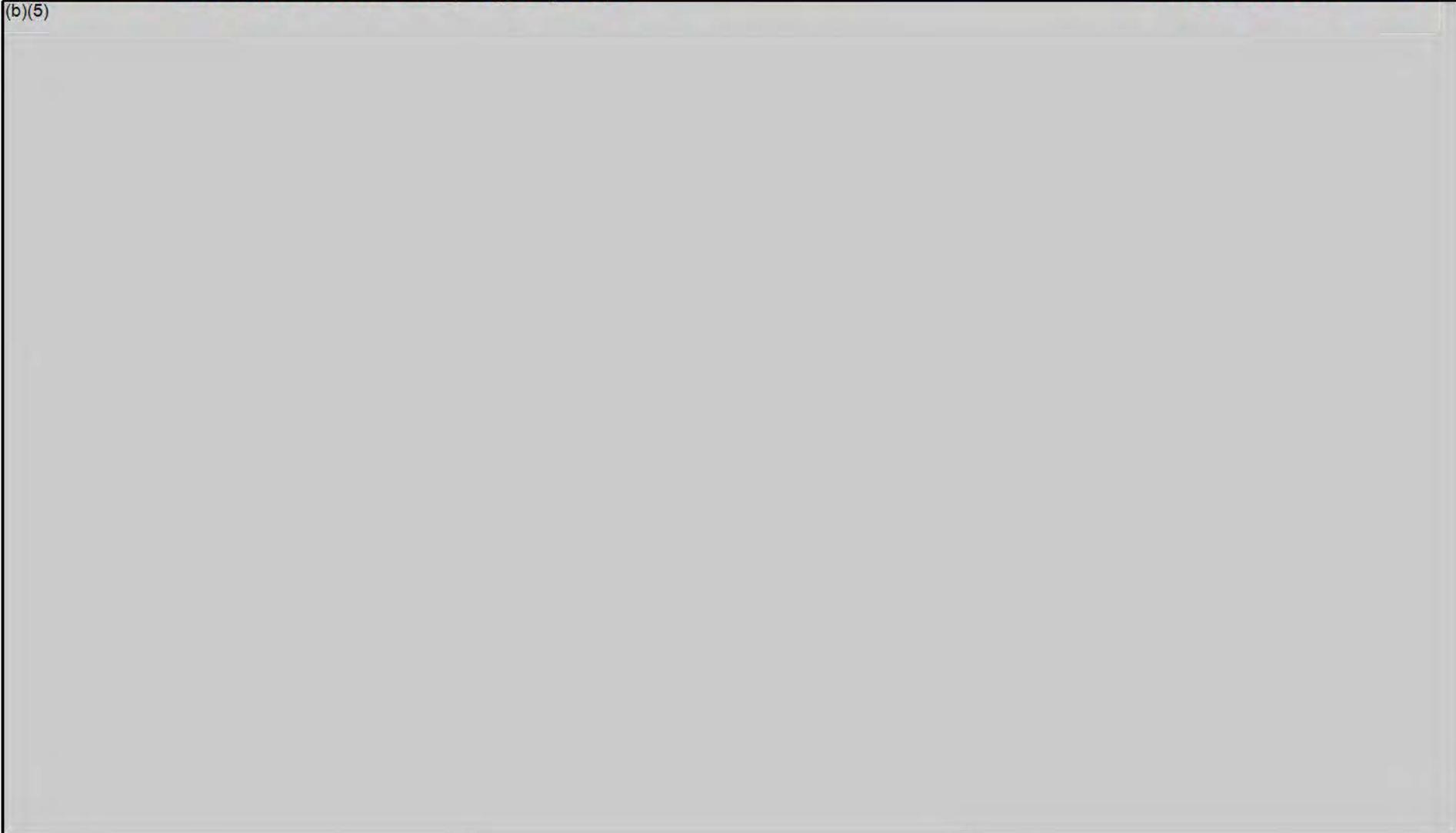


# MRBM

2013 BMDS Accountability Report (BAR)

Resource Plan

(b)(5)



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Director for Operations



# MRBM

2013 BMDs Accountability Report (BAR)

Contract Plan

	Time (b)(5)					
	FY 2012				F	
	Q1	Q2	Q3	Q4	Q1	Q2
LM Prime Contract (CPAF) HQ0006-04-D-0006 Awarded: 9 Dec 2003 PoP: 08 Dec 13						
Exercise Option 3						
Hardware Delivery Orders (CPAF) DO 22 Awarded: 15 Oct 08 PoP: 14 Apr 14						
DO 27 Awarded: 20 Jul 11 PoP: 30 Dec 14						
Data Analysis Delivery Order (CPAF) Awarded: 6 Nov 09 PoP: 8 Dec 13						
MRBM T1/T2 (g)						
SRP-3 (CPIF) FA8818-08-D-0038 Awarded: 01 Jun 08 PoP: 30 Aug 12						
Aerojet (FFP) FA8818-09-D-0024 Awarded: 17 Jun 09 PoP: 31 Dec 11						
AMRDEC Aging Surveillance (MIPR)						

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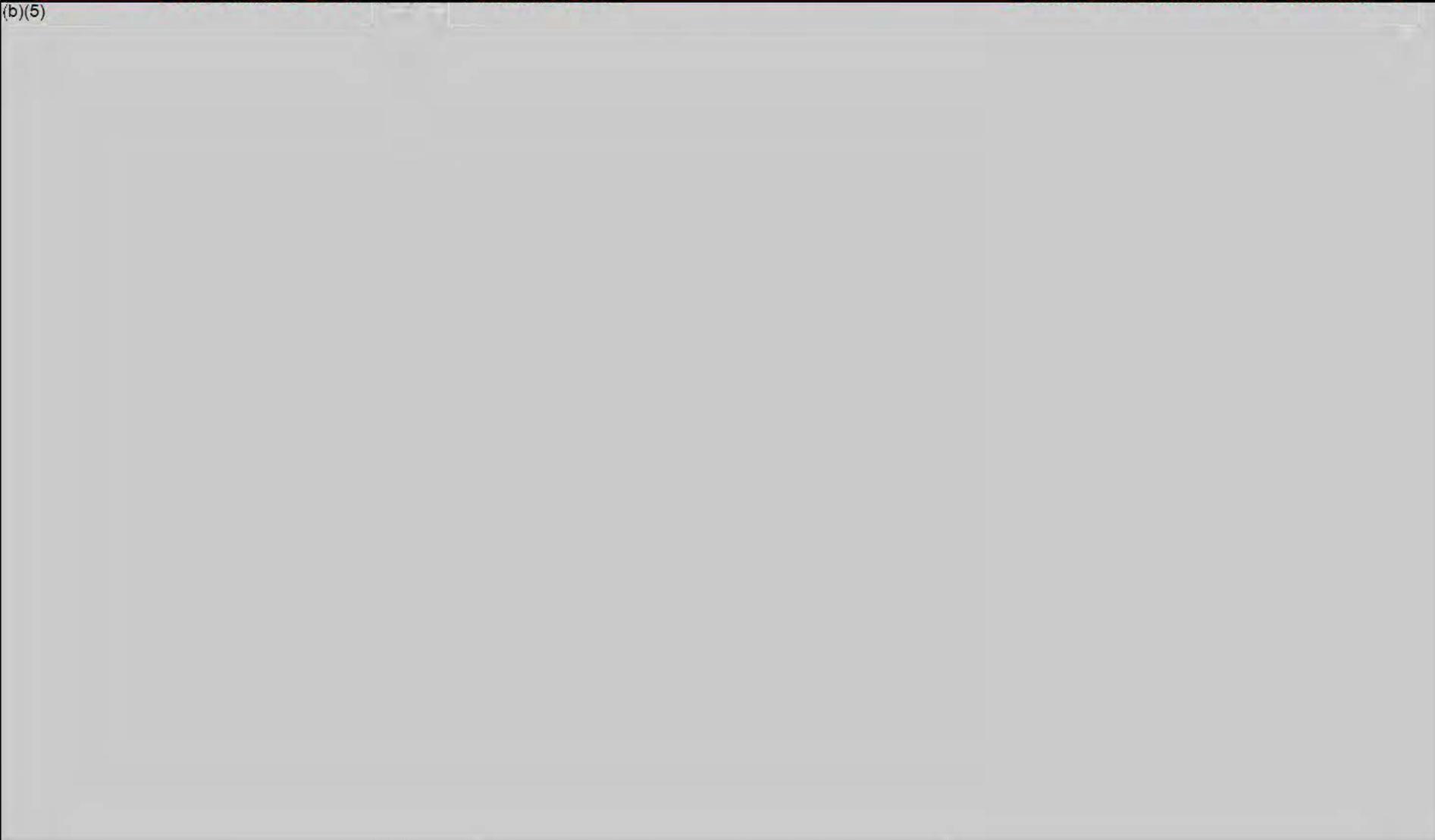
# MRBM

Status as of 28 Feb 13

2013 BMDS Acco [REDACTED] Report (BAR)

Buy/Delivery/Inventory Summary

(b)(5)



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# Short Range Ballistic Missile (SRBM)



# SRBM

2013 BMDS Accountability Report (BAR)

Significant Change Summary

Significant Change	Impact to Plan
(b)(5)	(b)(5)
	(b)(5) reported for eMRBM on MRBM resource baseline in 2012 BAR)

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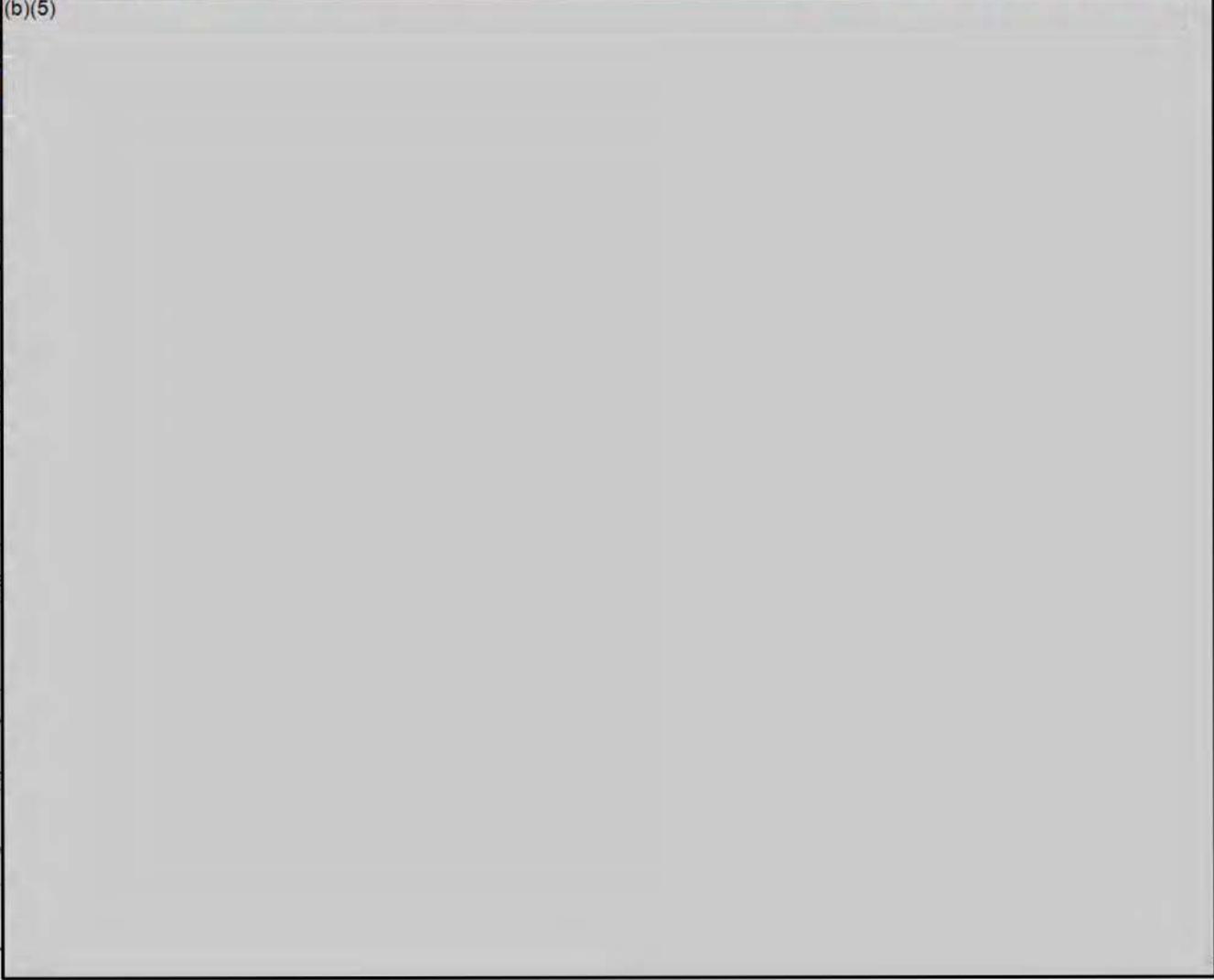
# SRBM

## 2013 BMDS Accountability Report (BAR)

## Schedule Plan

Status: 28 Feb 2013

	FY12				Time	
	Q1	Q2	Q3	Q4	Q1	Q2
Program Phase Decision Points Coleman Aerospace Return to Flight						
Element Knowledge Points						
Models & Sim Pre & Post Flight Test Model Updates	▲	▲▲▲▲▲	▲▲▲▲▲	▲	▲▲	▲▲
Capability Development			▲ Ship set #14 Delta			
FMA-1			▲ Ship set #10 & AI&T	▲ Ship set #13 & AI&T		▲ Ship set #
(b) (31-10)						
MRT			▲ Ship set #10 Delta PS			
ARAV-A		▲▲ Ship set #8 & #9 to inventory				
ARAV-B			▲ Ship set #10 to inv	▲ Ship set #18 to inventory		
(b)			▲ Ship set #9 Delta PSRR (a			
SRBM T3				▲ Ship set #1 De		



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 Program Executive for Programs & Integration



# SRBM

2013 BMDS Accountability Report (BAR)

Technical Plan

# See Classified Annex F

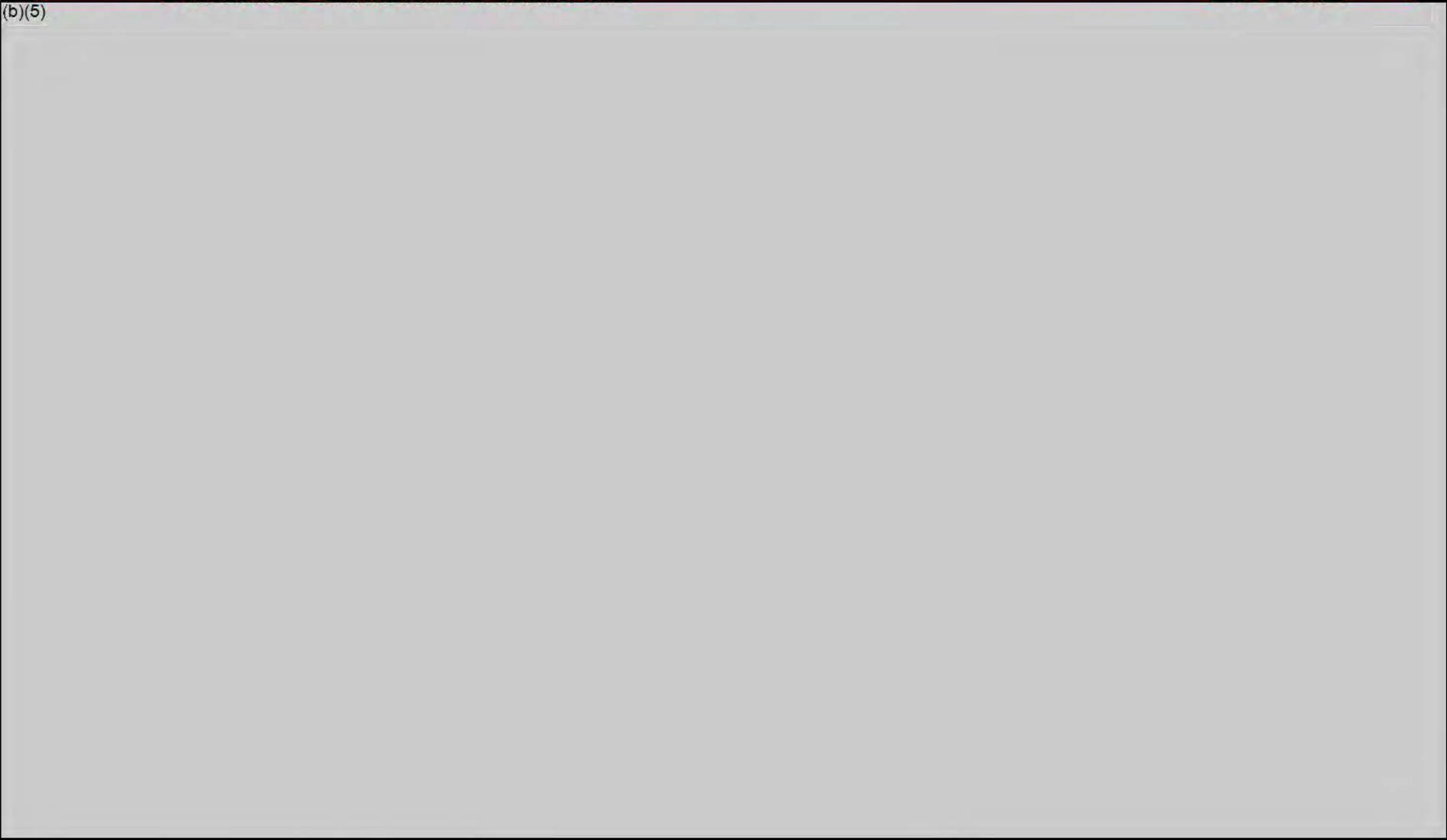


# SRBM

2013 BMDS Accountability Report (BAR)

Test Plan

(b)(5)



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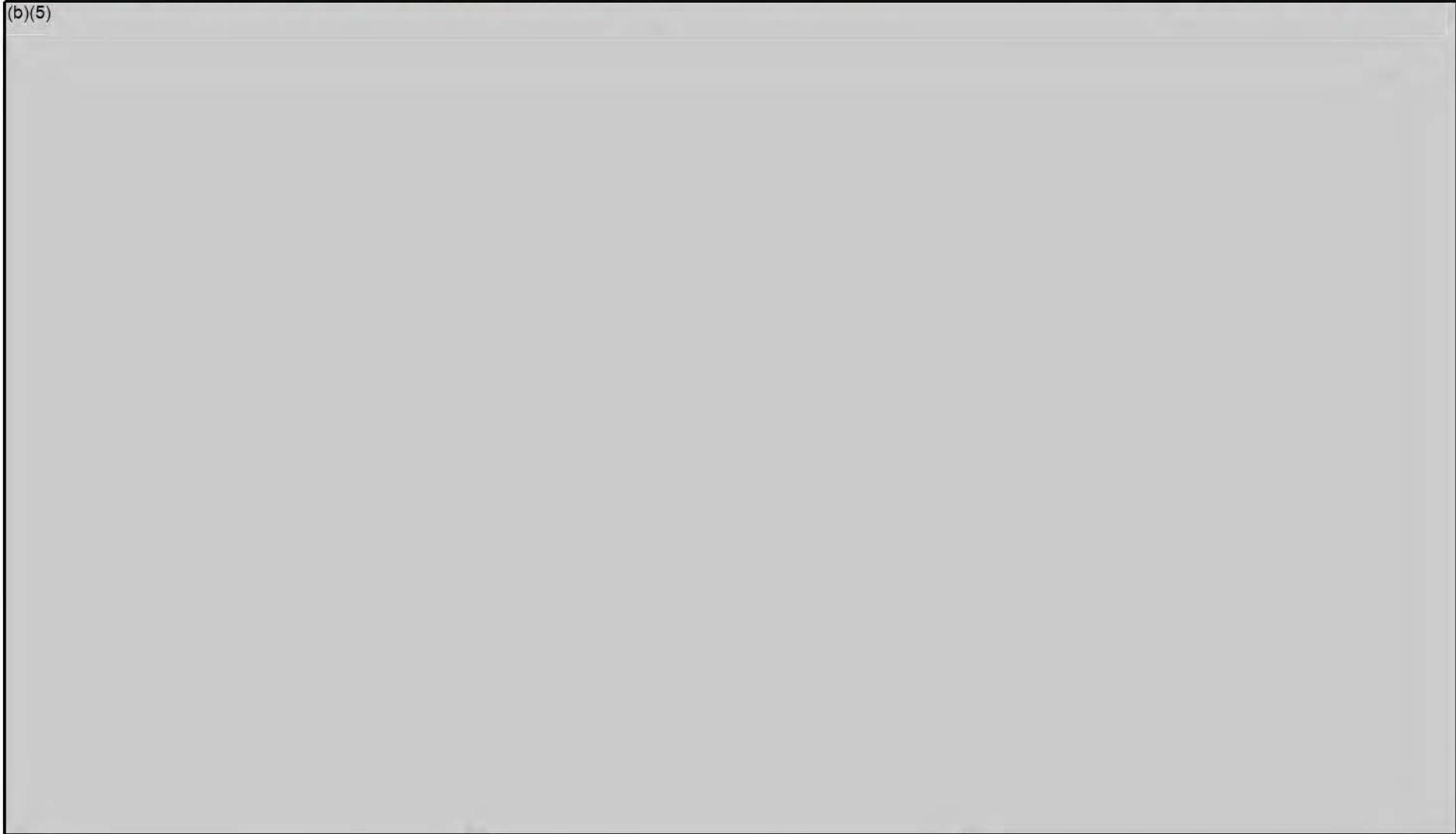


# SRBM

2013 BMDS Accountability Report (BAR)

Resource Plan

(b)(5)



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# SRBM

2013 BMDS Accountability Report (BAR)

Contract Plan

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# SRBM (1 of 2)

(b)(5)



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# SRBM (2 of 2)

(b)(5)



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# Targets Common Components



# Common Components

2013 BMDS Accountability Report (BAR)

Significant Change Summary

Significant Change	Impact to Plan
MBRV Deliveries	<b>Schedule:</b> MBRV deliveries were realigned to comply with IMTP 13.1.
(b)(5)	(b)(5)
(b)(5)	(b)(5)

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# Common Components

2013 BMDS Accountability Report (BAR)

Schedule Plan

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# Common Components

2013 BMDS Accountability Report (BAR)

Technical Plan

# See Classified Annex F

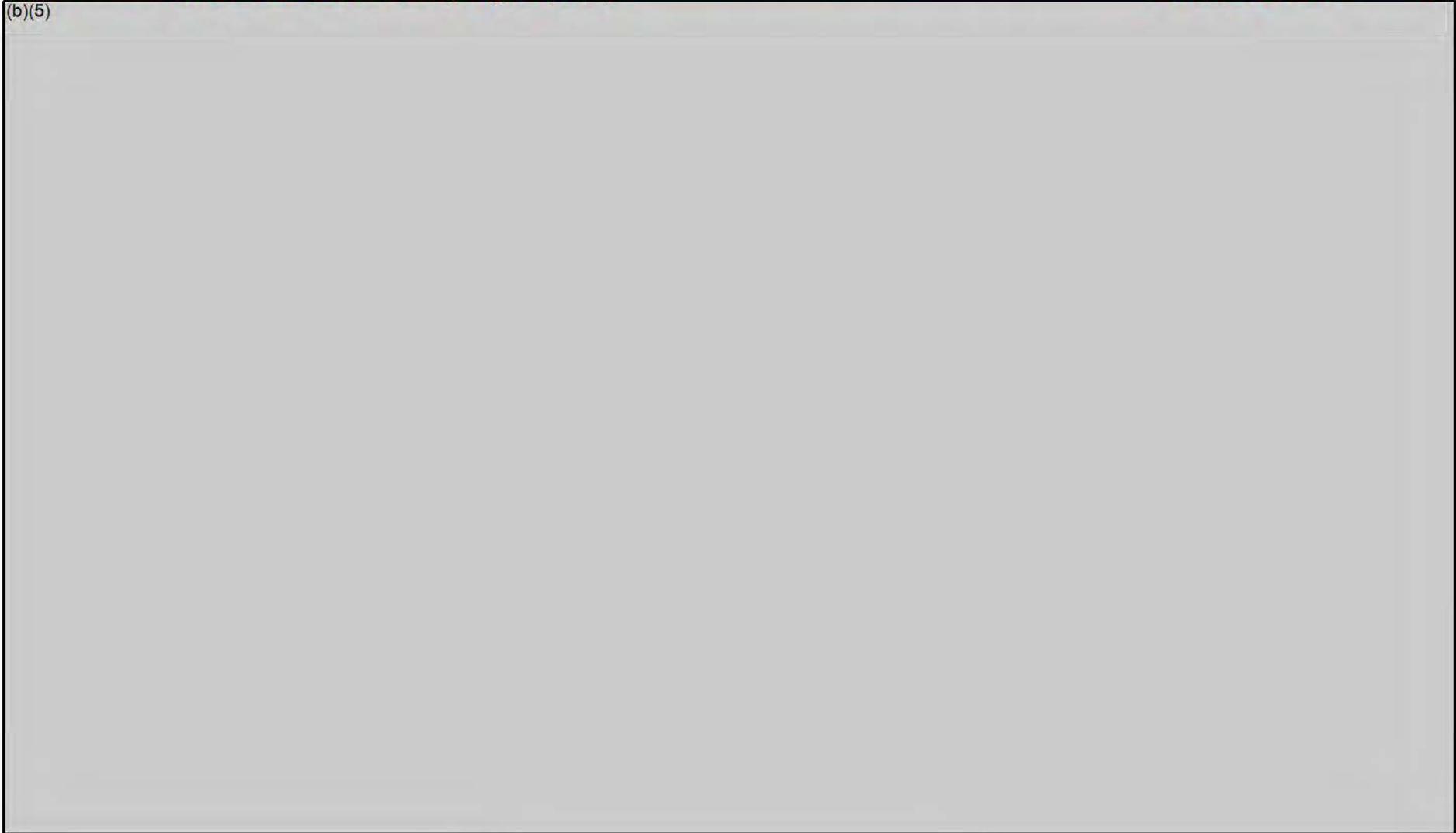


# Common Components

2013 BMDS Accountability Report (BAR)

Resource Plan

(b)(5)



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# Common Components

2013 BMDs Accountability Report (BAR)

Contract Plan

Time Now



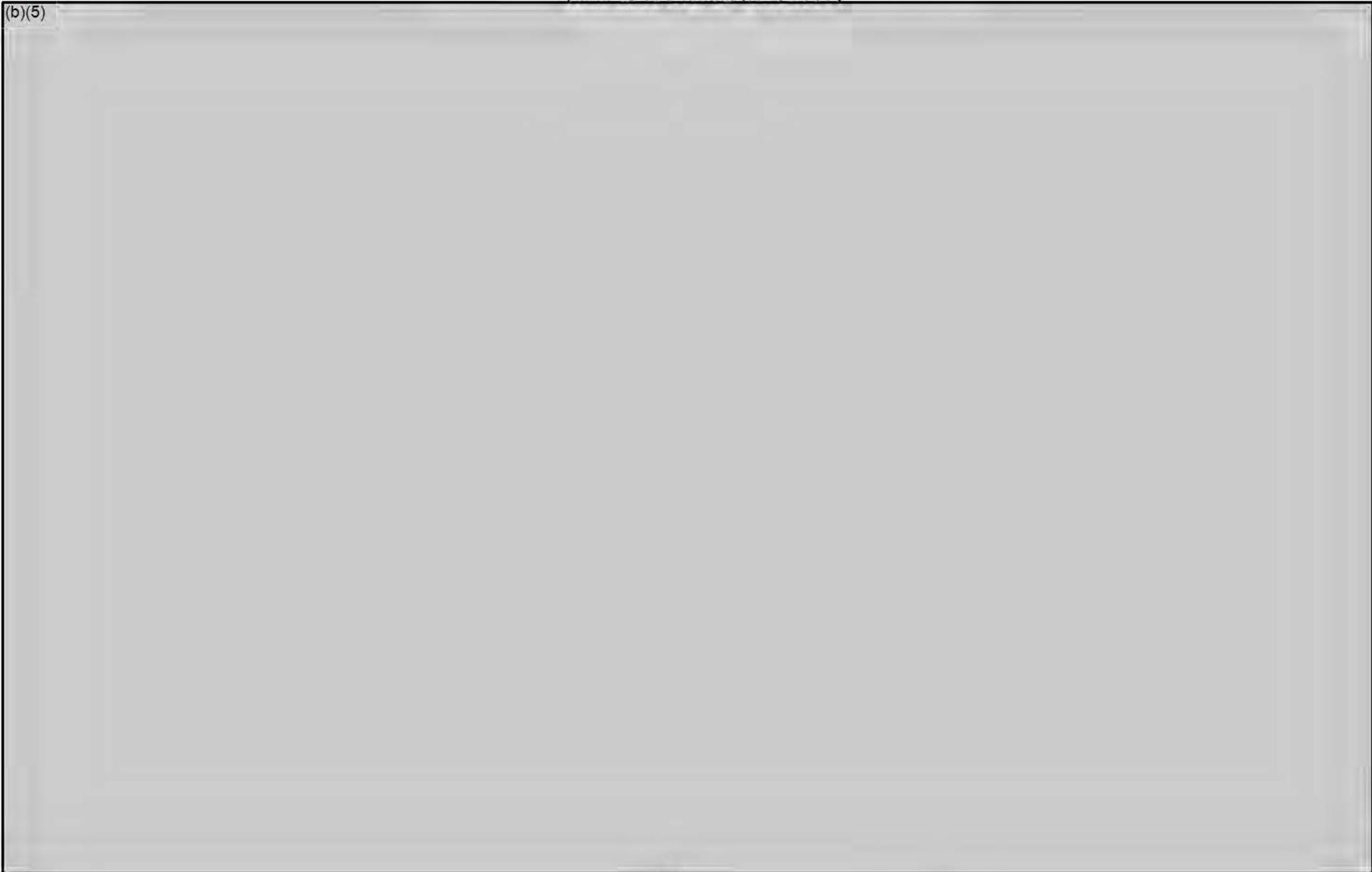
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 Barney Klehman  
 Director for Acquisition

Appendix A: MDA Contract Performance Summary  
(data as of February 28, 2013)

(b)(5)



**Appendix B – Missile Defense Executive Board (MDEB) – Report of Activities for CY 2012**

The following is in response to response to Section 232 of the National Defense Authorization Act (NDAA) for fiscal year (FY) 2012, Public Law (P.L.) 112-81.

Meeting Date	Agenda	Decisions and Recommendations
January 26, 2012	<ul style="list-style-type: none"><li>• Status of Phased Adaptive Approach (PAA)</li><li>• Prioritized Capability List (PCL)</li><li>• BMDS fiscal year (FY) 2012 Program/Budget (President Budget Request (PBR) FY 2013 effects)</li><li>• European PAA (EPAA) Life Cycle Cost Criteria</li><li>• Return to Flight of GMD and Standard Missile (SM)</li></ul>	<ul style="list-style-type: none"><li>• Approved the submittal of a stand-alone FY 2012 BMDS Above Threshold Reprogramming (ATR) request as presented to the Missile Defense Executive Board (MDEB). Should a revision to the ATR be required, the specifics will be approved by Under Secretary of Defense (Comptroller) (USD(C) prior to submittal and the MDEB will be informed at the next meeting.</li><li>• Endorsed the Cost Assessment and Program Evaluation (CAPE) plan to perform full Independent Cost Estimates (ICE) and technical evaluations on Aegis Ashore, Aegis BMD (SM-3 Block IA, IB and Aegis Weapon System), SM-3 Block IIA Co-Development, SM-3 Block IIB, and Precision Tracking Space System (PTSS). Endorsed the CAPE plan to perform cost estimates and technical evaluations on EPAA-unique aspects of the Army-Navy/Transportable Radar Surveillance (AN/TPY-2) radars and the BMDS Command, Control, Battle Management and Communications (C2BMC) system. The Office of the Under Secretary of Defense (OUSD) for Acquisition, Technology and Logistics (AT&amp;L); OUSD(Comptroller); Office of the Under Secretary of Defense for Policy; and CAPE will specify the elements for the EPAA cost estimates. The MDEB will review and endorse the elements for determining EPAA life cycle cost and the resulting cost estimates.</li><li>• Acknowledged the Air and Missile Defense (AMD) PCL as the Warfighter's capability needs input to inform the Missile Defense Agency's (MDA) Program build for Program Objectives Memorandum (POM) for FY 2014.</li></ul>

Meeting Date	Agenda	Decisions and Recommendations
February 27, 2012	<ul style="list-style-type: none"><li>• EPAA Life Cycle Cost Element Decisions</li><li>• Status of New PAAs</li><li>• Sea-Based X-band radar (SBX) Limited Test Operations</li><li>• Status of Above Threshold Reprogramming</li><li>• FY 2014 Top-level Budget Controls</li></ul>	<ul style="list-style-type: none"><li>• Approved the agreements regarding CAPE's cost estimate parameters for the EPAA. The specific quantities will be refined as the analysis concludes.</li><li>• MDA will initiate development of the FY 2014 BMDS program plan using President's Budget (PB) 2013 controls, and USD(AT&amp;L) provided fiscal guidance.</li></ul>
April 13, 2012	<ul style="list-style-type: none"><li>• Classified Briefs</li></ul>	No published Acquisition Decision Memorandum (ADM).
April 26, 2012	<ul style="list-style-type: none"><li>• Hedge Options</li><li>• BMDS Funding Responsibilities</li></ul>	No published ADM.
June 25, 2012	<ul style="list-style-type: none"><li>• Hedge Strategy Status</li><li>• Draft of FY2014 BMDS Pres Budget Request</li><li>• PTSS Comprehensive Review Status</li><li>• BMDS Achievable Capability List (ACL)</li><li>• PCL Analysis</li><li>• Cobra Dane Assessment</li></ul>	<ul style="list-style-type: none"><li>• Concurred with the PTSS Comprehensive Review status, including parameters, schedule, and input to an Analysis of Alternatives.</li><li>• Endorsed the Operational Forces Standing Committee proposed C2BMC element Tri-Service Structure in response to the MDEB Lead Service assessment action.</li><li>• Endorsed the draft BMDS PBR for FY 2014 funding requirements.</li></ul>
July 27, 2012	<ul style="list-style-type: none"><li>• EPAA Element Cost Estimate</li><li>• Integrated Master Test Plan Changes</li><li>• BMDS Operations and Sustainment (O&amp;S) Funding</li><li>• AMDI Committee Priorities and Issues</li><li>• Status of Cobra Dane Transfer</li></ul>	<ul style="list-style-type: none"><li>• Endorsed the continued development of the Services and MDA Joint Track Management Capability (JTMC) Bridge and Integrated Air and Missile Defense (IAMD) capabilities including the conduct of a Nimble Fire war game at the Virtual Warfare Center which will include JTMC and assess potential integrated fire control kill chains in support of investment balanced decisions.</li></ul>
November 9, 2012	<ul style="list-style-type: none"><li>• Program Review (PR) for FY 2014 Missile Defense Issues</li><li>• Action From 3-Star PR</li><li>• Read Ahead Only: Remote Sensor Assessment</li></ul>	No published ADM.
December 11, 2012	<ul style="list-style-type: none"><li>• Status of Hedge Options</li><li>• Implications of Deputy's Management Action Group (DMAG) Decisions</li><li>• IAMD Status and Decisions</li><li>• FTI-01 Operational Assessment</li></ul>	<ul style="list-style-type: none"><li>• Endorsed the Joint Requirements Oversight Council-validated "Single Integrated Air Picture" Key Performance Parameters (KPPs) for an initial IAMD capability, which the JTMC and bridge are intended to demonstrate, and recognized a need to</li></ul>

Meeting Date	Agenda	Decisions and Recommendations
	<ul style="list-style-type: none"><li>Warfighter Involvement Process (WIP)</li></ul>	revisit the KPPs and a joint operational concept for IAMD full capability. <ul style="list-style-type: none"><li>The Navy committed to provide \$1.0M in FY 2014 for continued development of the</li></ul>

(b)(5) [Redacted]

for CY 2012

### Appendix C: Resource Baseline Methodology

The *resource baseline* is the expected investment in acquiring a capability and includes all costs associated with delivery of a BMDS product, and are derived from time-phased cost estimates in then-year dollars jointly approved by MDA's Program Directors and the Director of Cost Estimating and Analysis.<sup>1</sup> The baselines are expressed in base year dollars indexed to the year resource baselines are approved. For example, cost estimates for new baselines are indexed to the base year FY 2013.

Risk is incorporated in the cost estimates that form the basis for information in the resource baseline charts included in this report. The process for incorporating risk utilizes the technical baseline, the schedule baseline, and GAO best practice methodologies. The results of the cost risk analysis are used to develop confidence levels for each program element's baseline. Program executives determine the specific confidence level to be used in the resource baseline chart of the BMDS Accountability Report.

For most BMDS program elements, risk is traded with affordability so that there is an equally likely chance of either a cost underrun or overrun. For test execution, a higher probability of success is chosen for the confidence level. Recently, affordability initiatives resulted in contracts for IRBM, Missile Defense Agency Engineering Support Services (MIDAESS), THAAD, and GMD Development and Sustainment Contract (DSC) that were awarded at prices below the 50% cost estimate confidence level, indicating that the confidence measures may be conservative.

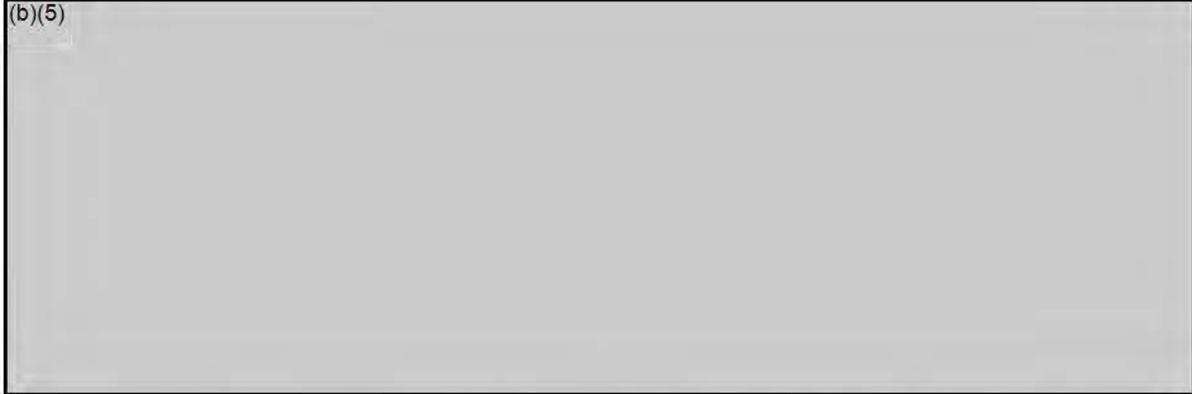
While MDA manages costs for all line entries on the resource baseline, the Agency measures performance using the metrics shown in the unit cost table for each resource baseline chart. MDA metrics measure cost performance three distinct ways. MDA uses Program Acquisition Unit Cost (PAUC) and Average Procurement Unit Cost (APUC) for programs that produce countable interceptors, sensors, launch systems, or fire control systems. The Agency uses Program Acquisition Cost (PAC) for programs that do not produce countable units.

(b)(5)

(b)(5)

<sup>1</sup> Cost baselines for targets are treated differently because of uncertainty about the quantity of targets needed for testing beyond the FYDP period. As a result, "to complete" costs are not included in cost baselines for targets.

(b)(5)



PAC is the sum of Development (RDT&E Appropriation), Production and Deployment (Procurement Appropriation), and Military Construction (MILCON Appropriation) costs.

## Appendix D: Acronyms

### A

A3	Arrow-3
AA	Aegis Ashore
AACTV	Aegis Ashore Control Test Vehicle
AAFTM	Aegis Ashore Flight Test Mission
AAMDC	Army Air Missile Defense Command
AAW	Anti-Air Warfare
ABIR	Airborne Infra-Red
ABP	Airborne Processor
ABS	American Bureau of Shipping
ACL	Achievable Capabilities List
ACS	Attitude Control System
ACWP	Actual Cost of Work Performed
ADSI	Air Defense System Integrator
AFB	Air Force Base
ALO	Aegis Light Off
AMD	Air and Missile Defense
AMD1	Air and Missile Defense Integration
AN/TPY-2	Army Navy/Transportable Radar Surveillance – Model 2
AOR	Area of Responsibility
APUC	Average Procurement Unit Cost
ARAV	Aegis Readiness Assessment Vehicle
ASB	Acquisition Strategy Board
AST	Arrow System Test
ATEC	Army Test and Evaluation Center
ATRC	Aegis Training and Readiness Center
AUC	Average Unit Cost
AUR	All Up Round
AWS	AEGIS Weapon System

### B

BAR	BMDS Accountability Report
BCWP	Budgeted Cost of Work Performed
BCWS	Budgeted Cost of Work Scheduled
BETD	Best Estimate Test Date
BLD	Build
BLOS	Beyond Line of Sight
BMC	Battle Management Center
BMD	Ballistic Missile Defense
BMDS	Ballistic Missile Defense System
BOA	BMDS Overhead Persistent Infrared Architecture
BOD	Board of Directors
BSC	Battery Support System
BSFO	Blue Sparrow Fly-Out

BSP	BMD Signal Processor
BVT	Booster Vehicle Test
BY	Base Year
<b>C</b>	
C2BMC	Command and Control, Battle Management and Communications
C4	Command, Control, Communications, and Computers
CAAT	Contingency Analysis and Activation Team
CAPE	Cost Assessment and Program Evaluation
CAR	Capability Assessment Report
CARD	Cost Analysis Requirement Description
CCC	Core Completion Contract
CCLS	Consolidated Contractor Logistics Support
CD	Capability Delivery
CDR	Critical Design Review
CDS	Common Display System
CDU	Cobra Dane Upgrade
CEC	Critical Engagement Condition
CE I	Capability Enhancement I
CE II	Capability Enhancement II
CENTCOM	U.S. Central Command
CERT	Certification
CFE	Contractor Furnished Equipment
CG	Guided Missile Cruiser (U.S. Navy)
CLS	Contractor Logistics Support
CM	Countermeasure
CMAV	Continuous Maintenance Availability
CNIP	C2BMC Network Interface Processor
CNT	Control Navigation Test
COCOM	Combatant Commander
CONOPS	Concept of Operations
COPS	Constellation Operations
CP	Computer Program
CPAF	Cost Plus Award Fee
CPAP	Construction Plans and Profiles
CPD	Capability Production Document
CPIF	Cost Plus Incentive Fee
CPR	Cost Performance Report
CPS	Capability Planning Specification
CR	Capability Release
CS	Combat System
CSEDS	Combat System Engineering Development Site
CSSQT	Combat System Ships Qualification Trials
CTL	Critical Task List
CTTO	Concurrent Test, Training, and Operations
CTV	Control Test Vehicle
CV	Cost Variance

CX	Common X-band Radar Software
CY	Calendar Year
<b>D</b>	
DA	Defended Area
DACS	Divert and Attitude Control System
DBR	Developmental Baseline Review
DCMA	Defense Contract Management Agency
DDG	Guided Missile Destroyer (U.S. Navy)
DDM	Development Decision Memorandum
DDR	Designated Defended Region
DMAG	Deputy's Management Action Group
DoD	Department of Defense
DOT&E	Director, Operational Test and Evaluation
DRS	DRS Technologies
(b)(3):10 USC §130	(b)(3):10 USC §130
DT	Developmental Test
DTC	Developmental Test Command
DTDP	Developmental Test Design Plan
DVT	Design Verification Test
<b>E</b>	
EAC	Estimate at Completion
EC2BMC	Enhanced C2BMC
ECD	Early Capability Delivery
ECL	Equipment Component List
ECP	Engineering Change Proposal
EDM	Engineering Design Module
EICO	Element Integration & Check Out
EKP	EC2BMC Knowledge Point
EKV	Exoatmospheric Kill Vehicle
E-LRALT	Extended Long Range Air Launch Target
EMD	Engineering Manufacturing Development
EME	Empirical Measurement Event
eMRBM	Extended Medium Range Ballistic Missile
EMRL	Engineering Manufacturing Readiness Level
EPAA	European Phased Adaptive Approach
ER4	Engineering Release – 4
(b) §130	(b)(3):10 USC §130
ESL	External Sensors Laboratory
ET	Embedded Test
ETEDDS	End-to-End Distributed Development System
ET&E	Engineering Test & Evaluation
EUCOM	U.S. European Command
EVM	Earned Value Management
<b>F</b>	
FAU/OP	Fleet Avionics Upgrade/Obsolescence Program

FBM	Forward-Based Mode
FBX-T	Forward-Based X-Band (Radar) Transportable
FCE	Fast CAAT East
FDE	Force Developmental Experimentation
FFP	Firm Fixed Price
FGA	Fort Greely, Alaska
FMA	Foreign Military Acquisition
FMC	Full Mission Capability
FMS	Foreign Military Sales
FOC	Full Operational Capability
FOUO	For Official Use Only
FPA	Focal Plan Array
FPI	Fixed Price Incentives
FQT	Functional / Formal Qualification Test
FS	Fixed Site
FTF	Flexible Target Family
FTG	Flight Test Ground Based Interceptor
FTM	Flight Test Standard Missile
FTR	Flight Test Round
FTT	Flight Test THAAD Interceptor
FTX	Flight Test Other
FUF	Fire Unit Fielding
FY	Fiscal Year
FYDP	Future Years Defense Program
<b>G</b>	
GAO	Government Accountability Office
GBI	Ground-Based Interceptor
GCCS	Global Command and Control System
GCN	GMD Communications Network
GCS	Ground Control Station
GEP	Ground Entry Point
GEM	Global Engagement Manager
GFC	GMD Fire Control
GFE	Government Furnished Equipment
GGT	Government Ground Test (Environment)
GMD	Ground-based Midcourse Defense
GOT	Guidance Object Track
GROW	Generic Rest of World
GS	Ground Systems
GSE	Ground Support Equipment
GT	Ground Test
GTD	Ground Test Distributed
GTI	Ground Test Integrated
GTX	Ground Test Other
<b>H</b>	
H&T	Humidity & Temperature

HC	Hazard Classification
HEMP	High-altitude Electromagnetic Pulse
HEL	High Energy Laser
HN	Host Nation
HPLUS	High Performance Liquid Upper Stage
HTK	Hit to Kill
HTV	Hypersonic Technology Vehicle
HWIL	Hardware-In-The-Loop
<b>I</b>	
IAMD	Integrated Air and Missile Defense
IAW	In Accordance With
IBMP	Integrated Ballistic Missile Picture
IBR	Integrated Baseline Review
ICA	Industrial Capabilities Assessment
ICBM	Intercontinental Ballistic Missile
ICE	Independent Cost Estimate
IDIQ	Indefinite Delivery Indefinite Quantity
IDT	In-Flight Interceptor Communication System Data Terminal
IFICS	In-Flight Interceptor Communications System
ILS	Integrated Logistics Support
IM	Insensitive Munitions
IMDO	Israel Missile Defense Organization
IMS	Integrated Master Schedule
IMTP	Integrated Master Test Plan
INCO	Installation & Checkout
INSURV	Board of Inspection Survey
IOC	Initial Operational Capability
IPD	Initial Production Decision
IPR	In-Progress Review
IRBM	Intermediate-Range Ballistic Missile
IRPT	Independent Readiness Review Team
ISG	Integration and Synchronization Group
ISTC	Integrated System Test Capability
ISTS	Integrated Simulation Tactical Software
I&T	Integration & Test/Installation & Test
<b>J</b>	
JC	Juniper Cobra
JCM	Joint Capabilities Mix
JFTM	Joint Flight Test Standard Missile
JRE	Joint Range Extension
JROC	Joint Requirements Oversight Council
<b>K</b>	
KP	Knowledge Point
KTR	Contractor
KW	Kinetic Warhead

**L**

LAD Launch Area Denied  
LCCE Life Cycle Cost Estimate  
LDACS Lightweight DACS  
LKE USS LAKE ERIE  
LOE Level of Effort  
LoR Launch on Remote  
LRALT Long-Range Air Launch Target  
LRBM Long-Range Ballistic Missile  
LRS&T Long-Range Surveillance and Track  
LUT Limited User Test  
LV-2 Launch Vehicle – 2

**M**

MBRV Modified Ballistic Missile Re-Entry Vehicle  
MDA Missile Defense Agency  
MDEB Missile Defense Executive Board  
MDR Mission Design Review  
MEIT Multi-Element Integration Testing  
MILCON Military Construction  
MMR Multi-Mission Radar  
MMSP Multi-Mission Signal Processor  
MRBM Medium-Range Ballistic Missile  
MRL Manufacturing Readiness Level  
MRT Medium Range Target  
MSC Military Sealift Command

**N**

N/A Not Applicable  
NDAA National Defense Authorization Act  
NET New Equipment Training  
NJ New Jersey  
NORTHCOM U.S. Northern Command  
NMP Navy Manning Plan  
NSCC Naval Systems Computer Center  
NRC Non-Reoccurring Cost

**O**

O&M Operations and Maintenance  
O&S Operations and Support /Operations and Sustainment  
OAR Operational Assessment Report  
OFSC Operational Forces Standing Committee  
OPIR Overhead Persistent Infra-Red  
OSD Office of Secretary of Defense  
OSM Objective Sensor Model  
OSM-S Operational Sensor Model – SBX  
OT Operational Test  
OTA Operational Test Agency/Other Transaction Authority  
OTRR Operational Test Readiness Review

<b>P</b>	
PA	Performance Assessment / Project Agreement
PAA	Phase Adaptive Approach
PAC	Program Acquisition Cost
PACOM	U.S. Pacific Command
PAUC	Program Acquisition Unit Cost
PB	President's Budget
PCB	Program Change Board
PCIL	Peripheral Component Interface Laboratory
PCL	Prioritized Capabilities List
PCNT	Propulsion Control Navigation Test
PDR	Preliminary Design Review
PDRR	Preliminary Design Readiness Review
PER	Program Execution Review
P <sub>ES</sub>	Probability of Engagement Success
P.L.	Public Law
PM	Program Manager
PMB	Performance Management Baseline
PMC	Partial Mission Capability
PMRF	Pacific Mission Range Facility
POM	Program Objective Memorandum
PoP	Period of Performance
PPU	Prime Power Unit
PRR	Program Requirements Review
PRRA	Production Readiness Risk Assessment
P <sub>K</sub>	Probability of Kill
P <sub>SSK</sub>	Probability of Single Shot Kill
PSSR	Pre-Ship Readiness Review
PTS	Permit to Ship
PTSS	Precision Tracking Space System
<b>Q</b>	
Q	Quarter
QA	Quality Assurance
QTY	Quantity
<b>R</b>	
RDT&E	Research, Development, Test and Evaluation
Refurb	Refurbishment
RFI	Request for Information
RFP	Request for Proposals
RR	Readiness Review
RSC	Raid Size Capacity
RT	Real Time
RTI	Return to Intercept
RV	Reentry Vehicle
RVS	Raytheon Vision System

**S**

SA	Situational Awareness
SAMP	Single Acquisition Management Plan
SATCOM	Satellite Communications
SBIRS	Space-Based Infra-Red System
SBX	Sea Based X-Band (Radar)
SCG	Security Classification Guide
SCR	System Concept Review
SDR	System Design Review
SHF	Super High Frequency
SIPRNet	Secure Internet Protocol Router Network
SIL	System Integration Laboratory
SIT	System Integration Test
SM-3	Standard Missile - 3
SRA	Selected Restricted Availability (Ship Availability)
SRALT	Short-Range Air Launch Target
SRBM	Short-Range Ballistic Missile
SRR	System Requirements Review/Ship Readiness Review
SS	Summary Screen
SSLA	System Security Level - A
SSSTRP	Software System Safety Technical Review Panel
STRATCOM	U.S. Strategic Command
SV	Schedule Variance
SW	Software
SY	Shipyards
SYS	System

**T**

T2	Transition and Transfer
T&E	Test and Evaluation
TA	Technical Assessment
TB	Test Bed(s)
TBD	To Be Determined
TC	Targets and Countermeasures
TCD	Technology Capability Declaration
TDACS	Throttleable DACS
TDP	Technical Data Package
TDU	TDACS Demonstration Unit
TEWA	Threat Evaluation and Weapons Assignment
TFCC	THAAD Fire Control and Communications
THAAD	Terminal High Altitude Area Defense
TM	Terminal Mode/Technical Manual
TOG	Technical Objectives and Goals
TOM	Target Object Map
TOO	Target of Opportunity
TPR	Technical Product Review

(b)

(b)(3):10 USC

TSRM	Third Stage Rocket Motor
TY	Then Year
<b>U</b>	
UEWR	Upgraded Early Warning Radar
UHF/EHF	Ultra High Frequency/Extremely High Frequency
uRVA	Unshrouded Re-entry Vehicle Adapter
USCENTCOM	U.S. Central Command
USCG	U.S. Coast Guard
USD AT&L	Under Secretary of Defense for Acquisition, Technology and Logistics
USEUCOM	U.S. European Command
USFT	U.S. Flight Test, Reference U.S.-Israeli Caravan Test
USG	United States government
USNORTHCOM	U.S. Northern Command
USPACOM	U.S. Pacific Command
USSTRATCOM	U.S. Strategic Command
<b>V</b>	
VA	Virginia
VAC	Variance at Completion
VAFB	Vandenberg Air Force Base
VLS	Vertical Launching System
V&V	Verification and Validation
VV&A	Verification, Validation, and Accreditation
<b>W</b>	
WF	Warfighter
WIN-T	Warfighter Information Network-Tactical
WIP	Warfighter Involvement Process
WSESRB	Weapon System Explosive Safety Review Board
WSMR	White Sands Missile Range
<b>X</b>	
XBR	X-Band Radar

**Appendix E: Multiple Sources for Security Classification**

- Aegis Security Classification Guide (SCG) Change 1 with Administrative Change
- Air & Missile Defense Prioritized Capabilities List 2009; March 18, 2010
- Air & Missile Defense Prioritized Capabilities List for Program Objective Memorandum 2014; October 11, 2011
- Arrow Deployability Program
- Arrow System Improvement Program to Include Change 1
- BMD Target Systems with Change 1
- BMDS AN/TPY-2 Radar Forward Based Mode (FBM) SCG
- BMDS SCG MDA
- Ground Based Midcourse Defense (GMD) SCG to Include Change 1
- Terminal High Altitude Area Defense (THAAD) SCG

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