

UNCLASSIFIED//FOUO



NATIONAL RECONNAISSANCE OFFICE
2009 STRATEGIC PLAN

Controlled by compilation. This document is marked UNCLASSIFIED//FOR OFFICIAL USE ONLY due to the compilation of information contained herein.

UNCLASSIFIED//FOUO

NRO Approved for Release 8/18/10

UNCLASSIFIED//FOUO

UNCLASSIFIED//FOUO

NRO Approved for Release 8/18/10

UNCLASSIFIED//FOUO



NATIONAL RECONNAISSANCE OFFICE
2009 STRATEGIC PLAN
FEBRUARY 2009

UNCLASSIFIED//FOUO

NRO Approved for Release 8/18/10

UNCLASSIFIED//FOUO

UNCLASSIFIED//FOUO

NRO Approved for Release 8/18/10

PURPOSE

This Strategic Plan provides top level strategic direction for the National Reconnaissance Office (NRO). It builds on the progress to-date and represents an interim step in an ongoing strategic planning and implementation process.

This plan provides organizational direction and establishes the framework and context for planning and executing detailed technical efforts. Its primary focus is a number of corporate-level initiatives that the NRO must address in order to move in new

directions. These initiatives are fundamental to achieving the NRO's long-term goals and objectives and are the core of this plan. To ensure they are effectively addressed, the NRO will implement a rigorous follow-through process led by the Director, NRO (DNRO) and managed by the NRO Performance Improvement Officer (PIO). ■

Table of Contents

1 Purpose	4 Section 1: Strategic Plan	17 Section 2: Corporate Initiatives
2 Director's Note	4 Vision	
	6 Strategic Intent	
	7 Key Drivers	
	8 New Value Model	
	9 Technical Priorities	
	11 Ground	
	13 Space	
	14 User Engagement	
	14 Workforce	
	16 Looking Forward	

Scott F. Large
 Director, National
 Reconnaissance Office



The overarching performance value for analysts and

2009 STRATEGIC PLAN

DIRECTOR'S NOTE

The NRO's position as an organizational element of the Department of Defense (DoD) and a key component of the Intelligence Community (IC) makes continued relevancy to both intelligence and operational needs critically important. This Strategic Plan describes our vision for re-emphasizing that relevancy and outlines the direction we will take to retain it.

The NRO is poised to begin delivering a fully integrated space and ground architecture providing collective, cross-domain mission management and data processing. This architecture will closely couple our diverse collection and ground systems to improve user responsiveness, more effectively leverage the new technical architectures being implemented by our mission partners, and improve overall IC effectiveness. Ultimately, the NRO will become a foundational element of a balanced mix of nodes in a networked information collection and distribution system.

This vision is achieved by adopting a fundamentally new approach to defining our ground enterprise. The primary focus will be increasing the *value* of our collected

data through multi-INT fusion at the source. The NRO's role in this information collection and distribution network will build on our extensive capacity to move data. We will become a preferred network and data management solution provider enabling our mission partners and end-users to meet their mission objectives. With our networks and integrated satellite mission management and processing functions as a foundation, we will rapidly move new and innovative capabilities out of our labs and into operational use.

With a heightened focus on the ground enterprise, we are building on our heritage as a premier builder of innovative space systems — systems that have traditionally provided, and continue to provide, an undeniable advantage for our Nation and our users. We are re-establishing our reputation for on-time and on-budget delivery. We are also focusing on delivering the best long-term value for the systems we build. Remaining a viable satellite provider, we are focusing on sustaining the national security space industrial base that we ultimately rely on for our success. And that focus will

Performance measure will be intelligence operational users.

be a fundamental tenet of our future space architecture. We will also increase our emphasis on protecting our space assets and their supporting ground networks and infrastructure.

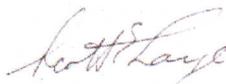
As we define our investment strategy for the future, we are adopting a new value model in which future programs must make good business sense as well as good technical sense. Our program will be based on a solid business case analysis, a long-term investment strategy, and a strong pre-acquisition phase.

This strategic plan defines our vision for attaining our mission objectives; at its core is the most critical element for its success — our workforce. The NRO will implement proactive talent management with career development and effective corporate succession planning as key cornerstones. To maintain our world-class acquisition and operations cadre, we will continue to leverage the joint nature of our workforce in close coordination with parent DoD and IC elements.

The substance of this plan is what we are doing now and what we will do in the future.

The initiatives in Section 2 are strategic catalysts that will enable us to move in new directions. They also represent the NRO's initial response to the recommendations derived from the recently completed NRO Stakeholder Analysis. This analysis included a survey of a broad cross-section of our mission partners, users, overseers, and industrial partners, and it is the best assessment to-date of where they believe the NRO should focus its efforts.

This plan looks forward. We now have the organizational and management tools necessary to achieve our long-term strategic goals and to improve our acquisition and program management performance. We are leveraging those tools to more effectively execute our mission and to deliver on our commitments. The stage is set for achieving a re-engineered NRO focused on delivering the capabilities expected by our citizens and demanded by our users. ■



1

SECTION ONE

STRATEGIC PLAN



VISION

The NRO is part of the very foundation of the IC's ability to deliver timely and relevant information to decision makers. It is also an essential source of critical information supporting DoD operational planning and execution. As the NRO moves forward, it must continue to deliver on both commitments.

The NRO's vision for the future builds on its heritage while addressing a more dynamic and complex threat environment:

BE THE FOUNDATION FOR GLOBAL SITUATIONAL AWARENESS

Goal 1: Provide on-demand worldwide access to intelligence targets of interest, ensuring collection is responsive to end-user requirements.

Goal 2: Provide collected data and information on timelines responsive to user needs.

Goal 3: Provide capabilities that are fully integrated with, and complementary to, other IC and DoD collection assets and intelligence disciplines.

The NRO will accomplish these goals by fully leveraging an integrated ground

and space capability. The end-state will give users unprecedented global **Access** to information with value-added **Content** incorporated at the earliest point of consumption based on user-defined needs. Further, the NRO will do this in a **Timely** manner to ensure users with the most pressing needs have an unparalleled intelligence advantage. In collaboration with mission partners, NRO ground segments will leverage state-of-the-art information technology to provide a rapidly responsive, multi-INT ground environment fully integrated within the NRO and across the IC and the DoD. The space segment will exploit the high ground to provide timely and global access for a multi-INT suite of sensors. And all of this will be accomplished within the context of a challenging resource environment and with the knowledge that ultimately the user will determine the value of the systems the NRO proposes and delivers. The NRO will capitalize on technology advancements while ensuring on-time delivery and the best possible value to its stakeholders.

To deliver on this vision, three overarching corporate imperatives will guide planning and execution at all levels within the organization:

- > **Consistently deliver on acquisition and operational commitments.** The NRO will continue to focus on 24/7 operations and uninterrupted support to intelligence and operational requirements while reestablishing its reputation for acquisition excellence and restoring confidence in its ability to deliver on time and on cost.
- > **Achieve Enterprise Integration.** Space systems will be designed, built, and operated as a single, fully integrated, multi-INT architecture, and an integrated ground enterprise will replace the current

array of program-based, vertically aligned systems. The long-term strategy is to evolve with our mission partners towards an architecture where intelligence problems are generically tasked across the entire overhead constellation and data from individual systems is fused to maximize overall capability and intelligence value for all users.

- > **Ensure the critical enablers fundamental to achieving the organization's long-term strategic goals and objectives are in place.** First and foremost is an effective workforce.

NOTATIONAL FUTURE ARCHITECTURE

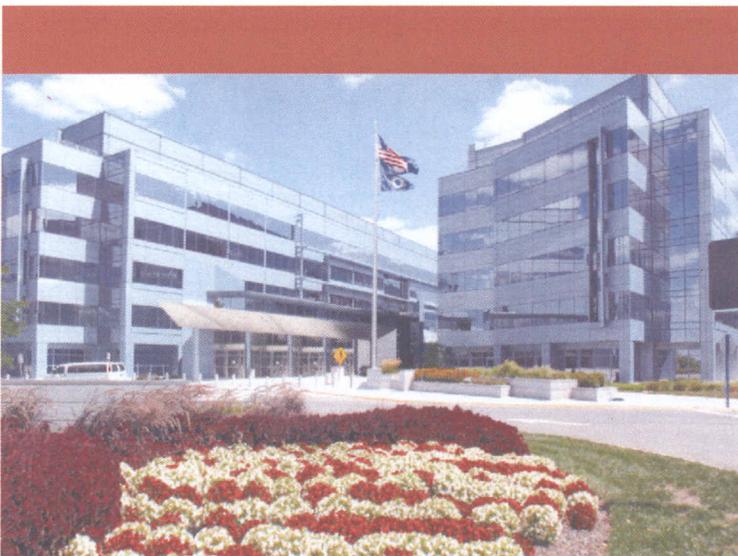


THE MOST
CRITICAL
ELEMENT IN
OUR LONG-TERM
SUCCESS IS OUR
WORKFORCE.

The NRO must ensure that it has a well-trained, professional, and competitive government workforce. The NRO must also effectively and appropriately use Federally Funded Research and Development Contractors (FFRDC) and private sector support personnel when necessary to augment the government workforce. And finally, the organization must have a well-understood systems architecture and business strategy to ensure all components at all levels within the organization have a common understanding of the direction in which the organization is moving.

STRATEGIC INTENT

The NRO's primary deliverables are on-demand global situational awareness, near real-time information access, and the tools to enable mission partners and users to efficiently task the overhead constellation and to derive the maximum intelligence value possible from on-orbit capabilities and delivered products.



The NRO is driven by a new set of engineering and management priorities. Ground capabilities now have the same precedence as satellite collection. Quick-reaction user support is as important as longer-term system development. In a significant shift away from the practice of separate INT-specific space systems, the NRO will design, build, and operate its systems as a single integrated entity optimized for *enterprise* rather than program-level performance. The organization is focused on accelerating the delivery of new and innovative ground capabilities that *amplify* overhead capabilities and are responsive to evolving user needs. The corporate intent is to build a balanced mix of collection systems and sensors that delivers data into an integrated ground infrastructure that is designed and implemented in collaboration with mission partners and users. In parallel, NRO satellites are evolving from their traditional role as the central elements of independent, INT-based systems into an interoperable suite of nodes in a fully networked information collection and distribution system.

Dynamic new intelligence problems and programmatic realities are driving new organizational perspectives and measures of success. Time-to-market and cost are now as important as system performance. These considerations, and the new *business management* perspective they add to the systems planning process, will help ensure the NRO proposes only those solutions that deliver *best value*. Within this context, performance is just one of many factors that must be balanced to ensure the NRO delivers the maximum intelligence value possible within the resources available. At the engineering level, this means the organization will not strive for the last ten percent of

performance capability if it becomes a major cost or schedule driver and is not necessary to meet approved performance requirements. At the architectural level, the NRO is also enabling the compression of the tasking-collection-processing-exploitation-dissemination (TCPED) timeline by selectively emphasizing areas with the greatest intelligence benefit. Resources will be invested in areas yielding the greatest performance improvements based on an end-to-end system perspective. In addition, the NRO is leveraging new information technology capabilities to implement a secure, fully integrated, service-oriented ground architecture based on open standards, collaborative data search and discovery engines, and near real-time information access tailored to user-specific needs.

The emphasis now is on *enterprise*-level planning, cross-INT integration, and closer linkages with other IC and DoD collectors and functions. The NRO is also developing new measures of success. What matters most is *enabling the production of actionable intelligence and supporting deployed warfighters*.

The NRO is also changing the way it approaches its mission. The organization is now focused as much on what it does with the data it collects as it is on collecting it. Ground systems can enhance the intelligence value of information provided to users and, if managed effectively, can enhance the performance of on-orbit systems and sensors. The NRO will continue to push the state-of-the-art in space, but it will also expand its focus to bring its considerable skills to bear in the broader areas of information and network management.

The NRO recognizes that the pace and complexity of new intelligence problems

demand integrated, multi-INT solutions and the rapid fusion of data from multiple sensors and sources. It also recognizes the enhanced intelligence value and collection efficiency that can be gained from operating its systems synergistically rather than independently. The NRO's focus is on designing, building, and operating its systems as a single integrated *enterprise* and on recasting overhead collection as a strategic complement to other IC and DoD collection systems and intelligence disciplines.

The NRO transformation is not taking place in isolation. Led by the Director of National Intelligence (DNI), the IC is also changing the way it does business. As part of the Integrated Intelligence Architecture (I2A), the National Security Agency (NSA) and the National Geospatial-Intelligence Agency (NGA) are in the midst of their own transformations. The NRO will continue to support IC and DoD transformation efforts and will ensure that what it does technically and programmatically is integrally linked with, and complementary to, what its mission partners and users are doing.

KEY DRIVERS

Multiple trends are converging to create new challenges and new opportunities.

Space is critical to IC and DoD intelligence and operational needs. Despite significant capability improvements in other collection disciplines, space is recognized as offering unmatched global access, timeliness, and sustained denied area collection capability not duplicated by any other collection approach or group of collection assets. Space plays a major role in the nation's overall intelligence collection posture and the tactical operational value of overhead is unquestioned.

DYNAMIC NEW
INTELLIGENCE
PROBLEMS AND
PROGRAMMATIC
REALITIES ARE
DRIVING NEW
ORGANIZATIONAL
PERSPECTIVES
AND MEASURES
OF SUCCESS.

Intelligence problems, technologies, and user needs are evolving at unprecedented rates, and the NRO must find ways to factor this into its system planning and execution activities. In the past, the organization implemented limited scope, quick-reaction initiatives to address new threats in the operational environment and to respond to evolving user needs between major system upgrades. However, these efforts were, for the most part, narrowly defined and primarily INT-centric in implementation. The challenge today is to broaden and institutionalize these processes to create a more agile NRO that is better adapted to dynamic user needs and responsive to the continuously changing global threat environment.

The level of mission support that users have become accustomed to is at an unprecedented and artificial high. However, the current budget does not replace legacy systems on a one-for-one basis and the net result is that the high levels of mission support users have come to expect will inevitably decline as legacy systems reach the end of their on-orbit lives. And this will happen as global threats and user needs are expanding. This creates an imperative for the entire organization to work to find new and innovative ways to derive the maximum value possible from the capacity available.

Mission protection is becoming increasingly important. As advanced technologies continue to proliferate, so do the operational threats to NRO systems. At one time, space was effectively a sanctuary, but that is no longer the case. Recent anti-satellite tests dramatically demonstrated the vulnerability of satellites in low earth orbit. They also served as a reminder of the tremendous asymmetric advantage that the U.S. derives

from its space systems and the fact that adversaries perceive this as a significant weakness. The NRO will reassess the survivability of its existing systems and factor such threats as cyber and direct interference into new system planning activities.

The NRO is clearly focused on the highest priority intelligence problems, but for the first time in its history, it also finds itself in the "commodity" collection business. In some areas, the NRO must maintain a base collection capability to support a wide variety of basic intelligence and operational support applications that do not require or merit capability enhancements. From an investment perspective, the added intelligence value that could be gained from improved sensors or systems does not offset the added cost and technical risk associated with new development. The NRO is developing an approach to sustain commodity collection while continuing to pursue innovative concepts and state-of-the-art development in other areas.

It is clear that the competition for budget resources will become more intense over time. To remain competitive, the NRO will demonstrate the *value* of its capabilities and products from the user's perspective. The fact that NRO satellites have typically lasted from 10 to 30 years once on orbit is an advantage and a clear reflection of both the operational and investment value of overhead systems. But this achievement has also created a certain level of user expectation.

NEW VALUE MODEL

In light of these realities, the NRO is adopting a new program planning checklist tailored to the new environment:

THE NEED FOR
INTEGRATED
MULTI-INT
SOLUTIONS IS
NOW GREATER
THAN EVER.

The NRO is now focused as much on what it does with the data it collects as it is on collecting it.

- > **Business Case Analysis.** Demonstrated intelligence return-on-investment and cost-effective business management are fundamental to everything the NRO does in the engineering and operational areas. This requires the organization to think in terms of intelligence value from the user's perspective and to balance cost, performance, and time-to-market. It also requires that the NRO find smarter ways to manage the industrial base that it ultimately depends on for its long-term success, particularly for space systems. The cost of NRO systems must be backed by a solid *business case* if the organization is to remain competitive in a resource-constrained environment.
- > **Long-term Investment Strategy.** System planning will be based on long-term perspectives and programs will be evaluated based on their total life cycle cost. The NRO is in the business of providing sustained capability to satisfy ongoing requirements consistent with long-term IC and DoD strategies. Based on historical experience, a 20-year program life cycle is the norm rather than the exception for NRO space systems. Ad hoc technical planning, driven by year-to-year budget exigencies, increases total program cost, disrupts otherwise rational decision making, and leads to capability gaps.
- > **Balanced Performance.** Performance will be evaluated and optimized at the *enterprise* level against the total set of intelligence problems and requirements

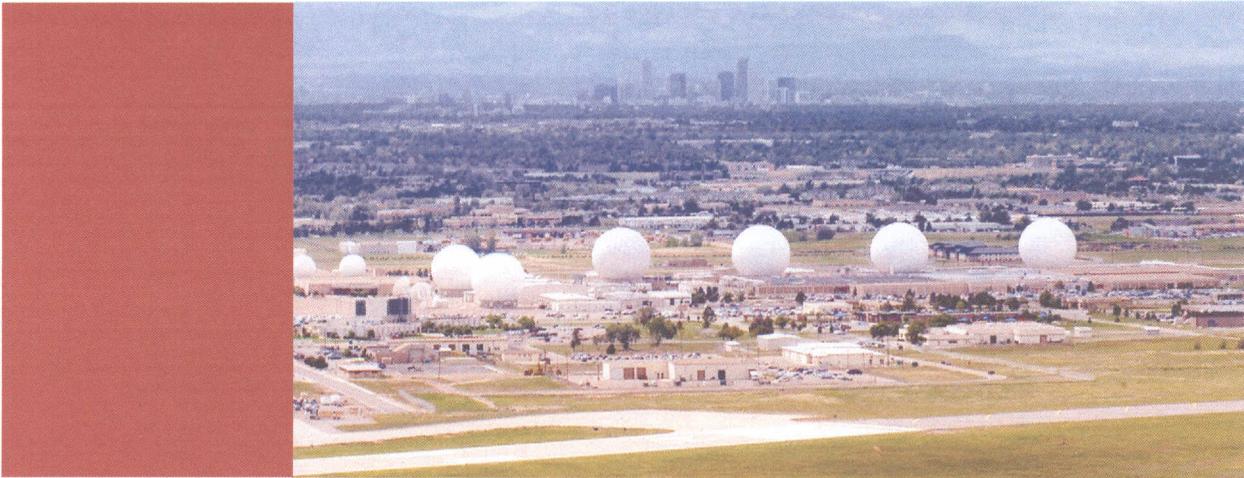
tasked to overhead collection. INT-specific performance is an input, not the answer.

- > **Assured Capability.** Continuity of operations, information assurance, and survivability will be addressed early in program planning processes to ensure this essential functionality is integrated into new programs from the outset at the lowest possible cost. It is imperative to ensure the uninterrupted flow of NRO products and services, especially when they are needed the most.
- > **Technology Insertion.** Regular technology insertion is essential if the NRO is to keep pace with dynamic changes in the intelligence environment. Technical flexibility and system adaptability are key. The unique benefits of overhead collection are derived from unchallenged access to denied areas combined with unexpected performance. To protect this edge, we must implement a system of systems that maintains assured space access while concurrently improving other overhead attributes that will guarantee technological surprise. The NRO architecture must continue to deliver more than just point solutions. Technology insertion will be factored into initial system planning and program approval processes rather than as an afterthought following authority to proceed.



TECHNICAL PRIORITIES

These high-level priorities reflect major emphasis areas and provide the context



within which lower level technical initiatives will be planned and executed:

- > **Implementation of an integrated ground architecture.** The intelligence value and operational efficiencies inherent in a fully integrated ground architecture based on commercial standards and off-the-shelf hardware and software are compelling. The emphasis will be on common processing, integrated mission management, improved communications, and end-to-end integration within the NRO and across the IC.
- > **Optimization of the overhead enterprise architecture.** The emphasis in space will be on spectral and frequency diversity, minimizing time-to-access, and accelerating time-to-market. The NRO will focus on novel collection approaches and integration with airborne and terrestrial capabilities. The NRO will embrace commercial and government off-the-shelf solutions to the maximum extent possible. The overarching performance measure will be intelligence value for analysts and operational users.
- > **“Mainstreaming” the lab process.** This will be pivotal in enabling the NRO to keep pace with dynamic changes in the target and operational environments. The emphasis will be on providing tools that enable the creation of actionable intelligence and on ensuring that users and operators are able to derive the maximum value possible from NRO systems and the data they provide. We will consolidate these capabilities into a common virtual environment focused on multi-INT solutions in the highest payoff areas from an *enterprise* perspective. The NRO will also find ways to accelerate the transition of new products into operations without compromising on the acquisition and operational discipline that is fundamental to the organization’s long-term success.
- > **Supporting larger transformation processes.** The NRO will design its systems as fully integrated complements to other IC and DoD collection, processing, and analytical capabilities as part of the larger intelligence enterprise. As the organization moves forward, it will

partner with NGA and NSA, as well as other IC and DoD elements, to develop architectural visions, mission needs, and transformational plans.

GROUND

NRO ground systems will be functionally realigned and designed to capitalize on the cross-program commonalities and synergies inherent in command and control, mission management, processing, and information systems. The NRO will acquire future ground systems as an integrated and federated *enterprise* by adopting commercial IT best practices and solutions to provide increased agility, mission assurance, and innovation while reducing overall investment requirements and improving time-to-delivery. All systems will comply with a common set of IT standards to facilitate software and data integration. In this commercial-like ground architecture, information is virtual, assured, available on demand, and globally accessible. The NRO goal is to operate as efficiently as the best commercial IT and knowledge service companies, enabling authorized users to receive, task, and query trusted information on demand, from anywhere in the world. This integrated ground enterprise will enable a wide range of new real-time automated information products and services, allow more efficient use of on-orbit collectors, facilitate cross-mission tipping and cueing, and provide for dynamic re-tasking.

To achieve these enhanced capabilities, the NRO is working with its mission partners to ensure information is seamlessly and continuously available to all users. Similar to commercial collaborative IT business practices, the NRO will ensure the seamless availability of all data from all databases. This

initiative will allow users to derive maximum benefit from the considerable investment represented by our ground stations.

The NRO has traditionally built separate ground systems for each of its satellite programs. As satellite development times increased, the cost of their unique ground systems also increased and the systems themselves failed to provide the flexibility to respond to the tremendous growth and opportunities provided by the commercial information technology (IT) revolution. In addition, these system-specific, stand-alone ground systems required time-consuming modifications to add new functionality or upgrade existing facilities. To enable customers to rapidly respond to new targets and target characteristics, the NRO is transforming its ground systems by developing new enhanced information products and services with expanded access, enhanced content, and reduced timelines. The challenge is to implement this vision seamlessly without disrupting ongoing operations.

The ground transformation will enable the NRO to perform upstream processing, making information available to users at the earliest opportunity. Instead of delivering single isolated products, the NRO is developing integrated products and services by fusing products from various space platforms and performing advanced functions such as change detection. Upstream processing can also be used to extract specific features from the available information. In addition, upstream processing provides integrated information solutions that leverage on-the-shelf or in-the-pipeline technologies and capabilities to support various unique implementation techniques. The ground transformation

THE EMPHASIS
NOW IS ON
ENTERPRISE-LEVEL
PLANNING,
CROSS-INT
INTEGRATION,
AND CLOSER
LINKAGES
WITH OTHER
IC AND DoD
COLLECTORS
AND FUNCTIONS.

ULTIMATELY
THE USER WILL
DETERMINE
THE VALUE OF
THE SYSTEMS
THE NRO
PROPOSES AND
DELIVERS.

will also enable the NRO to keep pace with changes in the target environment that are heavily influenced by new commercial technologies and commercial refresh cycles. This will be accomplished in concert with our mission partners.

The NRO will take advantage of the fact that the ground is inherently a more forgiving operational environment than space and that it therefore offers the opportunity to use more flexible acquisition approaches to accelerate the delivery of new capabilities. The NRO will not compromise on disciplined systems engineering and acquisition management, but it will tailor those processes to take full advantage of the fact that ground hardware and software can be easily modified and upgraded after delivery. The intent will be to bias acquisition and system engineering processes to encourage innovation and to facilitate the rapid delivery of new capabilities within an integrated enterprise framework.

As the NRO works to transform its ground architecture, it will ensure end-to-end integration with IC-level initiatives that are being planned and managed under the auspices of such efforts as the IC Integrated Intelligence Program. In all areas, the overall measures of effectiveness will be:

- > **Access** — The NRO will make its products and services available to the widest possible set of users consistent with mission partner authorities and prerogatives. The NRO will collaborate with its mission partners to ensure timely and assured access. The NRO will also use IC metadata and cataloging standards to enhance the integration of NRO information with other IC and DoD collection sources.
- > **Content** — This includes sensor-driven

content as well as post collection value-added processing. Sensor sensitivity, phenomenological diversity, synergistic mission management, data fusion, and automated correlation with other data sources all contribute to enabling users to generate actionable intelligence. Fusion and correlation are particularly important because they add intelligence value beyond original data content.

- > **Timeliness** — Intelligence problems are more dynamic and are moving at a faster pace than ever before. The operational metric for “near real-time” is just that. The NRO will work in collaboration with its mission partners to facilitate compression of the TCPED cycle to enable the timely delivery of actionable information.

The culture of sustained mission availability, well beyond engineering design specifications, and the ability to regularly deal with seemingly devastating on-orbit anomalies to maintain on-orbit assets have been cornerstones of NRO success. As new ground architectures are designed and implemented, there will be a strong focus on continuing to provide the tools needed to sustain an uninterrupted around-the-clock operations tempo. Human factors engineering and supportability will be key design considerations, and ground station operators will play key roles throughout the ground transformation process from requirements formulation through fielding and operations testing.

Finally, the ground transformation must continue to provide information assurance. System operations and collected information must be protected from intrusion and tampering. This is essential in enabling users to make confident assessments based on information provided from a trusted

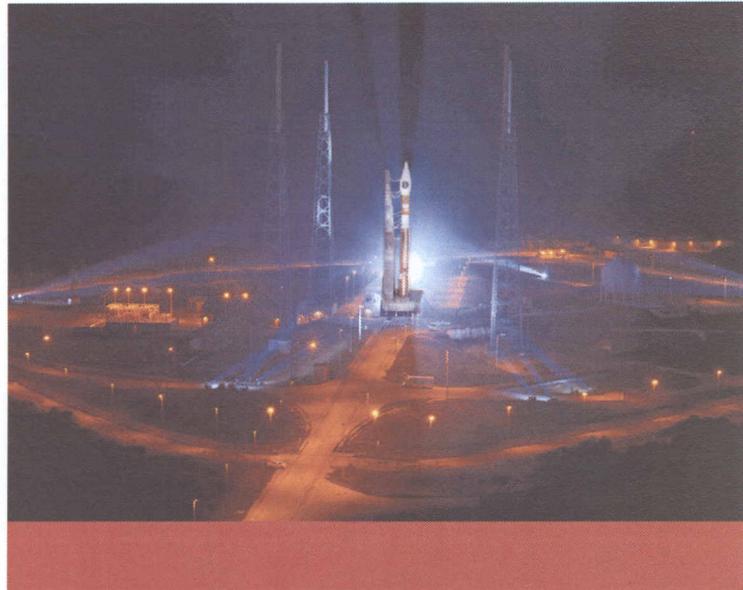
source. Users must be able to identify and authenticate to the network and collaborate seamlessly with multiple users and producers at the right security and access levels. NRO efforts in this area will be in concert with broader IC and DoD information assurance programs and policies.

SPACE

As the NRO works to transform its ground systems, satellites will evolve from their traditional role as central elements of independent programs into an interoperable and balanced mix of nodes in a networked information collection and distribution system.

While many of the key characteristics that have traditionally differentiated NRO satellites are likely to continue to be design drivers for the foreseeable future, the character of NRO space systems is expected to evolve in two significant respects. First, satellites will increasingly be tasked collectively, with their data combined to provide more useful intelligence more rapidly. This means that collected data is likely to become more standardized in format and more amenable to rapid and increasingly automated processing and exploitation. Second, space systems will be required to respond to increasingly rapid end-to-end response times.

To this end, the NRO is revising its criteria for acquiring, operating, and disposing of its satellites. Ultimately, the intent is to implement a sustainable architecture, where "sustainable" means developing an enterprise-optimized, steady-state process for acquisition, launch, and replenishment. Such a process will maximize value while preserving the industrial base and ensuring that life cycle costs remain within a relatively steady-state budget.



Consistent with this approach, the NRO will work with its oversight organizations to implement a more cost-effective, *best value* satellite procurement approach. Minimizing satellite production costs is ultimately dependent on establishing a stable production base. The current NRO satellite production model is characterized by schedule instability, production gaps, and labor inefficiencies. From a business perspective, it is arguably the least efficient acquisition model possible. It is also one of the largest contributors to negative cost perceptions. At the macro level, satellite costs are affected more by *how* things are produced rather than by *what* is being built. The lowest cost, *best value* procurement approach for the long term is achieved by establishing a steady-state production and launch flow sized to maintain, but not exceed, the approved on-orbit constellation based on realistic forecasts of on-orbit life. Changes to this steady-state level, particularly production rates below the minimum sustainable

level, create labor and restart inefficiencies that add to total program cost and lead to costly mistakes. Establishing a fixed launch schedule based on satellite availability also creates predictable technology insertion opportunities that will enhance the NRO's ability to respond to dynamic changes in the target environment.

To further reduce cost and technical risk, the NRO will base new development on existing designs whenever possible. Experience has proven that starting with a clean sheet of paper and attempting to design the ideal system optimized against the most stressing IC requirements is inevitably the highest risk and most costly approach. Instead, the NRO will emphasize the evolutionary development of existing platforms and subsystems when it makes good business and operational sense. When evolutionary development is not responsive to user needs, the NRO will undertake new development, but it will do so in a more disciplined manner. When executing new acquisitions, the NRO will emphasize and significantly strengthen its pre-acquisition technology and manufacturing maturation, engineering analysis, cost estimating, and decision making processes to ensure everything necessary for program success is in place and verified prior to granting authority to proceed.

While the NRO will continue to invest in state-of-the-art research and development (R&D), it will also take advantage of existing commercial capabilities. In some areas, commercial capabilities have evolved to the point where they are meaningfully contributing to the space intelligence mission. When it is technically possible, the NRO will continue to embrace this reality if it represents a *best value* approach. The

organization is already implementing this approach in selected areas. When it makes sense, it will also do so in others.

Overarching all of this will be the development of a long-term industrial base strategy for each new satellite acquisition program. The continuing level of support that the NRO will be able to provide its users in a resource-constrained environment, and its long-term success as an acquisition organization, are ultimately dependent on implementing such strategies.

USER ENGAGEMENT

A close working relationship between the NRO and its customers is essential to future success. The NRO user engagement strategy will span from strategic to tactical engagement. We will continue to work closely with mission partners through regular senior leadership meetings, personnel exchanges, and collaborative planning. We will also continue to engage Combatant Commands and the military services to understand future strategies and operational needs. In addition, NRO ground station operators are interacting daily with users and mission partners. The NRO is also engaging its partners in the IC, the Office of the Secretary of Defense, and the military Joint Staff. These measures will be part of an overall External Engagement Strategy and multiple NRO components will participate in its implementation.

WORKFORCE

The most critical element in the NRO's long-term success is its workforce.

Much of the NRO's success over the past 40 years can be attributed to its unique staffing



The NRO is focused on accelerating the delivery of new and innovative ground capabilities that *amplify* overhead capabilities and are responsive to dynamic changes in the target environment.

model. The diverse set of skills, experiences, and perspectives reflected in the mix of uniformed military, civilian, IC, and DoD personnel who staff the organization lends a unique joint flavor to the NRO that is one of its key strengths. However, this staffing model creates a complicated workforce management and employee development challenge with a variety of policies and processes governing each individual segment of the workforce. In addition, parent service and agency workforce initiatives and demographic trends directly impact the talent pool from which the NRO draws. The complexity of the NRO staffing model requires innovative approaches to corporately manage and develop the workforce in ways that overcome barriers to effective teamwork, promote fair and equitable treatment, and provide unique development opportunities to meet NRO mission requirements while supporting career competitiveness according to parent service or agency standards. To address these challenges and complexities, the NRO is implementing a number of corporate initiatives to ensure it has the right workforce to support its evolving mission.

The NRO has historically relied on parent service and agency workforce planning and development initiatives and has tended to *respond to, vice anticipate*, workforce changes. Coordination and integration of workforce planning typically occurred at the parent service/agency level in

response to what was perceived from their perspectives as urgent anomalous workforce issues. To address this issue, the NRO has implemented a corporate process for workforce analysis and occupational planning that aligns short- and long-term workforce requirements with parent service/agency demographics, trends, and workforce initiatives. This process is now being used *proactively* to develop and coordinate long-term workforce strategies to support evolving NRO staffing needs.

Despite close and supportive relationships with our staffing partners, personnel resources across the IC and DoD have become increasingly stretched; as a result, skill depth, management continuity, and workforce stability within the NRO have become pressing concerns. To address this concern, the DNRO has taken the initial steps to implement a limited separate NRO career service to supplement the current staffing model. This career service will be established under the Defense Civilian Intelligence Personnel System and initial positions and funding are included in the fiscal year 2010 President's Budget. This career service will provide a cadre of permanent NRO employees to enhance management continuity, improve workforce stability, and provide a long-term management perspective.

The NRO is also implementing a *Talent Management Initiative (TMI)*. TMI will

INTELLIGENCE
 RETURN-ON-
 INVESTMENT AND
 COST-EFFECTIVE
 BUSINESS
 MANAGEMENT
 WILL BE
 FUNDAMENTAL
 TO EVERYTHING
 THE NRO DOES IN
 THE ENGINEERING
 AND OPERATIONAL
 AREAS.

provide the overarching philosophical foundation and framework to drive changes in leadership development, organizational culture, and personnel-related systems and processes. Effective leadership is essential to the long-term success of the NRO and will be a particular focus. Within the TMI framework, the NRO will develop and implement processes to provide new leadership learning opportunities, developmental assignments, and executive coaching opportunities. The NRO will also implement a broad range of TMI workforce-related initiatives tailored to its unique cultural and skill development requirements.

The NRO will institute a comprehensive succession management process designed to ensure there is an identified and qualified pool of potential replacements for all critical positions. This process will provide enhanced developmental opportunities for employees in all disciplines and will prepare and posture personnel to assume increasing levels of responsibility. In accordance with leadership development best practices, the NRO's succession management program model will be structured such that 70 percent of the effort will focus on learning through on-the-job experience, 20 percent will involve mentoring to better transition knowledge to less experienced personnel, and 10 percent will be devoted to traditional training venues. All personnel assigned to the NRO will be included in the new succession planning process and its associated training and education regardless of their parent agency affiliation.

As part of the overall workforce enhancement process, the workforce will have access to the services and resources of the NRO's *Leadership Development and Assessment Center*. Employees will receive practical

insights on preparing for roles of increased scope and complexity, accelerating readiness for new roles, and managing the transition between roles. Evaluating and understanding where an employee currently ranks with regard to the experiences, skills, and competencies needed for higher-level positions then provides a basis for a focused development plan.

An effective workforce is fundamental to everything the NRO plans to accomplish. These initiatives, as well as a number of other ongoing efforts, are designed to build on existing strengths to ensure the organization is effectively postured for the future.

LOOKING FORWARD

The fundamental mission of the NRO is the same today as it was when the organization was first established, and it is not expected to change. But the way NRO products are used, the mix of users relying on NRO products and capabilities, and the target environment have changed significantly. These new realities are causing the organization to change the way it does business and to adapt to a new environment characterized by continuous change and increasingly more challenging intelligence problems. The *Strategic Framework* articulated a compelling vision for the future and the *NRO Transformation* provided the management, organizational, and business process tools to enable it to happen. This plan further refines the NRO's long-term goals and objectives and implements the initial steps to make them a reality. ■

2 SECTION TWO

CORPORATE INITIATIVES

PURPOSE

The following initiatives address key enablers and essential first steps that must be in place to make progress against the NRO's long-term goals and objectives. They also reflect the DNRO's view of what, at the highest level, must be accomplished to move the organization in new directions. These initiatives do not represent everything the NRO will focus on in the coming months, but they do represent many of the highest priorities.



PROCESS

To ensure effective follow-through, each initiative will be assigned to a Responsible Officer who will be responsible to the DNRO for developing an integrated execution plan with measurable milestones and deliverables, and for overseeing the overall execution process. Each initiative also has a designated lead Accountable Officer who will be responsible for managing the day-to-day execution process and for coordinating and integrating the efforts of the various participating Directorates and Offices (Ds&Os). The Directors of the coordinating Ds&Os will be responsible for ensuring the necessary resources are available for successful execution and for

overseeing the efforts of their respective organizations. The PIO will facilitate the overall initiative process. The PIO will be responsible for addressing issues that arise, coordinating regular status updates for the DNRO, and providing integrated performance reporting and analysis. The PIO will also be responsible for coordinating any scope adjustments that may be necessary and for recommending follow-on initiatives as warranted.

INITIATIVES

IMPERATIVE 1: Consistently Deliver on Acquisition and Operational Commitments:

1 *Building on recent corporate governance and acquisition management improvements, develop and begin implementing an Acquisition Excellence Improvement Plan that comprehensively addresses project management philosophy and processes at all levels within the organization.*

Develop and document a comprehensive plan for improving across-the-board NRO acquisition and program management performance. Build on the organizational and business process improvements implemented by the *NRO Transformation*. Identify the key contributors to acquisition success and develop specific initiatives to improve organizational performance. Address all phases of the end-to-end acquisition process to include: pre-acquisition architectural, technical, and resource planning; technical and risk assessment processes; cost and schedule estimating; contracting; source selection strategy and proposal evaluation criteria; program implementation to include contractor oversight, fee strategy, fee determination, and baseline management; testing and verification; acquisition and engineering standards; and internal and external status reporting. Place special emphasis on developing mechanisms to build improved processes into day-to-day program management practices and establishing measures of performance to track and assess interim as well as long-term progress.

Responsible Officer: Chief Operating Officer (COO)

Accountable Officer: Director, Systems Engineering (SE) in coordination with the Deputy Director, NRO, Business Plans and Operations (DD/NRO/BPO) and the Directors of Office of Contracts (OC), Signals Intelligence Systems Acquisition (SIGINT), Imagery Intelligence Systems Acquisition (IMINT), Communications Acquisition and Operations (COMM), Ground Enterprise Directorate (GED), and Advanced Systems and Technology (AS&T)

Due Date: End-to-end execution plan due 31 March 2009.

2 *Building on work to-date, develop an Integrated Framework for Enterprise Requirements Management, Prioritization, and Investment Planning that envelops all NRO functional areas and activities.*

Develop a single, integrated requirements management and priority ranking structure enveloping all NRO functions and activities to include acquisition, R&D, and future system planning as well as long-term corporate goals, objectives, and priorities. The intent is to develop a single priority structure to guide NRO-wide investment planning and technical development.

Responsible Officer: COO

Accountable Officers: Director, SE in coordination with the DD/NRO/BPO, the Deputy Director for Mission Support (DDMS), the Chief Information Officer (CIO), and the Directors of SIGINT, IMINT, GED, AS&T, COMM, System Operations (SO), and Management Services and Operations (MS&O)

Due Date: End-to-end execution plan due 31 March 2009.

PERFORMANCE
WILL BE
OPTIMIZED
AT THE
ENTERPRISE
LEVEL.

To remain a viable satellite provider, the NRO must focus on sustaining the national security space industrial base that it ultimately relies on for its success.

3 *Develop and begin implementing a proactive NRO Space Industrial Base Engagement Plan.* Develop a comprehensive and programmatically realistic strategy to proactively manage the NRO space industrial base with the intent of minimizing acquisition costs, improving product quality and mission assurance, and ensuring the long term viability of the limited pool of development contractors and component suppliers that the NRO ultimately relies on for its success. Focus on areas the NRO can control while ensuring appropriate coordination and synergy with other government organizations with satellite development and manufacturing equities. The overarching intent is to develop a long-term strategy with supporting rationale and analysis that can be cogently articulated to external oversight organizations and that can be incorporated into the next major new start. Also evaluate modifying existing programs and contractual relationships to align them with the long-term strategy once it is developed and defined.

Responsible Officer: COO

Accountable Officer: Director, SE in coordination with the DD/NRO/BPO and the Directors of SIGINT, IMINT, COMM, AS&T, OC, and Office of Security and Counter Intelligence (OS&CI)

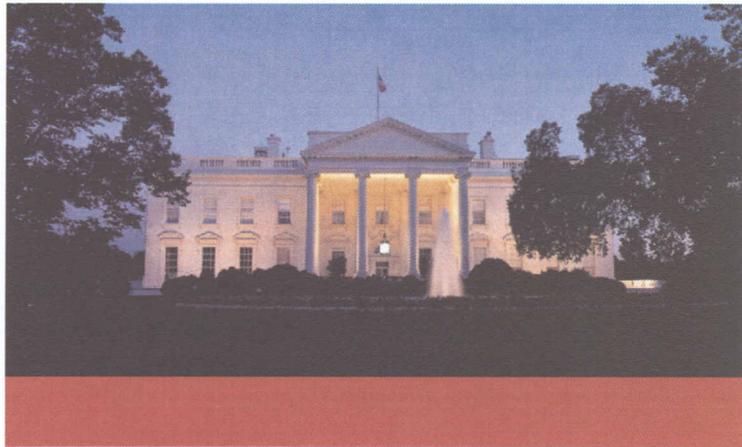
Due Date: End-to-end execution plan due 31 March 2009.

4 *Develop and begin executing an Integrated Information Assurance (IA) Architecture and Implementation Plan.* Develop and document a comprehensive, programmatically realistic, and fiscally responsible IA architecture and implementation plan enveloping all current and planned programs and activities. Deliverables include a documented baseline reflecting the existing IA baseline and a coordinated end-to-end program plan with documented requirements, defined deliverables, and an achievable schedule. Also develop processes and procedures to ensure IA considerations are fully integrated into all operational, future systems planning, and acquisition activities.

Responsible Officer: CIO

Accountable Officer: CIO in coordination with the Directors of SE, OS&CI, GED, COMM, and SO

Due Date: End-to-end execution plan due 31 March 2009.



Ultimately the NRO will become a foundational element of a balanced mix of nodes in a networked information collection and distribution system.

IMPERATIVE 2: Achieve Enterprise Integration:

5 *Building on work to-date, formalize and begin implementing an Integrated Ground Transformation Plan.*

Based on the *NRO Integrated Ground Business Plan* and the *Integrated NRO Program Plan for Transformation*, develop, document, and begin execution of a single integrated ground transformation plan. Deliverables include: a documented baseline reflecting the existing ground architecture; documented requirements and a technical baseline for a programmatically realistic and fully integrated end-state architecture; a fiscally responsible implementation plan; a documented Program Management Plan consistent with DNI major system acquisition documentation requirements; and an integrated end-to-end project management plan with interim milestones and deliverables.

Responsible Officer: COO

Accountable Officer: Director, GED in coordination with the CIO and the Directors of SE, SO, COMM, AS&T, Program Control, and MS&O

Due Date: End-to-end execution plan due 31 March 2009.

6 *Develop the Space Enterprise "To-Be" Architecture and Implementation Plan.*

Complete the definition of, and the analytical justification for, a balanced, multi-INT satellite reference architecture that addresses the full range of problem sets tasked to overhead. This reference architecture is intended to provide a basis for IC coordination and long-term investment planning as well as a foundation for internal requirements prioritization and budget planning. Address reliability, survivability, and technology insertion. Deliverables include a programmatically realistic to-be architecture, a fiscally responsible implementation plan, and an integrated IC vetting and coordination plan. As part of the architecture development process, engage industry to perform a comprehensive evaluation of current and emerging technologies, as well as potential alternative acquisition approaches, that might reduce cost and improve performance.

Responsible Officer: COO

Accountable Officer: Director, SE in coordination with the Directors of SIGINT, IMINT, COMM, SO, AS&T, and Program Control

Due Date: End-to-end execution plan due 31 March 2009.

7 *Building on the new organizational structure and existing resources, develop a comprehensive Integrated External Engagement Strategy addressing all external interfaces and functions.*

Develop a comprehensive and coordinated approach for ensuring all engagement areas are proactively addressed and that the roles and responsibilities of each of the multiple NRO components having external interface responsibilities are clearly understood, synergistically aligned, and documented. The intent is to ensure there is a clearly articulated strategy to address each engagement area; that activities within and across all areas are complementary; that external components have a clear understanding of their appropriate points of contact within the NRO; and the NRO is communicating a clear and consistent policy and message. Address all areas of functional responsibility to include the full range of user support, mission partner engagement, and flight operations support activities. Also address user needs, formal requirements, lab support, external oversight to include acquisition and programmatic oversight, legislative liaison, and public affairs. Differentiate between staff, senior level, and decision maker engagement. Ensure mechanisms are in place to share significant information across all elements having external interface responsibilities.

Responsible Officer: Principal Deputy Director, NRO (PDDNRO)

Accountable Officers: Jointly led by Director, SE and DDMS in coordination with the DD/NRO/BPO, the Director, SO, and CIO

Due Date: End-to-end execution plan due 31 March 2009.

IMPERATIVE 3: Ensure the Critical Enablers Fundamental to Achieving the Organization's Long-Term Strategic Goals and Objectives are in Place:

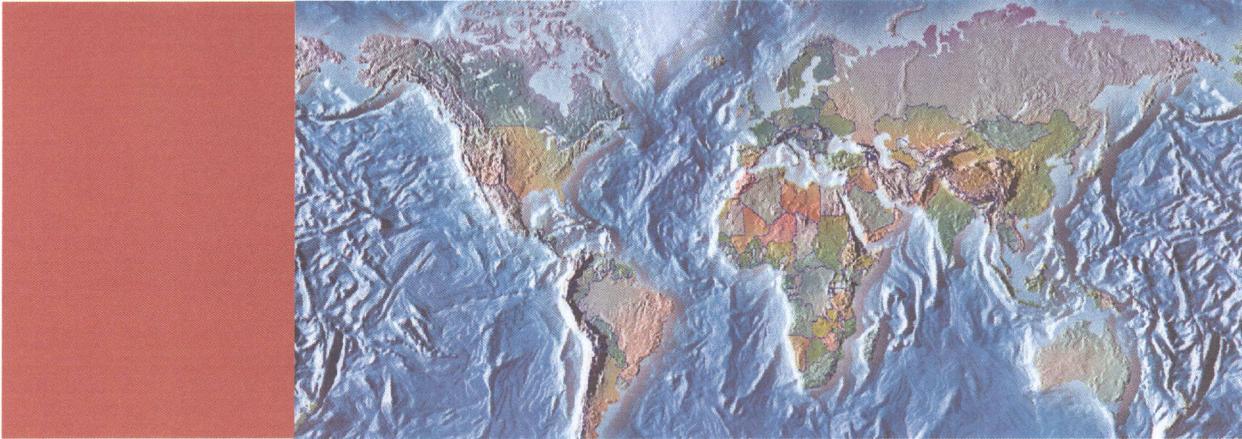
8 *Develop an NRO Career Service Concept of Operations (CONOPS) and Implementation Plan.* Develop an implementation roadmap and CONOPS for the new NRO Career Service. The roadmap should identify what needs to be done to make the career service effective and the steps necessary to ensure its successful implementation. The CONOPS should address how the NRO will integrate the career service into its existing staffing structure, the process and selection criteria for filling NRO positions, career service management processes, and infrastructure support issues such as payroll and recruitment. In addition, incorporate plans to engage academia and relevant government agencies to foster opportunities for workforce recruitment, growth, and diversity.

Responsible Officer: PDDNRO

Accountable Officer: Director, Human Resources (HR) in coordination with the DD/NRO/BPO

Due Date: End-to-end execution plan due 31 March 2009.

THE NRO IS
EXPANDING
ITS FOCUS
TO BRING ITS
CONSIDERABLE
SKILLS TO BEAR
IN BROADER
AREAS.



INTELLIGENCE
PROBLEMS,
TECHNOLOGIES,
AND USER NEEDS
ARE EVOLVING AT
UNPRECEDENTED
RATES.

9 *Develop and begin implementing a Comprehensive Strategy for Meeting Acquisition Workforce Needs.* Conduct a comprehensive review of the existing composition of the acquisition workforce to include government personnel from all agencies and services, FFRDC, Systems Engineering and Technical Assistance (SETA) contractors, and private sector Systems Integration (SI) personnel. Applying a mission assurance-based framework, establish the appropriate mix between government and contractor personnel required to support the enterprise and ensure its long term organizational success and develop a program plan for achieving that mix. After determining required numbers and skills, take the steps necessary to provide the FFRDC, SETA, and SI skills necessary to support SE's new scope of responsibilities and ensure its long term organizational success.

Responsible Officer: COO

Accountable Officer: Director, SE in coordination with the Directors of HR and OC, and the DD/NRO/BPO

Due Date: End-to-end execution plan due 31 March 2009.

10 *Develop and implement a Corporate Succession Planning Strategy.* Develop a comprehensive corporate succession planning strategy and implementation plan based on TMI concepts that addresses the policy and real-world staffing constraints associated with each individual career service supporting the NRO mission.

Responsible Officer: PDDNRO

Accountable Officer: Director, HR

Due Date: End-to-end execution plan due 31 March 2009.

11 *Develop an Integrated Program Security Guide.* Develop and coordinate the approval of an integrated, multi-INT security guide enveloping all NRO mission areas, programs, and operational activities.

Responsible Officer: PDDNRO

Accountable Officer: Director, OS&CI

Due Date: End-to-end execution plan due 31 March 2009. ■

UNCLASSIFIED//FOUO

UNCLASSIFIED//FOUO

NRO Approved for Release 8/18/10

UNCLASSIFIED//FOUO



UNCLASSIFIED//FOUO

NRO Approved for Release 8/18/10