



ENABLING A RESPONSIVE AND AGILE INTELLIGENCE ENTERPRISE

A White Paper prepared by the
AFCEA Intelligence Committee

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Serving Intelligence Professionals and their Community

Enabling a Responsive and Agile Intelligence Enterprise

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Foreword

The Intelligence Committee of the Armed Forces Communications and Electronics Association (AFCEA) is pleased to present this paper, part of a series of white papers¹ focused on the future of the Intelligence Community (IC). These white papers, and the AFCEA Intelligence Symposia they accompany, are intended to contribute substantively to the national discussion on strengthening our nation's intelligence capabilities.

Introduction

The IC has shifted from a Cold War footing in response to the evolving threats facing the United States and its allies. The Community faces a wide range of intelligence and analytic challenges with many unknowns – both traditional and asymmetrical. In addition, the rate of change is more rapid than ever. This combination of factors generates new intelligence challenges; as a transformational leader in the IC has said, “How do we solve problems that we have not yet conceived of?” In other words, how can a large, multi-tiered, and compartmentalized enterprise like the IC act with speed and agility? Large bureaucracies, by their nature, are typically slow and laden with process.

However, the IC has demonstrated it can operate effectively and quickly. One example is its role in the successful campaign to energize and support the Northern Alliance to overthrow the Taliban in Afghanistan in the winter of 2001.

Other examples include the Office of the Director of National Intelligence (ODNI) Analytic Transformation
















¹ To view other AFCEA Intelligence Committee white papers, see: <http://www.afcea.org/mission/intel/committee.asp#papers>

Initiatives (e.g. Mission Manager Concept,² Rapid Analytic Support, and Expeditionary Response Teams) and the ODNI's Rapid Technology Transition Initiative. The task now is to leverage these successes and accelerate transformation in other areas.

A Vision for the Future

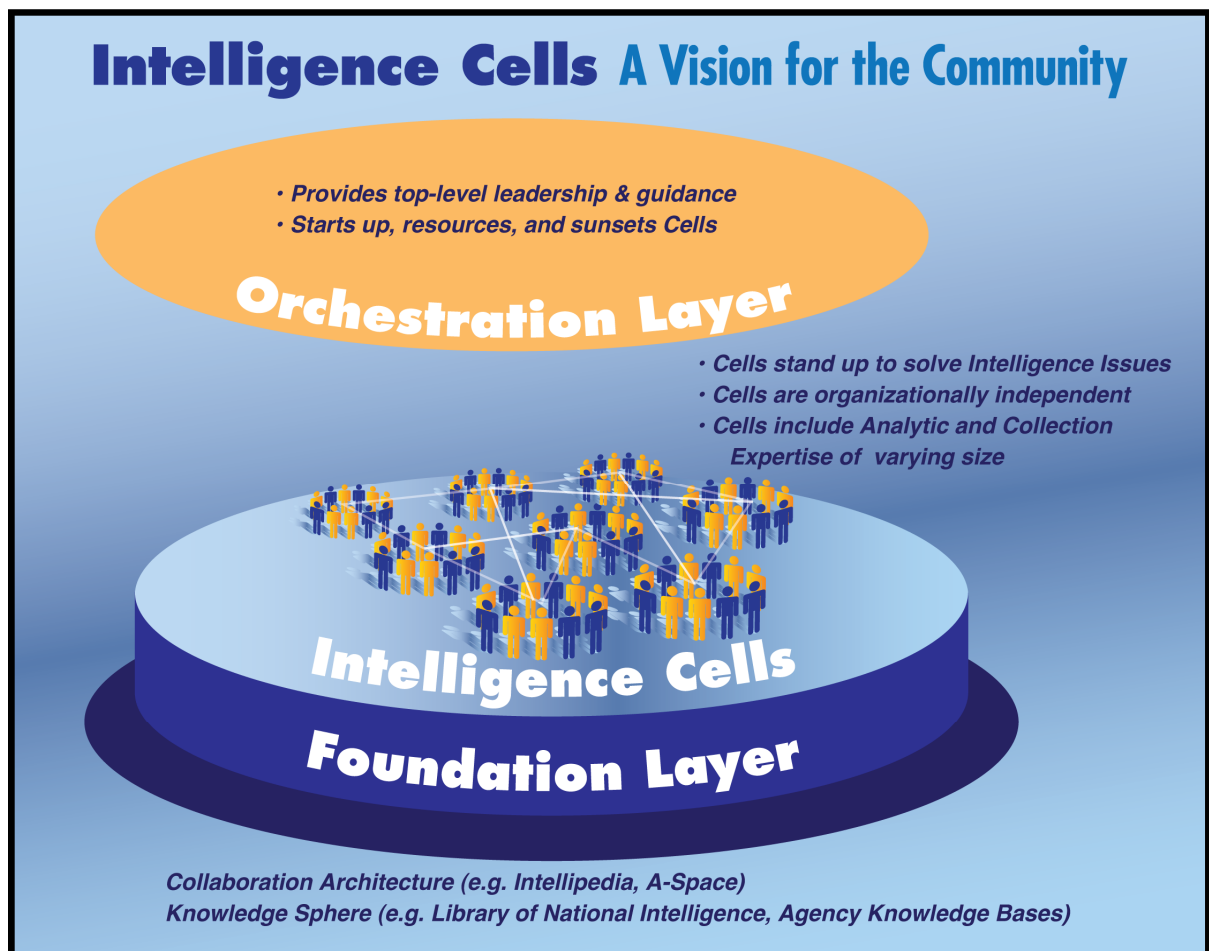
Design Principles for a New Intelligence Enterprise To Increase Speed and Agility

-  Manage by exception – “orchestrate not micro-manage”
-  Promote “mission-oriented collaboration”
-  Provide incentives for mid-level management to collaborate
-  Resource intelligence cells with talent, operational funds, and enabling technology
-  Ensure that Analysis drives Collection
-  Promote “diversity of thought”
-  Increase permeability of government / industry boundary
-  Empower “analytic hunters”
-  Use “write to release” principles
-  Use organizationally independent teams
-  Leverage the best practices and resources across government, industry, and academia
-  Streamline acquisition processes
-  Enable a knowledge sharing culture with minimal information barriers

² The DNI's Mission Manager concept allows for the rapid and flexible constitution of specialized teams, drawn from throughout the Community, to address specific problems. These teams can also be disestablished swiftly to conform to changing needs.

In the following pages, we propose a vision for the future that leverages many of the steps already taken by the ODNI and the Office of the Under Secretary of Defense for Intelligence (OUSD(I)), intelligence agencies, and the entire IC to operate in an asymmetric manner without losing the strength of a large enterprise. We suggest a three-layer blueprint to enable faster decision-making, network effects, and agility. The components include:

- ✚ **An Orchestration Layer** - *Providing streamlined leadership while maximizing freedom for solving intelligence challenges.*
- ✚ **Intelligence Cells** - *Yielding network effects and maximizing unique capabilities across the IC.*
- ✚ **A Foundation Layer** – *Enabling the Intelligence Cells through a common, secure collaboration and knowledge sphere and information architecture for use across the IC (includes major collection and exploitation systems).*







The following sections describe each of these components in more detail.


The Orchestration Layer

The Orchestration Layer provides streamlined leadership for the Intelligence enterprise while maximizing degrees of freedom for solving intelligence challenges. The Orchestration Layer is comprised of enlightened leaders who guide operational entities (Intelligence Cells) to address the spectrum of intelligence tasks in which the IC engages.

Design principles relevant to the Orchestration Layer include:

-  **Manage by exception – “orchestrate not micro-manage”** – *To increase the speed and agility, we need to push decision making down to the lowest level. This approach is managing by exception. The protocols established between paramedics and doctors are an example of this concept. Paramedics operate under pre-approved protocols, for standard situations, that allow them to make decisions about patients and treat them based on their training without always asking a doctor for permission. For the IC, we need to make the Orchestration Layer thin to ensure that the natural tendencies to add more bureaucracy do not take hold.*
-  **Promote “mission oriented collaboration”** – *“Mission oriented collaboration” is collaborating with a reason to support a real intelligence mission, not simply for the sake of sharing information to meet an organizational imperative. The Orchestration Layer must motivate the new Intelligence Enterprise to do the right thing for the mission, not the right thing for any one agency.*
-  **Provide incentives for mid-level management to collaborate** – *The IC leadership must reward the middle level managers for the same perspective – support of the IC mission.*
-  **Resource intelligence cells with talent, operational funds, and enabling technology** – *The Orchestration Layer is responsible for providing working level*

entities (Intelligence Cells) with the right people, funding, and enabling technology so that the Cells can in turn complete their missions. This responsibility will require greater allocation of funds to analytic and collection operations budgets.

 **Ensure that Analysis drives Collection** – *The Community is mandated to provide answers to intelligence consumers. Analysis provides these answers through the use of analytic tradecraft. Collection must support and enable the analysts with the best available data that we can afford. Collection that is driven by analysis represents contemporary practice among large enterprises, a practice that ensures front-end resource decisions are made in the context of activities underway throughout the enterprise.*

The Orchestration Layer must provide thin process frameworks to guide the work of the Intelligence Cells. The leaders in the Orchestration Layer must establish easy-to-follow, value-added mission processes that capture the best practices across the IC.

Examples include: advanced analytic tradecraft that may work especially well on a particular target; or a security best practice that enables collaboration while smartly securing what needs to be secured. Once a success pattern is discovered, the Orchestration Layer should help promote these ideas to existing and new cells.

These processes must also include how to establish, support and disestablish cells.

Role of ODNI and OUSD(I)

In the current IC structure, the ODNI and the OUSD(I) would make natural co-sponsors of the Orchestration Layer. The Intelligence Cells are made up of organizationally independent intelligence professionals that come from across the IC. The new National Intelligence Coordination Center (NIC-C) may prove to be an excellent platform to “orchestrate” the actions of the entire IC.

From Dr. Donald Kerr's testimony on the NIC-C:

On October 1, 2007 we established a new National Intelligence Coordination Center (NIC-C), in partnership with the Under Secretary of Defense for Intelligence (USD(I)) and the former DJIOC (now the Defense Intelligence Operations Coordination Center). This new center established the means by which the DNI and Secretary of Defense can prioritize, synchronize, integrate, and task national, defense, and domestic collection resources. The NIC-C brings together all collection systems and agencies and will increase the opportunity to optimize the deployment of collection capabilities to protect against strategic surprise, manage collection resources, and focus on the nation's top priorities. (From the 500 Day Plan Hearing before the Intelligence Community Management Subcommittee of the House Permanent Select Committee on Intelligence December 6, 2007, Dr. Donald Kerr Principal Deputy Director of National Intelligence)

Intelligence Cells

Intelligence Cells yield network effects and maximize the many unique capabilities found across the IC. In this construct, Intelligence Cells perform joint intelligence or joint knowledge production. They are stood up by the Orchestration Layer to address a specific intelligence challenge. Once that tasking is completed, the Orchestration Layer “sunsets” the cell. Each cell should be as small as feasible, but with the right skills and authority, to accomplish its mission. The makeup of a cell must be multi-INT (i.e. SIGINT, HUMINT, IMINT, ...) and represent a cross section of disciplines (e.g. analysis, collection, legal, enterprise architecture, technology development) to




provide diversity of thought and experience. The cells should include government, industry, and academia as appropriate to solve the particular challenge. Optimally, intelligence professionals would be provided the opportunity to nominate themselves to serve in a particular cell.

The teams used to develop National Intelligence Estimates (NIEs) are an excellent example of an Intelligence Cell in the IC today. The IC develops NIEs with organizationally independent teams that are empowered to do an IC-wide task. NIEs create knowledge using diversity of thought and engage industry and academia as needed to develop the best possible estimate. Another example is the ODNI's Rapid Analytic Support and Expeditionary Response (RASER) teams.

Not all the work that the IC accomplishes should be performed as cells; some tasks are more foundational in nature and are accomplished in support of the work that cells perform. The Foundation Layer described in the next section provides more details on this part of our proposed IC enterprise.

Design principles relevant to the Intelligence Cells:

 **Promote “diversity of thought”** – *The IC needs “diversity of thought” to ensure that it develops innovative solutions to Intelligence challenges and also to help ensure it does not have analytic biases when developing estimates. When we stand-up an Intelligence Cell we need to seek a wide range of experiences, cultures, and backgrounds to yield a variety of competing hypotheses. According to James Surowiecki in The Wisdom of Crowds³, there are four key criteria that separate wise crowds from irrational ones:*

1. *Diversity of opinion* - Each person should have private information even if it is just an eccentric interpretation of the known facts.

³ Surowiecki, James. *The Wisdom of Crowds: Why the Many Are Smarter Than the Few and How Collective Wisdom Shapes Business, Economies, Societies and Nations*. Anchor, 2004.

2. *Independence* - People's opinions are not determined by the opinions of those around them.
3. *Decentralization* - People are able to specialize and draw on local knowledge.
4. *Aggregation* - Some mechanism exists for turning private judgments into a collective decision.

✚ **Increase permeability of government/industry boundary** – *We need to be much more comfortable in making the boundary between working in government and working in industry more permeable. With this cross-fertilization, government gains ideas and diversity of thought from industry, while industry becomes more mission-focused and better able to respond to government's needs.*

✚ **Empower “analytic hunters”** – *We must unleash the imagination of intelligence analytic professionals to go out and find the data wherever it is. They should be empowered to hunt for it, not wait for it to be delivered through existing collection channels.*

✚ **Use “write to release” principles wherever possible** – *The IC has grown up protecting its sources from others. In many cases, this has led to the withholding of actionable intelligence that is needed by an intelligence consumer for critical mission reasons. We must evolve to a “write to release” paradigm. For example, we need to write our intelligence product to be useable by state and local law enforcement in support of the Homeland Security mission.*

✚ **Use organizationally independent teams wherever possible** – *Organizational independence (from any specific agency) helps ensure the Intelligence Cells are focused on the broader intelligence mission, not any one organization's mission. The Community's “mission manager” approach reflects this concept.*

✚ **Leverage the best across government, industry, and academia** – *When the public and private sectors work intelligence problems together, there is much greater diversity and degrees of freedom to solve intelligence challenges.*

The Foundation Layer

The Foundation Layer enables the Intelligence Cells through a common, secure collaboration and knowledge sphere for use across the IC. This layer provides the mission-focused underpinning for collaborative knowledge sharing. The major collection and exploitation enterprises in the IC are the critical component of the Foundation Layer. They provide the strength and bulk that gives the Intelligence Cells the power of a large enterprise yet in a framework that provides agility and speed.

The IC Enterprise Architecture and IC-wide information architecture being developed by the ODNI provides the information technology backbone that supports the Foundation Layer. This backbone must be enabled by Service Oriented Architecture (SOA) and Web 2.0 technologies and approaches. The Foundation Layer also includes such initiatives as the new A-Space, Intellipedia, and the Library of National Intelligence efforts. All of these should ride on a flexible and robust SOA framework. Strong acquisition program management is required to ensure conformance to these architectures of mission systems IC-wide.

Design principles relevant to the Foundation Layer:

- 📌 **Streamline acquisition processes to enable speed and agility** – *Current acquisition processes are not conducive to an agile enterprise. Our adversaries are able to change their tactics, techniques, and procedures in hours, days, or weeks. Most IC acquisitions take months or years to produce new capabilities to counter our adversaries' actions. We must transform our acquisition processes and regulations to be more flexible. This will be the topic of a future AFCEA Intelligence Committee white paper.*



- ✚ **Evolve personnel security to enable a knowledge sharing culture with minimal information barriers** – *The IC’s personnel security system needs to be dramatically transformed and modernized. While this is a focus area of both the ODNI and the OUSD(I), the pace of change must be accelerated. For an excellent treatment of how to improve this critical function, see the Intelligence and National Security Alliance’s October 2007 white paper, “Improving Security While Managing Risk: How Our Personnel Security System Can Work Better, Faster, And More Efficiently.”*

Moving Forward - Actionable Next Steps

Across today’s Intelligence Enterprise, we need to “lean out” decision making processes and policies, while at the same time ensuring legal and privacy concerns are addressed. Specifically we need to:

- ✚ *Develop lightweight mission processes and CONOPS for the Orchestration Layer and Intelligence cells*
 - *Pilot the effort with an Orchestration Layer and two to three cells (possible use of RASER teams 1 and 2 combined with the Mission Manager Concept). This would serve as a “pipe-cleaner” to validate the processes before institutionalizing them*
 - *Pilot the use of government/industry/academia mixed Intelligence Cells*
 - *Expand integration of resources reporting to the ODNI and OUSD(I) and incorporate these resources into analytic pilots*
- ✚ *Develop “industry to government” and “government to industry” permeability*
- ✚ *Develop a streamlined acquisition process that is fair, lawful, effective, and rapid*
- ✚ *Accelerate modernization of the personnel security clearance system to streamline incorporation of new talent into the IC*
- ✚ *Emphasize the Mission Manager concept currently implemented in the ODNI as a starting point for the establishment of the Orchestration Layer*
- ✚ *Ensure that Analysis drives Collection and move Mission Managers to the ODNI’s Analysis organization*

- ✚ *Continue the work in developing A-Space, Intellipedia, and the Library of National Intelligence to ensure a robust information sharing foundation is available for the Intelligence Cells to use*

A unique opportunity is at hand for the Intelligence Community. The Community's leadership is making cooperation a reality. The recommendations put forward in this paper are intended to help facilitate that integration.

The AFCEA Intelligence Committee is a group of public- and private-sector volunteers that oversees AFCEA International's outreach to the Intelligence Community. By providing alternate means for the exchange of ideas of interest to intelligence professionals, the committee seeks to make a contribution to national security. <http://intel.afcea.org>