MITRE



Number13 INTELLIGENCE AFTER NEXT

THE INTELLIGENCE COMMUNITY IS MISSING A UNIFIED SET OF PRIORITIZED INTELLIGENCE NEEDS

by William Gray and Mihai Lungulescu

An IC-wide Unified Priorities Process

The Intelligence Community (IC) currently lacks the processes to develop a unified set of prioritized needs for senior leadership to address capability gaps. While Intelligence Community Directive (ICD) 115, Intelligence *Community Capability Requirements Process*, references critical intelligence needs, this concept has never been fully developed, resulting in everything being considered a critical intelligence need. The lack of a prioritized IC-wide list of critical intelligence needs aligned to capability gaps leads to ineffective and inefficient allocation of resources to deliver capabilities.

Developing a system to identify a unified set of prioritized gaps, or prioritized critical intelligence needs, would help senior leaders make informed decisions to better address the Community's most pressing needs. It could also be used to help shape other key processes, such as developing future strategic guidance, future year fiscal planning, and mission value frameworks. Developing a method to effectively prioritize requirements would allow the IC to efficiently shift resources to mitigate programmatic risk and avoid the loss or degradation of vital programs, capabilities, and resource investments.

The IC does not have an integrated, codified process to identify, and more importantly, prioritize critical intelligence needs as a validated IC-wide concept. Individual Community elements have tried to implement pieces of a process as it relates to their respective equities, but the efforts are often not integrated nor coordinated IC-wide and lack visibility across the Office of the Director of National Intelligence (ODNI). We propose ODNI establish a formal ODNI-led, IC-wide priority intelligence need (PIN) process, where elements across ODNI are marshalled to facilitate greater coordination and integration. This will deliver a prioritized mission needs baseline that enables the alignment of other key ODNI and Community processes. A notional IC PIN Process could be developed as in Figure 1.

Critical Intelligence Needs versus Priority Intelligence Needs

When the ODNI was established in 2005, it adopted many existing processes from across the U.S. government. ICD 115, published in 2012, set out the Intelligence Community Capability Requirement (ICCR) process. It laid the groundwork for development of critical intelligence needs (CIN). As ICD 115 states, "CINs are gaps or shortfalls in a national intelligence mission, topic, or objective, deficiencies in business processes, or potential technological opportunities."

Every requirements document used in the ICCR process has a section to identify the associated CINs. Unfortunately, the idea of a critical intelligence need was never fully developed within the ODNI process, unlike the DoD's Joint Capabilities Integration and Development System (JCIDS) process that includes a Capability Gap



Figure 1. Notional IC Prioritized Intelligence Needs Process

Assessment function¹. Consequently, the Community predominantly opted to align its capability requirements documents to overarching national strategic guidance, such as the National Intelligence Priorities Framework, and the National Intelligence Strategy, documenting, in multiple cases, solutions with identical priorities.

Research for this paper identified a deficiency that could be resolved with a concerted effort to prioritize the CINs to develop PINs. PINs, unlike CINs would allow ODNI to:

- Efficiently balance acquisition efforts against the Community's current and future prioritized needs
- Enable a mission-based approach to drive future capability development efforts
- Enable Return on Investment analyses

Proposed Process Integrates Efforts Across ODNI

Creating a PIN process for the IC would assign responsibilities and actions across ODNI offices.

- The ODNI's National Intelligence Managers (NIMs), charged by DNI's Mission Integration (MI) directorate with developing Unifying Intelligence Strategies (UIS) documenting customers' intelligence needs, would be the starting point for the PIN process. NIMs are aware of the mission they need to perform and the current capabilities of the Community. If they are not able to meet a mission need with an existing capability, that would be a gap². Unlike the UIS process, each NIM would be responsible for providing a prioritized list of gaps. These would be similar to the DoD's Combatant Commander's Integrated Priorities List (IPL).
- The ODNI's Requirements, Cost, and Effectiveness (RC&E) office would take the NIMs' prioritized gaps and put them into a standardized format. Working with ODNI/MI's Mission, Performance, Analysis, and Collection (MPAC) – responsible for current capabilities – and with Functional Managers – responsible for future capabilities – they would develop a matrix of gaps to move to the next forum.

- Capability Gap Assessment Forum. This forum would bring together the NIMs, the Combatant Command J2s and the ODNI National Centers to look at the gaps against operational mission environments and assess the value they would place on each gap. As an example, using a "1,000 Coin" exercise, this forum can identify and prioritize resources to meet the gaps through a lens of their functional or geographic area.
- The results would be presented to an ODNI Senior Steering Group (SSG), with Policy and Capabilities (P&C) and Mission Integration (MI) as the principals. The SSG would be responsible for providing guidance and background to ensure a collective understanding of the identified performance gaps. The SSG would then provide recommendations to the Principal Deputy Director of National Intelligence (PDDNI) for validation.
- A prioritized 1-to-N list would be given to the PDDNI, who could approve it, amend it, or return it for more work. Once approved and signed, the results would be codified as the IC PINS.
- The PIN would be binned and assigned to ODNI staff for execution via respective protocols. These would include capability, capacity, policy and strategy or manpower, to name a few. Additionally, developers and material suppliers throughout the IC could use the list to get a better understanding of the ODNI's major priorities so they will have a better idea of which ones to tackle as they compete for resources.

Proposed PIN Process

The first step of the PIN process is initiated by Mission Managers (e.g., the NIMs) identifying prioritized gaps. These gaps should clearly identify what the Mission Manager is unable to do and what they believe they need to address these shortfalls. The gaps should be individual, and not "bundled" into larger, more complex gaps.

¹Capability Gap Assessment: A deliberate assessment of the future year's defense program that reviews Combatant Command Integrated Priority Lists and other issues and perspectives from the Services and other DoD components, relative to fielded materiel and non-materiel capability solutions, and development efforts, which may already be underway to address capability gaps. (CJCSI 5123.01H)

² Represent prioritized issues that limit the NIMs ability to successfully achieve assigned roles, functions and missions.

The next step in the process is Gap Development. The Requirements function would manage this step and would begin by analyzing the Mission Managers' identified gaps. Requirements would begin to take the information from these identified gaps and put it into a template, similar to Figure 2 below. It is possible that multiple Mission Managers would have similar gaps, and these would need to be aggregated into one gap that would go forward. The Mission Manager who considered this the most pressing gap for their area of responsibility would be considered the "sponsor" of the gap. The Requirements function would then validate the gaps' alignment to existing strategic policy and guidance.

At this point, the Requirements function would push the templates to the other ODNI offices supporting the Gap Development process.

Risk Function

The ODNI office responsible for determining risk would evaluate the gap and determine the risk to the mission of not addressing the gap. Using the definitions and the metrics in Figure 3, they would assign a value of Low, Substantial or High. This value would be recorded on the template in the appropriate areas. They may provide additional details showing their evaluation of the risk and how it was determined.

On-going and Planned Efforts Function

The Requirements office would be responsible for working with the IC, other ODNI departments, and the Department of Defense to determine what efforts were currently on-going or planned to address the gap. Using the definitions and the metrics proposed in Figure 3, they could assess these efforts as Primarily Adequate, Nominal, or Inadequate. Additionally, they would identify the organization(s) addressing each need and provide an estimated completion date for each on-going effort.

Gap Prioritization Forum

The Mission Needs function would oversee this portion of the Gap Development and work with the NIMs, ODNI Centers and the Combatant Command Directors of Intelligence (J2s) to assess the value of addressing the gaps against a range of mission environments.

	2023 NIM Gap # Process:	Current:	2023 NIM A Gap # 2023 NIM B Gap # : 2022 NIM A Gap # 2022 NIM C Gap #	Mission Risk	OGE Assessment	Composite Priority	Recommendation me of Gap			
	Specified Mission Gap									
(Classifica	(Classification) The IC lacks the ability to									
	Alignment to ODNI Guidance									
	CIG Mission Priority(s)		IPG Mission Areas		Ot	her Documentatio	in			
	Mission Risk Assessment									
	Assessment of On-Going and Planned Efforts									
	Composite Priority									
	PDDNI Recommendation(s)									

Figure 2. Notional Gap Development Template

Applying the definitions and metrics in Figure 3, they would perform their evaluation and assign values of Low, Substantial or High. They can include any analyses allowing senior leaders greater insight into how the tabulations were developed. When the above functions are completed, the requirements function would take the inputs from the three functions and manage the process to move forward to the next step in the process.

Category	Definition	Metric
Mission Risk	 Provides a holistic assessment of the ability of the IC to meet strategic requirements in the near-term and considers the following: 1. Probability of occurrence 2. Impact to achieve NIS objectives 3. Exposure: length of time before risk realized, or length of time before action can be taken to prevent risk 	Low: Probability of mission failure is low Substantial: Increased probability of mission failure High: Probability of mission failure is high
On-Going and Planned Efforts	Current committed and planned efforts at funded capacity; includes capabilities which are beyond MS-A and R&D / S&T efforts	Primarily Adequate: Assessed as adequately addressing the mission gap Nominal: Assessed as a nominal effort in addressing the mission gap Inadequate: Efforts will not address the mission gap
Composite Priority Gap	Prioritizes IC gaps which are deemed critical to meeting NIS objectives	 Low: Probability of efforts not addressing the mission gap is low Substantial: Efforts in addressing the mission gap are nominal High: Probability of efforts not addressing the mission gap is high
ODNI Recommendations	 Material and/or non-material recommendations addressing the PIN. Takes into consideration the following: 1. Nature of the strategic environment 2. Ability to operate within and influence the environment 3. Adversaries and potential enemies' current and future ability to operate within and influence the environment 4. Degree of NIS objective satisfaction 	Maintain Level of Effort: Efforts assessed as adequately addressing the mission gap Moderate Investment: Efforts assessed as nominal in addressing the mission gap Major Mitigation Needed: Efforts must increase to address the mission gap

Senior Steering Group

A Senior Steering Group (SSG) would be chaired by the Deputy Director for National Intelligence, with principal advisors from across ODNI and the Under Secretary of Defense for Intelligence and Security (USD(I&S)). The SSG would be ultimately responsible for validating the results of the Gap Development process. Upon successful completion of the review process, the SSG would provide recommended actions to the PDDNI. Recommendations would be offered to Maintain the Current Level of Effort, Provide Moderate Investment, or Major Mitigation is Needed. Additionally, they should have a list of their specific recommendations, which office is responsible for them, and a desired completion date.

Principal Deputy Director of National Intelligence Endorsement

The PDDNI review would allow senior leadership a last chance to modify the recommendations based on their knowledge and on discussions with the DNI or other seniors across the US government. When satisfied with the list of PINs and the recommendations, the PDDNI would sign a formal memo approving the list of prioritized intelligence needs. The list would then be used by the different ODNI offices that oversee the capability, capacity, and non-material processes to begin to resolve the gaps. It would be used by the Policy and Strategy office to help them shape future policy and guidance, and by the comptroller to understand what the DNI's priorities are regarding funding future projects. It would be used by the IC and to understand what needs the ODNI most wants satisfied, to aid elements who are proposing new capability solutions. The recommended PIN development and approval process is shown in Figure 4.

Operationalizing the Process

Developing a list of prioritized needs would provide IC leadership with a structured process to understand mission gaps and identify a consolidated approach to apply finite resources. Having a senior-level forum with representatives from DDNI/P&C and DDNI/MI as well as the IC Chief Financial Officer, the IC Chief Information Officer and the Chief Data Officer, would provide an





inclusive whole-of-IC perspective and counsel to the DNI. When fielded, the PIN process would produce a singular, prioritized intelligence needs list that can be used to 1) help shape future strategic guidance; 2) focus IC acquisition elements on key intelligence needs; and 3) allow ODNI senior leaders to make resource decisions based on a demonstrated and repeatable process with input from across the IC.

IC agencies could use the prioritized list to focus RDT&E efforts to deliver solutions to the most pressing needs of the Community. IC agencies would stand a better chance of receiving approval and funding for future major system acquisitions if they leverage the approved PINs. And lastly, by having a clear understanding of what the whole-of-IC's priorities are, elements would be in a better position to help work synergistically to achieve Community and organic goals. Figure 5 depicts the key inputs, outputs and controls that affect the PIN process.

Conclusion

It would be a misnomer to say that the IC does not have critical intelligence priorities. However, the Community does not have a codified process to identify, and more importantly, prioritize critical enterprise intelligence needs. Individual offices have performed portions of what was identified above, but over time and multiple reorganizations, these processes have fallen by the wayside. Establishing a formal PIN process utilizing elements from across ODNI will greatly impact the Community and deliver a prioritized mission needs baseline enabling other key ODNI and Community processes.



Figure 4. Input-Process-Output Diagram of the IC Prioritized Intelligence Needs Process

References

1. Walden, David D., Roedler, Garry J., Forsberg, Kevin J., Hamelin, R. Douglas, Shortell, Thomas M., "Systems Engineering Handbook: A Guide for System Life Cycle Processes and Activities" 4th Edition, 2015.

2. Chairman of the Joint Chiefs of Staff Instruction 3170.011, "Joint Capabilities Integration and Development System (JCIDS)" 23 January 2015, including errata as of 5 May 2015.

3. Chairman of the Joint Chiefs of Staff Instruction 5123.01H, "Charter of the Joint Requirements Oversight Council (JROC) and Implementation of the Joint Capabilities Integration and Development System (JCIDS)," August 31, 2018.

4. Chairman of the Joint Chiefs of Staff, "Manual for the Operation of the Joint Capabilities Integration and Development System (JCIDS), August 31, 2018.

5. Office of the Deputy Assistant Secretary of Defense for Systems Engineering, *Department of Defense Risk, Issue, and Opportunity Management Guide for Defense Acquisition Programs,* January 2017. Available at: https://www.dau.edu/tools/Lists/DAUTools/Attachments/140/RIO-Guide-January2017.pdf.

6. Intelligence Community Directive 113, "Functional Managers," 19 May 2009.

7. Intelligence Community Directive 115, "Intelligence Community Capabilities Requirements Process," 21 December 2012.

8. DJ-8 and ADNI/SRA Memorandum, "Procedures for a Common Intelligence Community Capability Requirements (ICCR) – JCIDS," 31 July 2013.

9. DNI.gov, "Who We Are: DDII." 2021. [Online]. Available: https://www.dni.gov/index.php/who-we-are/organizations/ddii/ddii-who-we

10. DNI.gov, "Who We Are: Policy and Capabilities." 2021. [Online]. Available: https://www.dni.gov/index.php/who-we-are/organizations/policy-capabilities/policy-capabilities-who-we-are______

11. DNI.gov, "Who We Are: Mission Integration." 2021. [Online]. Available: https://www.dni.gov/index.php/who-we-are/organizations/mission-integration/mission-integration-who-we-are

12. DNI.gov, "Who We Are: Chief Information Office." 2021. [Online]. Available: https://www.dni.gov/index.php/who-we-are/organizations/ic-cio/ic-cio-who-we-are

13. DNI.gov, "Who We Are: Chief Finance Office." 2021. [Online]. Available: https://www.dni.gov/index.php/who-we-are/organizations/cfo/cfo-who-we-are

14. Senate.gov. "Senate Armed Services Committee Advance Policy Questions for Mr. Bradley Hansell Nominee for Appointment to be Deputy Under Secretary of Defense for Intelligence and Security." 2021. [Online]. Available:

https://www.armed-services.senate.gov/imo/media/doc/Hansell APQs_08-06-20.pdf

Authors

William Gray: Mr. William Gray is a principal systems engineer with 32 years of experience as an intelligence professional. A former US Air Force officer, he joined MITRE in 2018 after retirement from active duty. He is a subject matter expert on the DoD and IC requirements processes and currently works within the MITRE Collection and Tasking Division.

Mihai Lungulescu: Mr. Mihai "Mike" Lungulescu currently works in MITRE Collection and Tasking Division as a Principal Systems Engineer with over 28 years of DOD and IC experience. A retired US Air Force intelligence officer, Mike supports MITRE efforts in assessing IC mission value, enterprise-wide collection orchestration, and major system acquisitions requirements.

Intelligence After Next

MITRE strives to stimulate thought, dialogue, and action for national security leaders developing the plans, policy, and programs to guide the nation. This series of original papers is focused on the issues, policies, capabilities, and concerns of the Intelligence Community's analytical workforce as it prepares for the future. Our intent is to share our unique insights and perspectives surrounding a significant national security concern, a persistent or emerging threat, or to detail the integrated solutions and enabling technologies needed to ensure the success of the IC's analytical community.

About MITRE

MITRE's mission-driven teams are dedicated to solving problems for a safer world. Through our public-private partnerships and federally funded R&D centers, we work across government and in partnership with industry to tackle challenges to the safety, stability, and well-being of our nation.

