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Rethinking the Concept of Global Coverage in the U.S. Intelligence Community

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"You want to make sure you have the coverage you think you have when something bad happens."—Thomas A. Lawson, Executive Vice President, Factory Mutual Insurance Company¹

1. Introduction

Although the United States is the only country in the world that has a truly global intelligence enterprise, even the significant resources that the U.S. Government invests are not adequate to cover the world in the depth required to provide robust and reliable global warning. The most significant transnational threats—such as terrorism and proliferation— and the challenges posed by countries such as China, Iran, North Korea, and Russia typically require disproportionate investments because of their policy priority and because they pose difficult intelligence challenges.

Inevitably then, many issues and countries are provided with much more limited intelligence resources:

- As collection capabilities are focused on the highest priorities, signals intelligence and human intelligence collection capabilities are less available to target lower priorities. Geospatial intelligence (GEOINT) from space can collect globally, but is still subject to prioritization, and its ability to contribute to a variety of economic and political topics is limited.
- On the analytic side, while intellectual firepower can partly offset limited collection, the explosion of information available to the analytic community means that these resources are also focused on the highest priorities.

Moreover, the challenge of making the right investments is complicated not only by unforeseen world developments, but also fluctuations in U.S. policy priorities over time. In the increasingly globalized and hypersonic information space that shapes policy decisions, issues and developments can arise with a rapidity that surprises even those directly involved. The events of Arab Spring in 2010 provide a particularly compelling example, but are hardly unique. Natural disasters, humanitarian crises, and low-level insurgencies can quickly move from being background noise to occupying center stage. Consequently, at any given point in time, the policy attention focused on an issue may reflect neither last month's policy agenda nor long-term assessments of U.S. strategic interests.

¹ Quoted in Rodd Zolkos, "Overcoming Key Challenges in Global Coverage Programs," *Business Insurance* 46, Issue 10 (3/5/2012).

2. The Origins of the Concept of Global Coverage within the Intelligence Community

In the wake of the demise of the Soviet Union, the U.S. Intelligence Community (IC) was forced in the mid-1990s to come to grips with two unpleasant realities: (1) in the absence of the single looming Soviet threat, the challenge of allocating intelligence resources had become more fluid and complicated; (2) the resources committed to the intelligence enterprise were being reduced. To address these two challenges, the Clinton administration in 1995 developed guidance for the IC. Known as PDD-35, this document identified the following intelligence priorities:

- Crisis situations, including support to U.S. military operations.
- Countries that threaten regional stability or pose significant threats to U.S. interests.
- Transnational threats, such as drug trafficking, terrorism, and weapons of mass destruction.

While PDD-35 provided a reasonable first-cut at a framework for prioritization, its application almost immediately raised questions about IC responsibilities for issues and countries not identified as priorities within the PDD-35 framework. To accommodate the need to prepare for and respond to requirements beyond those designated as the policymakers' highest priorities, the PDD-35 framework was adjusted in October 1996 to include "global coverage." As Acting Director of Central Intelligence (DCI) Tenet stated in his 1997 Worldwide Threat briefing, "there will be no relief from the sort of crises that appear suddenly and do not fit the traditional role."² To deal with these sorts of circumstances, he stated, "We will be providing global coverage—including a capacity to surge during crises…" Subsequent statements by IC leaders have reiterated this view. For example, Director of National Intelligence (DNI) Negroponte in his 2007 Annual Threat Assessment noted, "it is not too much of a stretch to say that events anywhere can—and often do—affect our interests and the security of our nation and our people. As a result, the Intelligence Community must maintain global coverage."³

² Acting DCI George Tenet, "Statement Before the Senate Select Committee on Intelligence Hearing on Current and Projected Threats to the United States," February 5, 1997.

³ DNI John Negroponte, "Annual Threat Assessment of the Director of National Intelligence," January 11, 2007.

3. The Key Elements of the IC's Approach to Global Coverage

The IC has handled the challenge of global coverage primarily as an issue of managing scarcity in collection and analytic resources. Lower priority challenges are allocated fewer—and a reduced range—of collection resources. Likewise, while some efforts are made to ensure a base level of analytic investment even where clandestine collection is absent, the analytic level of effort against lower priority issues and countries is reduced. Given the diverse set of missions and departmental responsibilities that member agencies of the IC have, execution of global coverage tends to have a significant "coalition of the willing" aspect as individual intelligence components balance global coverage responsibilities against their other priorities.

A. Improved Prioritization of Resources

Given the necessity of prioritizing the application of intelligence resources, one prominent feature of the IC's approach to global coverage has been efforts to improve the prioritization frameworks and interagency processes for making decisions about the allocation of intelligence resources. Most prominent in this regard has been the National Intelligence Priorities Framework (NIPF), which was promulgated by the DCI in 2003 and later adopted by the DNI in 2005.⁴ The NIPF assigns priorities to intelligence targets, and the heads of IC elements are directed to ensure "that IC element planning, programming, and budgeting activities and the allocation of collection and analytic resources are informed by the NIPF."⁵ Given that the diverse agencies of the IC have specific mission and departmental support responsibilities, execution of this guidance varies among individual agencies. Over time, first under the DCI and later under the DNI, a number of interagency mechanisms have been developed to facilitate transparency and coordination across agencies in implementing NIPF priorities. At minimum, the goal is to ensure that as agencies make their own prioritization decisions, they can do so with knowledge of the allocation decisions of other IC elements. At maximum, the intent is to enhance the return on investment on a limited portfolio of collection and analytic resources through improved coordination and some burden-sharing.

⁴ Marshall C. Erwin and Amy Belasco, *Intelligence Spending and Appropriations: Issues for Congress* (Congressional Research Service, September 18, 2013).

⁵ Intelligence Community Directive 204, "National Intelligence Priorities Framework," 2 January 2015, 3.

B. Open-Source Intelligence as Gap Filler

Since the formulation of concept of global coverage, open-source intelligence (OSINT) has been identified within the IC and by external commentators as the principal collection resource to help the IC meet its global coverage responsibilities. Among the virtues cited with regard to OSINT's ability to support the global coverage mission are its low cost, ability to quickly turn to the developments of the day, and potential as a cuing mechanism for more costly intelligence-collection assets.⁶ Within the IC, the Open Source Center (OSC), which was stood up by the DNI in 2005 as the successor organization to CIA's Foreign Broadcast and Information Service (FBIS), has the lead role for OSINT within the IC; it regards global coverage as an area where it makes a particular contribution. While OSC is the premier player in the open-source arena, these sorts of capabilities are widespread throughout the IC and other elements of the U.S. Government.

In more recent years, with the rapid development of a variety of social media platforms, open-source collection has been broadened beyond traditional media sources (e.g., newspapers, television) and now gives particular attention to exploitation of various kinds of social media (e.g., Facebook, Twitter, Weibo, YouTube). In its FY12 Business Plan, the National Open Source Committee (an ODNI organization that brings together IC seniors to guide open-source collection activities throughout the IC) noted the importance of monitoring social media:

Social media is a "game changer" in gauging global societal and political developments, providing an unprecedented opportunity to gain insights into public sentiment, trends, and even leadership intentions. Monitoring the pulses of various populations via social media will increasingly provide the IC with a greater warning capability and a better sense of over-the-horizon issues.⁷

C. Tools for Improved Warning

Over the years, interest in and attention to the application of formal analytic methods and approaches to warning by the analytic components of the IC have generally been limited. In the 1980s, example, the CIA's Directorate of Intelligence conducted quarterly assessments of the prospects for instability in countries around the world—based on analyst judgments about a common set of indicators. And since 1994, the CIA's Directorate of Intelligence has sponsored the Political Instability Task Force (PITF), which has developed models, based on open-source information, to forecast the long-term risk of political instability around the world.

⁶ Stevyn Gibson, "Open Source Intelligence: An Intelligence Lifeline," *RUSI Journal*, February 2004.

⁷ National Open Source Committee, FY12 Business Plan, 7.

But in the wake of the Arab Spring and amid the growing difficulties that the analytic community has in making sense of ever-increasing volumes of information, interest in more formal approaches has increased. While development of such tools is not uniquely focused on global coverage, the IC is moving to improve its ability to provide warning under programs sponsored by the ODNI's Intelligence Advanced Research Project Activity (IARPA) and at individual agencies. The 2014 ODNI *National Intelligence Strategy* notes, "continued IC vigilance will be required to maintain global coverage of conflicts as they arise and potentially threaten U.S. interests."⁸ The *Strategy* later pledges that "the IC will expand its use of quantitative analytic methods" and develop "capabilities for dynamic horizon-scanning and discovery to assess changing and emerging conditions…"⁹

Two IARPA programs illustrate the sorts of capabilities that the IC and outside researchers are seeking to develop:

- The Open Source Program (OSI), which was established in 2011, seeks to develop and test novel methods to help the analytic community anticipate such significant events as political crises, economic instability, mass violence, and various types of humanitarian crises through the application of innovative statistical methods to publicly available data.¹⁰ One research focus for this effort is the ability of social media to track and assess the evolution of social disorder.¹¹
- The Aggregative Contingent Estimation (ACE) program, which is based on the concept of "the wisdom of crowds," seeks to improve the accuracy of judgmentbased forecasts by aggregating many independent judgments. As part of this effort, IARPA has launched a large-scale forecasting tournament designed to monitor the accuracy of probabilistic forecasts about future developments around the world.¹² Using data from this tournament, priority areas for research include training, statistical approaches to improve the accuracy of expert forecasts, and identifying the attributes of those who have greater forecasting success.

⁸ Office of the Director of National Intelligence, *The National Intelligence Strategy of the United States of America 2014*, 4.

⁹ Ibid., 7.

¹⁰ "IARPA Announces New Research Program," ODNI News Release No. 24-11, August 24, 2011.

¹¹ Ting Hua, Chang-Tien Lu, Naren Ramakrishnan, Feng Cheng, Jaime Arredondo, David Mares, and Kristen Summers, "Analyzing Civil Unrest through Social Media," *Computer* 46 (12) (2013): 80–84.

¹² B. Mellers, E. Stone, P. Atanasov, N. Rohrbaugh, S. E. Metz, L. Ungar, M. M. Bishop, M. Horowitz, E. Merkle, and P. Tetlock,. "The Psychology of Intelligence Analysis: Drivers of Prediction Accuracy in World Politics," *Journal of Experimental Psychology: Applied* (January 12, 2015).

D. Expanding the Pool of Expertise and Information

Despite more limited access to collection capabilities and a smaller personnel base, the analytic components of the IC responsible for global coverage topics have undertaken a variety of efforts to leverage external resources for information and insight. Most intelligence agencies regard "outreach" programs that engage academics and other private sector experts as important tools to augment internal expertise, solicit alternative views, and broaden the information base for their own research. Bringing private sector experts in for consultations, hosting conferences, and commissioning tailored research projects are typical ways of augmenting IC expertise.

IC components responsible for global coverage accounts also attempt to tap into the broader pool of expertise and information that resides within the U.S. Government as a whole. For example, global coverage is a periodic topic for dialogue between the IC and those who have the ability to overtly collect information through their normal duties, such as defense attaches.¹³

Finally, as with any intelligence requirement, the IC seeks to engage foreign liaison services that can assist—either through collection or analysis—in meeting U.S. global coverage requirements. Liaison services are likely to have more robust interest in monitoring developments in their immediate neighborhoods and hence may be more willing and able to devote resources to an issue that the United States regards as a lower priority. For some U.S. agencies and their foreign partners, these relationships have been formalized into long-standing sharing agreements. For example, the National Geospatial Intelligence Agency (NGA) has close working relationships with its counterparts in the United Kingdom, Australia, and Canada¹⁴ that allow the U.S. IC to capitalize on these organizations' capabilities to meet global coverage and other requirements.

E. Facilitating Global Agility

A long-standing concern with regard to global coverage has been the ability of the IC to agilely respond to unforeseen developments in countries that have been allocated limited collection and analytic resources. With the implementation of PDD-35 in the mid-to-late 1990s, congressional concern quickly emerged about its impact on resources devoted to "lower tier" countries and more generally about the IC's ability to "surge" to meet unanticipated contingencies in a period of budget austerity. In June 1996, The House Permanent Select Committee on Intelligence (HPSCI) published a staff study, *IC21: The*

¹³ James Shelton, "Foreign Engagement & Global Coverage under the New Defense Strategy: FAOs, Security Cooperation, and the Defense Attache System, 18–19 September 2012," FAOA Journal of International Affairs 15, no. 3 (December 2012): 25–29.

¹⁴ National Geospatial Intelligence Agency, "Unified GEOINT Operations and the Quadripartite Partners," https://www.nga.mil/Partners/InternationalActivities.

Intelligence Community in the 21st Century, which devoted a chapter to an examination of the IC's "surge" capability, noting:¹⁵

"Surge" capability can be defined very broadly, including the ability to: move resources quickly to address immediate, usually ad hoc needs; augment existing capabilities from outside the IC; and, improve responsiveness of resources by building more flexible options for collection.

A number of developments since the IC21 report have improved the IC's agility in responding to global crises around the world. The IC now has in place much more robust and interconnected information networks than was the case in the late 1990s. Consequently, the ability to share information and collaborate analytically in a crisis is now significantly easier, and there are greater incentives to do so. At the organizational level, the HPSCI's staff concerns about the then-DCI's authority to "surge" resources are less pertinent in the post-2005 IC world, with the stand-up of the DNI and a continuing series of initiatives to improve integration across the IC. Moreover, efforts have been made at individual agencies to improve their internal ability to respond to emerging global contingencies.

Nonetheless, progress is less clear with regard to some other aspects of global agility that HPSCI report raised. Whether the IC maintains an adequate global "base" of knowledge to facilitate an effective response to a crisis is uncertain; it is largely assumed that for the lowest priority topics, OSINT will be sufficient. Likewise, despite the dramatic increases in contractor support to the IC since the terrorist attacks of 11 September 2001, facilitating the use of knowledgeable external resources to augment IC capabilities on historically low-priority issues is still a budgetary challenge.

¹⁵ Permanent Select Committee on Intelligence, House of Representatives, *IC21: The Intelligence Community in the 21st Century*, "Chapter X. Intelligence Community 'Surge' Capability," June 5, 1996.

4. IC's Current Approach to Global Coverage: Appropriate, but Insufficient

These five elements of the IC's approach to the challenge of global coverage have merit and should be continued. Nonetheless, it is unlikely that they will result in a systematic improvement in warning about significant developments in lower tier countries, particularly in a period when intelligence budgets are under increasing pressure. Consequently, the IC's current approach poses significant reputational risk as the ability to anticipate future developments on global coverage issues is likely to run below customer expectations, notwithstanding claims over the years that policymakers understand the implications of the resource allocations that the IC has made.

Particularly in a period of budget stress, implementing a systematic process like the NIPF to frame decisions about the allocation of scarce resources is clearly necessary. But the result still is that surprise is more likely in areas where fewer resources have been applied. On the collection side, the IC's capabilities have diverse entry points for collection and consequently vary in their ability to report on specific issues. Their streams of reporting are, in essence, partial samples of reality. Reducing the range of collection inevitably constrains understanding of the developments being observed. On the analytic side, having a limited talent pool working on issues of lower concern to policymakers reduces the potential that analytic judgments will be challenged and tested by peers and management. Moreover, it is unrealistic to expect that for lower priority topics there will always be an experienced, full performance analytic work force ready at a moment's notice to take on any crisis that may emerge.

The value of OSINT has long been appreciated in the analytic community, and the increased volumes of publicly available information and the emergence of social media have added to its value. Nonetheless, OSINT has its limitations. As one study on the use of news reporting to track the "swine flu" pandemic notes, "News is not a mere representation of an external reality, but rather a social product; news volume frequently does not neatly parallel scientific risk assessments."¹⁶ This observation is obviously not limited to either epidemiology or scientific risk assessments.

The social nature of open-source information suggests that significant investments need to be made in mapping these sources. Illustrative in this regard is a study that

¹⁶ Smith et al., "Understanding Newsworthiness of an Emerging Pandemic: International Newspaper Coverage of the H1N1 Outbreak," *Influenza and Other Respiratory Viruses* 7 (5) (2013): 847–53.

examined the use of public media to track the outbreak of diseases.¹⁷ It highlighted two particular limitations. First, the level of reporting reflected resource decisions by news media organizations—coverage, for example, declined over weekends and holidays. Second, there were indications that reporting on one disease could "crowd out" reporting on other diseases, but those effects were disease-specific.¹⁸ Interpreting data having these sorts of biases is a challenge. Likewise, a problem in the interpretation of social media is that only a limited amount of research has been conducted to develop approaches to sampling social media data sets.¹⁹ And there is the challenge of understanding how attitudes expressed online are translated into offline behavior.²⁰

Given these sorts of complexities, the development of quantitative tools to analyze social media and other sorts of open-source information is likely to take some time, and the insights that emerge may not be generalizable from one issue to another. As one study conducted under IARPA's OSI program observed on the use of OSINT to forecast civil unrest, context matters.²¹ The need to incorporate context either through improved analytics or through human interpretation, as former OSC Director Doug Naquin²² and others²³ have argued, will be critical.²⁴

Moreover, the application of big data analytics to intelligence questions raises a host of issues that are less important in the commercial world. Divining the intentions and actions of government actors is often key. Many governments and other political organizations have programs to manipulate what appears in the public domain, including social media, to shape opinion in their own and other countries. Consequently, there is a significant need for U.S. Government entities to develop capabilities to conduct credibility

¹⁷ D. Scales, A. Zelenv, and J. S. Brownstein, "Quantifying the Effect of Media Limitations on Outbreak Data in a Global Online Web-Crawling Epidemic Intelligence System, 2008–2011," *Journal of Emerging Health Threats* 6 (2013): 21621.

¹⁸ The same challenges apply to quantitative exploitation of classified information. Both resource constraints and "crowding out" influence classified reporting streams.

¹⁹ David Omand, Jamie Bartlett, and Carl Miller, "Introducing Social Media Intelligence (SOCMINT)," *Intelligence and National Security* 27 (6) (2012): 801–23.

²⁰ Ibid.

²¹ P. Manrique et al., "Context Matters: Improving the Uses of Big Data for Forecasting Civil Unrest," *IEEE Intelligence and Security Informatics (ISI)*, June 4–7, 2013, Seattle, Washington.

²² Hamilton Bean, "The Paradox of Open Source: An Interview with Douglas J. Naquin," *International Journal of Intelligence and Counterintelligence* 27:1 (2014): 49.

²³ Omand, Bartlett, and Miller, "Introducing Social Media Intelligence (SOCMINT)."

²⁴ Indeed, some have argued that such metaphors as "horizon scanning" using big data imply that "finding faint evidence of possible futures is actually rather easy" when it is not. See Pierre Rossel, "Beyond the Obvious: Examining Ways of Consolidating Early Detection Schemes," *Technological Forecasting & Social Change* 78 (2011): 375–85.

analysis of social and other media on intelligence issues, such as the use of chemical weapons in Syria.²⁵

Finally, the IC's efforts to broaden the range of information and expertise on global coverage issues are on the mark, but the result is likely to resemble more a patchwork quilt than a reliable safety net because the partners that the IC is engaging have their own priorities and capability limitations:

- With regard to "outreach" to academia, for example, the opportunities for significant expansion of such ties may be limited. A recent survey of what current and former national security decision-makers (including representatives from the IC) want from academic experts in international relations field found significant gaps between policymaker expectations and academic research interests and capabilities both in terms of substantive areas of interest and research approaches.²⁶ Perhaps as a consequence, U.S. scholars' engagement in nonacademic consulting is significantly below that of scholars in countries such as France and Israel.
- While more can probably be done to elicit insights from non-IC colleagues in the U.S. Government, these organizations face their own resource challenges and there is little reason to expect that they will be more forward leaning than the IC in reporting on lower priority topics.
- With regard to foreign liaisons as sources of assistance for the global coverage mission, a variety of constraints exist. Most of these services are smaller and less resourced. Their willingness to assist in filling global coverage requirements can shift as their own priorities and resources change, and their willingness to work with U.S. agencies can also be buffeted by broader political dynamics.

The result is that these sorts of efforts, while certainly valuable in specific cases, are unlikely to provide more than a partial offset to limited U.S. collection and analytic resources.

²⁵ Sue E Kase et al., "Exploiting Social Media for Army Operations: Syrian Crisis Use Case." *Proceedings of SPIE* 9122, 91220D (2014).

²⁶ Paul C, Avery and Michael C Desch, "What Do Policymakers Want From Us? Results of a Survey of Current and Former Senior National Security Decision Makers," *International Studies Quarterly* 58 (2014): 227–46.

5. Adjusting the Current Paradigm

If the IC's current approach to global coverage is appropriate, but insufficient, what else can the IC do? The core dilemma of global coverage is that it is unrealistic to expect that the application of limited collection and analytic resources will yield levels of knowledge and insight comparable to what can be achieved for the highest priority intelligence targets.²⁷ In this context, there is likely to be significant value to examining the risk-management aspects of global coverage.

A. Expectations Management

As DNI Clapper has noted in a concept he labeled "immaculate collection," public expectations about the IC's performance tend to ignore risk, cost, and the potential for political embarrassment.²⁸ In this respect, a major challenge for global coverage is expectations management. While IC leaders have used the term numerous times in public briefings and documents since the mid-1990s, articulation of its specific goals and expected standards of performance has been negligible, at least in public. In what specific terms is the IC covering the globe? At the low end of the scale, the 1996 IC21 report suggested that the goal might be the development of an adequate information base on all countries and issues as a platform on which the IC could surge when circumstances require. At the more ambitious end, the 2014 National Intelligence Strategy has the goal of improving the IC's "ability to foresee, forecast, and alert the analytic community…and convey early warning to national security customers to provide them the best opportunity for action."²⁹

What are reasonable standards of performance with regard to global coverage? Given the diversity of issues that the IC is expected to follow and significant differences in the amount of information available on those issues, some challenges will be more difficult than others. For example, looking at the experience of Israeli intelligence with regard to the Intifada in Palestine, the victory of Hamas in the 2006 elections, and the events of the Arab Spring in 2010, one Israeli scholar argues that intelligence organizations have particular difficulty in tracking these sorts of social changes and predicting their political

²⁷ I am not suggesting that more intelligence resources applied to an issue *will always* yield more knowledge and insight (that is why some intelligence problems are called "hard targets"), but that it is unreasonable to expect the same results *on average* when fewer resources are available.

²⁸ Office of the Director of National Intelligence, "Remarks as Delivered by The Honorable James R. Clapper, Director of National Intelligence to the AFCEA/INSA National Security and Intelligence Summit," September 18, 2014.

²⁹ ODNI, The National Intelligence Strategy of the United States of America 2014, 7.

consequences.³⁰ Whether or not this particular observation is true, it would be helpful if the U.S. IC provided greater precision about its global coverage goals and at least some sense of what it can be expected to achieve.

B. More Systematic Assessment of Risk

The agencies of the IC—in both operations and analysis—understand and apply the concept of risk to management of their activities. The types of risk that shape IC activities are wide-ranging and include operational risk (i.e., compromises of operations); analytic risk (i.e., making the wrong call); and political risk (i.e., a policy decision based on erroneous assessments or reporting). Likewise, the IC understands, perhaps more than most organizations, the costs that may result when critical information is not collected because of risk aversion.

Nonetheless, although operating in inherently risky circumstances and having rigorous risk-assessment processes in some areas such as security, the agencies of the IC fall short of being fully mature in their management of risk, at least as defined in the business literature on risk management: such organizations are completely aware of risk and proactive in their management of threats and opportunities through the application of sophisticated and detailed techniques.³¹

Given that a decision to allocate fewer resources is fundamentally a decision to accept risk, the IC needs to move beyond broad statements that simply acknowledge greater risk. There is no template for undertaking such assessments in the IC, but several approaches could be explored.

1. Focus Expert Judgment on Global Coverage Risks

The application of expert judgment is a standard technique in risk assessment.³² Fortunately, the IC has at its disposal a wealth of substantive expertise on global coverage from the analysts who have responsibility for lower tier countries and issues. One approach would be to systematically survey these analysts about the prospects for game-changing developments could require the IC to significantly increase the resources allocated to lower tier issues. These assessments could then be used as a basis for IC contingency planning. There may also be benefit in benchmarking such assessments against those who conduct political risk assessments for the private sector.

³⁰ Eyal Pascovich, "Intelligence Assessment Regarding Social Developments: The Israeli Experience," International Journal of Intelligence and Counterintelligence, 26 (1) (2013): 84–114.

³¹ Anna Corinna Cagliano, Sabrina Grimaldi, and Carlo Rafele, "Choosing Project Risk Management Techniques. A Theoretical Framework," *Journal of Risk Research* 18 (2) (2015): 232–48.

³² Ibid., 235.

2. Systematically Assess the Resiliency of Global Coverage

Recently, scholars from several international think tanks called attention to the potential that actors operating below the level of formal institutions or outside established governance structures could have potentially destabilizing effects in the increasingly interdependent world that now exists—a phenomenon that they label as "femtorisks."³³ These scholars argue that conventional risk-assessment approaches, which rely on estimating the probability and consequences of future events, are inadequate to deal with these sorts of challenges. Rather, it is preferable to focus on the resiliency of the organizations charged with dealing with them.

Applying this approach to the problem of global coverage suggests the need to look more deeply and systematically into the IC's ability to respond to crisis developments in global coverage countries. Some of these data—for example, the number of analysts on an account or existing language expertise—are currently scrutinized by the IC, but a meaningful assessment of resiliency would require that the net be cast much more broadly. Areas that would need to be assessed and integrated include the ability of different collection capabilities to respond in a crisis; the sufficiency of current databases (e.g., the Modernized Integrated Database); and the IC's real ability to leverage external resources, such as expertise in the private sector. A more complete mapping of the resources available in a crisis could provide insight into potential areas for investment.

³³ A. B. Frank et al., "Dealing with Femtorisks in International Relations," *Proceedings of the National Academy of Science* 111, no. 49 (December 9, 2014): 17356–62.

6. Examining "Lessons Learned" From Past Global Coverage Crises

While the potential risk of failure in forecasting adverse developments overseas is a known part of the global coverage challenge, less appreciated is the difficulty that the IC sometimes has in knowing the thresholds at which these developments are likely to engage policymakers. Africa, for example, has over the years been a venue for a variety of developments (e.g., government repression, humanitarian crises) that sometimes elicit dramatic policy responses and sometimes do not. The world's increasingly globalized and hypersonic information space appears to have introduced a significant element of uncertainty and volatility in policy responses to such developments. While research along this line would not fit easily into the IC's mission set, a historical examination of thresholds for policy intervention could help inform IC risk assessments and planning processes related to global coverage.

7. Adjustments in Global Coverage Investment

Beyond improving the IC's ability to understand and communicate more precisely about the risks that the U.S. Government is accepting, improvements in risk assessments should position the IC to make more fine-grained adjustments in allocating resources to global coverage accounts. The generally thin base of external global-coverage-related expertise that the IC can call upon in a crisis may be something that can be tackled at modest cost:

- At a minimum, it would be worthwhile to do some surveys of external expertise in lower priority topic areas and make at least some preliminary engagements with those experts to establish a foundation for collaboration when it may be required.
- Along this line, it would also be worthwhile to explore the feasibility of taking better advantage of government capabilities outside the National Intelligence Program through some targeted investments. Possibilities to be examined include military components, such as the Joint Reserve Intelligence Centers, and the law enforcement community.
- More ambitiously, consideration should be given to establishing dedicated "knowledge broker" units outside the IC to facilitate the building of more permanent relationships between private sector researchers and experts within the IC.³⁴ One of the recommendations of the WMD Commission—which was not implemented—was "the establishment of at least one not-for-profit research institute to serve as a critical window into outside expertise for the Intelligence Community."³⁵ The Commission envisioned an organization not directly managed by the IC whose principal mission was to serve as a vehicle to reach out to private sector experts, including those from academia, business, and Federally Funded Research and Development Centers. Given the more limited IC resources focused on lower priority countries and issues, global coverage would be a particularly useful focus for such an entity.

³⁴ Kathleen Vogel and Christine Knight, "Analytic Outreach for Intelligence: Insights from a Workshop on Emerging Biotechnology Threats," *Intelligence and National Security*, 14 May 2014.

³⁵ The Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction, *Report to the President of the United States*, March 31, 2005, 399.

It may also be worthwhile to re-examine the analytic business practices for global coverage countries and issues. Currently, these accounts are largely handled as more thinly staffed versions of higher priority accounts. Given the more limited policy demand for reporting and analysis on global coverage issues, it may make sense to shift the focus of the analytic effort toward warning about game-changing developments and preparation for future contingencies.

References

- Avery, Paul C., and Michael C Desch. "What Do Policymakers Want From Us? Results of a Survey of Current and Former Senior National Security Decision Makers." *International Studies Quarterly* 58 (2014): 227–46.
- Bean, Hamilton. "The Paradox of Open Source: An Interview with Douglas J. Naquin." International Journal of Intelligence and Counterintelligence 27:1 (2014): 49.
- Cagliano, Anna Corinna, Sabrina Grimaldi, and Carlo Rafele. "Choosing Project Risk Management Techniques. A Theoretical Framework." *Journal of Risk Research* 18 (2) (2015): 232–48.
- The Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction. *Report to the President of the United States*. March 31, 2005, 399.
- Erwin, Marshall C., and Amy Belasco. *Intelligence Spending and Appropriations: Issues* for Congress (Congressional Research Service, September 18, 2013).
- Frank, A. B., et al. "Dealing with Femtorisks in International Relations." *Proceedings of the National Academy of Science* 111, no. 49 (December 9, 2014): 17356–62.
- Gibson, Stevyn. "Open Source Intelligence: An Intelligence Lifeline." *RUSI Journal*, February 2004.
- Hua, Ting, Chang-Tien Lu, Naren Ramakrishnan, Feng Cheng, Jaime Arredondo, David Mares, and Kristen Summers. "Analyzing Civil Unrest through Social Media." *Computer* 46 (12) (2013) 6689273: 80–84.
- "IARPA Announces New Research Program." ODNI News Release No. 24-11. August 24, 2011.
- Intelligence Community Directive 204. "National Intelligence Priorities Framework." 2 January 2015, 3.
- Kase, Sue E. et al. "Exploiting Social Media for Army Operations: Syrian Crisis Use Case." *Proceedings of SPIE* 9122, 91220D (2014).
- Manrique, P., et al. "Context Matters: Improving the Uses of Big Data for Forecasting Civil Unrest." *IEEE Intelligence and Security Informatics (ISI)*, June 4–7, 2013, Seattle, Washington.
- Mellers, B., E. Stone, P. Atanasov, N. Rohrbaugh, S. E. Metz, L. Ungar, M. M. Bishop, M. Horowitz, E. Merkle, and P. Tetlock. "The Psychology of Intelligence Analysis: Drivers of Prediction Accuracy in World Politics." *Journal of Experimental Psychology: Applied* (January 12, 2015).

- National Geospatial Intelligence Agency. "Unified GEOINT Operations and the Quadripartite Partners." https://www.nga.mil/Partners/InternationalActivities.
- National Open Source Committee, FY12 Business Plan, 7.
- DNI John Negroponte. "Annual Threat Assessment of the Director of National Intelligence." January 11, 2007.
- Office of the Director of National Intelligence. *The National Intelligence Strategy of the United States of America 2014*.

- Omand, David, Jamie Bartlett, and Carl Miller. "Introducing Social Media Intelligence (SOCMINT)." *Intelligence and National Security* 27 (6) (2012): 801–23.
- Pascovich, Eyal. "Intelligence Assessment Regarding Social Developments: The Israeli Experience." *International Journal of Intelligence and Counterintelligence* 26 (1) (2013): 84–114.
- Permanent Select Committee on Intelligence, House of Representatives. *IC21: The Intelligence Community in the 21st Century.* "Chapter X. Intelligence Community 'Surge' Capability." June 5, 1996.
- Scales, D., A. Zelenv, and J. S. Brownstein. "Quantifying the Effect of Media Limitations on Outbreak Data in a Global Online Web-Crawling Epidemic Intelligence System, 2008–2011." *Journal of Emerging Health Threats* 6 (2013): 21621.
- Shelton, James. "Foreign Engagement & Global Coverage under the New Defense Strategy: FAOs, Security Cooperation, and the Defense Attache System, 18–19 September 2012." FAOA Journal of International Affairs 15, no. 3 (December 2012): 25–29.
- Smith et al. "Understanding Newsworthiness of an Emerging Pandemic: International Newspaper Coverage of the H1N1 Outbreak." *Influenza and Other Respiratory Viruses* 7 (5) (2013): 847–53.
- Acting DCI George Tenet. "Statement Before the Senate Select Committee on Intelligence Hearing on Current and Projected Threats to the United States." February 5, 1997.
- Vogel, Kathleen, and Christine Knight. "Analytic Outreach for Intelligence: Insights from a Workshop on Emerging Biotechnology Threats." *Intelligence and National Security*, 14 May 2014.
- Zolkos, Rodd. "Overcoming Key Challenges in Global Coverage Programs." *Business Insurance* 46, Issue 10 (3/5/2012).

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