

# Global Systems INITIATIVES

"Applying a whole systems approach to complex global issues."



*The Global Systems Review* is a periodic e-newsletter that explores critical world issues through the lens of whole systems thinking

## In This Issue:

- ***The Three Layers of Interconnectedness*** – How an ever-deepening understanding of interconnectedness sheds light on national security.  
By Louise Diamond
- ***What's New in Security?*** – Exploring parameters of a people-centered, big-picture-oriented new narrative for national security.  
By Lorelei Kelly
- ***PNSR's Blueprint for National Security 2010*** – Concrete recommendations for reforming our national security process and infrastructure.  
By Dale Pfeifer
- ***Americans Facing our Future with Resilience*** – Considering new approaches to enhance our resilience and sustainability.  
By Michael McDonald

## **The Global Systems Review Issue 17 June 2010**

*The Global Systems Review* is a periodic e-newsletter that explores critical world issues through the lens of whole systems thinking.

This issue of the *Global Systems Review* continues a series of articles dedicated to an exploration of emerging national security narratives.

### ***The Three Layers of Interconnectedness***

*What would our world look like if we understood that everything is interconnected? But REALLY understood it!*

That question drives my understanding of national security and all the inter-related global issues and systems crises we currently face. Because we understand now that we live in an interconnected world, it behooves us to understand what interconnectedness is, and what it means for our policies on national security.

Interconnectedness is at the heart of systems thinking. In 35 years of studying this phenomenon, I've come to see that there are layers of meaning, levels of insight that, once understood, have immediate and significant implications for how we interact with the world.

**Layer One: We're All in This Together.** At this first level, we understand that we live in a world where interdependence reigns. In terms of national security, this means that global problems and their solutions are cross-boundary, cross-sector, multi-stakeholder affairs. What happens anywhere affects everywhere; what one actor (individual or group) does affects others. Ultimately, this means that the well-being of any nation depends on the well-being of others; we exist in a web of mutual dependence. As Mother Theresa said, 'We belong to each other.'

This has profound implications for the changes we must make in our thinking about national security, for no longer can the US 'go it alone.' Complex global issues require collaboration between nations but also with non-state actors from many disciplines. It also takes us into territory of the counter-intuitive, where the more we work for the legitimate interests of others the more we serve our own interests. This alone necessitates a huge shift in traditional US security thinking and popular culture, which still values individual strength. It also means that national security is, in some sense, an oxymoron, for only with global security is any one nation truly secure.

**Layer Two: Connect the Disconnected.** When we understand interconnectedness more fully, we come to see all the ways we have accepted separation, fragmentation, and disconnection as normative. If, indeed, everything is interconnected, then our task is to mend that which is broken, unite that which is separate, and bring together disparate pieces into an integrated whole.

In this context, our stove-piped bureaucracy and our polarized political system impede our ability to act on our interdependence. Whole-of-government, interagency efforts, and bi-partisan commissions are attempts to correct this, as are initiatives that reach out to engage actors on the global stage where we have previously practiced isolation. However, there are other implications we need to consider:

- We need to insure our policies connect across time, seeing the relationship of past, present, and future – an especially challenging practice in an American culture that, unlike older civilizations, traces its past back only a few hundred years, and in a corporate and political environment that looks toward the next election cycle, the next quarterly report.
- We need to connect across differences. This means we must include a whole new set of diverse voices in our policy-making processes; do better at taking into account cultural, historical, and sociological differences and worldviews; and seek to find the common ground and common humanity with those we feel most alienated from.
- Great and continued pain is a signal that profound disconnection is calling for healing. Unhealed wounds fester, as much in the body politic as in the human body. In the international community the

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Israeli-Palestinian relationship and the India-Pakistan relationship over Kashmir are important unhealed wounds, continuing to resonate around the world in various and ever-more-virulent forms – until they are resolved in some way, the foundation of our global security remains at significant risk.

**Layer Three: All My Relations.** As we go even deeper into an understanding of interconnectedness we come back to where we started, that is, to what Native American and other ancient wisdom traditions have told us from forever, namely, that there is only one family of life on and with the planet. The implications of this sound simple at first, but on further analysis show a need for a profound transformation of our assumptions, beliefs, and strategies.

This is true in our relationships with other peoples, because in a living web the nodal points where various strands intersect are all about relationships. The fact of being in relationship with all others on this planet is a given; the only factor we can influence, then, is the quality of those relationships. Every national security decision we make should ask, 'Does this improve the quality of the relationship?' If not, the web is further weakened.

All My Relations is also extremely relevant to our relationship with the natural world. One family of life means that human beings are an integral part of – not superior to, separate from, or in control of – an intricate web in which all life forms play a unique role while also relying on each other for the well-being of the whole. As we face issues of climate change and global warming; food, water, and mineral scarcity; de-forestation and desertification; degradation of soils, oceans, and air; peak oil; species loss; and other environmental disasters-in-waiting, we must realize that the old paradigm of man having dominion over nature for his own benefit is not only not sustainable, it actually poses a series of grave threats to our security.

At core, if we really understood this deep level of interconnectedness, we would understand that the earth is not an inert set of rocks and minerals to be exploited, but a living being which includes us as part of, not apart from, its entirety. To Western mind this is a radical notion; indigenous peoples have known this always. And yet, we are gradually coming to it. The environmental movement, the religious Care for Creation movement, the views of Earth from space, and the realization by the national security elite that climate, energy, and other environmental issues are indeed critical elements of our national security landscape are all indications of a growing awareness of what it means to be one family of life sharing a single vital home.

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### ***What's New in Security?***

America sits at a crossroads. How we talk about security today will impact our nation's "grand strategy" for a generation. "Grand strategy" is a long-term vision about who we are and where we are going in the world. Policies support a grand strategic narrative by prioritizing steps to move us forward toward the goal. It is becoming increasingly obvious that Americans are working through a tremendous shift in how we understand what keeps us safe. The Cold War ended in 1991 with the demise of the Soviet Union--yet it has taken nearly two decades and several difficult experiences for American leaders to stop looking backward for answers to contemporary security threats. Before 1991, the centerpiece of our security narrative was "containment". Yet the cardinal feature of today's security threats is that they cannot be contained. From Iraq and Afghanistan, to climate change and criminal networks--the paramount theme in these current issues is that they have no boundaries--nor do they have a military solution. Indeed, that the tools we have to engage the world remain dominated by the last century. Judging from our priorities and budget, it seems that we--as a nation-- are better prepared to fight Napoleon than Bin Laden.

The 1990's and then the post- 9/11 world illustrated how the world has changed. Security challenges went from being predictable and rational --and fixable with hardware , to random and chaotic --requiring human resource solutions. Think of the difference between US Army tanks lined up against the East German border and US soldiers walking girls to school in Kandahar.

The most important contribution that systems-thinkers can make to this evolving transformation is to create a narrative for elected leaders about the security challenges we face in an era of global change. To help them make the distinction between force and power--and understand how today power lies in the ability to influence that change. We must go to state and federal leaders with the "big picture" on the agenda.. Many electeds know that circumstances have shifted and also see that our nation continues to pursue a security strategy conceived for a bygone era. The problem is that only rarely do local officials or Members of Congress hear from constituents with long-term, global interests in mind. They rarely know about local expertise and supportive relationships in their states and districts i.e. individuals who may offer framing and language to help communicate a new US presence in the world --nor do they see the political space necessary to make this kind of issue worth talking about. These are fix-able problems.

In order to keep Americans safe and prosperous, and with our civil liberties intact, we must update and modernize our security policies and our presence in the world. Global threats like climate change, deadly extremist violence and disease have no simple solution and do not respect political boundaries. Today, credible influence is a measurement of strength, much like military dominance was a generation ago. We must move from the last century's security strategy of threat containment to a modern strategy of long

term thinking and relationship building.

This new people-centered strategy is based on the premise that, in today's world:

- Our security must address the safety of people across and within our own borders
- We cannot achieve security alone
- We need a new combination of policies and resources to be secure

This premise requires that we view security as a larger concept than warfighting or hardware dominance. Today's threats require better software, i.e. more skilled individuals trained for modern day needs. New security challenges require flexibility, advance preparation and policies that build resilience. And nearly all today's concerns will benefit from improved coordination, communication and innovation. While the military and our civilian government agencies will always be vital contributors, reaching this modern vision of security will require teamwork, both domestically and internationally, and must include non-traditional players like the private sector, non governmental organizations, and individuals in other parts of the world.

So what's new in security? Lots of opportunity, and lots of work ahead.

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### ***PNSR's Blueprint for National Security 2010***

In 200y Congress mandated a study aimed at reform of the U.S. national security system. This study, undertaken by the Project on National Security Reform (PNSR), aimed to develop a whole-system perspective on 21st Century national security based on a detailed examination of the entire national security system by more than three hundred dedicated national security executives, professionals, and scholars. After identifying the system's inherent problems and their root causes, a bold set of recommendations or a blueprint for the next generation national security system (Forging a New Shield, 2008) – and a detailed plan for implementation (Turning Ideas into Action, 2009) – was presented to the President, Congress and the American public.

The Project's Guiding Coalition of 23 experienced national security practitioners and scholars have concluded that a program of deliberate iterative reform is necessary to align the U.S. government with a rapidly changing global security environment. The Guiding Coalition concluded unanimously that the legacy institutions established more than 60 years ago no longer enable American leaders to formulate coherent national strategy, integrate America's hard and soft power to achieve policy goals, match resources to objectives, or plan effectively for future contingencies. Such concerns have been echoed by the U.S. Secretary of Defense Secretary Gates in a series of recent speeches where he described the situation as:

America's interagency toolkit is a hodgepodge of jerry-rigged arrangements constrained by a dated and complex patchwork of authorities, persistent shortfalls in resources, and unwieldy processes. Consider that the National Security Act that created most of the current interagency structure was passed in 1947. (Robert Gates, February 24, 2010)

As presently constituted, these institutions lack means to detect and remedy their own deficiencies.

PNSR's blueprint for national security reform is multi-fold with four fundamental aspects of the reforms include:

- A fundamental redefinition of national security to include the full spectrum of risks and opportunities facing our nation in the 21st Century.
- A national security system designed to be strategic and anticipatory, focused on national missions, and capable of integrating all instruments of national power.
- A comprehensive planning process that aligns resources with our national security strategy and creates a unified national security budget to achieve greater mission effectiveness and resource efficiency.
- More effective mechanisms for congressional oversight of and support for interagency missions and use of resources.

This table gives a more detailed description of the recommended reforms.

**Table 1. PNSR's Vision for Reforming the National Security System**  
(Click Here or on Table for Expanded View)

FROM	TO	HOW	SO WHAT
Severe systemic and structural imbalances/dominated by agency stovepipes/lowest-common denominator consensus/paced to slowest player/no system development	Focus on national missions/unity of effort/highly collaborative whole-of government solutions/decisive/agile	Create integration authorities and principles/strengthen capacity and support of National Security Staff/personnel and information management reforms	Enables the nation to deal effectively and efficiently with complex problems
Lack of integrated national strategy/no strategic context for resource decisions/biased stovepipe control of resources to narrow agency capabilities, not national missions	Strategy-driven decision-making/resources aligned with strategic objectives/funding appropriately balanced across all instruments of power	Quadrennial National Security Review/National Security Strategy/Planning and Resource Guidance/integrated national security budgets	Provides better security for reduced expenditures, maybe a savings of \$100 billion per annum
Highly reactive, no strategic management/many process functions unperformed/excessively narrow scope of national security	Strategic management of end-to-end processes/system addresses full spectrum of national security risks and opportunities/uses foresight to anticipate	Redefined role for National Security Staff/recruit strategic managers/fundamental redefinition of national security/foresight development	With a system that is strategic, anticipatory, and alert to all risks and opportunities, creates time to effectively address problems and pursue opportunities and maintains a competitive edge
Overburdened and under resourced National Security Staff/unable to handle complexity and rate of change/can focus only on the urgent and daily in-box/staff burnout	National Security Staff focused on high policy, grand strategy, and strategic management/issue management decentralized to interagency entities focused on national outcomes	Washington-based interagency teams/integrated Regional Centers/common map of world regions/interagency task forces/unified county teams	Provides the capacity to address important issues at the highest level while ensuring the effective implementation of policy decisions
Fragmented legislative oversight/no whole-of-government perspective/weak representation of soft power instruments/reinforces divisions in Executive Branch	Effective congressional oversight of and support for national missions and interagency activities/appropriate support for all instruments of national power	Select committees on national security/revitalize foreign policy committees/consolidate homeland security oversight	Maintains a vigorous system of checks and balances/restores role as nation's board of directors/enables Congress to contribute to development of national security system

Since releasing *Forging a New Shield*, PNSR has been working with stakeholders in departments and agencies and on Capitol Hill to refine its recommendations and identify implementation challenges to varying effects. While some progress has been made, the sweeping reforms recommended by PNSR have yet to be addressed. However, the recent release of President Obama's National Security Strategy has reinvigorated the drive for transform. The strategy calls for a range of reforms that cannot be achieved without sweeping reforms. As suggested by James R. Locher III in his testimony before the Oversight and Investigations Subcommittee of the House Armed Services Committee in a hearing on "Interagency National Security Reform: Pragmatic Steps Towards a More Integrated Future," an implementation plan now needs to be developed to ensure the execution of the organizational changes prescribed by the new National Security Strategy.

Achieving national security reform is a significant undertaking. However daunting the task, we believe that nothing less than systemic reform will reliably secure our country from peril, and we are confident that American government can re-invent itself once more. No area of policy is more critical than national security. If we fail to keep pace with the opportunities afforded by change as well as the challenges posed by an unpredictable world, we will ultimately be unable to preserve our way of life at home.

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### **Americans Facing our Future with Resilience**

Addressing citizen and community resilience in the Gulf Coast states in light of the Deepwater Horizon oil spill is a significant challenge for the U.S. as a society. It is already giving us a better understanding of our private sector and governmental readiness to face the complex and wicked problems we can no longer avoid – without fundamentally changing societal practices to become more sustainable and proactive in avoiding risks that cannot be managed after the fact without catastrophic effects.

Following the U.S. Resilience Summit 2008, anticipating the highly complex and wicked strategic problems that this Administration was going to face in its first few years, a White House node of the U.S. MPHISE (Medical and Public Health Information Sharing Environment) has now been tested. The White House MPHISE architecture was established in preparations for the H1N1 second wave in the United States. Several MPHISE meetings were held during the 2009 H1N1 pandemic in the White House with all pertinent agencies participating.

The federal government is now exploring how it can engage information sharing environments and open government more broadly. However, it will also require a society-wide interoperable technological umbrella to effectively address the complexities we now face. The Deepwater Horizon oil spill crisis is an

indication in microcosm of the need for a National Sustainable Security Infrastructure, a U.S. Resilience System, and a public/private consortium sufficient in resources and scope to engage the highest potentials of U.S. society in an agile, unity of effort to realize our collective capacities for resilience and sustainability during this second decade of the 21st century.

### **National Sustainable Security Infrastructure**

The White House MPHISE (Medical and Public Health Information Sharing Environment) node, although it has not yet been discussed widely as such, has been the first domain-specific pilot of the National Sustainable Security Infrastructure (NSSI). The NSSI is a U.S. society-wide umbrella infrastructure utilizing information sharing environments and network-based teams at the most general level. It can be considered to be a Web 3.0 environment linking mission-driven intelligent social networks with a rich semantic web back end to enable information sharing, decision-making, fifth generation command and control, and cooperative preparedness and response activation across American society's many stovepipes.

There are three sub-umbrellas under the NSSI: 1) a U.S. government classified layer; 2) a U.S. government non-classified layer; and 3) an emerging civil society-driven U.S. Resilience System. Appropriate information sharing within and across the first two layers is significantly enhanced by the NSSI in general, and its MPHISE specifically within the medical and public health domains. The third umbrella, the U.S. Resilience System, is newly emerging, and has vital, strategic capabilities augmenting the first two U.S. government layers of the NSSI in facing several of the most critical challenges facing our nation in the second decade of the 21st century and beyond.

### **U.S. Resilience System**

The U.S. Resilience System is architected as a civil society complex adaptive system to address challenges that threaten the health, human security, resilience and sustainability of the American people and their communities of interest globally. The U.S. Resilience System is being designed and developed to address the 21st century strategic challenges that the US government's hierarchical controlled systems are unlikely to address effectively without a resilient and engaged public. The U.S. Resilience System, by improving citizen and private sector resilience, preparedness, and response, also reduces the risk of public loss of trust in government.

The U.S. Resilience System strengthens American civil society and governance in two significant ways: 1) by making clear what types of risks and challenges government agencies and incident commands are designed to effectively address, and which problems and opportunities are only addressed effectively with citizen, private sector, and civil society engagement with government; and 2) by providing task servers that enable civil sector and whole society cooperative response to highly complex problems, often with mission critical gaps that require synergistic action and local knowledge government incident command systems are not architected to effectively address alone. The U.S. Resilience System has the distinct advantage of engaging the best of 21st century science, technology, management, and governance, unconstrained by bureaucratic rules that often cripple government agility and responsiveness.

### **Race to Resilience Public/Private Consortium**

A civil society-driven public/private consortium called the "Race to Resilience (R2R)" was formed during the H1N1 first wave in the United States, to move forward the NSSI, its Medical and Public Health Information Sharing Environment (MPHISE) and the U.S. Resilience System in conjunction with A team players within the White House, key agencies, and private sector institutions responsible for critical infrastructure. This process was started by working with leaders that have the knowledge base and experience to understand the need for complex adaptive systems, open information sharing environments, and intelligent social networks to face rapidly emerging complex and wicked problems, such as those being experienced now in post-earthquake Haiti and the Deepwater Horizon oil spill. Overtime, the systems engaged through the Race to Resilience (e.g., Resilience Networks) will enable millions of Americans to utilize complex adaptive systems tools and methodologies with simple interfaces, to engage powers and cognitive capacities far beyond the formal scientific and technological training they may have received in school.

With these tools in hand, we, as American citizens, will be able to engage as essential participants in solutions effectively addressing highly complex and wicked problems, rather than just passively observing our health and human security diminishing, or watching others utilizing current mainstream mechanistic paradigms, tools, and methods that are at best unable to reach resolution on our country's most strategic challenges. At worst, today's mainstream tools and methodologies hide the real problems from the public. In so doing, they spawn dissent and conflict, and all too often encourage interventions that are worse than the original problem. The Race to Resilience as an alternative provides Americans with a new era of green economic and socio-ecological opportunities to shape a new resilience and a sustainable future for America and our global partners.

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