

**Nanyang Technological University**  
**S. Rajaratnam School of International Studies**  
**Centre of Excellence for National Security (CENS)**  
**Singapore**

Executive Office of the President of the United States:  
The Need for New Capabilities

*Lessons From Singapore and the  
Project on National Security Reform*

Fulbright Specialist Scholarship Essay

Sheila R. Ronis, Ph.D.  
Director, MBA/MM  
Walsh College

Distinguished Fellow  
Project on National Security Reform

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## **Introduction:**

The Vision Working Group of the Project on National Security Reform (VWG PNSR) recommended the establishment of a Center for Strategic Analysis and Assessment (CSAA) in its July 2010 *Report and Scenarios* (Ronis, 2010). Over a five-year period of study, the PNSR VWG established that the United States needs a place, a process and set of capabilities in the Executive Office of the President, to develop and test grand strategies for the nation, particularly to support the national security system.

The *National Security Strategy* is the closest published document that represents a comprehensive discussion of where the country is going and what it wants to accomplish. Published from The White House from time to time, it is neither sufficiently long term nor a true strategy that links resources with objectives over time. It represents, at best, a list of aspirational goals by an administration. In a world of increasing complexity, the United States should consider long-term, whole of government thinking and planning. Other countries have established such a set of capabilities within the heart of their governments, such as the United Kingdom and Singapore. For that reason, the set of capabilities in Singapore was benchmarked as the VWG develops specificity for the proposed Center. This document represents a synthesis of lessons learned from the Singapore system recognizing that not all of the processes are scalable to the U.S. government.

## **The Context:**

For decades the private sector has routinely used management tools such as forecasting, scenario based planning, strategic visioning, political and economic risk assessments, etc., but the government, especially in a whole of government way, rarely, if ever, uses such tools across the board although sometimes those tools are used in pockets, in specific agencies or departments.

The question is, “what mechanisms should the U.S. government develop to improve the nation’s ability to plan in a whole of government way for its future; to be better prepared for a future that is very different from its past?” At the end of World War II, General George C. Marshall said, “We are now concerned with the peace of the entire world, and the peace can only be maintained by the strong” (Marshall, 1945). But, how does the United States remain strong? What does that mean in a world of globalization? And, how should the country define what national security is in such a complex and interdependent world?

The VWG of PNSR took a systems approach to examining this series of questions. The Group stepped out into the next larger system and the system beyond that to look across the entire mosaic at the elements and their interdependence and interactions to better understand the whole and its behavior. The study engaged in both analysis and synthesis and used visioning tools to assist in testing the creation of the new structures, policies,

strategies and processes necessary for a successful 21<sup>st</sup> Century national security system as outlined in *Forging a New Shield*, (PNSR, 2008) the overall study presented to the President of the United States, The President-elect and the U.S. Congress in December, 2008.

U.S. security is rooted in the successful integration of all major elements of national power; economic, diplomatic, military, informational and so on. When successfully combined, the vitality as a nation is ensured and the country's ability to encourage positive change throughout the globe is enhanced. The Project on National Security Reform proposed a modern apparatus to serve the nation's needs well into the 21<sup>st</sup> Century to support the broad national security challenges and address the interagency mechanisms in the organizational space between the President of the United States and the Cabinet level agencies and departments.

The Vision Working Group asked the question, "what is the basis for re-thinking the national security system and how will success in the future be characterized?"

If "what is" and "what is not" in the arena of National Security is artificially or prematurely narrowed, it is likely that situations will be misread that can ultimately, and negatively, affect the nation. Ten years ago the challenges related to sub-prime mortgages, diseased birds, automobile emissions, and pilot training rosters were not typically the focus of national security. Today, it is clear that they might well have been. The point is no one can imagine or determine now with certainty what might affect the nation in the future.

Threats can be assessed and prioritized based upon considerations such as urgency, impact, magnitude, mitigation options, and intention. Opportunities can be assessed and prioritized based upon considerations such as knowledge, expertise, probability of success, resources, long term sustainability, proportionality, and intention.

Based on this approach, National Security can be considered:

*Any situation, condition, or entity that has the potential to enhance or degrade the viability and vitality of the nation (Benner, 2007).*

*So that*

*The National Security System would be responsible for and measured by:*

- *The viability and vitality of the nation,*
- *Peaceful and positive development throughout the countries of every region, and*
- *Cooperation and collaboration around the globe.*

The National Security System needs to become a "learning organization" that can anticipate, adapt to, and successfully address the widest range of threats and opportunities for both the good of the nation and the world. As a complex adaptive system, the future

security system will need to possess certain inherent qualities that will be critical to success. It must:

- Share information and collaborate horizontally,
- Accommodate unanticipated needs and partnerships,
- Ensure agility in the face of uncertainty,
- Incorporate ad-hoc structures and processes, and
- Maintain a long-term view.

Because the U.S. national security system is a complex adaptive system, it is difficult to separate geo-political, social and economic phenomena. These elements interact as a system of systems. In fact, in most instances, it is a complex system of complex systems and that is the challenge facing the nation.

The environment of the 21<sup>st</sup> Century is and will continue to be characterized by rapid change and continuing uncertainty. Many factors contribute to a security landscape that differs greatly from the world envisioned at the end of the Cold War and even more since 9/11. Simply put, globalization has resulted in a world that is increasingly interconnected and inter-dependent. Readily available technology, environmental degradation, global capital market collapses, transnational terror, global disease, cyber attacks, and a host of other concerns have added complexity to the national security landscape. This volatile, uncertain, complex, and ambiguous environment or VUCA, as taught at the War Colleges, will demand the application of a wide range of traditional and innovative strategies and tactics to counter threats and take advantage of opportunities.

Based upon both the realities being faced today and the context emerging for tomorrow the following are basic observations.

First, *the world is a system*, like a spider web. Movement or damage in one spot has the potential to be felt throughout the entire web. Like in a pond, while the ripples may be visible closest to where the stone is thrown, the entire pond feels some level of movement and/or impact. Global interdependence is now a reality and national security issues must always assume a global focus.

Second, *the nation's homelands are no longer protected by distance or time*. The great oceans that buffered the United States from much of the world for example, no longer serve as boundaries. Therefore, the distinction between foreign affairs and homeland concerns has become blurred – perhaps even non-existent for all. National security is a merged “mess” of internal, external, and interdependency issues and this has enormous consequences for dealing with national security issues.

Third, the reality of *globalization demands a holistic world-view* along side of specific national interests. The needs and concerns of every country must be developed in concert with the welfare and security of the entire globe. To participate in globalization requires new ways of connecting to everyone else on the planet to ensure are all secure – being a

rogue nation, or having rogue citizens can change everything in ways that are far reaching.

More than 2500 years ago, the ancient Chinese Philosopher, Sun Tzu, said in his masterpiece, *The Art of War*,

“If you know your enemy and you know yourself, you need not fear the result of a hundred battles.

If you know yourself but not the enemy, for every victory gained, you will suffer a defeat.

But if you know neither yourself nor the enemy, you will succumb in every battle.” (Tzu,  $\approx$  400 B.C.)

In today’s global context, this quotation suggests that if a nation is in any kind of competition, it must be familiar with, and develop knowledge of its competitors as well as itself if success is to be expected. How well have nations developed relationships with their partners and friends to ensure cooperation when there is a problem anywhere on the globe? No one is big enough or wealthy enough to truly cover the world in terms of knowledge and/or capabilities.

General Dwight D. Eisenhower, in a speech said, “Plans are worthless, but planning is everything.” (Eisenhower, 1957) President Eisenhower is explaining that through the knowledge learned in planning processes, plans are more likely to be successful. And, this is learning in the Sun Tzu sense.

The complex systems within the national security community have interesting characteristics worth identifying and discussing. Probably the most important characteristic is that complex systems cannot be controlled – at best, they can be influenced. And, the systems can only be influenced if understood intimately; what the late American statistician, Dr. W. Edwards Deming calls “profound knowledge” of a system. (Deming, 2000)

The Center for Strategic Analysis and Assessment needs to be a learning organization to support whatever national security structure is in place in the United States. The Center would be created to learn, analyze, assess and synthesize risk, foresight and the development of “grand strategy.” Government policy makers may want the Center to predict. But, prediction assumes theories and theories require assumption testing to learn. The complexity sciences say that in complex systems there are limits to what can be learned or known with any precision; you can predict probabilities but not certainties. Even in physics, the Heisenberg Uncertainty Principle says if some things are known, other variables cannot be known. Such is the case in the national security system. Many policy makers expect prediction and control of the real world complex systems they are supporting. In the real world, complexity science is clear. Prediction and control of complex adaptive systems is impossible with certainty.

One of the Vision Working Group findings included the need to synthesize “all of government” solutions to complex system issues and problems; and sometimes “all of society.” The only successful way to do that is to be learning about the system issues -- in hyper learning modes using accelerated learning processes and coupling those with foresight tools such as Delphi techniques. These enable the development of scenarios for planning... and ultimately being able to develop “Grand Strategies.” The VWG also found that the United States needs to systematically use these tools and processes to improve decision-making and, create mechanisms for that to happen at the whole of government level -- at the level of the President.

The Center for Strategic Analysis and Assessment in the Executive Office of the President will be in the business of developing scenarios and “grand strategies” to apply lessons learned in a world of complexities and that requires context and synthesis. It also requires breaking down the stovepipes of government so they can work together effectively. Mechanisms to use complex systems thinking and foresight tools in the decision-making processes of the executive branch of the government need to be developed.

#### **PNSR VWG Scenario Development Process (Ronis, 2010):**

The PNSR VWG began by asking the question, “How can foresight be used to have an impact on Presidential decision-making in the context of the uncertainties inherent in an interconnected, fast-changing world?” The findings of the overall PNSR effort were stress tested by developing a set of scenarios to see if they improved system performance. In addition to complementing and enhancing the overall PNSR findings, the visioning process resulted in detailed scenarios against which specific options generated by the project were assessed.

The process used to develop the scenarios began by determining the purpose and scope of the scenarios. Since The National Security Act of 1947 survived largely intact for more than sixty years, despite major social, technological, economic, environmental, and political changes, the Vision Working Group looked ahead about fifty years. The nation will face extraordinary changes in the next fifty years. Most forecasters and technologists believe that the rate of change in the next decades will accelerate so rapidly it will be difficult to imagine.

It was with this in mind that the Vision Working Group created scenarios that would provoke discussion and debate within the Project and hopefully lead to better, more resilient recommendations. The next step required the development of a questionnaire to be given to experts representing some of the best minds in the nation. For that process, experts in many fields including a cross section of the sciences and engineering and in particular The National Academies were enlisted. The best approaches to the development of a survey instrument were examined and a questionnaire was developed to

solicit the input of experts in many fields. The National Academies hosted a conference to explore these issues and based on the findings, the survey instrument was finalized.

The Vision Working Group then created a list of experts to receive the questionnaire in many disciplines across the sciences, engineering, arts, futurists, and fields too numerous to mention. The experts' viewpoints would be critical to the successful development of scenarios that would be based on their projections of the future.

The questionnaire was then sent to over 1500 experts who were queried via email about the future of their disciplines. It was hoped that 2-3% of the population would return their opinions regarding the future to ensure a sufficient population. The Project obtained 133 responses; a 9% response and the responses represented a full spectrum of disciplines. The experts' insights on future trends and milestones were aggregated, analyzed and synthesized to better understand the ways that the future could unfold.

The trends identified by the experts were then woven into nine scenarios representing three time horizons; 2020, 2040 and 2060.

Before the scenarios could be used to stress test the recommendations of the Project, the Vision Working Group asked the Commandants of three major schools at the National Defense University to choose selected faculty who taught in the national security curriculum of each school to read all nine scenarios and give the Vision Working Group feedback regarding the scenarios.

The scenarios were then stress tested with the national security faculty

- at the National War College,
- the Industrial College of the Armed Forces, and
- the Joint Forces Staff College.

Based on the feedback of the faculty, adjustments were made.

The five major solution sets of the Project were then stress tested by the Working Group Leaders using all nine scenarios developed.

As a caveat, the scenarios were intentionally designed to stress the Working Group's recommendations from several angles. The scenarios should not be viewed as predictions, but rather glimpses into plausible alternative futures. The scenarios are intentionally inconsistent and oft times bleak, all in the interest of provoking a wider range of conversation.

For each scenario, five general questions were used in testing the solution sets.

1. What are the stressors in the scenario?
2. How well was the system able to anticipate the scenario problems?
3. If the system was not able to prevent/remove the threat, how well was the system able to react?

4. How well was the system able to recover?
5. How well does the “system” function as a whole; specifically, the structures and processes?

As the Working Group leaders worked through the scenarios, it was clear that each solution set performed differently in the different scenarios. Strengths and weaknesses of the solution sets gradually emerged.

Each scenario is followed by specific discussion questions to ponder. Three general questions used are:

1. How will the recommendations function in the scenario presented?
2. Are there problems or solutions identified that have not been addressed?
3. If this future is not desirable, what choices should be made today to avoid it?

The 2020 scenarios include:

Scenario 1: Red Death, in which the country is struggling to get back on its feet after a major biological attack and witness a debate about the future role of the US government both at home and abroad. Half of the worlds’ population perishes in this disturbing scenario.

Scenario 2: The People’s War in which the United States faces global asymmetric warfare against a nuclear-armed great power. The entire federal government is caught in the conundrum of how to respond to anonymous attacks at home and abroad while avoiding an escalation to nuclear war.

Scenario 3: A Grand Strategy in which the utility of an integrated grand strategy development capability is explored for smoothing the transition from one Presidential Administration to another; the time when the country is most vulnerable.

The 2040 scenarios include:

Scenario 4: A New Economy in which the United States faces its worst economic crisis since the Great Depression. The crisis is a perfect storm of the unintended consequences of new technologies, policies, court decisions, and popular expectations.

Scenario 5: Army of One in which the intersection of unmanned, robotic warfare and on the ground, assisted diplomacy, is explored. This scenario depends upon the continuation of current trends in robotics and sensors technology, as well as a public policy choice to enable greater real-time interaction between the military and diplomatic arms of the US government.

Scenario 6: Who Holds the High Ground in which major competitive changes in the Earth-Moon system are envisioned from the perspective of a traditional interagency space



working group.

Scenario 7: A Brave New World in which a plan is examined to apply proven neuroscience, psychiatric, and medical techniques to the control of pathological behaviors in a world of readily accessible weapons of mass destruction and genetic engineering.

The 2060 scenarios include:

Scenario 8: A Warm Reception in which the challenge of developing international consensus for action on the issue of global climate change and the possibility of unintended consequences is focused.

Scenario 9: It's a Small World in which the implications of a very different future are explored, wherein small, molecular scale machines (nanotechnology robots or "nanobots") have become ubiquitous.

Finally, the possibility of a technological singularity by 2060 is noted, when robots will be smarter than human beings and how this will affect life on earth is unknown.

The scenarios demonstrated that the five major findings of the Project on National Security Reform significantly improved system performance.

### **Singapore Examples for Benchmarking:**

By studying the Strategic Policy Office, National Security Coordination Secretariat, National Security Coordination Centre, Horizon Scanning Centre, Centre for Strategic Futures and the Risk Assessment and Horizon Scanning Centre in the Office of the Prime Minister and the Centre of Excellence in National Security at the S. Rajaratnam School of International Studies at Nanyang Technological University, there are many lessons that will assist in the establishment of the U.S. Center.

According to Peter Ho of the Singapore Civil Service, (Ho, 2010) there are four major roles for their Centre for Strategic Futures, all of which should be represented in the U.S. EOP Center's set of capabilities. They are:

"Challenge conformist thinking" by building global networks and partnerships with academia, think tanks and global thought leaders through conferences and projects;

"Identify emergent risks" by creating risk maps and communicating emerging issues to decision makers;

"Calibrate strategic thinking processes" by using scenario planning and risk assessment to develop policy and new capabilities;

“Cultivate capabilities, instincts and habits,” by using systems and strategic frameworks and mindsets to deal with uncertainty, disruptive shocks and whole of government approaches regularly.

*This set of capabilities and mindsets represent a strategic capability for Singapore that, although not specifically scalable to the United States, would certainly enhance the capabilities within the Executive Office of the President, if adopted in the United States.*

### **The Center for Strategic Analysis and Assessment:**

The scenarios used in the PNSR study represent the kind of creative systems thinking that the United States needs today; the kind of thinking that should be infused in the Center for Strategic Analysis and Assessment. The nation needs to support strategic decision-making in an interagency whole of government manner at the highest levels for issues of national importance and/or security.

This can be accomplished by the establishment of the Center which will be a place, a process and a set of capabilities that enable the development and use of forward-looking global contexts improving decisions by integrating all major elements of national power--economic, diplomatic, informational, defense and others--to assess 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> order effects of decisions and develop “grand strategy” where necessary. And, Singapore represents an example of where this kind of thinking is thriving.

The Center should provide a rigorous framework to analyze, synthesize, test assumptions, red team solution sets and integrate the elements of national power to provide contexts to support long term strategic decisions. The Center will support the integration of the nation’s near, mid, and long-term national security planning based on pragmatic internal (U.S.) and external (the world) assessments and aspirational visions of what the future could be. The center would endeavor to help translate policies made by the various EOP offices into plans for the interagency space.

The Center should provide comprehensive exercises to support the development of grand strategies and policies in the interagency. It should continually develop scenarios, table-top “games” and simulations anticipating areas that should be strategically thought about to inform policy and strategy development.

### **Networking and Outreach:**

It should provide workshops and seminars as well as outreach activities to the private sector, academia, think tanks, communities of practice and the American People.

It should provide long term planning capabilities to maintain unity of purpose over successive Administrations and generations of leadership.

For all the things The Center for Strategic Analysis and Assessment will do, it should not develop policy. It should *inform* the development of policies and “Grand Strategies” by providing context and testing assumptions of those making policy and strategy decisions.

Annually, The Center for Strategic Analysis and Assessment should host a “State of the World” conference in which they will share “lessons learned” from the systems, processes and scenarios developed in the Center. Internal staff promotions and cross-training among experts will be critical to inform future national policy and strategy leadership with fused, strategic thinking capabilities.

One role of the Center should be to ensure that strategic American and global assets -- human, material and those related to our national power -- are known and employed strategically and systematically when needed. The Center will need to operate in both open and classified environments depending on the needs of the president and the issue being discussed or studied.

Examples of scenarios that might be developed in the Center should include:

- U.S. energy independence solution sets
- Global religious extremism issues and strategies
- Strategies to improve science, technology, engineering and mathematics graduate degrees by U.S. citizens
- Increasing U.S. children’s science and mathematics scores for 6th, 9th and 12th grades
- Universal health care sustainability
- Industrial base incentives
- Palestinian Israeli peace talks
- War gaming
- Peace gaming and everything in between.

Grand strategy assessments of major recommended policy initiatives should be cross-walked with an interagency mindset across all elements of national power.

There are two strategic weaknesses of the United States that regularly keep the nation from looking at its future in a strategic and systemic way and preparing itself for that future. The U.S. does not engage in strategic visioning or foresight exercises and they do not write and/or execute “grand strategies” *as a nation* and they need to do both. Worst of all, they do not even think this way.

The Center should be established within the interagency and continuously develop scenarios of the future. This will help senior government policymakers plan for an integrated future across the entire government spectrum including the Congress. This will probably include Congressional committee reform that creates interagency mission funding mechanisms through inter-committee decision-making processes across jurisdictional boundaries. Systems thinking provides the framework that establishes the

need to break down the barriers in the stove-pipes of government from the top to the bottom.

And, finally, within the Center, the nation needs to help senior government policymakers plan for the role the U.S. will play in that future including how the U.S. will remain strong in the Marshall sense. Although originally conceived to “fit” into other national security reforms, the capabilities of the Center need to be established within the EOP with or without the other reforms envisioned (PNSR, 2008).

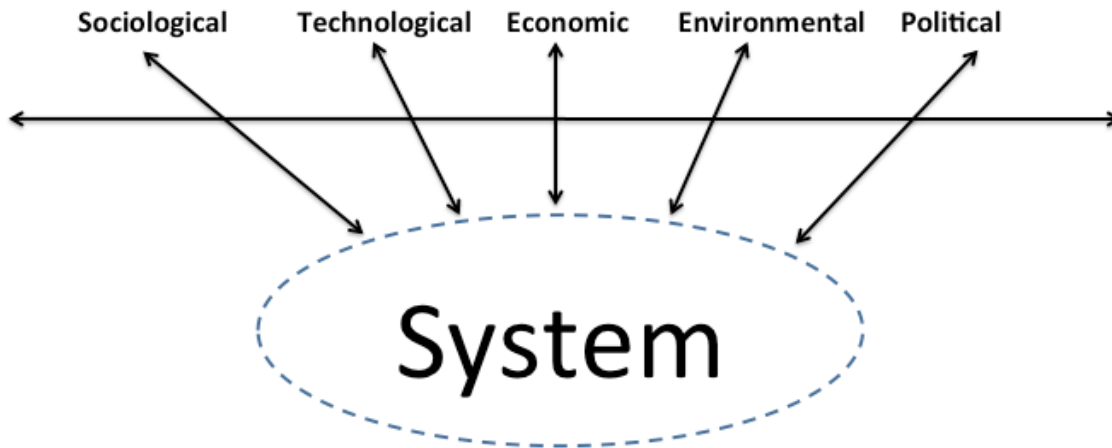
#### Assessment Capability:

The assessment Center’s capability, should be developed using the five essential planning perspectives of 1) space, 2) the planet, 3) regions, 4) countries, 5) and U.S. internal (domestic) for each of the three time cycles of near, mid, and long-term. Each of these near, mid, and long-term assessments would include both geographic and functional dimensions.

The assessment of risk needs to encompass system risk most of the time. Frequently, the impact of a particular course of action has an economic or political risk associated with it. But, risk in a world of complexity requires an understanding, not only of individual risk variables but of the interactions of risks associated with all of the system variables across the STEEP risk spectrum from sociological, technological, economic, environmental and political risk. Frequently, the risk must be accumulated and the algorithms need to take into the consideration the amount of risk and the associated influence of multiple risk factors at the same time. Only when all of the risk is accounted for in a system, can a risk variable be calculated.

# System Risk

## Across the STEEP Variables



“System Risk” is the aggregation and understanding of the many forms of risk that occur internal and external to the system but which potentially have an impact on the system; the product of the interactions and interdependencies of the various forms of risk, sociological, technological, economic, environmental and political.

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Sheila R. Ronis, Ph.D., Walsh College,  
Project on National Security Reform

### Visioning Capability:

Visioning would produce both pragmatic and “what-if” scenarios to test assumptions, ends, ways, and means of plans. The Center will include various inputs from the U.S. intelligence community, homeland security, private industry, and international entities as needed.

The Center should provide the president with an ability to immediately take stock of the status of both the internal system and the external environment, as well as to understand the decision points necessary to maintain his/her policy objectives in the near, mid, and long-term across the whole of government in the five planning perspectives. The Center director would be a senate confirmed member of the EOP at an executive level and the staff would be comprised of a majority of full-time civil servants to provide continuity between administrations. Consequently, the director should have rank commensurate to this responsibility. This position should be Senate-confirmed for two reasons: 1) to help satisfy the desire for congressional oversight over this most central function of the Executive Branch; and 2) it would help this official garner the support of the wider interagency in this process. This person should therefore be at the rank equivalent to the President’s highest directors in the EOP just one position in rank below the National Security Advisor or Chief of Staff. The Center Director should brief the President formally once a month but would sit on any EOP executive committees as required.

Advisors and contractors from outside of government would likely be a part of the Center in the preparation of its work products since the Center expects to keep some of its hires as part-timers and this might include work done by contracted advisors from outside government in order to keep the Center on the highest edges of evolving technologies and processes for its mission accomplishment.

The President of the United States should have a place and a process to conduct “grand strategy” on issues of national importance and security. The Center, within the Executive Office of the President should develop and support many functions and capabilities in support of the development of these “grand strategies.”

### The Gaming Function:

One of the most critical functions of the Center should be the capability for gaming issues of national importance and security in support of the development of “grand strategy.” Gaming is usually considered the process of thinking through events in a step-by-step, point, counter-point fashion to explore possible outcomes of certain courses of action over others. These processes enable thinking through situations that can occur before decisions are made through exercises of varying kinds. The processes should be developed to ensure a thorough investigation and analysis of the situation and exploring positions on all sides of the question involved. These capabilities will range from “red teaming” proposed courses of action to developing step by step table top exercises meant to role play situations in foreign policy or peace negotiations to the development of alternative visions of the future and calculating risks associated with each one to determine which set of decisions should be made and which policies should be implemented to create the preferred future state.

Gaming is a form of scenario based planning. Gaming processes improve the ability to develop strategies and policies or choose specific decisions over others in a world of uncertainty. The objective of a game, however, is not to predict behaviors but to learn about the potential of certain behaviors and their effects over others and which sets of behaviors and therefore outcomes might be best for the “end game” you are looking for. Games are structured thinking processes that ultimately produce analysis and synthesis to improve decision-making regarding strategies and policies. It requires holistic and systems thinking about specific issues.

The spectrum of games available in the Center will include traditional scenario based “stories” associated with specific interagency issue or country teams and “grand strategy” level issues such as “energy independence by 2050” or “sustainable peace in the Middle East.”

The gaming capabilities within the Center will be available at many different levels of scale and complexity depending on the needs. Levels from “grand strategy” to tactical concerns are levels of scale. Levels of complexity can also be varied depending on the sets of issues to be examined. Levels of sophistication can also vary through the use of

tabletop exercises that use pencils and paper to the use of algorithms in the development of software that can facilitate a variety of games using simulations in computers.

Games can be developed at any level of system scale. The “grand strategy” level will be used to describe the highest level of strategy needed, usually at the global or country-to-country level. The “strategic” level will imply the whole agency or department level or at the level of an institution such as the Army. The “operational” level will imply a lower level of an organization such as a directorate or a battalion level. The “tactical” level can go as low as the individual in a group or a small group such as a platoon level.

What is most important is that the mission of the exercise be identified so that clear objectives can be written and exercises developed to accomplish the mission. All games should have one thing in common. They should facilitate learning about a particular topic, course of action or policy decision to better understand the dynamics of the environment surrounding the issue, the issue itself, the stakeholders and players involved. Games are studies. In particular, decisions should be thought through looking holistically at the situation and determining the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> order effects of decisions involved. For example, tools as diverse as causal loop diagramming and mathematical techniques of operations research will be available in the Center and available for gaming as needed. Causal loop diagrams visually “map” the relationships between phenomena and decisions. Operations research techniques are frequently used to study costs and effectiveness of judgments. Many methods for strategy and policy analysis, synthesis, and systems thinking will be used. In fact, all suitable methods within the structured and disciplined processes that will enable better thinking will be used in the Center. According to Richard Kugler, in his seminal work *Policy Analysis in National Security Affairs: New Methods for a New Era*,

“...the U.S. Government will continue to face many difficult decisions in the national security arena because the future is hard to see, and the consequences of alternative policies are hard to predict... systems analysis can help improve the quality of these decisions... it can help the Government think clearly in times of uncertainty and during noisy debates about policy and strategy.” (Kugler, 2006).

Most of the games employed in the Center will be developed for the Center but will draw upon the myriad games that have been used over decades to think through “war” scenarios, but with other themes including economic, diplomatic and environmental issues in addition to the traditional war-peace issues that games have played in the past. Learning through play is a major way to prepare for the future; not only for children; for all who need to use imagination and knowledge, coupled with experimentation, to practice the way forward – using games. As Arie De Gues says in *The Living Company: Habits for Survival in a Turbulent Business Environment*, describing the original Royal Dutch Shell scenario process development,

“...the decision-making process is in fact a learning process in any company and there are ways to improve the speed, if not the quality, of the decisions. The more in depth the simulation, and the more that ‘play’ triggers the imagination and learning, the more

effective the decision-making process seems to be. In companies that attempt large-scale internal change, this is particularly true. Decisions cannot be made in the old authoritarian manner. They need interaction, intuitive reflection, and the fostering of collaborative mental models. They need play. They need learning.” (De Gues, 1997).

New gaming and analytical tools need to be honed in The Strategy Center. They will continuously improve over time. As Robert Lempert argues in Francis Fukuyama’s *Blindside*,

“Policy-makers may not always welcome a critical spotlight on the potential weaknesses of their proposed strategies. But, if rigorous assessment of surprise becomes as commonplace as budgeting and accounting, policymakers will find it harder to ignore.” (Fukuyama, 2007).

The Center will further make use of these assessments to engage in medium- and long-term projections of future threats, risks, and opportunities, again incorporating such diverse and interrelated elements as economic, diplomatic, societal, environmental, technological, military, and so forth.

The Center can be tasked by any agency, or by the president, to assess, game out or develop “grand strategies” for problems whose impacts and solutions cut across multiple government agencies. Such assessments and solution sets will be presented to each affected agency to provide a basis for cooperation, policy formulation, and/or resource allocation.

#### Engage in Rigorous Problem Analysis:

Effective policies must be grounded in rigorous problem analysis incorporating both a multi-disciplinary approach as well as sensitivity to the ways in which policies will affect other variables. Failing that, policies may be made based on false or outdated assumptions or may produce unintended consequences in the long-term.

Currently, the various organizations of the federal government are host to exceptional bodies of knowledge and expertise. Yet the ability to engage in rigorous problem analysis in crafting policies is hindered by a number of factors.

The demands of urgent emerging national challenges, coupled with limited human resources, frequently preclude rigorous problem analysis. This is especially true when doing so requires drawing on diverse competencies spanning multiple agencies or departments.

Nowhere does the capability exist to thoroughly test the assumptions of analysts, which may prove false, outdated, or incomplete. Their conclusions, moreover, are invariably aimed at achieving short-term objectives, and they lack the ability to thoroughly assess the medium- and long-term impacts of proposed policies. Finally, the quality of problem



analysis can be hindered by the inevitable loss of institutional memory sustained through turnovers in human resources with successive administrations. The Center should seek to remedy these shortcomings. Unburdened by the need to make or implement policy itself, it is wholly devoted to problem analysis, research, scenario development, gaming and assessment.

The Center should continuously develop scenarios and provide assessments of the global climate and of emerging national challenges. Decision-makers can also task the Center to engage in specific projects where the agencies lack the resources to conduct such analysis themselves, or where the issues transect multiple departments or agencies. Its research, which employs a variety of analytic and testing tools and draws on a broad range of expertise, will help inform policies and “grand strategy” in the interagency.

The Center should also provide a rigorous framework to analyze and test assumptions, as it continually develops scenarios, games and simulations to anticipate the effects and secondary impacts of potential solution sets and proposed policies into the medium- and long-term.

Finally, the Center seeks to facilitate finding, identifying and storing national and global assets, both human and physical, as needed to develop specific expertise.

#### Facilitate Long-term Planning and Preserve Institutional Memory:

As the rate of change and the complexity of challenges continue to increase, there is little doubt over the value of conducting long-term strategic planning and attempting to create anticipatory government (Fuerth, 2006.) However, the turnover and shifts in priorities that accompany successive administrations can render this process difficult. Long-term planning, to the extent that it can be carried out at all, is necessarily limited to 2- or 4-years out. Strategies that take longer to achieve may be discarded by future administrations or congresses. Furthermore, policy planners must, in order to remain relevant, tailor their strategies based on the political priorities of the president under whom they serve.

Yet another challenge to long-term planning is the loss of institutional memory that accompanies personnel turnover. In federal organizations most of the organization’s institutional memory is held within the memories and experiences of its employees, and much of it will thus be lost with administration changes, regardless of the quality of transition teams.

While it will not formulate tactics itself, the Center will seek to provide a consistent basis for the creation of forward-thinking interagency “grand strategy.” This is to be accomplished by providing long-term projections and assessment of the global environment spanning well beyond the time frame of one administration. These projections will be continually assessed and revised, but will retain the characteristics of incorporating all facets of national power. The work of the Center will thus help inform the policies of each new administration. As such, it will help minimize the risk that

successive administrations will adopt narrow national priorities that fail to adequately understand the full range of issues, and continually remind policy-makers of the long-term global environment. It also provides workshops and seminars, as well as a long-term strategic planning capability to maintain unity of purpose over successive administrations and generations of leadership.

In addition to providing forward-thinking visions to assist in policy-making, it can also serve as the memory of the bureaucracy for each new administration. It will enable new administrations to learn about past treaties, commitments, views and processes that have occurred across the inter-agency.

By engaging all facets of national power and a full range of expertise to engage in short-, mid- and long-term assessments of the global environment, the Center will enable the country to not only react to the changing global environment, but to preempt changes to that environment, and play an active role in shaping a better future through the development and use of scenarios and various other tools.

The Center will support the EOP in the development of whole of government “grand strategies” that are both long term (at least a decade) and interagency. National Assessments of both geographical and functional threats & opportunities spanning the concentric and inclusive spectrums of space, the planet, specific regions and/or sub-regions, specific countries within regions, and the U.S.

#### A National Security Strategic Management Process:

Developing “Grand Strategies,” either at the request of the President, the National Security Advisor or any interagency issue team will occur through the use of a generic strategic process to think through the policies and strategies that will be required to be developed.

Issues that are strategic are not just important; the word “strategic” has at least two additional meanings. First, strategic issues are systemic, that is they are related to an entire system and must be put into context. Secondly, strategic issues need to be dealt with over time, so all strategic issues have a temporal component to them, as well. Since management is the process of directing the accomplishment of objectives through others, strategic management can be viewed as managing an institution as a system over time. The Center will always be looking out at least ten years, and will frequently study longer time horizons.

In the coming years, the new national strategies will need to be developed within the context of the world. The Center will support the integration of the nation’s “grand strategies,” based on pragmatic assessments and aspirational visions of what the future could be. The majority of the staff would be full-time civil servants, to provide continuity between administrations. The center would have many functions; Assessment Studies for the development of “grand strategies,” Scenario Development and Gaming, outreach

through conferences and projects, and “challenging conformist thinking,” like Singapore.

### **In Conclusion:**

In summary, the Center’s core capabilities need to include:

- Strategic and systems thinking and “visioning”
- The development of a holistic and evolving view of the global environment and national security context
- The ability to game specific scenarios to assist in the formulation of contingency plans and to test the impacts of proposed policies
- Regular development of scenarios out 10, 20, 50+ years
- The capacity to house leading edge tools and technologies for assessments, especially “system risk”
- Engaging in “red teaming” and alternative analyses to test assumptions and solutions with rigorous problem analysis
- Providing, when necessary, classified research environments, if necessary development of “grand strategies” as assigned by the President and facilitating long-term planning and preserving institutional memory
- Providing networking and outreach to government, academia, industry and the general public including public seminars and conferences
- Challenging conventional wisdom in the Singaporean sense and the Project on National Security Reform sense.

The Center should be established to help senior government policymakers plan for the future and the role the U.S. will play in that future including how the nation will remain strong in the Marshall sense.

The entire world expects the United States to remain a leader. The United States cannot do this unless they are strong. And they cannot be strong unless they plan for and shape their future. The saying from the Judeo Christian Bible, “Where there is no vision the people will perish,” from Proverbs 29:18 is as true today as it was thousands of years ago.

As a nation, the United States needs to become proactive in using foresight and vision in shaping the future and working toward a world of increasing liberty, prosperity, justice and peace because that is the world future generations deserve.

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