INSTITUTE FOR DEFENSE ANALYSES

Defense Governance and Management: Improving the Defense Management Capabilities of Foreign Defense Institutions

Part 1: Defense Policy and Strategy Development for Foreign Defense Institutions
Part 2: Defense Governance and Management: Defense Policy and Strategy Seminar Material

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Executive Summary

This two-part paper is intended to assist United States government representatives in advising foreign defense institutions that seek to improve their defense governance and management capabilities. By defense institutions, we mean ministries of defense and the headquarters staffs of the armed forces and/or military services, as well as other national-level institutions responsible to plan for and manage the development and employment of armed forces.

Part 1 focuses on the conceptualization, development, and application of defense policy and strategy. The terms policy and strategy are often misunderstood and frequently substituted for one another. Policymaking is not strategy, though many policy makers act strategically. Also, while strategy provides a necessary foundation to planning processes, developing strategy is not planning.

Planning, by its nature, is informed by analysis and supports the development of strategy. Policy and strategy should document, to the degree it is possible, the logic (or the approach) defense leaders believe will best align the future capabilities of the national defense sector to the challenges and/or opportunities anticipated. Armed with such information, defense planners formulate plans to outfit a force with the capabilities required to achieve the objectives specified (or intended) by policy and strategy.

With respect to the conceptualization and application of policy and strategy, this paper is constructed to address the questions of what are policy and strategy, why they are important to a defense institution, and where they are derived from. Additionally, there is a discussion on constraints that may limit what a nation's armed forces will do and how these must be considered.

There are two broad categories under which nations should either review extant policy and strategy or create new strategy and/or policy. These categories are calendar and event driven. The former is a planned and regular review and the latter is driven by some unforeseen event. In either case, there is not a set of steps or a dogmatically defined process for developing national defense policy and strategy. Rather, the process will be tailored to the particular country and set of circumstances where policy and strategy must be developed. However, there is a common set of design parameters, design principles, and design questions that are identified and are provided in this paper.

In order to provide appropriate guidance to defense planners concerned with implementing defense policy and strategy, it is necessary to assess the risk of stated policy or strategy, and to articulate the operational challenges the armed forces are expected to meet. Accordingly, this paper provides guidance on risk assessment and the role of scenarios in describing operational challenges.

Included in Part 1 are two appendixes. Appendix A provides details on when it is appropriate to conduct a Strategic Defense Review (SDR) and how an SDR is managed. Conducting an SDR is a particular means of developing national defense policy and strategy.

The topic of Appendix B is scenarios. The appendix provides details on the key attributes, structure, and management of scenarios. Scenarios provide a common framework for analysis to examine both the current and future (or planned) force structure's ability to implement defense strategy. Scenarios are also used to evaluate alternatives to a force structure development (or force generation) plan and to evaluate risk.

Part 2 is a set of seminar materials provided as PowerPoint slides; some with annotated notes. These materials are for use by U.S. government representatives sent to educate or familiarize members of foreign defense institutions on the topics covered in Part 1. The slides are intended to be modular. Accordingly, a user is encouraged to adapt the seminar materials to the topics he or she wants to focus on and further modify based upon the audience.

Finally, this paper should not be considered the last word on these topics. The development of policy and strategy is always evolving with improvements being made. This is because policy and strategy development come from a synthesis of insight based on what can be observed and learned. Furthermore, all nations have unique characteristics that require any advisor to tailor his or her methodology to fit the circumstances of the organization and officials being advised.

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1. Defense Policy and Strategy

A. Introduction to Policy and Strategy

Policy and strategy are often misunderstood and frequently substituted for one another. Policymaking is not strategy, though many policy makers act strategically. Strategy cannot be boiled down to simple equations or definitions, though aspects of strategy may be simple.

When referring to policy as it is applies to the defense sector of a national government, it is really public policy. This implies it is formulated through a process that has political considerations in mind. Additionally, for public policy to be effective, it must be enforceable by the public agency responsible for formulating the policy. In the case of defense policy, at least for nations that are democratically oriented, this most often refers to a civilian ministry or agency of government (i.e., The Ministry of Defense). Given this, our definition of public policy is, "a purposive and consistent course of action produced as a response to a perceived problem of a constituency, formulated by a specific political process, and adopted, implemented, and enforced by a public agency."[1]

More specifically, defense policy orients itself to the challenges assigned to the defense sector by national policy. The constituents of defense policy, in a democratically oriented nation, are primarily the citizens. The political process through which defense policy is formulated is shaped by national policy and law, and the prevailing politics of the constituency. Finally, the implementation of defense policy falls to the ministry of defense (or other appropriate civilian agency) and the defense and security services created to implement defense policy.

While strategy provides a necessary foundation for planning processes, it is not as much planning as it is a process. As a process, formulating strategy may be deliberate, or it may need to be expedient. Deliberate strategy formulation is usually the realm of nations and organizations. Expedient formulation is often associated with individuals who must quickly develop strategy in response to an unforeseen crisis or challenge (e.g., Margaret Thatcher's strategy for reasserting British control over the Falkland Islands following an unforeseen invasion and occupation of those islands by Argentina in 1982).

Regardless of the temporal or spatial dimension of strategy formulation, the strategy development process must simply communicate and prioritize complex matters to its constituents or subordinates.[2] With this idea in mind, there are several useful definitions of strategy to have in mind.

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1 Wayne Hayes, "The Public Policy Cycle," accessed 24 October 2014, http://profwork.org/pp/study/define.html.

2 Daniel Steed, "Finding Strategic Man," War on the Rocks, October 7, 2014, accessed 11 December 2015, http://warontherocks.com/2014/10/finding-strategic-man/.

First, strategy is not planning. Rather, strategy answers questions about how to deal with competitive situations or challenges in an uncontrolled environment. Planning, alternatively, must necessarily make assumptions about the environment.

Strategy can also be described as an approach to achieve a policy objective. Strategy as an approach is also synchronous with the idea of strategy as process that leads to a synthesis of ideas. A definition from the basic doctrine of joint operations of the United States Armed Forces emphasizes both aspects of approach and synthesis. It defines strategy as, "an idea or set of ideas for employing the instruments of national power in a synchronized and integrated fashion to achieve objectives."[3] Employing instruments implies an approach and synchronizing and integrating implies synthesis. Finally, to bring the conversation back to policy, the objectives strategy seeks to achieve should be determined by policy.

To illustrate these points, we can use Sun Tzu's classic work, *The Art of War*. Sun Tzu clearly understood the environment of his time. It was one of nearly constant total war fought amongst interdependent states. As a policy, he stressed to his reader that the goal of war (the policy) should be to capture any state intact and only to destroy it if no other options are available. To accomplish this policy, Sun Tzu's recommended strategy was to position one's armies during specific campaigns in such a way to end any war quickly and to avoid economic damage, which provokes resistance and allows enemies to eventually turn the tide of war in their favor. This synthesis of ideas proposes an approach to warfare. The ideas account for the whole environment and communicate priorities and complex ideas succinctly.

B. What are Organizational Defense Policy and Strategy Primarily Concerned With?

Without any deviation from the two definitions of strategy proposed in section A, it is possible to express strategy in four different ways. First, strategy can be expressed as a pattern of behavior in order to achieve a policy objective. For example, the United States National Security Strategy of 2010 stated that an approach to security was to "build at home and shape abroad," and in order to shape abroad, U.S. instruments of power would pursue comprehensive engagement and promote a just and sustainable order through the use and integration of American power.[4] In other words, U.S. security policy objectives would be achieved through the pattern of our behavior.

Second, strategy can be expressed as a position. For example, it is common to hear American leaders say that the United States will continue to be the guarantor of access to the world's air, maritime, and space commons. This implies that the United States will position itself to guarantee this access.

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3 U.S. Department of Defense, *Joint Publication 3-0, Joint Operations*. Washington, DC: 11 August 2011, GL-16.

4 Barack Obama, *United States National Security Strategy*, May 2010, accessed 26 January 2016, https://www.whitehouse.gov/sites/default/files/rss_viewer/national_security_strategy.pdf.

Third, strategy is often expressed as a perspective that results from a synthesis of ideas that come from learning, observation, and experience. Edward Land's perspective on what the Polaroid Company would be came from a synthesis of ideas that sprang to mind from an observation that people did not want to wait to see the photos they took and his knowledge and understanding of technology.

Finally, and what will be the primary topic of the rest of this paper, strategy can be expressed as a plan. For a ministry of defense, this is primarily an expression of how it intends to accomplish and align policy objectives with planned activities and ultimately the articulation of the defense budget. There is much more to planning than policy and strategy; however, as stated previously, policy sets the objectives and strategy must provide the synthesis of ideas and define the approach to achieve those objectives. These provide the foundation required for effective planning and subsequent resourcing, execution, and evaluation. This is a framework we will refer to as the policy implementation cycle, as depicted in Figure 1.

Figure 1. Policy Implementation Cycle

Strategy, as an expression of a plan, provides overall guidance within an organization to ensure that specific decisions and actions are taken in context and are coherent with the organization's overall aim or purpose (its policy). This is the primary concern of organizational defense policy and strategy.

To summarize sections A and B in simple terms, policy is a set of stated objectives an organization is trying to achieve and strategy provides synthesis of ideas and intended approach to achieve objectives. Well-formulated policy and strategy provide a clear purpose to the multiple components of an organization or entity and are mindful of the environment within which they must be operationalized.

C. Why have Defense Policy and Strategy?

Providing defense and security for a nation is a complex endeavor, with competing interests from within the defense and security sector, from across government, and from the international community. Furthermore, the political objectives and foreign policy aims of a government will most likely exceed the available resources to achieve its aims. Another way to think about this is that no nation can afford to reduce all of its security risks to zero. Therefore, it is necessary to determine national priorities and then adopt policies consistent with those priorities along with their attendant strategies for implementation.

National defense policy and strategy identifies defense priorities that should drive resource allocation within the defense sector and guide the management of the defense enterprise. Without such guidance, a parochial and fragmented decision-making process will occur, with no assurance that the military services and other components and agencies of defense will agree upon a common view of the future, their roles, or their priorities. The result will be an inefficient defense institution that fails to deliver the government's policies and priorities and wastes resources.

With respect to managing the defense enterprise, national defense policy and strategy connects the national law and/or national policy to the functional managers of defense for the entire defense enterprise. It communicates a common vision of the future. It prioritizes the use of available resources for the armed forces and defense components and agencies. In prioritizing resource allocation, policy and strategy should also provide a framework for identifying the potential risks in the security environment and their implications for defense planners over short, medium, and long-term planning horizons. What risks are reduced based on prioritized resource allocation and what risks are accepted?

Policy defines the management framework of the defense enterprise, including the relationship between the civilian (Ministry of Defense) and armed forces staff. Strategy helps defense planners define and prioritize the mission areas the defense sector is responsible for and the capabilities required to operate successfully given defense's assigned mission areas. Defense policy will project the availability of defense resources, their broad allocation across defense, and any constraints or restraints on their use. As part of defense management, a national defense policy and strategy provides the essential input and prioritization to the other essential functional components of defense institutions – its financial, human resource, and logistics management processes.

Finally, a clear national defense policy and strategy represents the defense enterprise to external stakeholders:

- Other ministries who are stakeholders in defense and security (e.g., a foreign ministry or an interior ministry);
- Ministries to which the defense institution is accountable for its budget (e.g., the finance ministry);
- The cabinet or executive council that may serve a coordinating role within government for the establishment of a national strategy and the national budget;
- The chief executive who serves in the role of commander-in-chief of the armed forces; and
- International and non-governmental organizations with which defense may have regular, periodic, or exigent relations.

This representation also communicates to external agencies what the defense sector expects of other government departments and agencies or assumes other government agencies will provide. This transparency helps the various government entities work better together and deliver the government's objectives.

To conclude, the reason to have defense policy and strategy is that "the alternative *[no policy and strategy]* is paralysis or [merely] agreed consensus and therefore meaningless."[5]

D. Constraints on Defense Policy and Strategy

All nations have some constraints that limit what a nation's armed forces will do, and these constraints must be considered in order to develop feasible defense policy and strategy. For example, it is pointless for a strategy to point to a need for expeditionary, offensive, armed forces capability if the country's law or national policy forbids deploying armed forces abroad for other-than-humanitarian reasons or in support of international peacekeeping operations. Referring to Figure 1, these constraints are depicted by the circle on the center of the model. Laws, values, culture, inherent doctrine, existing institutions, etc., constrain what objectives a nation or a defense ministry may pursue, which consequently constrains the formulation of policy and strategy. Constraints will be unique to each individual country. However, the following are a set of common constraints that should be identified prior to developing policy or strategy:

- Law: The establishment of an armed force is generally codified in a nation's laws and/or constitution. The legal code will likely state the extent or limitations on the use of the armed forces and may specify some things that are specific responsibilities of the armed forces and some things, which are specifically off

[5] "Governing and Managing the Defence Sector", David Chuter, 2011 Institute for Security Studies Pretoria, South Africa. https://www.issafrica.org/uploads/Book2011GovManDefSec.pdf.

limits for armed forces. For example, Section 124 of Title 10 of the United States Code states, "The Department of Defense shall serve as the single lead agency of the federal government for the detection and monitoring of aerial and maritime transit of illegal drugs into the United States." Therefore, it follows that U.S. defense policy and strategy must provide objectives to be achieved and articulate an approach as to how the Defense Department will detect and monitor the transit of illegal drugs into the United States. Article 9 of the Constitution of Japan states that the Japanese people renounce war as a sovereign means of settling international disputes. The effect has been a policy that limits development of Japanese armed forces to a self-defense force. Laws may also specify whether military forces can be used in civil emergencies and the degree to which military services can participate in police activities or internal security operations.

- Current state of the armed forces: For policy and strategy to be realistic and implementable, it needs to start with a realistic judgment on the current capability of the armed forces. Declaring a policy objective of having an all-volunteer, professional army that is 200,000 strong in three years, when current Army end-strength is 50,000, is both unrealistic and not credible. This applies to all aspects of military capability and requires a means to assess capability. A useful assessment framework for military capability is the DOTMLPF-P[6] framework. This encompasses most of the functional aspects of military capability. However, it cannot account for the difficulty in conducting an assessment in the first place, which may be difficult for policy makers who have an adversarial relationship with the armed forces or within nations that do not wish to be transparent about their military capability.
- Available resources: The resources available to defense (a subset of the national resources) are a key determinant of the size and shape of the Armed Forces. While defense policy and strategy should not be resource constrained, it should be resource informed. Policy makers and strategists need to understand the national economic forecast and projected revenue allocation defense is expected to receive in the future. If the nation does not produce this type of data, then policy makers and strategists must make some feasible assumptions based on historical trends and likewise constrain their policy and strategy development. Otherwise, given the expression of strategy as a plan, it is certain that the operationalization of plans to implement strategy will be improbable at best.

Finally, the last constraints to discuss are the country's capacity and its understanding and experience of change. How well have a country and the defense establishment adapted and reacted

[6] DOTMLPF-P Doctrine, Organization, Training, materiel, Leadership and education, Personnel, Facilities, and Policy; *Joint Capabilities Integration and Development System (JCIDS) Manual*; 19th January 2012.

to significant events in the past that forced changes? How well educated is the likely cadre of officers and civilians who will undertake the work?

Developing a national defense policy and strategy are significant work, both intellectually and with respect to the resources required. In addition, it is likely that a first attempt to develop national policy or strategy will result in some substantial reprioritization of resources. This means that within the defense establishment there will be "winners" and "losers" as a result of the new policy or strategy. Therefore, if the defense establishment has little or no experience of significant resource changes, then without careful work socializing the changes, implementing policy decisions or executing strategy will run into early and significant obstacles aligned against change.

E. Where are Organizational Defense Policy and Strategy Derived from?

Formulating policy and strategy starts with identifying national values and interests. These are what politicians are elected on as they translate the people's values and interests into policy. These policies can be gathered from their statements or manifestos. Appraising these interests and values and putting them in context within the strategic environment leads to the development of national policy and resultant national strategies. Figure 2 depicts such a process.

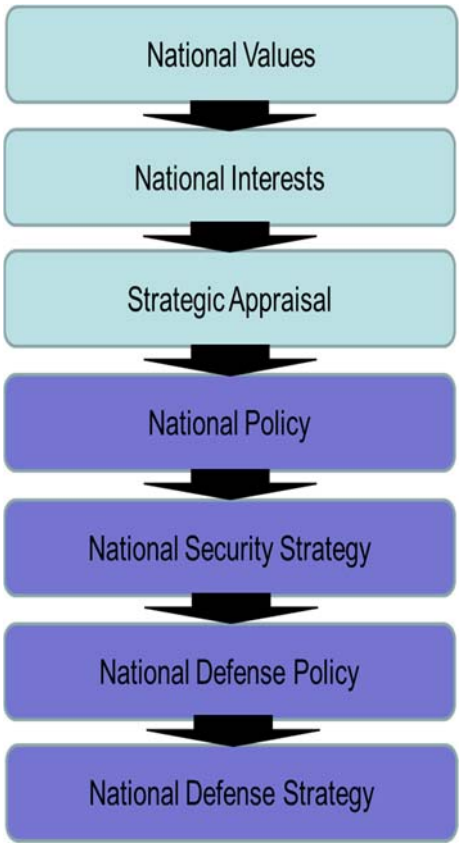

Figure 2. Derivation of Policy and Strategy

For defense policy and strategy development, a national security strategy will be most influential on defense. These higher-level documents cover the whole of government, including domestic and foreign policy, as well as defense. They provide a wide contextual framework from which national defense policy and strategy can be derived. It is not the existence of these documents or statements that is important but their content, and the processes by which they were established. A country's constitution and laws can provide guidance on the expected roles and missions for the armed forces, as can agreements and commitments with neighboring countries and international institutions, e.g., the United Nations (UN), North Atlantic Treaty Organization (NATO), Economic Community of West African States, etc.

To stress a point, a nation may not have a national security strategy so titled, but this does not mean a security strategy does not exist. For example, the nation of Liberia produced, with the help of the World Bank, a document titled, "The National Development Strategy of Liberia." To

secure the lasting peace of the nation, the stated policy objective is to move Liberia, as a nation, into middle-income status (in comparison to global averages) by 2030. Within that strategy, there is an articulation of how the security sector will contribute to this broad national policy objective. From this document, the Liberian Ministry of Defense has the necessary foundational guidance to produce defense policy and strategy. Figure 3 is a depiction of the national policy and strategy of Liberia.

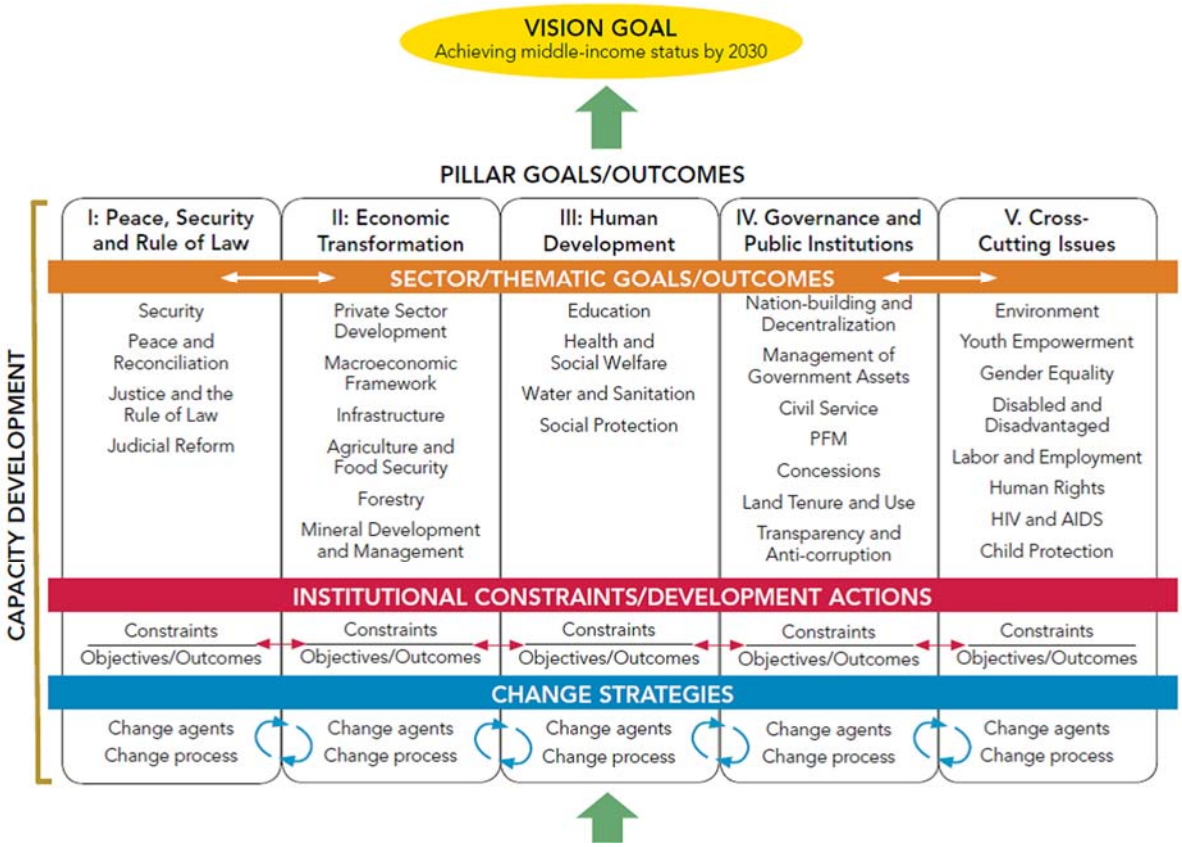

Figure 3. The National Development Strategy of Liberia[7]

Again, it is not so important that specifically titled documents exist. Rather, what is important is the identification, statement, and agreement of a nation's priorities and the expected role of defense and the armed forces. This may be present in formal, national policy directives and security strategy or it may have to be derived from other sources.

Also, understanding the process of how national security policy or strategy is established can provide useful information and insights for developing national defense policy and strategy. If a centralized and inclusive process is used, it suggests a broad understanding across government and

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7 The World Bank Institute, *Liberia's New National Development Strategy, Planning for Stronger Results in a Low Capacity Context*, accessed on the world wide web at: http://www.africa-platform.org/sites/default/files/resources/case_study_on_liberia_strategy_planning.pdf.

a process that can be utilized for national defense policy and strategy. However, if either a non-inclusive or non-centralized process is used, it suggests a more top-down, non-transparent, or fragmented approach. In such cases, formal policy and strategy is not likely to be more than words on paper that are never implemented. Defense leaders in such a nation that seek transparent reform of their institutions are unlikely to find existing policy and strategy formulation processes to be helpful for defense policy and strategy formulation.

F. When to Create Policy and Strategy; Understanding the Different Types

There are two broad categories of when nations should either review extant policy and strategy or create new policy and strategy. The categories are calendar driven and event driven. They are different in terms of process and the level of effort required, as summarized in Figure 4.

Attribute	Calendar	Event (SDR)
Timing	Regular; scheduled	One-off; unplanned
Scope	What has changed	Comprehensive
Participation	Within defense	Whole of government
Staff	Permanent office	Bespoke office created
Outcomes	Modest changes	Whole scale change
Duration	6 – 9 months	1 – 2 years

Figure 4. Attributes of Calendar and Event Driven Policy and Strategy Formulation

1. Calendar driven

This is a regular scheduled review typically timed to fit within wider inter-government processes, such as budget preparation and submission, or legally prescribed to occur on a regular cycle. For example, in Colombia, the law requires the president to issue a new National Development Plan following each presidential election and the plan must include sector strategies, to include a defense sector strategy. In the United States, the law requires that the Department of Defense submit a Quadrennial Defense Review to the Congress following each presidential election year.

The periodic cycle of these reviews is dependent on each country's specific processes and needs, but the cycle is commonly annual, biennial, or quadrennial. In some cases, a nation will

review existing policy and strategy on an annual or biennial basis while also planning for robust quadrennial reviews. In these cases, the annual reviews do not consume significant parts of the defense establishment. Rather, a fully manned division or office within the defense institution plans and executes these reviews with little assistance or consideration beyond defense.

Pre-planned and widely known about, annual or biennial reviews are a limited examination of existing defense policy and strategy, focused on environmental, legal, financial, or policy changes that occurred since the last review. As required, existing policy and strategy are updated and resulting force development, force generation, and operational priorities are adjusted. A quadrennial review, on the other hand, is more likely to be a robust effort that involves other than defense institutions and may result in a plan to reset existing force structure by reallocating resources toward new capabilities.

2. Event driven

These reviews are undertaken as a result of an unforeseen or significant change to the country, its government, or its environment (e.g., a newly democratic country, a country recovering from a recent conflict, or a severe change in economic conditions forcing significant adjustments to budget forecasts). The needs and implications of the defense ministry and armed forces need to be reviewed in the context of government-wide policies and priorities. Such a significant review is commonly known as a Strategic Defense Review (SDR). By involving the whole of government in the review, the process will address multiple facets of defense that may otherwise not need to be examined during calendar-driven reviews. For example, the relationship between the military services under the defense ministry and internal security forces under a different ministry's leadership and the responsibilities for providing internal security.

An SDR is a resource intensive effort and will consume significant labor hours within the defense establishment and elsewhere across government. While typically a top-down process, it should build consensus concerning the challenges defense must address. It should also provide direction regarding defense policies, capabilities, force structure, and budgetary issues. Depending on several factors, including the nature of unforeseen or significant change, the breadth and depth of the review, and the scale of the resulting changes, an SDR will take approximately one to two years. An SDR is explained in detail as an annex to this work.

To summarize, a calendar-driven process will likely start with a review of the extant national security and defense strategy. It will be a defense-focused review that examines the defense implications of security strategy, and then determines the changes required to defense policy and strategy and the resultant changes to defense priorities, actions, and resource allocation. An event-driven process should start at the national values and interests levels, with defense playing a contributing role to wider discussions involving the whole of government. During this stage, there is little the defense establishment can do on its own until the values, interests and national policies and strategies start to take shape. This is one of the reasons that an SDR process takes much longer than a regular, periodic process.

To conclude this section, there are also different types of policy and strategy that can be written or reviewed, and not all are suitable for the processes described above. The different types can be considered in one of two categories – Primary and Derivative.

3. Primary

These policies and strategies are at the national defense level, providing guidance across the whole of the defense enterprise. They set the overall direction and priorities for the defense sector. All other policies and strategies are subordinate and must be coherent with primary national defense policy and strategy.

> "Fundamentally, the purpose of an SDR is to foster discussions of and decisions about a country's vital interests, how best to protect them and to scope the required resources" - *Strategic Defense Reviews – Procedures, frameworks and tools to enhance future defense institution building projects,*" CSIS, Taylor and Boggs, Sept 2011

4. Derivative

These policies and strategies may be functional in nature and pertain to a specific topic, such as human capital development or acquisition. They may also be specific to operational or military service issues. Though they are lesser policies or strategies, they still provide important guidance on the priorities and functions of defense and should support the implementation of primary policy and strategy. Other examples of derivative policies or strategies are defense industrial policy, science and technology policy, policies on the use of less-than-lethal weapons, or a supply chain management and distribution strategy.

G. Developing Defense Policy and Strategy

There is no set or defined process for developing a national defense policy and strategy. Each process needs to be tailored to the particular country and set of circumstances where policy and strategy must be developed. Even those countries that undertake regular, periodic reviews tend to adopt a slightly different process each time.[8] However, there is a common set of **design parameters**, **design principles,** and **design questions** that have been identified as good practice when developing policy or strategy.

1. Design Parameters

These should be considered as the process is developed and include:

- Centralized or decentralized: A centralized approach that is directed from the top down and limits the actors involved is easier to manage. It will be easier to stay focused on the agreed scope of issues policy and strategy must address. A centralized

[8] GAO, *Quadrennial Defense Review - Future Reviews Could Benefit from Improved Department of Defense Analyses and Changes to Legislative Requirements*, Report to the Committee on Armed Services, U.S. Senate, GAO-07-709 (September 2007).

approach will tend to make fewer compromises, and will probably be conducted more quickly. A decentralized approach, which may be led from the top down but must adapt in accordance with agreed to recommendations that come from the bottom up, will take longer. However, broad stakeholder participation and buy-in and an increase in transparency from the broad participation does allow for a richer set of views and options to be examined.

- Role of the legislative branch of government: Beyond just the elected chief executive of a nation, if there are elected legislators assigned specific responsibility for oversight and/or appropriations of the defense sector, they play a role in successful implementation of defense policy and strategy. The more informed about the formulation of policy and strategy, especially when significant changes to previously established policy or strategy are being considered, the more likely that the resulting policy and strategy will be eventually approved and resourced by the legislators. Furthermore, legislators can provide political guidance on the envisioned priorities of emerging policy and strategy, as well as their view of the likelihood of the legislative branch of government to resource the new policy and/or strategy. However, their involvement should not become so granular that the legislative body or an individual legislator exercises direct influence over the formulation of what should be executive-level defense policy and strategy. That degree of involvement threatens the credibility of the process.
- Current capability and capacity of the armed forces: Information about the current capabilities restrains the scope of the process. A nation with sophisticated defense institutions, multiple international alliances or partnerships, and an expeditionary military will likely require a broad and detailed review to ensure that all aspects of defense capabilities are considered. A simpler defense sector need only focus on the core aspects of the military, what its purpose is, what its missions are, and the capabilities to deliver them.
- Perceived threats and challenges: Assumptions about the expected future environment is a necessary parameter to define. These assumptions must include threats, the challenges those threats present, and a stated decision as to whether defense must be prepared to respond to the challenges. This provides some guidance of what is likely to be expected from the armed forces and will inform the development of defense policy and strategy. As a simple example, a nation may face a threat from malign actors that attempt to use its territory as a base of operations to carry out attacks against unstable neighbors. Based on the threat, the armed forces may be assigned the challenge of preventing the use of sovereign territory as a base for foreign insurgent operations. This challenge, if prioritized higher than other potential challenges, may point to the need for more armed force capability that enhances border and territorial

security and less capability (for example) to sustain deployed operations at sea or in a foreign nation.

- Foreign policy objectives: The government's foreign policy aims can have a substantial impact on the development of a national defense policy and strategy. In some cases, a commitment to gain membership of an international body, such as NATO or the European Union, will drive a whole set of priorities, initiatives, and resources. In other cases, the stated objective may be to participate in UN Peacekeeping missions within the country's continent. Again, this will drive the priorities and resources for the country and needs to be reflected in policy and strategy.
- Urgency: A regular, periodic review will be planned in advance, with the only urgency likely being the need to complete the work on schedule so it informs broader government considerations of total resource allocation. An SDR will be reacting to a significant event and should already have urgency to it. However, attempting to conduct an SDR in less than 12 months is extremely challenging and a balance needs to be struck between expediency and depth of the review.

2. Design principles

While there is no set process or template for developing a national defense policy and strategy, there is a set of principles, which if followed, increase the likelihood the policy and strategy will be effectively implemented:

- Senior Ownership/Leadership: This specifically refers to those individuals who will make the final decisions and explain and justify them to other stakeholders in government and the public. These leaders must provide guidance at the beginning of the process and regular vector checks throughout the process. Furthermore, they need to be engaged at the senior levels of other government agencies and organizations that have a stake in approving or implementing defense policy and strategy. Succinctly stated, senior ownership "significantly increases the odds that the conclusions of the review will be actualized."[9]
  - Another essential reason for clear leadership of the policy and strategy formulation process is that policy and strategy require an organization to acknowledge choices among options that may ultimately require trade-offs among defense capabilities and a reallocation of resources within existing organizational structures. Because this is true, it should be an assumption that forces opposed to making choices that require trade-offs will be disruptive to the process. For that reason, senior ownership or leadership must be prepared to provide a clear intellectual framework and counterweight to those forces and to be responsible and accountable for making

[9] Jennifer M. Taylor and Emily Boggs *Strategic Defense Reviews – Procedures, frameworks and tools to enhance future defense institution building projects*, CSIS, (Washington, DC Sept 2011).

choice that require trade-offs. To summarize, strategy demands choices, not consensus, and choices require leadership.

- Identify the policy community: This is often a larger group than might be obvious at first. It can broadly be defined as those individuals and offices that have "knowledge of the problem and an interest in solving it."[10] If conducting an SDR-type process, this community will extend beyond the defense establishment and is likely to include national finance, foreign affairs, and non-defense security organizations (e.g., the ministries of finance, foreign affairs, and interior).
- Transparency: An inclusive, open, and transparent process helps ensure that interested and affected individuals and institutions will feel informed and part of the process. This does not mean that the process has to include everyone. However, a concerted effort to reach out and inform those affected but not necessarily part of the policy community will make implementation more efficient and successful.
- Resource informed: This has been mentioned earlier, but it is often a difficult issue. Policymakers do not want to be constrained by budgets, yet planners want the policy to be affordable. The balance is for the policy and strategy to be "resource-informed." This means that the costs of policy and strategy decisions are estimated and compared against estimated, future, defense budget projections. If policy recommendations or strategic approaches are found to be unaffordable, then they are not feasible and more options can be explored until policy makers arrive at feasible recommendations.
- Time-bound: There should be a definitive start and end to the process with clearly identifiable final products. This helps ensure that the process does not get locked into an infinite loop of policy development, resource assessment, and review. As the national defense policy and strategy normally fit into a broader cross-government effort, the timelines are often dictated to the defense establishment.
- Congruence: There must be a concerted effort to ensure that the process pulls its guidance from higher-level documents or the direct and attributable statements of national leaders. This needs to be echoed throughout the process to ensure that the resulting products and policies can be easily traced back to these documents or statements. Time spent on this traceability will pay off should the policies and strategies be challenged by others. If there is a difference between national defense policy and strategy and higher-level guidance, the reasons and an explanation should be documented.
- Assumptions: All assumptions, however small they may appear, must be documented and scrutinized by participants to ensure their validity and reasonableness. Making the assumptions available to the policy community for comment will strengthen the

[10] "Governing and Managing the Defence Sector", David Chuter, 2011 Institute for Security Studies Pretoria, South Africa, https://www.issafrica.org/uploads/Book2011GovManDefSec.pdf.

assumptions and bring additional credibility both to them and to the policy and strategy formulation process.

3. Design questions

Finally, there is a common set of questions that should be addressed when developing defense policy and strategy:

- What are the threats to the security environment and which are the responsibility of defense?
- What are the stated or inferred mission areas of the armed forces?
- Which mission areas do the armed forces have lead responsibility for and which ones are they supporting?
- What are the stated or derived priorities for those mission areas?
- What are the specified or implied military tasks for these mission areas?
- What is the current or expected readiness (based on planned resource allocations) of the armed forces to respond to each mission area?
- Is there an assessment of the capabilities of the existing force structure?
- Which organization has responsibility for ensuring the Armed Forces have the wherewithal to undertake each mission area?
- What are the priorities across and within the mission areas and military tasks?
- What are the estimated future resource allocations to these priorities?

H. Risk Assessment and Operational Challenges

A necessary aspect of policy and strategy formulation is to assess the risk of stated policy or strategy and to articulate the operational challenges the armed forces will be expected to meet. This is because it is not possible for any government to reduce its security risks to zero. Not even the significant resources of the United States (which spends more than the other top ten defense spenders combined)[11] can mitigate all the security risks to the nation and its interests. Therefore, it is necessary for the policy and strategy to be systematically analyzed and prioritized, in order for the available resources to be broadly allocated. This process is known as a Risk Assessment and its outputs are Operational Challenges.

A risk assessment is the systematic analysis of the future security environment against the policy and strategy of the government. The analysis will identify gaps in the already planned capability of the armed forces to deliver the policy and strategy. These identified gaps are termed,

[11] International Institute for Strategic Studies (IISS), *The Military Balance 2015* (11 February 2015) https://www.iiss.org/en/publications/military%20balance/issues/the-military-balance-2015-5ea6.

"Operational Challenges." These Operational Challenges are prioritized before being provided to planning processes for resolution within the forecasted or available defense budget limit. The assessment should be objective wherever and whenever possible, with a focus on transparency, openness, and repeatability.

There are five steps to the process:

- Future Security Environment;
- Scenarios;
- Risk Assessment Framework;
- Scenarios Analysis;
- Operational Challenges.

1. Future Security Environment

As mentioned during the discussion on design parameters in section 7, perceived threats need to be identified during defense policy and strategy formulation. An assessment of the future security environment will consider the perceived threats, including the timeframe of the threats (near, mid and far) and the likelihood of the threats materializing. It may be that the future security environment presents threats and opportunities not uniquely defense oriented. In these cases, it is important to identify the role of the defense enterprise to address the threat. By addressing each of the *design questions* (see section 7), the mission areas for the nation's armed forces will have been identified, along with their relative priority to each other. A transparent, open, and repeatable process needs to operationalize this to enable objective risk assessment to be undertaken. The key to this is scenarios.[12]

2. Scenarios[13]

The role of a scenario is to provide a common framework for analysis to support decision-making consistent with current government policy. They are a cost-effective tool for analysis of the armed forces, which provides standards and commonality across the defense enterprise to enable proper benchmarking and/or comparisons on often disparate things. Scenarios underpin the analysis conducted to inform senior leader deliberations and studies on strategy, policy, and acquisition matters. They support force sufficiency and effectiveness studies that examine the current force's ability to execute the defense strategy. They inform analysis of force development plans as well as alternatives and risk.

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[12] The term Defense Planning Scenario (DPS) has meaning specific to the U.S. Department of Defense. To reduce the potential for confusion, the term DPS is not used in this document.

[13] A full definition of scenarios and their use is in Annex B.

Typically, a scenario is a fictitious, yet plausible sequence of events set in the real world, 3 to 20 years in the future. The plausibility of the scenario is essential to its credibility. The sequence of events described by the scenario should be based on intelligence and provide a realistic depiction of challenges or problems that lead to military intervention. Looking fewer than three years forward is too little time for any major resource allocation or force structure changes to take place and is too similar to contingency planning. Farther than 20 years into the future means no action needs to be taken in the short term, so there is little for decision makers to decide. In addition, 20 years is so far away that there can be little confidence that projections made today will be accurate.

Scenarios flow from the future security environment. They are a cost-effective tool for providing evidenced-based analysis to support senior decision makers. However, they must be constructed, managed, and subject to sound analysis to be useful to senior decision makers.

A scenario may describe anything that leads to the use of the armed forces, either in a primary or a supporting role. International peacekeeping operations, non-combatant evacuation, response to international terrorism, humanitarian assistance, and armed conflicts are all examples. Regardless of the nature of the scenario, it should provide an agreed set of common data[14] enabling the analysis of different concepts, capabilities, technologies, force structures, and courses of action. Scenarios are not only useful in policy and strategy analysis but when "nested[15]" correctly are useful for capability analysis and planning. In order for scenarios to be of maximum utility, most nations will develop a number of scenarios to cover all the potential missions and operational environments deemed by senior defense leaders to be plausible, which in turn will test all current and planned capabilities of the armed forces.

3. Risk Assessment Framework

With insufficient resources to deliver the policy and strategy, it is important to understand the priorities and the attendant risks of the policy and strategy. The purpose of a risk assessment framework is to identify the areas of highest priority and to inform choices. A risk framework does not need to be overly complex. An effective risk assessment framework may be simple in nature and low cost but effective in its use.

[14] See Appendix B for the attributes and essential elements of a scenario.

[15] The nested nature is similar to a parent and child analogy, with strategic scenarios providing the context for several operational-level scenarios to be derived from it.

A classic and effective framework considers two essential elements:

- Likelihood – How likely is a particular event to occur? While this can be informed by intelligence, it is largely a subjective assessment that is commonly scaled in terms of low, medium, and high.
- Impact – What is the impact should a particular event occur? This can also be informed by intelligence but is largely a subjective assessment as well, scaled in terms of low, medium, and high.

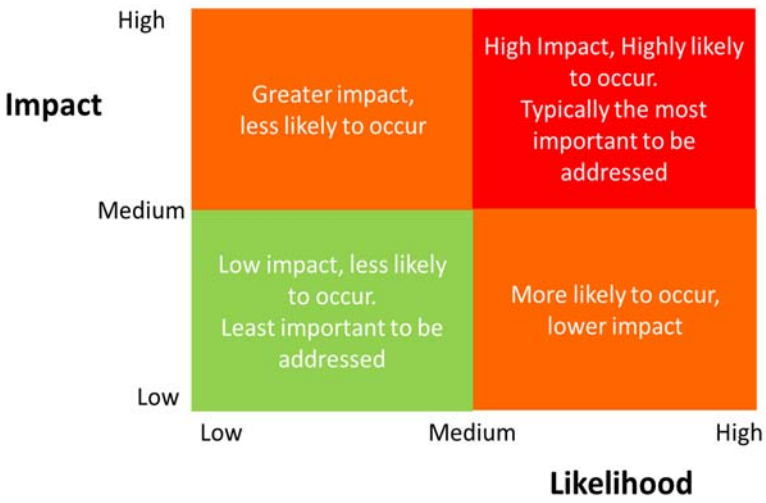

Figure 5. Risk Framework

Considering these two essential elements together provides an efficient and effective means of prioritizing. Clearly, the area in the top right (red) quadrant of Figure 5, represents the greatest risk, as it is both likely to occur and has high impact.

Urgency, a third element, can be helpful in prioritizing within each quadrant. Urgency considers when a risk might materialize and how long it will take to make changes in the force structure to mitigate the risk. If a risk is expected to materialize in five years and mitigation will take two years, then it is not particularly urgent. If a risk will materialize in three years and mitigation will take three years, then it is urgent. A risk assessment with all three elements – likelihood, impact, and urgency – will be helpful to prioritize where the limited management and analytical resources should be focused.

An initial use of a risk assessment framework is to analyze and prioritize the scenarios. The scenarios in the top right quadrant must be examined, while those in the bottom left quadrant are optional. The remainder should be considered, particularly those that are deemed urgent.

4. Scenario Analysis

The analysis of the scenarios at this stage does not need to be detailed, although a number of defense institutions responsible for managing globally deployed and diverse armed forces nations choose to analyze in great depth at this point. As a minimum, it is essential that the most likely military response, using the available and planned force structure, is identified for each scenario. Civilians can make a significant contribution during this stage by ensuring that the planned military response adheres to policy constraints and is proportionate, reasonable, and considers all

components of defense power from the outset. Where policy is not explicit, assumptions will need to be made concerning any simultaneity or dependencies among the scenarios.

Using analytic tools, military judgment, or a combination of both, an assessment needs to be made as to whether the scenario stresses the available and planned force structure to an unacceptable level. This indicates that the identified risk is too high. It is recognized that these are not precise terms and are subjective. Even the most sophisticated defense departments have a level of subjectivity in their analysis. This subjectivity is best mitigated by an open and transparent process in which others can scrutinize and ask questions about the judgments.

5. Operational Challenges

Where the scenario analysis determines the risk to be unacceptable (either more risk than was previously accepted or a new risk that was previously unidentified), these areas are categorized "operational challenges." Analysis of all the scenarios will lead to a series of operational challenges, which need to be prioritized due to resource constraints.

The risk assessment framework can also be used to prioritize the operational challenges. As a minimum, the operational challenges, which relate to the scenarios in the top right (red) quadrant of figure 5, should probably be identified as a priority and addressed first. This will provide a prioritized list of operational challenges, which need to be addressed within the resources available. It is recommended that each prioritized operational challenge be allocated to a single senior official or institution for developing defense's options for mitigation.

I. Defense Policy and Strategy Relationship to Defense Planning and Resource Allocation

As previously stated, no government will ever reduce all its nation's security risks to zero. Therefore, a primary governing act is to make difficult choices about how to allocate and manage resources against a prioritized set of capabilities intended to reduce risk and increase security. Policy and strategy should provide guidance to defense planners and analysts whose job it is to propose solutions that achieve this effect. In other words, the policy and strategy should provide some level of specificity to defense planning efforts that seek to implement strategy in accordance with policy and ultimately align the defense budget with policy's objectives. As stated in the previous section, the product of the analysis of the policy and strategy are a set of prioritized operational challenges. These then need to have mitigation options developed within the defense resources available, which is the role of a defense resource-management process that includes capability planning, programming, and budgeting.

However, it is important to remember that the operational challenges cannot be considered in isolation. The prioritized operational challenges need to be considered within a wider planning and resource allocation (or resource management) framework. Planners have the job of considering the priorities given by policy and strategy along with all the other (defense) enterprise wide

priorities and ultimately proposing an allocation of resources that serve to pay for defense activities necessary to achieve policy objectives.

Furthermore, even though defense policy and strategy may exist, defense leaders and planners are not immutably bound to act in accordance with extant policy and strategy. Sometimes, exigent, unplanned for circumstances arise that require senior leaders to make resource decisions contrary to formulated policy or strategy. A good example of this was the United States Army's decision to spend significant resources after the Iraq war began in 2003 on increasing the armor plating on its High Mobility Multipurpose Wheeled Vehicle, and subsequently on the development and fielding of the Mine Resistant Ambush Protection vehicle. No U.S. defense policy or strategy prior to the start of the war in Iraq in 2003 pointed to a need to prepare and equip U.S. ground troops against asymmetric threats from non-state actors utilizing improvised explosive devices (IEDs) against U.S. military formations. However, by 2004, this was the deadliest challenge facing U.S. ground troops in combat.

Though it was probably unintentional, Secretary of Defense Donald Rumsfeld articulated the problem defense leaders and planners face when confronting challenges not envisioned by historical policy and strategy formulation, but that nevertheless shape the capabilities of the future force. In late 2004, Secretary Rumsfeld was confronted by an audience of U.S. soldiers in Kuwait who complained about variations in and shortages of equipment, material, and spare parts amongst the units preparing to deploy to Iraq where IEDs were the most pervasive and deadly threat. Responding to the complaints, Secretary Rumsfeld said, "You go to war with the army you have, not the army you might want or wish to have at a later time."[16]

Subsequent U.S. defense strategy highlighted the irregular threat, defense policy placed emphasis on the rapid development and fielding of technology to counter IEDs, and resource management processes supported the new policy and strategy; however, this was after many resource decisions contrary to existing policy and strategy were already made. What this highlights is an unresolvable tension between anticipated future operations and current operations. When the future becomes current and operations require capabilities not anticipated in the past, then policy and strategy formulation have to adjust as current resource allocations reshape the force and make previous policy or strategy decisions unfeasible.

As covered earlier in this document, there is a set of questions defense policy and strategy addresses and which directly inform resource management processes. These questions are:

- What are the national interests?
- What are the global, regional, or domestic trends that may influence security?

[16] Eric Schmitt, "Iraq-Bound Troops Confront Rumsfeld Over Lack of Armor," *New York Times*, December 8, 2004.

- What are the anticipated future security challenges and the major risks to national security?
- What are the mission areas[17] of the armed forces?
- What are the desired attributes or the intended design of the armed forces?[18]

Defense planning processes make use of the answers policy and strategy formulates to these questions in order to propose institutional responses that may include:

- Changes in defense force structure (i.e., a change in the mix of personnel, equipment, and units);
- Changes in the posture (i.e., the location) and readiness of the forces; or
- Redistribution of the defense budget across the defense enterprise.

Defense resource planning may also point to the need for:

- An aggregate defense budget increase or decrease; and/or
- A decrease or increase in the percentage of GDP allocated for defense; or
- A need to revise the policy and strategy, because it is unaffordable.

Notwithstanding the tension between the future and the now, policy and strategy (if widely shared and available) serves to communicate the priorities of defense leaders to the members of defense sector, enabling those members to act consistently and with common purpose and direction. Therefore, policy and strategy should document, to the degree it is possible, the logic (or the approach) defense leaders believe will best align the future capabilities of the national defense sector to the challenges and/or opportunities anticipated. Armed with such information, defense planners can construct plans to resource a force with capabilities they assume are required to achieve the objectives specified (or intended) by policy and strategy.

To summarize, the relationship of policy and strategy to defense planning and resource allocation processes is:

- Defense policy and strategy are guiding references for defense planning processes that should ultimately determine how defense resources are utilized to build and sustain capabilities responsive to the specified and implied objectives of defense policy and strategy. These planning processes are capability planning, programming, and budgeting.

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[17] Mission areas are the most aggregate groupings of the activities charged to the defense enterprise. They answer the question: “What should the defense enterprise do?” Mission areas may be alternatively labeled as something similar (e.g., national security tasks or defense sector tasks).

[18] A strategy should not attempt to identify needed or required capabilities. Much more planning will be needed in order to make claims concerning needed or required capabilities (see Capability Planning Process).

- Defense policies and strategy inform choices concerning the potential redistribution of available resources to better respond to the future, resulting in a strategy-driven budget.

J. Conclusion

Policy is a set of stated objectives an organization is trying to achieve and strategy provides synthesis of ideas and an intended approach to achieve objectives. Well-formulated policy and strategy provides clear purpose to the multiple components of an organization or entity and is mindful of the environment within which it must be operationalized.

With respect to managing the defense enterprise, national defense policy and strategy connects the national law and/or national policy to the functional managers of defense for the entire defense enterprise. It communicates a common vision of the future, the priorities, and broadly speaking, the resources to be allocated to military services and defense components and agencies to implement the vision. By doing so, it provides a framework for identifying the potential consequences of the perceived security environment and the implications for defense planners – short-, medium- and long-term implications.

As we defined it, policy is a purposive and consistent course of action formulated by a specific political process, which is adopted, implemented, and enforced by a public agency. Policy may change as part of a review of strategy, or strategic options may be limited by policy.

From a defense perspective, strategy formulation is the synthesis of insight that produces the organizational vision and direction for how the defense establishment will accomplish its policy objectives. Most national armed forces are given the objective to defend their territory against incursion or invasion and to protect their population and natural resources from attack or exploitation. Specific to these objectives, the challenge for national leaders is to ensure that their nation and its armed forces are positioned to meet challenges that may arrive swiftly or unexpectedly.

To formulate policy and strategy, the defense sector should abide by certain design parameters and there are certain design choices in the policy and strategy making process to make. Just as importantly, policy and strategy formulation must ultimately guide national and defense leaders to make choices among various options so that policy and strategy provides clear guidance to defense planners.

Therefore, leaders responsible for formulating policy and strategy must consider options and make clear choices that position a nation and its armed forces to be able to achieve national objectives. The result is that policy and strategy render guidance that informs defense not only what it will do but, just as importantly, what it will not do. Furthermore, it prioritizes what to do. Given that no nation can reduce its security risks to zero, clear choices and priorities are the essential output of the policy and strategy formulation process that guides the planning processes responsible to develop and utilize defense capabilities.

Appendix A.
Strategic Defense Reviews

A. Introduction

Conducting a Strategic Defense Review (SDR) is a means of developing national defense policy and strategy. Its nature is comprehensive and resource intensive. To be successful requires significant senior leadership involvement and typically takes one to two years to complete. An SDR is not a feasible means of producing defense policy and strategy on a regular basis. Rather, an SDR should be undertaken where circumstances necessitate it, where the host country will be able to implement its results, and where the most senior leaders in the country are willing participants.

B. When to conduct an SDR

As discussed in the main body of the paper, the most common time for an SDR to be undertaken is following an unforeseen or significant change to the nation, its government, or its security environment that requires the defense sector to be reviewed in the context of government-wide priorities, policies, and resources. These events can be unforeseen (e.g., a severe economic downturn or a newly democratic country emerging from conflict) or they can be planned in advance (e.g., the United States requires a Quadrennial Defense Review (QDR) every four years[19] and the United Kingdom plans to conduct a Strategic Defense and Security Review (SDSR) every five years).[20] Identifying the catalyst for conducting an SDR provides clear indicators towards the focus of the review. In the event of an economic downturn, the review will be about reducing the defense budget so it aligns with a reduced budget forecast while still funding high priority programs and initiatives. A country emerging from internal conflict will likely focus on restructuring its armed forces from an emphasis on internal security towards new mission areas that align with national strategy and objectives in an expected, post-conflict environment.

Regardless of the reason for conducting an SDR, it is important that the process produce prioritized recommendations consistent with the government's objectives. The review must also provide a plan to implement the approved recommendations, because implementation is where defense transformation takes place. Therefore, to ensure that an SDR has a successful outcome, the process must encompass the implementation of decisions that result from the review.

A country's history, culture, and experience of transformation will shape the nature of the SDR; however, any SDR needs to be a disciplined process that adheres to some common principles.

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[19] Title 10, United States Code, Section 118(a).

[20] UK Ministry of Defence, *The Strategic Defence and Security Review*, Paragraph 1.3 (London: The Stationary Office, October 2010).

C. Setting the Scope and Participation

Having decided to undertake an SDR, two initial decisions that relate to the overall scope of the review and the breadth of participation need to be made, and these need to be thought about in broad terms:

Scope: What will the review entail? Will it cover all aspects of defense and security or select aspects? For example, based on events or environmental conditions, a nation may want its SDR to consider only domestic security capabilities. A wider scope that considers a nation's role in international peacekeeping or within a defense alliance will require participation by a broader range of executive agencies than just the Defense Ministry and the military services. The Finance Ministry (or the Treasury), the Foreign Affairs Ministry, and the Interior Ministry are all examples of agencies that typically have a role in resourcing defense, providing defense, setting defense policy, or supporting defense ministry and military service activities.

Participation: Who participates in the SDR and what is the nature of each agency's or individual's participation? The answer is that participation should be determined by scope, and scope should result from the reason the SDR is being conducted in the first place. It is common that an SDR have active participation from the national foreign policy, finance, and internal security agencies. Also, an SDR may have a coordinating body (or agent) that participates on behalf of the national executive (i.e., the prime minister or president). This body can be permanent, such as the United States' National Security Council staff, or created to function during the SDR. Additionally, some nations may request participation by key allies[21] or international governmental organizations.

D. SDR Design Principles

The design principles referred to earlier in the paper are immutable. They also apply to an SDR. The points below provide some specifics as to how and why the design principles apply to an SDR.

- Identify the policy community: The policy community for an SDR is likely to include more people than an annual/biennial review of policy and strategy. If the scope of the review is wide, then the community should include all forms of security agencies (military and domestic security services, as well as intelligence services), foreign policy and treasury agencies, and perhaps prominent members of civil society.[22]
- Transparency: The outcomes resulting from an SDR typically have significant national resource implications. A lack of transparency, meaning the SDR process is not open and inclusive of all stakeholders, will make implementing SDR decisions

[21] Deputy Secretary of Defense Gordon England remarks at Center for Strategic and International Studies on 1 February 2006 - http://www.defense.gov/qdr/report/FinalCSIS.pdf.

[22] UK Ministry of Defence, The Strategic Defence Review – A New Chapter, Supporting Information and Analysis, Section 7 paragraph 73 (London: The Stationary Office, July 2002).

more difficult. In fact, stakeholders excluded from the process may work to undermine implementation and use lack of transparency as a basis for their actions. Transparency may also extend to the public through a public consultation process.[23] Given public taxes pay for defense, extending transparency to the public can be a useful means of obtaining insights into the public's thoughts on defense priorities and assessing the public will for maintaining or increasing the defense budget.

- Resource-informed: An SDR is successful if its recommendations are implemented. Being resource-informed means SDR decisions should be affordable and that makes implementation possible. The active participation of the national budget agency (or agencies) in the review can be vital, as they are normally the final arbiters on significant investments or reprioritization of national financial resources.
- Time-bound: If an end-point is not decided by senior leaders at the beginning, the process can take on a life of its own and drag on for a long time. This does not need to be a public declaration or commitment to a specific date. It can be tied to an already existing process, such as budget submissions, or a time of year, such as winter.
- Senior Ownership: An SDR must be demonstrably led from the highest levels of government, because an SDR examines issues usually the responsibility of more than one government department or agency. A complex, multi-agency or multi-ministry SDR is often sponsored by the prime minister or president. This has the benefit of forcing government departments that usually compete with each other for limited budgetary resources to work together.
- Congruence: Final SDR recommendations and the subsequent outcomes from implementation should trace back to higher-level guidance that provided the impetus for the SDR. The stakeholders and the public should be able to relate to the decisions that result from an SDR.
- Assumptions: The need to catalogue, challenge, and consolidate all assumptions is crucial to the success of an SDR. Due to the scale of the review, this can be a difficult task. Because multiple government departments and agencies are participating, an SDR may require an executive secretary (discussed more fully in section 5 of this appendix) to manage the process and, just as importantly, document the assumptions. Airing these assumptions among the policy community (and the public as necessary) will significantly build trust that the review is open and transparent. Participants should be able to challenge assumptions on a constructive basis, as these assumptions can significantly drive policy and resources.

[23] UK Ministry of Defence, The Strategic Defence Review: A New Chapter-Public Discussion Paper (London: The Stationary Office, February 2002).

E. SDR Management

Conducting an SDR is a challenging management assignment. Each individual participant in an SDR brings the perspective, and perhaps the agenda, of the organization he or she represents. Therefore, the person ultimately responsible for conducting the SDR and submitting the final recommendations must manage the SDR team and must manage the interests of the various organizations that have representatives taking part. To meet this challenge, there are four common aspects to successful management of an SDR,[24] as depicted in Figure A-1: senior-leader steering group or committee; full-time secretariat; working groups; and agreed-upon terms of reference.

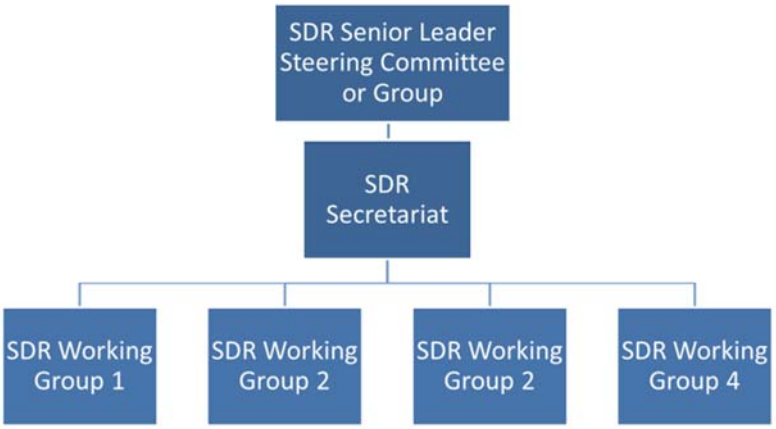

Figure A-1. SDR Management Structure

- Senior-leader steering group or committee: This group provides essential guidance, scrutiny, and oversight of the SDR process. The members should be leaders who can represent the organizations within the government taking part in the review. It may also be advantageous to include one or two members from outside the defense sector in a non-executive director role, as they "provide a creative contribution through independent oversight and constructive challenge."[25] Membership of this group or committee should be considered as an additional duty for those participating. These are not full-time roles and it is important that the leaders assigned to the senior steering group remain connected with the organizations they represent. Meetings should be scheduled regularly but not more than once a month unless contentious issues arising from the review require immediate attention. The SDR Secretariat will have responsibility for serving the needs of the senior steering group, ensuring that their guidance is adhered to, and providing the agenda and materials for their meetings.
- Full time Secretariat – The daily management of conducting an SDR requires a dedicated staff to ensure the process remains on schedule and consistent with senior level guidance. The secretariat is responsible for knowledge management. The secretariat records and keeps records of all assumptions. It also records, disseminates,

[24] Ibid.

[25] The Institute of Directors, "The Role of a Non-Executive Director" (accessed 13th November 2014), http://www.iod.com/guidance/briefings/cgbis-role-of-nxds.

and archives the output of the working groups and the senior steering group. Individuals selected to form the secretariat need to understand the breadth and depth of the topics scoped for review. They should have experience working with other government departments, and they need to be comfortable working with senior government officials. Finally, the leader of the secretariat (sometimes referred to as the executive secretary) should have the confidence of the members of the senior steering group and be empowered to work independently across government departments in order to keep the process on schedule.

- Working Groups – Working groups are created to examine specific issues and recommend solutions as directed by the Secretariat on behalf of the steering group. Each working group should be chaired by a subject matter expert, and membership should consist of those knowledgeable or responsible for the particular issue. Membership of a working group is normally considered an additional duty, with the possible exception of the chairperson of each group.
- Terms of Reference – Having an unambiguous, agreed to Terms of Reference (TOR) at the beginning of an SDR to define the scope, responsibilities, process, timetable, participants, and expectations is a requirement. The TOR should either be approved by the person or persons responsible to approve the recommendations of the SDR (i.e., the Chief Executive of the nation) or at least by the person or people responsible to submit the recommendations (i.e., the minister of defense). Also, the TOR must be available to all participating in the review and to those leaders of organizations who contribute personnel to the review. Time spent at the beginning of an SDR creating the TOR and gaining its agreement is time well spent. It will prevent and solve arguments and points of contention as the process proceeds.

F. SDR Process

There are seven procedural steps each SDR should follow[26] in order to arrive at a successful conclusion, as illustrated in Figure A-2. Though some countries may consolidate steps while others will expand them to suit their particular needs, the seven steps are:

i. Preparation: Write, get approval, and publish the TOR. The TOR must establish the governance of the review including the membership of the senior-level steering group or committee and the role of the Secretariat. This should include the identification of the departments, agencies, and entities that will be members of the group or committee. The

[26] US DOD, DASD (PS&SO) "SDR 101" Brief, 27th Jan 2011.

TOR should also assign individuals to the Secretariat and obtain resources (office space, equipment, travel funds, supplies, etc.) for the Secretariat.

ii. National security policy framework: This is rarely conducted by the defense establishment on its own. It is often led by a central body or the president or prime minister's office. The need here is to either review or write a basic set of national documents – National Policy and National Security Strategy. These need to identify and prioritize the national interests and objectives, and must include a strategic environmental assessment that identifies the challenges to the nation's security and the opportunities for defense to increase national security. The roles and responsibilities for addressing these threats and opportunities need to be clearly identified along with any national or cross-government assumptions.

Figure A-2. SDR Process

iii. Establish planning assumptions: Each department and agency involved in the SDR needs to develop a set of short (1-24 months), medium (2-5 years), and long term (5+ years) planning assumptions. These need to consolidated, reviewed, and agreed to as the initial assumptions for the SDR. Based on national roles and responsibilities, a range of suitable planning scenarios need to be developed and agreed to as the standard to assess and evaluate solutions to the challenges or to take advantage of opportunities. A set of standard scenarios is also necessary when comparing the competing interests and proposed solutions of multiple government agencies. Scenarios are also useful to evaluate proposed capabilities to meet the objectives of the SDR or to overcome the challenges presented in planning scenarios.

iv. Define military tasks: Based on national roles and responsibilities, a list of military mission areas should be developed and agreed to. Each military service is then responsible for identifying the military tasks required to successfully conduct operations within the mission areas. Using the standard planning scenarios (see Annex B for a more robust list of scenario characteristics), analysis should provide options on the capabilities required to execute the military tasks envisioned. The options need to be compared with the current and planned defense capabilities, and gaps or overlaps should be identified. Gaps must also be prioritized. A useful framework for capability analysis is to consider capability as a balanced integration of Doctrine, Organization, Training, Materiel, Leadership and

Education, Personnel, Facilities and Policy (DOTMLPF-P). Capability should be evaluated in terms of each of these components to determine whether a gap exists.

v. Force structure options: Using the outputs from the military task analysis, costed force structure options need to be developed. These costed force structure options should be specific enough for the individual military service to analyze their feasibility. Each force structure option should highlight the ability of each option to deliver specified military capability against envisioned tasks at an estimated cost and include potential areas of risk. The force structure options should also include recommendations for divestiture of capability. An SDR conducted due to a shrinking fiscal environment will not conclude successfully without some recommended tradeoffs to existing spending. An SDR conducted based on the assumption of a significantly altered future operating environment would exhibit shallow analysis if the recommendations did not propose divestiture of legacy capabilities suited to the historical but not the future environment.

vi. Decisions: The force structure options and their detailed implications need to be coordinated across the policy community. If the senior-level steering group is effective and well served by the Secretariat, this should be occurring as a matter of process. A decision brief should be presented to the chief executive (president or prime minister) for final approval or redirection.

vii. Announcement and implementation: Final decisions need to be recorded within an executable implementation plan. Otherwise, the entire SDR effort will have been a window dressing exercise leading to no change. It is recommended a directive or order to implement the decisions of the SDR be published in the chief executive's name. The directive should specify who is responsible for implementing each recommendation, with what resources, with support from whom, and by when. Finally, an external communications plan should also be developed in order to educate the national defense and security policy community, the public, and allies and international partners on findings, recommendations, and plans for implementation resultant from the SDR**.**

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Appendix B.
Defense Scenarios

A. What is a Scenario?

There are many possible definitions of a scenario[27]. Our definition is that a scenario is *a synopsis of a projected course of future events, including political-military and technological considerations for both threats and friendly forces. It is a fictitious, yet plausible sequence of events set in the real world, 3 to 20 years in the future.*

The plausibility of the scenario is essential to its credibility. Plausibility may be designed into the scenario if the sequence of events described that lead to military intervention is based on intelligence. The timeframe is also a critical design feature. Looking less than three years forward is too little time for any major resource allocation or force structure changes to take place and is too similar to contingency planning. Further than 20 years into the future means no action needs to be taken in the short term, so there is little for decision-makers to decide. Furthermore, 20 years is so far away that there can be little confidence that projections made today will be accurate.

A scenario can cover any type of mission that involves the use of the armed forces. This includes scenarios that have the armed forces in support of other government departments or agencies, such as disaster relief or humanitarian support, both overseas and at home.

While every scenario is unique, and each nation must develop scenarios that are fit for their purpose, there are a number of common elements that a scenario should encompass. Later in the annex is a more detailed description of these elements.

B. Why are scenarios needed?

Scenarios provide senior decision-makers with a mechanism to produce impartial, evidence-based advice on a range of critical issues, and they are a basis for conducting studies and analysis to support decision making. A principal use of scenarios is evaluating risk. Scenarios should confront decision makers with choices that can be evaluated in terms of how risk is mitigated or accepted based on choices. These choices include options for how the armed forces are structured between the various military service components, how the armed forces are resourced, or which new defense capabilities to pursue. A risk analysis of various options along with their estimated costs help decision-makers understand the trade space for addressing security challenges presented by scenarios.

[27] It is necessary to clarify that the term Defense Planning Scenario (DPS) has meaning specific to the U.S. Department of Defense. To reduce the potential for confusion, the term DPS is not used during this study. This study simply refers to scenarios.

Scenarios provide an agreed set of common data, enabling the study and analysis of concepts, capabilities, technologies, and force structures. The introduction and use of scenarios significantly reduces the dependence on expensive development activities and exercises. They are also more repeatable and auditable than tabletop exercises, which can be useful for exploring operational concepts but are hard to use if the objective is to examine risk and options across the entire defense enterprise.

Scenarios provide the baseline from which previously incomparable concepts or capabilities may be assessed and compared on the basis of cost and effectiveness. For example, scenario-based analysis could provide insights on how to increase fire support, be it from mortars, field artillery (cannon or rocket), attack helicopters, and/or close-air support. Correctly constructed scenario-based analysis will provide objective, evidence-based advice on the most cost-effective balance across these potential capability options independent of specific military service advocacy.

C. What is the Role of a Scenario?

The role of a scenario is to provide a common framework for analysis to support decision-making consistent with current government policy. The connection to policy is to ensure the scenario is relevant to challenges the government wants the armed forces to confront in the future.

Scenarios provide a standard or common means across the defense enterprise to make comparisons between dissimilar things. This is possible by holding certain variables such as weather, enemy response, and foreign government response constant through well-documented assumptions about the depicted operating environment within a scenario.

Scenarios underpin the analysis conducted to inform senior leader deliberations and studies on strategy, policy, and acquisition matters. They support force sufficiency and effectiveness studies that examine either the current or future force's ability to execute the defense strategy. Such studies allow for an examination of alternatives to force development plans and risk.

Scenarios should not advocate for a particular component of the armed forces, capability, or solution. Rather, scenarios should depict the armed forces' operating environments and expected challenges without prejudice towards any one military service or military capability.

Scenarios can also put a spotlight on often-overlooked areas of military need. These are usually jointly owned or supporting capabilities such as intelligence, surveillance, and reconnaissance, search and rescue, or combat services such as medical or transportation units. These are areas that are necessary for the armed forces to undertake a mission, but are often missed or ignored. Scenarios enable analysis across all lines of capability development – Doctrine, Organization, Training, Material, Leadership and Education, Personnel, Facilities, and Policies (DOTMLPF-P) to identify joint-based capability solutions.

D. The Nature of Scenarios

Scenarios need to represent a plausible, logical, and realistic sequence of events that present challenges requiring a response by the armed forces. It is crucial to have well-constructed and auditable studies and an analysis team that provides the basis for scenario development. This will lead to a plausible, realistic scenario. A way to measure plausibility is by whether the scenarios enable the development of feasible (i.e., possible to implement) joint concepts, which in turn provide input to joint capability planning.

Eventually, a defense department or defense ministry ought to have developed enough scenarios to cover all the potential mission areas the government may expect the armed forces to operate within. Each scenario should be independent and able to stand on its own. However, scenarios may have a nested nature that links strategic scenarios to operational and tactical scenarios, as illustrated in Figure B-1. This ensures commonality of context and assumptions. It is also more efficient, reducing development costs. However, it is more important to produce quality scenarios, as opposed to a large number of scenarios.

A few well-written scenarios that correspond to the priority mission area challenges of the chief executive and defense leaders will have more utility than many scenarios that are too shallow for useful analysis. Ultimately, scenarios point armed forces leadership to force development on the basis of capability planning. Given that most military capabilities are fungible, if capabilities are developed on the basis of well-written, carefully researched scenarios and their resultant joint concepts, then a nation is likely to be prepared to meet whatever challenges it may face.

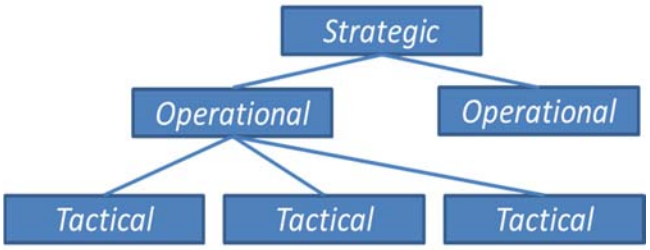

Figure B-1. Nesting of Scenarios

E. Nested Nature of Scenarios

As noted in the previous paragraph, scenarios may have a nested nature that links strategic scenarios to operational and tactical scenarios. This ensures commonality of context and assumptions, and is more efficient, reducing development costs. Nesting scenarios this way enables the analysis to be consistent across the various levels, and enables capabilities to be more easily compared and alternatives to be analyzed. Strategic scenarios provide context for several operational-level scenarios. Operational scenarios can be devolved to tactical-level scenarios. At each level, the subordinate scenarios carry forward certain assumptions like temporal and spatial matters and the capabilities of forces opposed to or working with the nation's armed forces.

F. Key Attributes of a Scenario

For scenarios to be of maximum utility, most nations develop enough scenarios to cover all the potential or assigned mission areas of the armed forces. These scenarios also need to cover all potential operational environments, and all the current and planned capabilities of the armed forces.

Regardless of the mission are covered or the operational environment described, we identify five key attributes any scenario should have. These attributes should be considered a standard for developing and evaluating scenarios. Should a scenario have all five attributes, it is likely (but not guaranteed) to be suitable for analysis to support a senior decision-maker.

The five attributes are: Relevant, Reasonable, Robust, Reusable, and Responsive.

1. Relevant

A scenario must be relevant to current government policy. If it is not, it will not be suitable for evaluating risk, examining options, and understanding resource allocation implications. The characteristics of relevancy are:

- Scenarios should be set no less than 3 and no more than 20 years into the future. This enables the scenarios to be distinct from contingency planning, though there can be overlap between them around the three-year mark. Usually, scenarios will need to be set further in the future to enable sufficient time for solutions to be developed to the challenges depicted. For example, the acquisition of new weapon systems, which usually have long lead times given their cost and the resultant need to introduce new doctrine and training and possibly new infrastructure before their full capability can be utilized. A scenario more than 20 years in the future is too far to be useful for analysis because they begin to fail the test of plausibility.
- The scenario must represent a future mission area the government is likely to ask the armed forces to operate within. It is recommended that enough scenarios be developed to cover ALL the potential mission areas the armed forces may be asked to participate in; however, as already stated, start with producing scenarios that cover those mission areas that represent the highest priorities of the chief executive or defense leaders.
- Each scenario should describe the joint campaign, force structure, plans, capabilities, and tactics of both friendly and opposing forces. There should be no advocacy for a particular military service, capability, or technology.
- Scenarios should depict the already developed ways and means for conducting armed forces' operations or they should clearly point to plausible and feasible operating concepts that depict how armed forces may operate in the future.
- Proceeding from the previous bullet, scenarios should use information that is based on projected or planned for force structure capabilities derived from existing

concepts, force development plans, budget projections, and intelligence. Using this information, the scenario should challenge the existing and planned force structure.

2. Reasonable

A reasonable scenario will be logical, with each step, stage, and assumption being credible. There should be no leaps of faith. Key characteristics are:

- The hypothetical sequence of events that leads to an armed forces' response should be logical, sensible, and plausible. Ideally, the timelines that lead up to a response will come from acclaimed, credible sources or from intelligence analysis. The sequence must be representative of expected warning times or it is not plausible.
- Any assumptions about likely adversaries need to be credible, transparent, and based on vetted intelligence or widely validated open source information. This will help to prevent parochial interests from advocating for enemy forces and tactics that may be an attempt to justify the acquisition of a particular capability or technology.
- Scenarios should be developed in an open and transparent process in which all stakeholders have the opportunity to provide input and advocate their position. The policy community must exert its authority to ensure scenarios are consistent with the government's policy objectives.
- Joint concepts of operation utilized to describe what friendly or adversarial forces may do should be consistent with known national strategy and doctrine. In the case of the adversary, this should preferably be based on intelligence.
- The environmental conditions of the scenario must be consistent with the geography and the season described.

3. Robust

A scenario must be robust enough to withstand scrutiny from within and outside of the defense community to include other government agencies, and increasingly from the public. Key characteristics are:

- The scenario and its challenges should be independent of any one military service. The scenario should provide an analytic means of testing multiple responses to the challenges presented and not advocate, promote or prove a single capability solution.
- The scenario needs to be credible and reasonable, yet still stressful enough that analysis will identify potential capability gaps and weaknesses in existing strategy, doctrine, future force structure, capabilities, technologies, or joint operating concepts and tactics;
- A robust scenario will be effective in providing measurement space for analysts to assess and test proposed operating concepts against the challenges the scenario presents;

- If a scenario assumes that there will be a multi-national response, the scenario needs to reflect the primary nation's operating force within the larger context of a coalition of nations. A scenario involving a coalition operation must identify the framework nation. The framework nation will be responsible for providing all the joint HQ and necessary enabling capabilities. Further, the framework nation's concepts and doctrine will probably be used as the references for operational planning. Similarly, a humanitarian relief scenario should reflect the role and relationship of non-defense and non-governmental agencies involved in the operation alongside the armed forces.

4. Reusable

A scenario should be reusable across a wide range of studies, thereby making its development a cost-effective investment that can be used repeatedly to provide evidence-based advice to senior decision makers. Key characteristics are:

- A scenario should not be developed for the sole purpose of a single study. Each scenario should have utility across a broad range of studies and analysis. However, it is not cost effective for all scenarios to be examined by all studies. A study should determine the scenarios it needs to examine in order to provide a sound foundation for a decision.
- Each scenario should be approved by the proper authorities (often the defense policy office's leadership) for its intended use. To provide maximum cost effectiveness, each scenario should be properly documented, especially the assumptions. Should a variation of a scenario be used, it too should be properly documented and the differences noted to ensure transparency and consistency.
- A management body should monitor the use of the scenarios by the various studies and ensure that the scenarios are being used appropriately.
- The breadth of the portfolio of scenarios should cover all potential mission areas that may require an armed forces response, as well as all potential operating environments and any other key aspects, such as being the framework nation or the use of strategic weapons.
- As previously stated, the scenarios should be nested to provide clear linkage from strategic levels to tactical levels, ensuring continuity of policy and assumptions and efficient development.

5. Responsive

A responsive scenario will ensure cost effectiveness and facilitate timely studies. Key characteristics are:

- The scenario, all its assumptions, and underlying data should be readily available to a study when needed, without the need for further (lengthy) development. Often this means these details being held in a central on-line repository with password access to manage and monitor use.
- The scenario design meets the analytical and decision-making needs of the senior decision-maker.
- The scenario should be flexible enough so a study can conduct analysis of reasonable alternatives. This means that a given scenario should not be so specific with respect to its temporal and spatial assumptions that it could not be modified.
- When scenarios do not already exist, then scenario development should be prioritized to ensure those needed for high priority, critical studies are developed first.

G. Structure of Scenarios

There is no set standard for the structure of scenarios across the international community or that can be identified as international best practice. What is important is that the scenarios are structured to fit the needs of a particular nation.

However, there are a number of **essential elements** a scenario should cover – including scenario context, military mission, assumptions, constraints, restrictions, geography, timeframe, timescales, and rules of engagement (ROE). Without these elements, a scenario will be unfit for purpose and fail an assessment against the five key attributes – relevance, reasonable, robust, reusable, and responsive.

Also identified are a number of **non-essential, but common elements** to scenarios, which will enhance their credibility, utility, and assessment against the key attributes. These include authority for military action, coalition activity, acceptable variations, and the role of non-combatants.

1. Essential Elements of Scenarios

Context – a description of the situation that leads to the need for military intervention. This does not need to be long or cover every detail. A short narrative of several paragraphs can be sufficient.

Military mission – a short statement on the type of military mission to be undertaken.

Assumptions – a list of the assumptions about the scenario including adversarial, neutral, and coalition forces (as relevant), risk of escalation, and use of weapons of mass destruction (if relevant).

Constraints – the actions or activities that the armed forces **must** undertake; for example, protecting the indigenous population or de-mining.

Restrictions – actions or activities that the armed forces must not undertake; for example, pursuit into an adjacent country or escalating the conflict out of a nation's territory.

Environment – a statement of the geographic location and prevailing weather conditions, often accompanied by a map of the region and a note on any geographical or environmental restrictions. Tactical level scenarios should indicate whether it is a day, night, or reduced visibility operation.

Timeframe – the period in which the scenario can take place. Note that some scenarios may only be relevant for the 3-to-5-year period and others may only be relevant in 5+ or 10+ years.

Time scales – a description of the timeline to the point in the scenario that a military response is required. This will commonly cover: ambiguous warning, unambiguous warning, partial mobilization, full mobilization, force deployment, force arrival, D-day, H-hour, V-day.

Rules of engagement (ROE) – a statement of the ROE and under what circumstances they could be changed. If possible, this should include the enemy and coalition forces ROE too.

End-state – a statement on the desired end state for the military response; for example, all entitled non-combatants successfully evacuated, or the territorial integrity has been restored, or a terrorist's cells/capabilities destroyed.

2. Non-Essential but Common Elements of Scenarios

Authority - A statement of the legal basis or authority for the military intervention taking place, e.g., UN resolution, mutual defense treaty, NATO Article 5, etc. This assists in identifying the scope of the mission and the likely rules of engagement.

Coalition - If relevant to the scenario, a statement on the contribution from, and the role of any coalition partner(s). As stated earlier, it is important to identify which nation in a coalition operation will be the framework nation and thereby provide the HQ elements and the necessary enabling capabilities.

Variations - It is desirable from a management and policing perspective to carefully identify and document acceptable variations from the scenarios baseline. These are essential for sensitivity analysis or an analysis of alternative options. This helps to ensure studies and analysis stay within accepted parameters while exploring options.

Non-combatants - It is common to include a description on the role of non-combatants and any consequential assumptions or constraints. This should include the size, role, and location

of indigenous personnel and non-government organizations (NGOs) such as the Red Cross and Médecins Sans Frontières.

H. Management of Scenarios

Because scenarios play a key role in decision-making and future force structure development, the scenarios and their development require management to prevent their utilization in the service of parochial interests. Ownership and management of the scenarios is normally held within the defense ministry and usually within the office responsible for defense policy or defense studies and analysis. Wherever the office is, its purpose is to ensure:

- scenarios adequately cover the government's policy and all potential mission areas the armed forces may undertake;
- scenario development staff is focused on defense leadership's priorities– both during development and review;
- plausibility of the scenario, its connection with intelligence, and the analysis of future strategic environment;
- the joint military perspective is represented throughout the scenario and there is no single service or capability advocacy;
- the development of the scenarios, their oversight, and their use is open and transparent.

The dedicated and permanent office assigned responsibility for the management of the scenarios will vary in size. This is largely dependent on the number of scenarios, the overall size of the armed forces, and how scenarios are used. The staff should work under the authority of the senior defense leader (often the secretary or minister of defense). In some countries, for valid reasons such as staff capacity or the complexity and variety of defense mission areas, management of scenarios may be split among several offices.

Finally, even if the office is within the defense ministry and not the armed forces staff, it should be staffed with active military officers (to provide military views and judgment) as well as civilians (to provide continuity, impartiality, and analysis). Collectively, these military and civilian professionals will have the responsibility and authority to create and update scenarios as they identify gaps in the scenarios' coverage of policy. In addition, they will manage the scenario documentation, monitor their use, and ensure their availability, working closely and cooperatively with other offices and importantly the analytic community.

I. Parochial Interests

While it is clear that scenarios are useful tools in the production of analyses to support senior decision makers, they are still open to abuse by those looking to promote their parochial interests.

In the majority of cases, it will be the armed forces' individual service components that try to manipulate the scenarios to tilt the analytic process toward their desired answer or conclusion. However, central staffs can also be guilty of parochialism in their attempts to reduce costs or justify a particular force structure, etc.

There are different ways in which a scenario or the process can be manipulated. An open and transparent management and development process are the keys to identify and prevent manipulation. Common abuses for which to be particularly vigilant include:

- Subtle changing of key assumptions or the addition of new assumptions, such as basing options, access to host nation facilities, or warning times;
- Variations to the base scenario that necessitate a particular solution or capability, e.g., enemy forces acquire significant anti-jamming or area denial capabilities;
- Incomplete analysis that does not examine the broader utility of a capability, e.g., only examining Day 1 of a conflict that would favor the contribution of air defense fighters and not close air support or sufficiently stress logistics capabilities (particularly war reserve stocks) that may not become apparent until several days of combat have occurred.

Those responsible to manage and develop scenarios have a collective responsibility to identify and prevent any and all of the above. Such behaviors undermine the credibility of the use of scenarios, the analytic tools, and ultimately the advice to senior decision-makers.

Appendix C.
Glossary

Acquisition	Encompasses a wide range of activities related to acquiring equipment, facilities, and services, including setting requirements, procuring those items, and supporting them through the entire life cycle.
Budget	The fiscally-constrained proposal that identifies the resources required to accomplish the first year of the Defense Program approved by the Secretary/Minister. The budget proposal includes all available funding sources, including but not limited to appropriated funds, the funds from special budgets, and other non-appropriated funds, as appropriate.
Capability (General)	An organization's ability to preplan and accomplish an objective and achieve the effects desired in a given environment and specified time period. Capability is generally a function of organizational structure, including personnel and equipment on hand; the readiness of personnel and equipment, training, and sustainment; and the funds that are available to or planned for the organization.
Capability (military)	The ability to achieve a desired effect under specified standards and conditions through combinations of means and ways across the doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) framework to perform a set of tasks to execute a specified course of action.
Capability gaps	The inability to achieve a desired effect under specified standards and conditions through combinations of means and ways to perform a set of tasks. The gap may be the result of no existing capability, lack of proficiency or sufficiency in existing capability, or the need to replace an existing capability.
Concept	A notion or statement of an idea – an expression of how something might be done – that can lead to an accepted procedure. A military concept is the description of methods (ways) for employing specific military attributes and capabilities (means) in the achievement of stated objectives (ends).
Capability planning	A deliberate process that provides a coherent basis for (1) planning and implementing the major missions or

	objectives assigned the armed forces by policy and strategy, (2) assessing the capability (see also Capability) to accomplish assigned major defense missions or objectives, and (3) developing broadly stated non-materiel or materiel-related approaches that address the most important capability-related challenges within an economic framework that necessitates choice.
Cost analysis	An economic evaluation process involving a wide range of techniques, including gathering (and assessing the accuracy and reasonableness of) cost-related data, and disaggregating, aggregating, categorizing, and analyzing cost information to obtain insights on relevant cost issues.
Defense investment	Two distinct functions: (1) investment/acquisition planning which entails assessing the relative merits of different ways of satisfying an approved capability-based requirement for infrastructure, real property, and materiel to include major equipment items and initial, replenishment, and war reserve stocks; and (2) procurement and contracting conducted in accordance with current laws and regulations.
Defense resource management	The process to ensure that the resources (funding, personnel, equipment, facilities, etc.) of defense organizations are used in the most efficient and effective manner to achieve desired objectives.
Defense resource planning	A systematic basis for identifying the resources required to accomplish assigned or potential objectives or provide a capability [see also Capability]. In resource-constrained environments, it usually requires developing multi-year plans or annual budget proposals that allocate limited resources to the highest-priority objectives.
Force structure	The manpower and materiel composition, by number and type of organizations, of the current, planned, or programmed total defense force tasked to perform defense missions.
Force development	An organizing construct of processes, policies, organizational information and tools that informs senior leader decision making on how to organize, train, equip, and provide forces to armed forces' units and commanders in support of defense strategy within allocated resource limits to accomplish armed forces' missions.
Force generation	a structured progression of increased unit readiness over time to produce trained, ready, and cohesive units

	prepared on a rotational basis for operational deployment in support of commanders and other armed forces' requirements
Force management	a process to align assignment, allocation, and apportionment of forces to units in support of defense strategy and the requirements of armed forces' commanders
Long-term planning	Planning that addresses the horizon six years beyond the Defense Program planning horizon.
Medium-term planning	Planning that addresses a medium-term planning horizon (the upcoming budget year (BY) + five years [for a total of six years]).
Policy	A purposive and consistent course of action produced as a response to a perceived problem of a constituency, formulated by a specific political process, and adopted, implemented, and enforced by a public agency.
Program	A group of related departmental activities and the resources required to achieve specific capability or performance-based objectives within the medium-term planning period. Programs, which are established by the Minister, relate desired outputs (capabilities) to resource inputs (structures, investment, readiness, facilities maintenance, and sustainment, and their associated funding requirements).
Scenario	A graphic and narrative description of area, environment, means (political, economic, social, and military), and events of a future conflict; it describes the timeframe, road to war, spectrum of conflict, global conditions before and during armed conflict; friendly and threat forces, to include weapons, munitions, and sensors lists; friendly and threat strategic and theater plans, including air, naval, and special purpose forces; friendly, unaligned, or independent and threat behavioral and cultural operational aspects and considerations; and operational and tactical orders and plans for friendly and threat forces involved in the conflict. It also includes considerations of geographic setting (weather, climate, topography, and vegetation), health hazards, transportation facilities, and other regional and operational elements. When appropriate, the operational scenarios will also address those unaligned or independent forces that may oppose threat, friendly, or both forces.

Senior leaders	Defense and Armed Forces' senior executives who include the Minister of Defense, assistant ministers, Chief and Vice Chief of the Armed Forces, major Service commanders, and others as may be determined by the Minister.
Strategy	An approach to achieve a policy objective.
Strategy (defense)	The art and science of coordinating the development and generation of armed forces to achieve national security objectives assigned to the defense sector.
Threat assessment	An estimate/evaluation of the potential defense capabilities a foe could draw on to threaten or attack a country or group of countries.

Appendix D.
Illustrations

Figures

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Appendix E.
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Appendix F.
Abbreviations

BY	Budget Year
DOTMLPF-P	Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, Facilities and Policy
ECOWAS	Economic Community of West African States
EU	European Union
GDP	gross domestic product
HQ	headquarters
IED	improvised explosive device
NATO	North Atlantic Treaty Organization
NGO	Non-government organization
QDR	Quadrennial Defense Review
ROE	Rules of Engagement
SDR	Strategic Defense Review
SDSR	Strategic Defense and Security Review
TOR	Terms of Reference
U.S.	United States
UN	United Nations

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Part 2: Defense Governance and Management:
Defense Policy and Strategy
Seminar Material

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Contents

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1. Introduction

Introduction

Part 1 of this document was written to assist United States government representatives advising foreign defense institutions seeking to improve the management of the defense sector. Part 2 was produced to break the broad scope of the main topic – the development of defense policy and strategy – into four components: Policy and Strategy, Strategic Defense Review, Threat and Risk, and Scenarios. The material can be used as one contiguous seminar or pulled apart and modified as deemed appropriate by the user given the particular situation and challenges facing the foreign government's efforts to improve its defense management capabilities. As additional help, the seminar slides are annotated with speaker's notes and additional explanations. The following is a brief description of each component:

Policy and Strategy

This section covers a general definition of policy and strategy and where they are normally derived from in a democratic government. A specific definition of defense strategy is offered in the form of ends, ways, and means and includes a number of practical examples. Knowing if a strategy is being effective is clearly important and there is a section on measuring a strategy's effectiveness and introducing the practical tool of the Likert scale.

Strategic Defense Review

As described in the main report, a strategic defense review (SDR) is a type of defense review for use under particular circumstances. This material describes an SDR and when it is suitable to undertake. It identifies the key principles of an SDR process for use throughout the conduct of the review. Finally, this material provides details on the seven phases of an SDR from preparation through implementation.

Threat and Risk

This component defines risk as a relationship between threat, vulnerability, and capability. When considering risk, it is important to consider first, second, and third order effects which are described in the material. There is guidance for determining matters of first priority and a practical tool for comparing risks. Finally, this section concludes with an explanation and guidance for thinking through the topics of vulnerability, threat, and probability when trying to quantify risk.

Scenarios

This component explains the role of scenarios and their utility to defense planning and management. As described in the paper, the identification and definition of the five key attributes to a scenario – relevant, reasonable, robust, reusable, and responsive – is included. The material provides guidance on the structure of a scenario and the recommended means for managing scenarios and their development. Finally, there

is a series of slides to aid in the analysis of a foreign institutions' approach versus the recommended approach described in Part 1 and outlined within the material.

NOTE TO USER: If you desire to share a soft copy of this material that does not contain the annotated notes, it is possible to remove all notes in one action using PowerPoint 2010.

First save the file under a different name (if you want to keep a version with the notes).

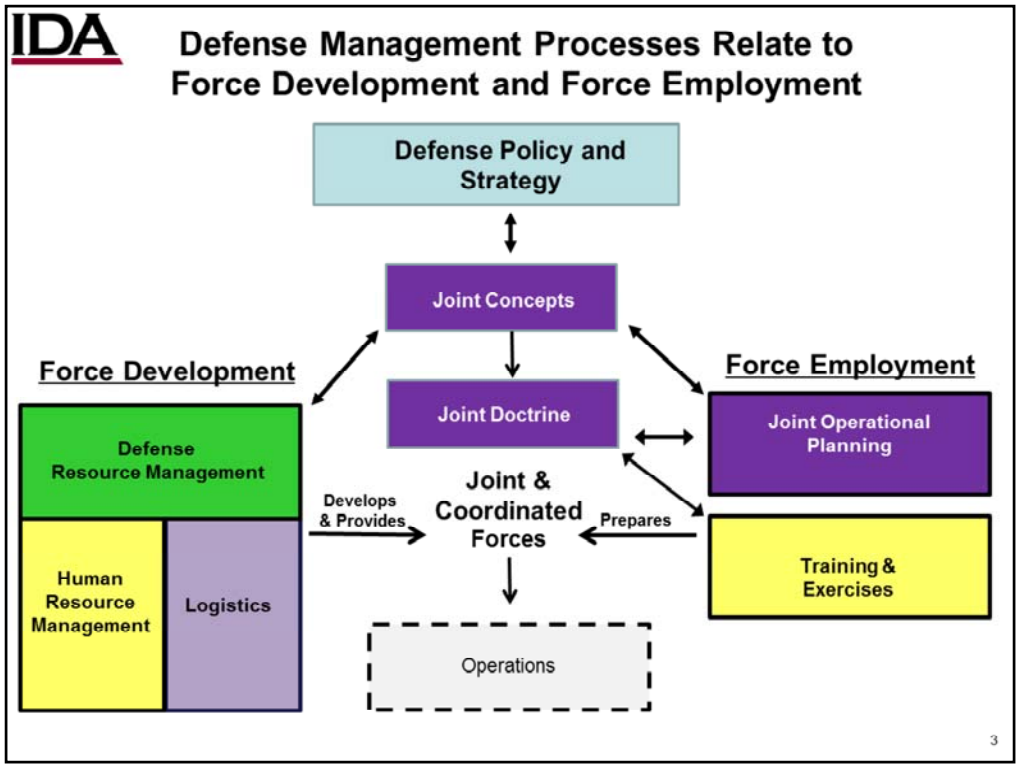
Then go to File> Info. There is a "Prepare for Sharing" section with a "Check for Issues" button. Press that button and select "Inspect Document." It then shows a list of things to look for, including (at the bottom) Presentation Notes. Select this (and whatever else), and press "Inspect." It will then alert you to the presence of notes and give you the opportunity to remove them all at once.

Press "remove" and they disappear.

IDA

Purpose

- Examine what policy and strategy are and where they are derived from in a democratic government
- Describe strategy in the form of ends, ways, and means, with practical examples
- Measure strategy's effectiveness, using practical tools



Policy and Strategy are one process of many within the field of Defense Management that has as its main purpose the provision and preparation of armed forces.

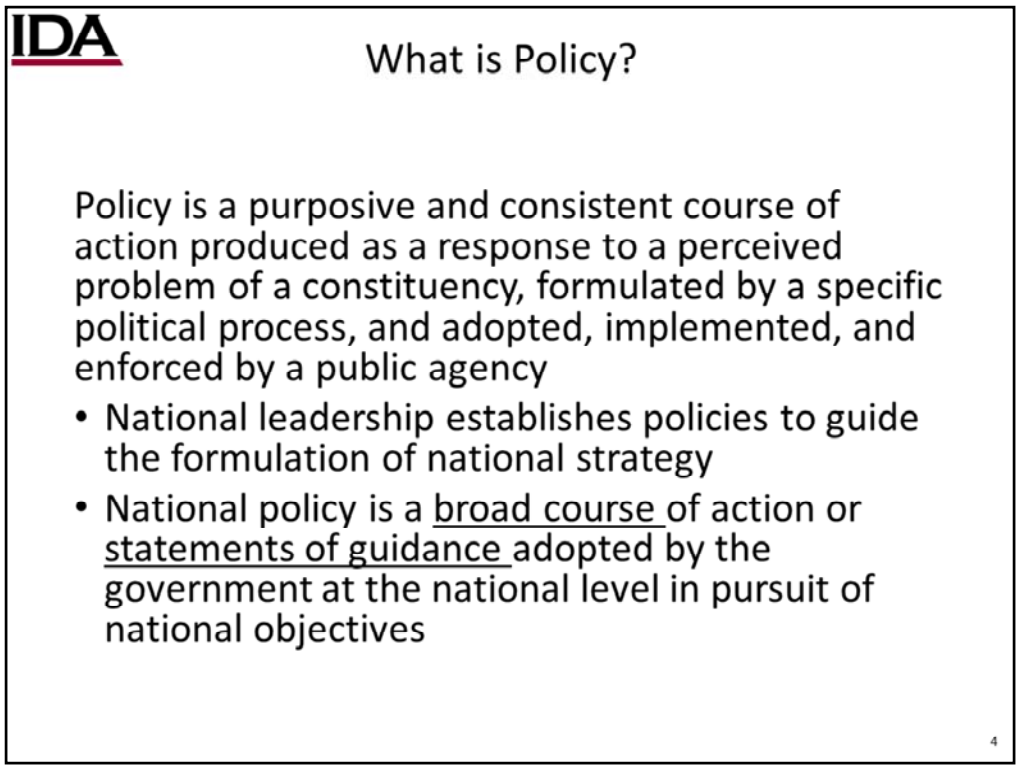
Each of the blocks on this chart can be unpacked and expanded.

However, our focus is on Policy and Strategy. Policy sets political objectives to achieve. Strategy defines an approach to achieve the objectives.

Concepts and Doctrine describe how armed forces will operate to achieve objectives.

And Force Development processes develop the means to implement the concepts.

Policy = Ends; Concepts = Ways; Force Development = Means; the synthesis of these three things articulated as a vision to develop a force structure to achieve policy's ends is a strategy. We will refer to this idea again later in the brief.



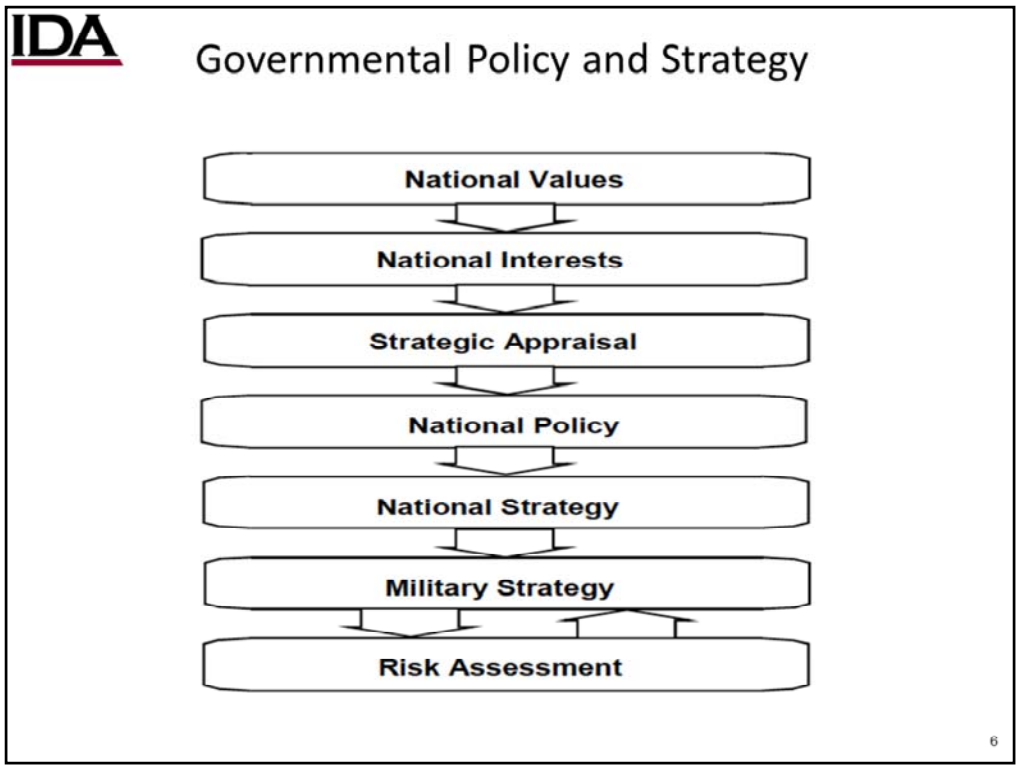
What is Policy?

A purposive and consistent course of action produced as a response to a perceived problem of a constituency, formulated by a specific political process, and adopted, implemented, and enforced by a public agency.

What is a Strategy?

There are several useful definitions of strategy to have in mind. First, strategy is not planning. Rather, strategy answers questions about how to deal with competitive situations or challenges in an uncontrolled environment. Planning, alternatively, must necessarily make assumptions about the environment.

Strategy can also be described as an approach to achieve a policy objective. Strategy as an approach also is synchronous with the idea of strategy as process that leads to a synthesis of ideas. A definition from the basic doctrine of joint operations of the United States Armed Forces emphasizes both aspects of approach and synthesis. It defines strategy as, "an idea or set of ideas for employing the instruments of national power in a synchronized and integrated fashion to achieve objectives." U.S. Department of Defense, *Joint Publication 3-0, Joint Operations*. Washington, DC: 11 August 2011, GL-16.



This slide demonstrates:

- The basis in Values and Interests for all National Security Strategy
- That Policy is established first and Strategy flows from Policy
- The hierarchy between upper- and lower-level strategy, with the political (national) level being superior to ministerial levels
- The strategic appraisal where threats are assessed and challenges identified

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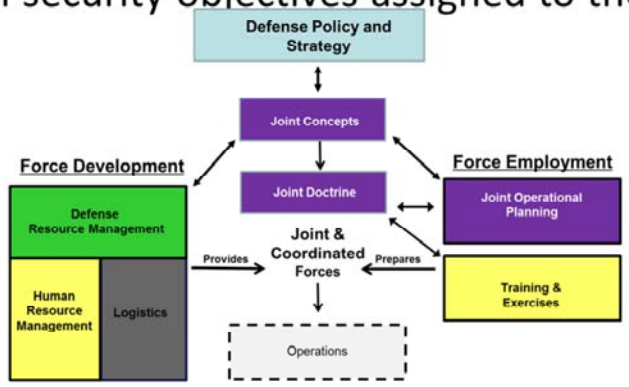
Defense Strategy

- The art and science of coordinating the development and employment of armed forces to achieve national security objectives assigned to the defense sector



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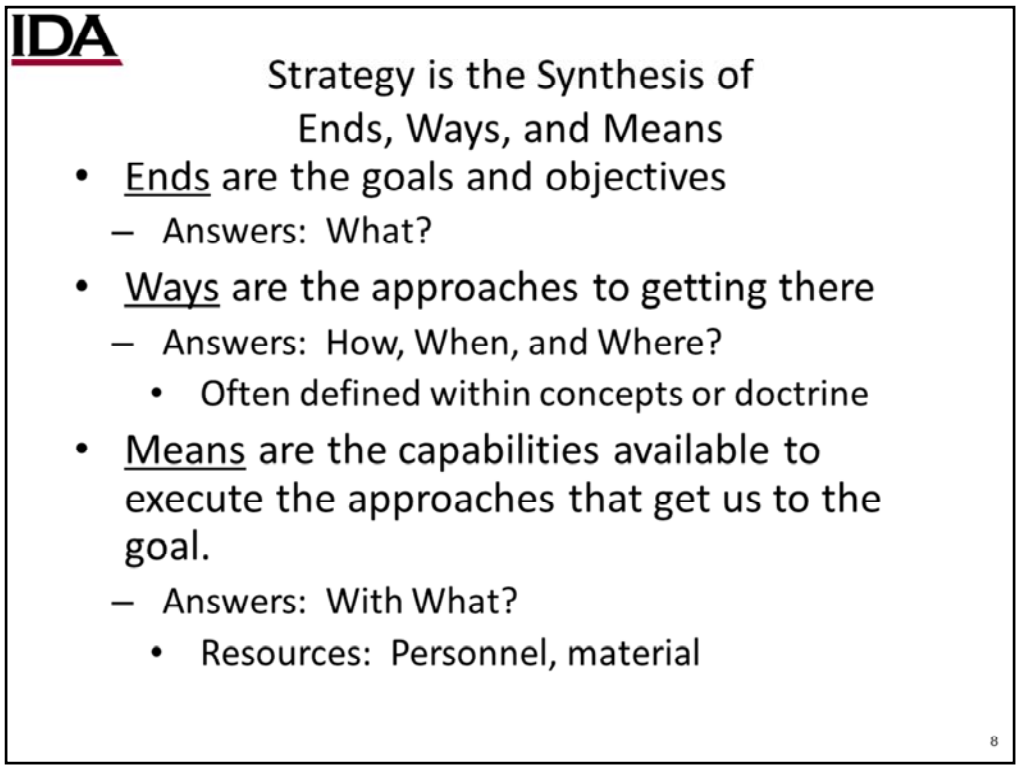
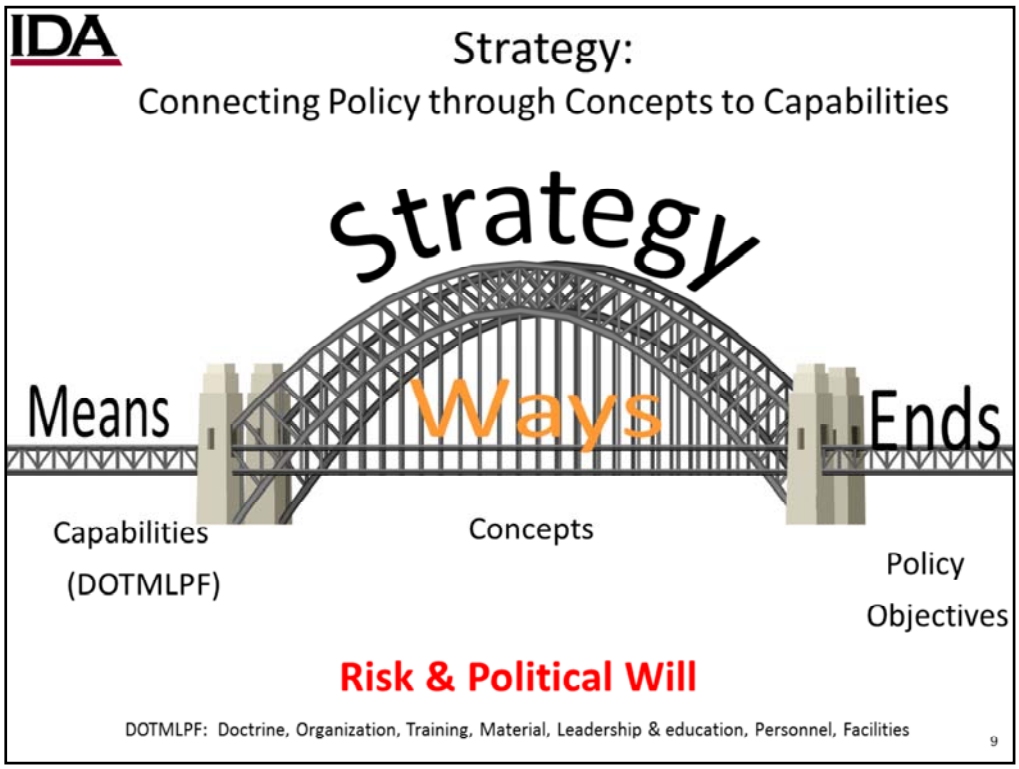
NOTE: Depending on the structure of a given nation's uniformed forces, it is possible that a Defense Ministry may include a national police force. It is also possible the audience may include representatives from security ministries other than the Ministry of Defense. Tailor the slide to the words that most fit the national context where the slides are being used.

The idea is that strategy is the defined approach to develop forces to meet future challenges as defined and prioritized by policy; AND

Strategy is the approach to meet near-term challenges assigned to the armed forces by policy which the existing force structure must plan for and operate against.



Capability Defined: the ability to carry out a task under specific conditions (time, distance, environment, and readiness standards). A capability is created as a result of the proper integration and balance of Doctrine, Organization, Training, Material & equipment, Leadership & education, Personnel, and Facilities (DOTMLPF) within a unit or organization.



Strategy should define an approach that connects policy to capabilities through concepts.

Policy defines the ends, the objectives the nation expects its armed forces to achieve.

Objectives are accomplished by capable armed forces. Capabilities are an integrated collection of D-O-T-M-L-P-F.

Concepts define how capabilities will be used to accomplish the ends.

Strategy is a defined approach to bridge the means to the end through concepts.

This is true in the short term through the employment of available forces in current and planned operations.

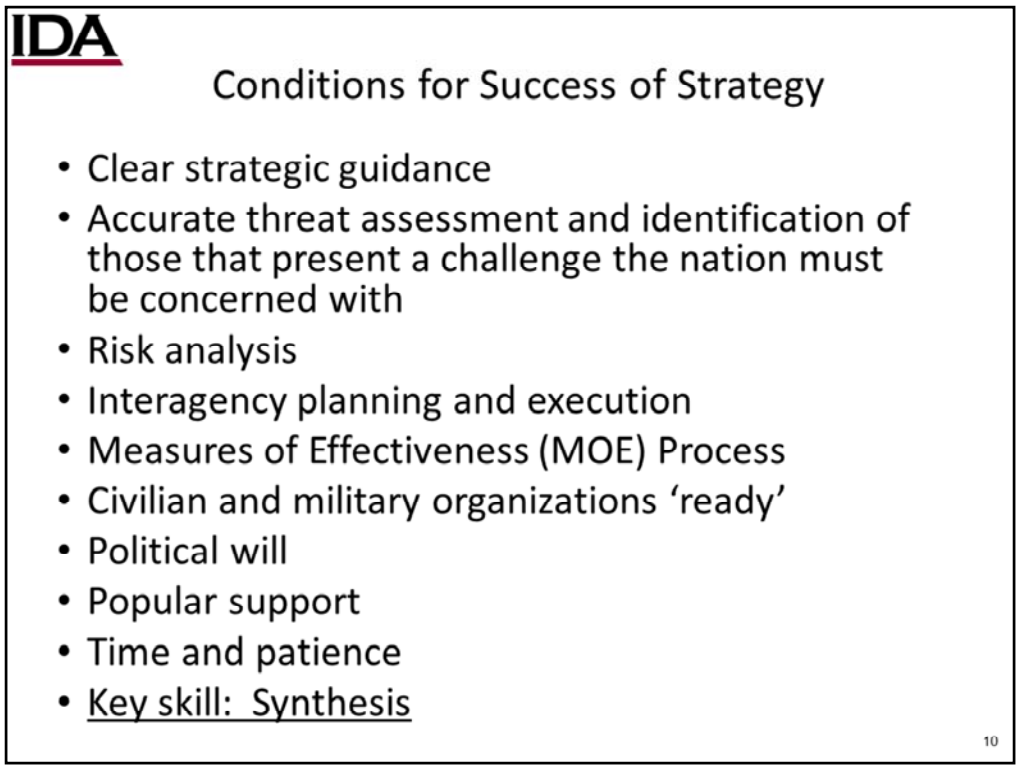
It is also true in the medium and long term to create the means required (force development) to execute a concept in support of a policy's ends.

If the capabilities available cannot achieve the ends, then the defense sector's leaders may need new concepts to drive the creation of new capabilities. In other words, a change in strategy.

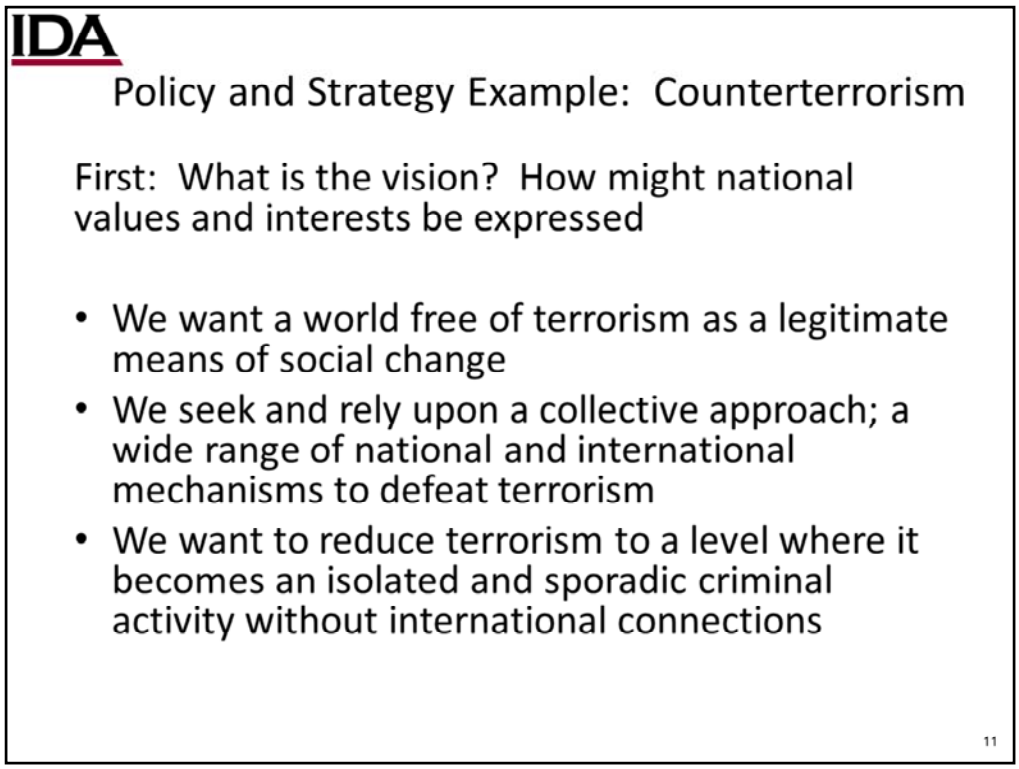
Finally, risk and political will are often overlooked inputs to strategy.

Risk is potential for loss of life and missions failure.

Political will – the will of the population to accept a given approach. To use an extreme example to explain political will, would attrition warfare be an acceptable approach when fighting a war on foreign soil against non-state actors? If not, then attrition warfare would not be a politically acceptable way to achieve an end of defeating a foreign counter-insurgency even if the armed forces were willing to accept the risk to life and equipment.



Having a great policy and strategy are not sufficient. They need to be successfully executed. There are many different pieces for delivering a successful strategy. Each are individually important, but crucial is the ability to synthesize across the various pieces.



A world free of terrorism as a legitimate means of social change

- A bit utopian in the first half but pragmatic in the second half

A wide range of national and international mechanisms to defeat terrorism

- The actual end that many states have tried to create

Terrorism reduced to a level where it becomes an isolated and sporadic criminal activity without international connections

- A solution that suggests a Measure of Effectiveness, although politically difficult to sell as a goal

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Policy and Strategy Example: Counterterrorism

Conduct the Strategic Appraisal. What threats exist and which present challenges the nation must prepare to respond to

- Infiltration through disaffected citizens in urban areas who are trained to conduct public attacks
- Networked criminal activity intended to finance public terrorist attacks
- Legally organized public charitable organizations that serve as a front for terrorist organizations
- Low public access to secondary and higher education among the nation's middle and lower classes
- Stagnant economy and limited opportunity for social mobility

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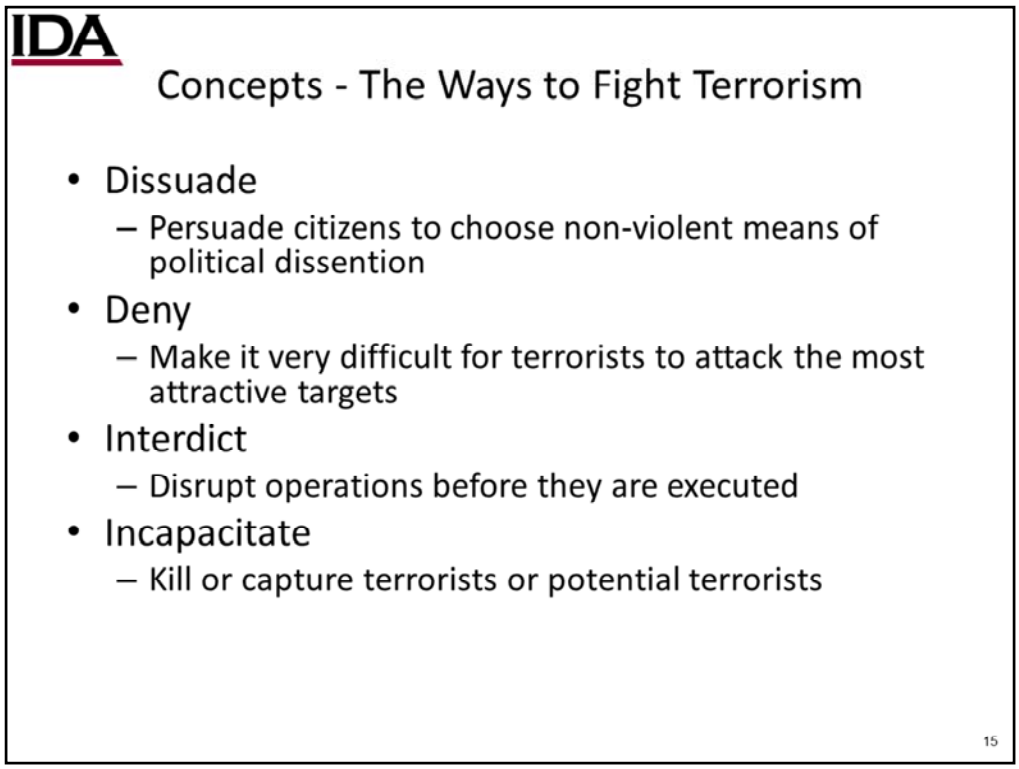
Policy: The Ends/Objectives

- Defend citizens and property
- Defeat existing terrorist groups
- Disrupt ongoing terrorist operations
- Deter future terrorism
- Diminish root causes of terrorism

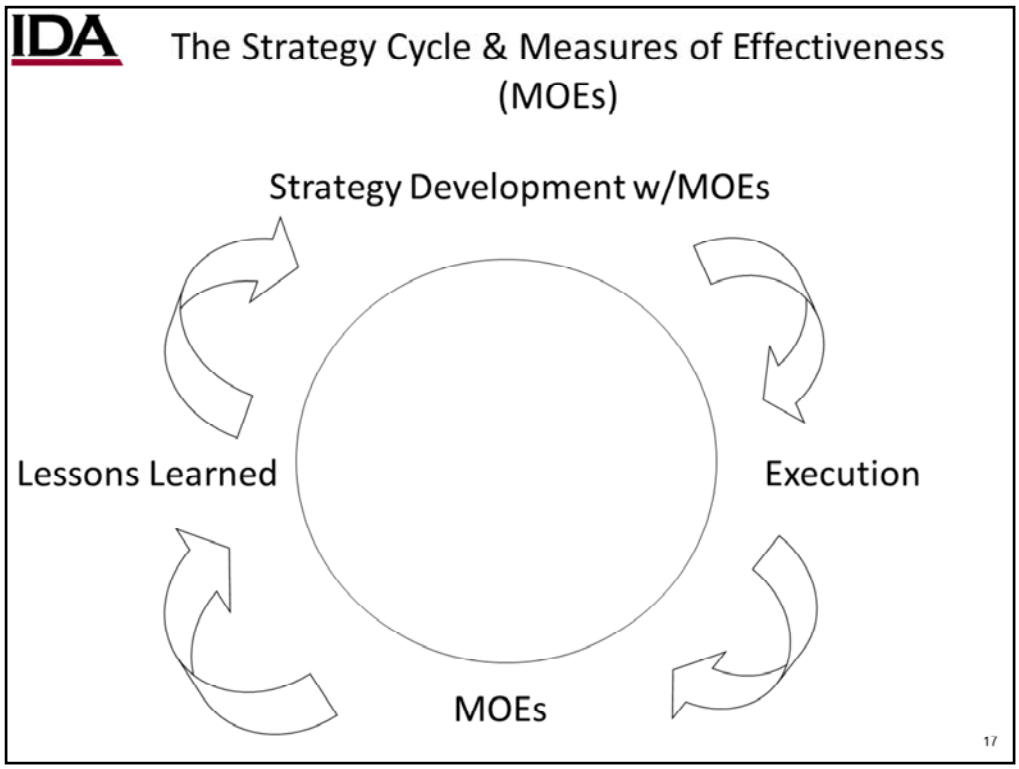
IDA The *Approach* or the *Synthesis of Ideas* is an Articulation of Strategy

- "Core" Strategy (Diminish Root Causes of Terrorism)
  - Improve social cohesiveness
  - Enhance government legitimacy
  - Reduce ideological support for terrorism
- "Defensive" Strategy (Protect Vulnerabilities)
  - Defend and protect citizens and property
  - Make terrorism too difficult/painful
  - Prepare to manage consequences of attack
- "Offensive" Strategy (Target Terrorist Threats)
  - Kill/capture terrorists
  - Disrupt terrorist operations
  - Destroy terrorist organizations

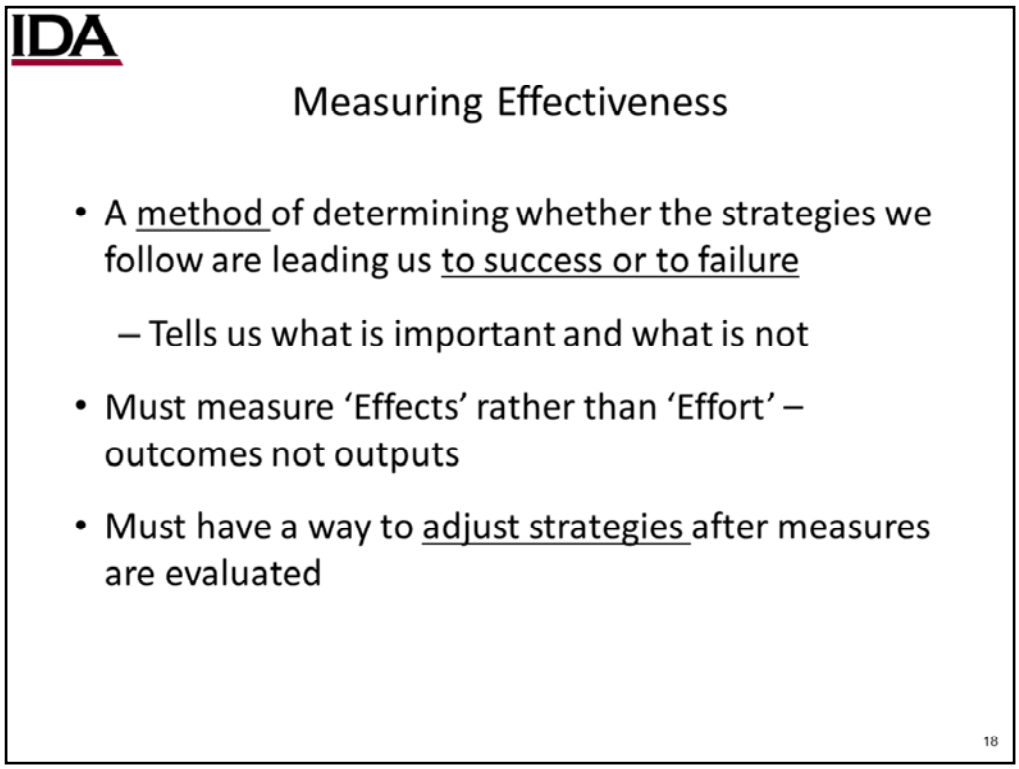


Or said differently, the way to respond to the challenges identified during strategic appraisal.

Many of today's threats have transnational and inter-ministerial aspects and thus require Whole of Government, even Whole of Society approaches. In developing approaches, assuring institutions have the appropriate tools and concepts (to apply their capabilities to a task) may mean discussing how these institutions coordinate and whether they have clear understanding of their respective roles and missions.



The arrows should suggest both the iterative nature of the process, as well as the feedback that should happen throughout the process.



Can't let ourselves go down a blind alley. Failure at any level is bad; failure at the strategic level can be catastrophic.

What is the difference between effort and effect?

Number of terrorists killed: Effort
Number of citizens killed: Effect

Strategy is a cycle. Like flying an airplane, it constantly needs adjustment. MOE provide the feedback needed to make adjustments.

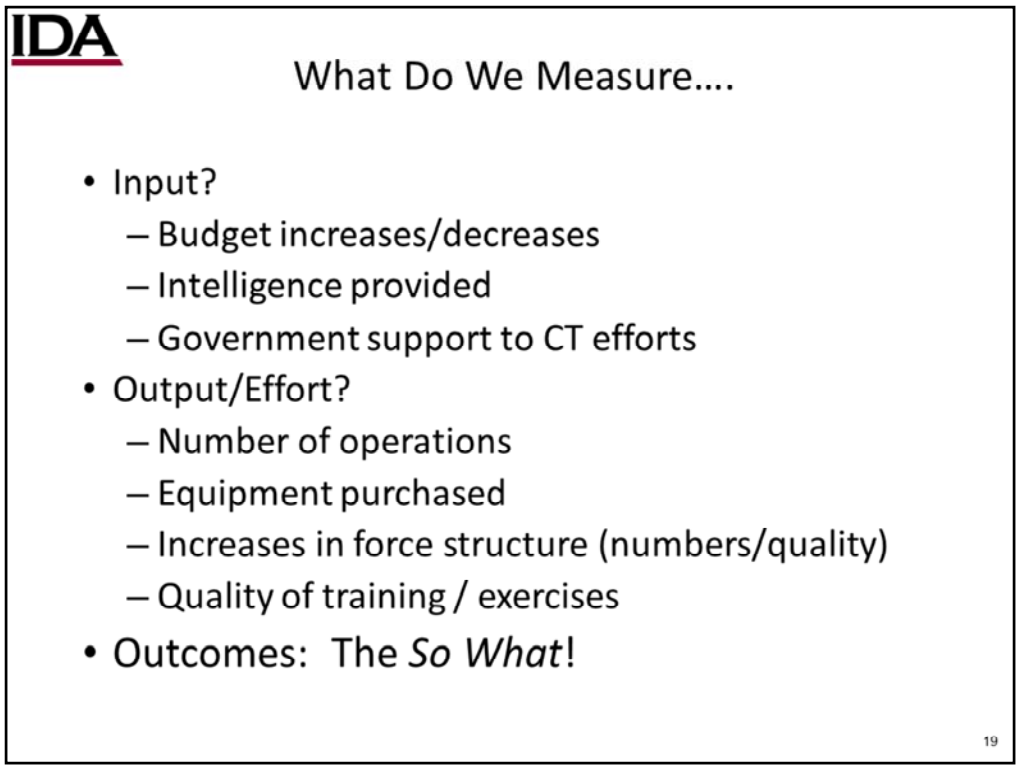
How many shipwrecks does a lighthouse prevent?

- We can take away the lighthouse and see what happens; or
- We can evaluate our processes and systems to make sure they are as good as we can make them with the resources we have

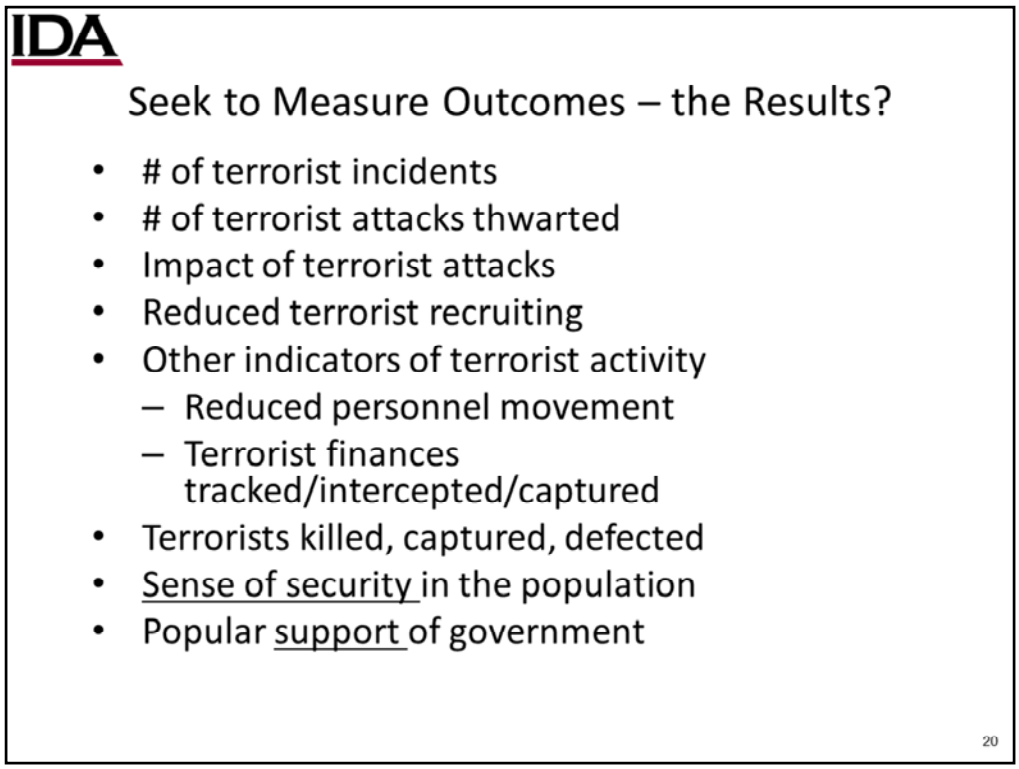
Need MOE up front in the strategy development process.

- Have someone in the room to always ask, "How are you going to measure that?"

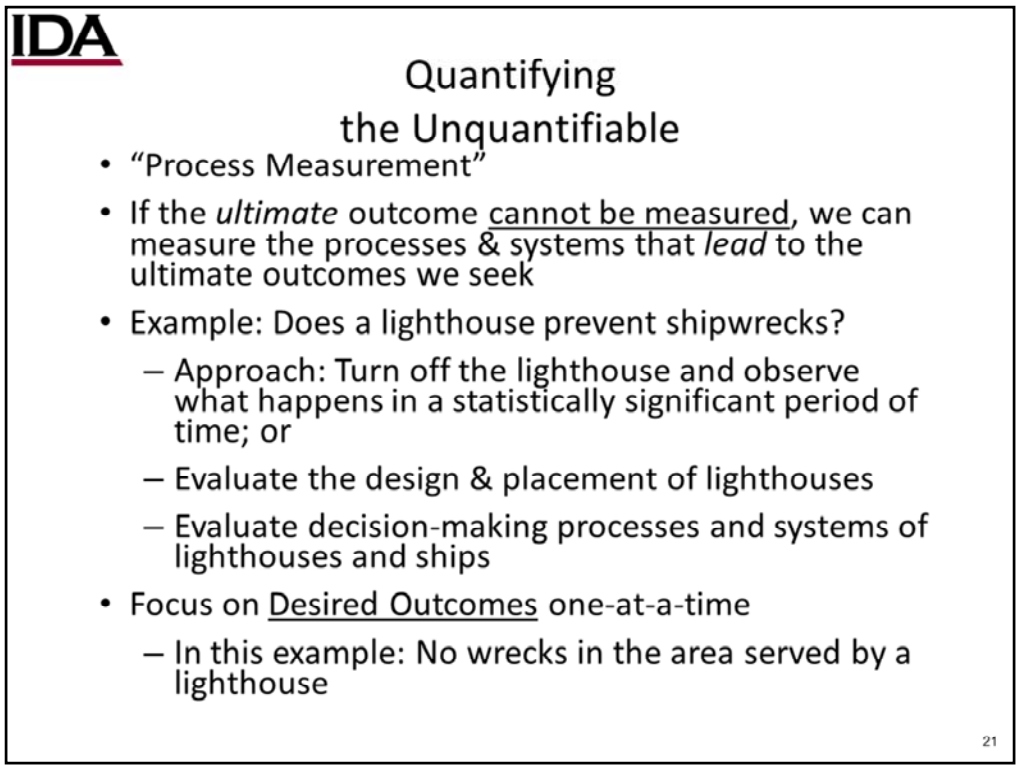
(protect these people – "Contrarians")



Sometimes, especially when a new approach is first implemented, all one can do is measure input and output. There may not be enough data yet to measure outcome. However, persist until some measurable outcomes from the implementation of strategy is available before declaring strategic success or failure of a given approach.



Results are better MOEs - but we must ensure that the results we measure are tied to a political objective or outcome.



The example of the lighthouse. How many shipwrecks does a 100-year old lighthouse prevent? We could turn off the light for a year to see what happens, or we can look at standards, best practices, and the latest technology to weigh whether a lighthouse is doing its job.

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MOE Example – Measuring "Core" Strategy
Objective: Improve Social Cohesiveness

- More is Better
  - Size of middle class
  - Education/literacy rate
  - Rural villages with computers/internet
  - Number of citizens volunteering for public service
  - Minority representation in government/industry
- Less is Better
  - Crime rate
  - Unemployment rate
  - Lawsuits claiming discrimination
  - Number of citizens without access to healthcare
  - Number of soldiers deployed within the country

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MOE Example – Measuring "Defensive" Strategy
Objective: Defend and protect citizens and property

- More is Better
  - Number of public safety messages
  - Number of interagency response exercises
  - Money allocated to local authorities for physical security
- Less is Better
  - Number of unfilled requests from local authorities
  - Number of incompatible government communication frequencies
  - Number of threats issued by terrorist groups

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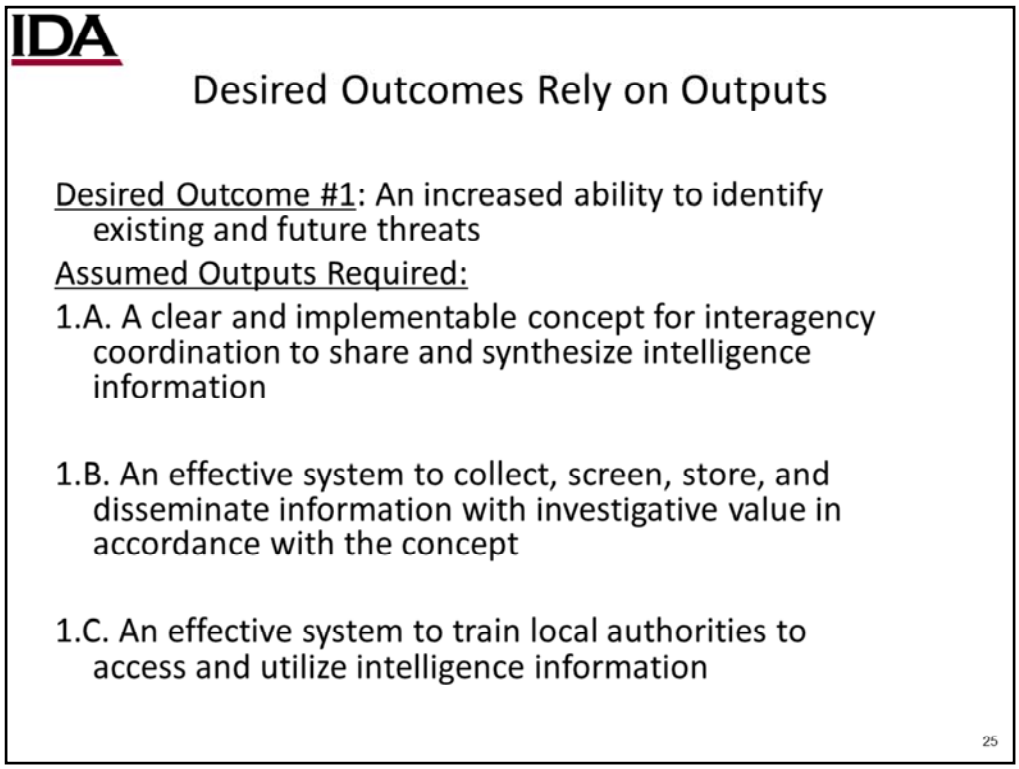
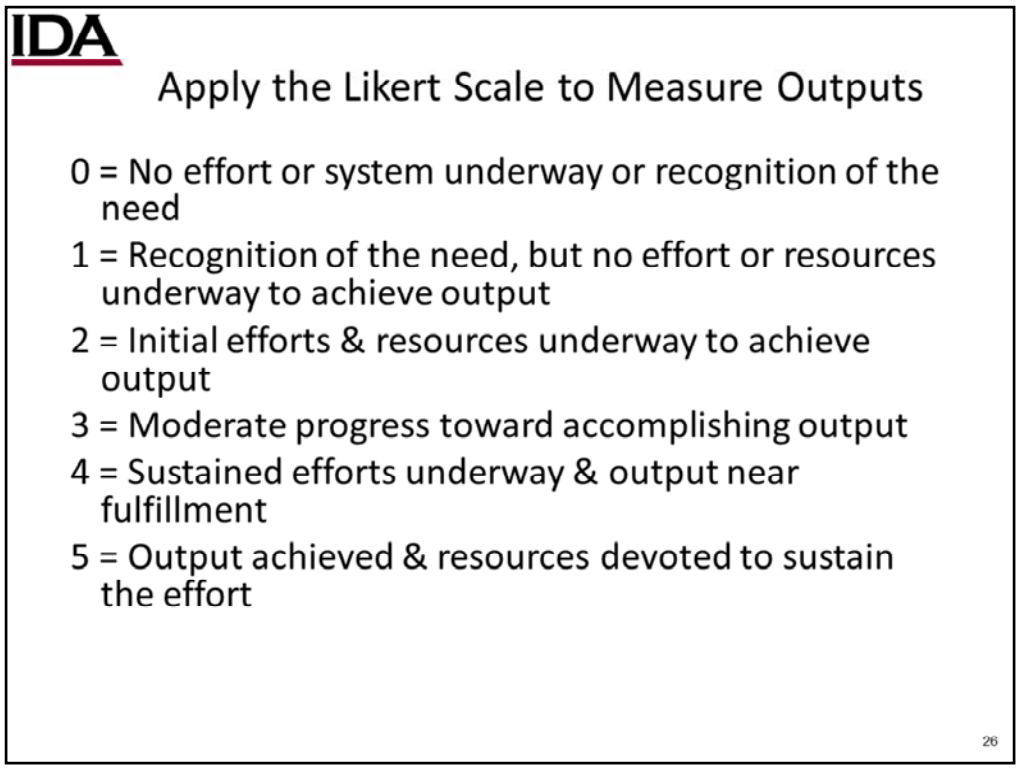
Moe Example – Measuring "Offensive" Strategy
Objective: Disrupt Terrorist Operations

- More is Better
  - Number of terrorists incapacitated
  - Number of terrorists defecting to government side
  - Number of terrorist networks disrupted
  - Terrorist finance sources cut off
- Less is Better
  - Number of terrorist attacks
  - Number of casualties resulting from attacks
  - Amount of economic damage caused by terrorist attacks



Determining what the outputs should be is a matter of strategy. What is the approach (the way) to achieve the outcome (the end). Strategy synthesizes all the inputs available and then makes assumptions about the outputs required to achieve an outcome.

Given that, a measure of effectiveness must be able to determine whether the assumptions were accurate – did the outputs lead to the outcome? Why or why not?



The scale is named after its inventor, psychologist Rensis Likert. If 5 is reached – then it is definitely time to start measuring outcomes.

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Example - Grading Ourselves on Likert Scale

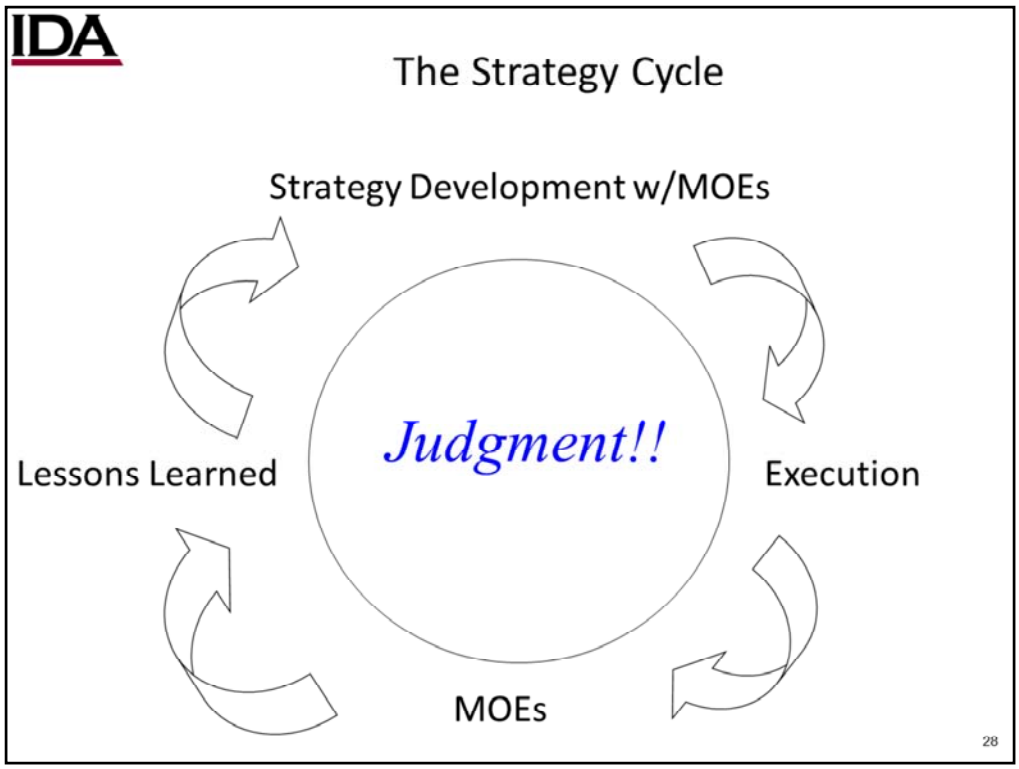
Desired Outcome #1: An increased ability to identify existing & future threats

1.A. A clear and implementable concept for interagency coordination to share and synthesize intelligence information (3)

1.B. An effective system to collect, screen, store & disseminate information with investigative value in accordance with the concept (1)

1.C. An effective system to train local authorities to access and utilize intelligence information (2)

- = TOTAL: 6 (*out of possible* 15)
- Conclusion: Invest more resources to increase ability to identify existing or future threats. Focus on finishing the interagency concept first so resources are more likely to be efficiently spent in building the system envisioned



If the entire cycle is completed, then one can judge whether a given strategy is effective or not and make corrections or start anew.

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Conclusion

- Setting policy leads to strategy development
- Strategy is an approach to achieve policy objectives
- Strategy is a designed use of ends, ways, and means that links policy to concepts, employing capabilities to achieve national objectives

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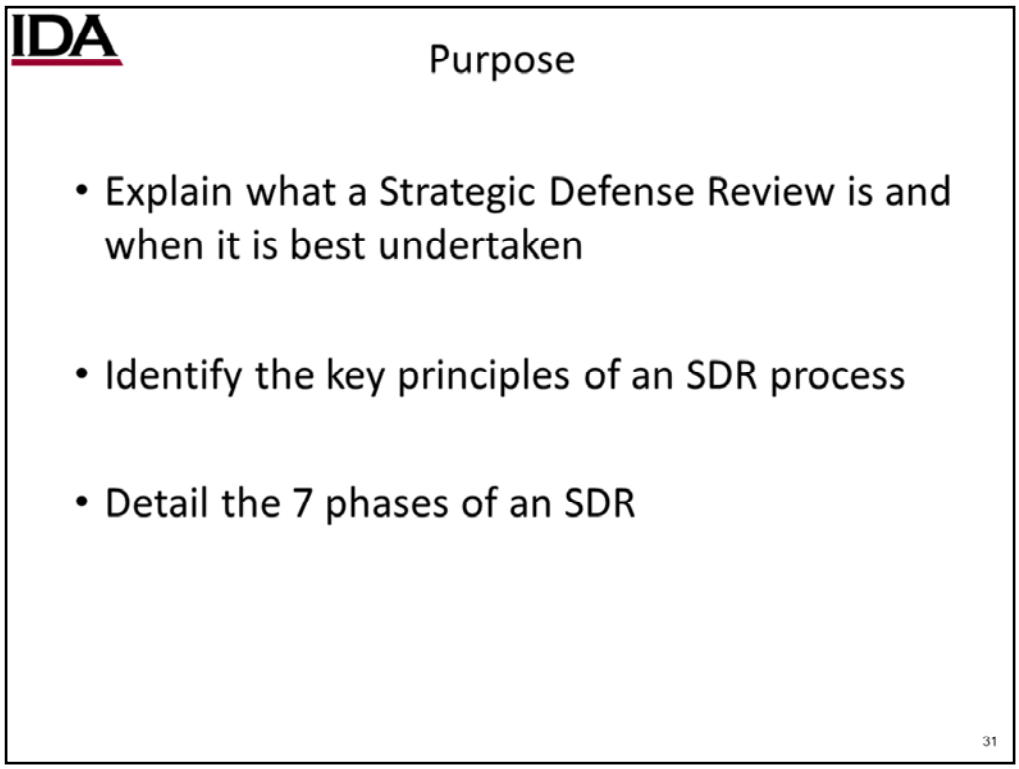
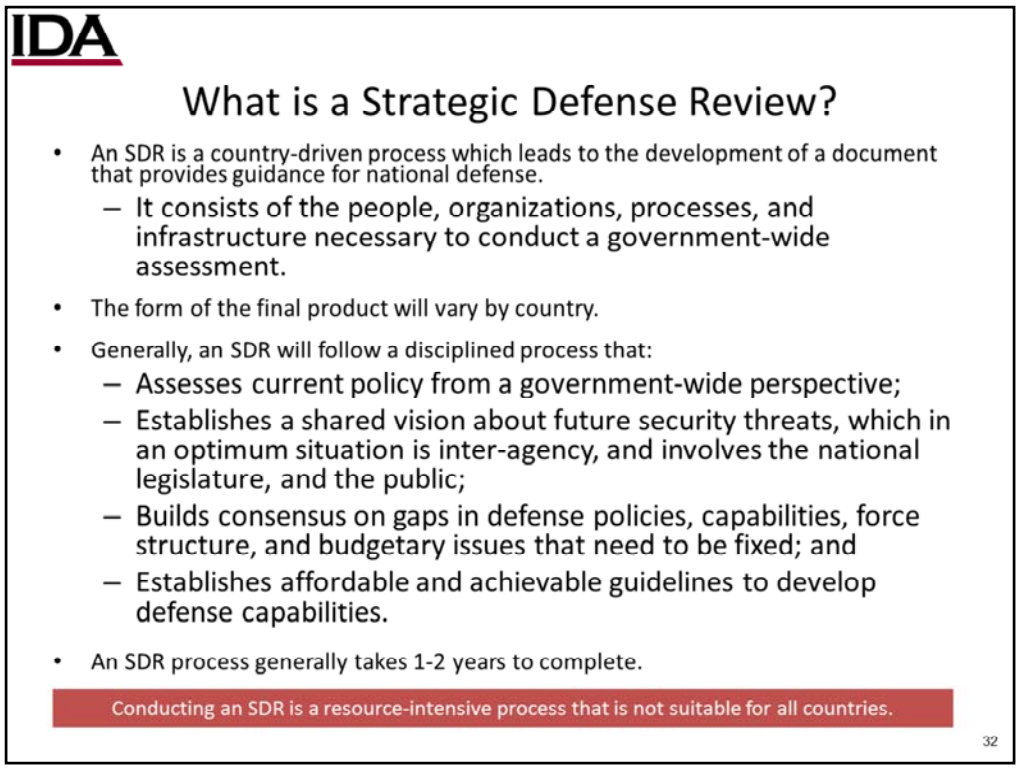
Component 2
Strategic Defense Review (SDR)



As described in the main report, a strategic defense review (SDR) is a particular type of defense review for use under particular circumstances. This seminar starts with a description of what an SDR is and when it is suitable to undertake this type of review. It identifies the key principles of an SDR process for use throughout the conduct of the review. Finally, this seminar provides details on the 7 phases of an SDR.



"Fundamentally, the purpose of an SDR is to foster discussions of and decisions about a country's vital interests, how best to protect them and to scope the required resources" - *Strategic Defense Reviews – Procedures, frameworks and tools to enhance future defense institution building projects,*" CSIS, Taylor and Boggs, Sept 2011

Taylor, J and Boggs, E. "Strategic Defense Reviews," Washington, D.C., Center for International and Strategic Studies, September 2011.

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Key Principles of SDR Process

- Requires top-level leadership
- Should generally be an open process
  - Though some elements may require closed, deliberative executive sessions
- National values and interests must be reflected in security and defense policy that informs an SDR
- Outcomes must be clearly linked to national values and interests to develop consensus among all stakeholders, particularly the public
- A complex process that addresses a wide range of issues
- Implementation plan must be practical and affordable

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Other principles: Transparency, broad participation, informed by fiscal restraints, time-bound, congruent with higher level guidance, and a clear understanding of planning assumptions.

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Seven Key Phases of Strategic Defense Review Process

1. Preparation
2. Review Security Environment – Set the National Policy Framework
3. Establish Planning Assumptions
4. Define Military Tasks
5. Develop Force Structure Options
6. Decisions
7. Announcements and Implementation

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Phase 1: Preparation – Key Activities to Occur

- Publish Inter-agency and Ministerial Directives establishing the SDR
- Develop Terms of Reference (TORs) for the Strategic Defense Review and establish appropriate governance bodies. A generic SDR includes:
  - Senior Level Steering Committee
  - Secretariat
  - Working Group
- For Senior Level Steering Committee, Secretariat and Working Group:
  - Identify departments and agencies that will be official and ex-official members
  - Identify and assign individuals to serve in each and appoint chair or co-chairs
  - Identify and obtain resources (e.g., equipment, office space, travel funds, transport, supplies, etc.) to support
- After review of TOR, develop and publish a Vision Statement. This includes:
  - Objectives: An outline of the political, military, social, and financial reasons for the SDR.
  - Policy and principles: What the Prime Minister sees as the framework of policy, principles, and his general thinking that underpins all the work.
- Develop and publish a time line and road map for completion of the SDR process

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Phase 2: Set National Security Policy Framework – Key Activities to Occur

- Review or, if not completed, *write* basic national-level planning documents
  - National Security Strategy
  - National Defense Strategy
- Produce a national-level strategic environment assessment document
  - Review threats and opportunities
- Indentify, articulate, and prioritize national interests and objectives
- Develop national-level list of roles and missions for departments and agencies involved in national security
- Develop list of the armed forces roles and missions
  - As applicable, the roles and missions of service components within the armed forces
- Develop understanding of national levels of escalation (i.e., peace, crisis, tension, war)
- Identify and define national levels of escalation
- Develop national level task list for each national level of escalation
- Develop armed forces task lists for each national level of escalation
- Establish planning structures in the Ministry of Defense and General Armed Forces Headquarters or Joint Staff to support SDR process

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Phase 3: Establish Planning Assumptions – Key Activities to Occur

- Each department and agency with a role in national security must develop short-, medium-, and long-term planning assumptions in the following areas:
  - Political
  - Military
  - Economic
  - Social
  - Cultural
  - Climate/Environment
- Consolidate and agree on an inter-agency list of short-, medium- and long-term planning assumptions in the above areas
- Develop and agree on a full range of planning scenarios that will be used as the standard to assess and evaluate the sufficiency of defense programs to achieve declared national security interests and objectives

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Phase 4: Define Military Tasks – Key Activities to Occur

- Develop a list of military missions to be conducted by the armed forces based on the national-level list of roles and missions
- Develop a list of military tasks that each military service within the armed forces must be able to execute to perform the agreed upon military missions
- Review planning scenarios and perform an analysis and assessment of the capability of each military service to execute its military tasks
- Develop a gap analysis for each military service in terms of its existing capabilities
- Conduct studies and analyses to assess capabilities needed to offset identified military gaps through non-traditional military means

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Phase 5: Force Structure Options – Key Activities to Occur

- Analyze and assess force structure options proposed during phase 4
- Prepare *cost analyses* for each alternative force structure option proposed
- Coordinate force structure options within the respective service components of the armed forces
- Develop a ministerial and joint or general headquarters staff level *consolidated, costed, and coordinated* list of force structure options for senior-level review

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Phase 6: Decisions – Key Activities to Occur

- Conduct interagency SDR process review in preparation for options to present to leadership
- Present options to the Minister of Defense (MOD) and his key deputies for decisions
- Consultations among MOD, his key deputies, and key military leaders of the General/Joint Staff
- MOD selects a course of action
- MOD briefs President/Prime Minister on selected course of action as well as alternatives not chosen
- President/Prime Minister approves/disapproves recommended course of action
- President/Prime Minister signs implementing order that provides guidance on how other departments and ministries will support MOD in implementation of SDR

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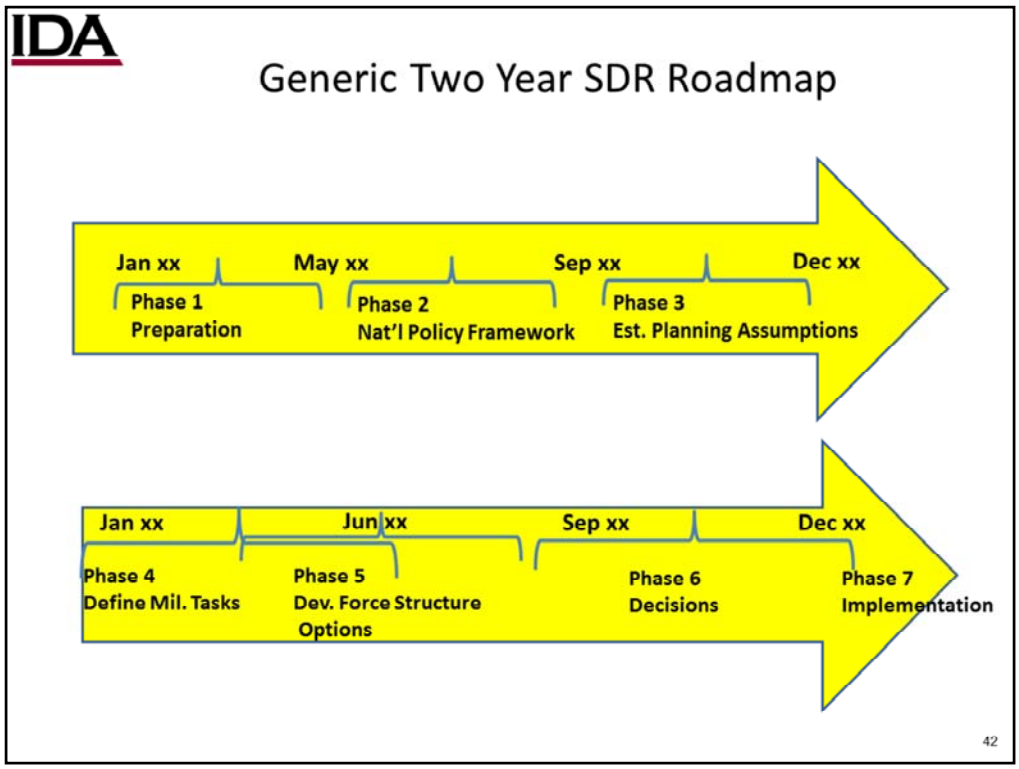
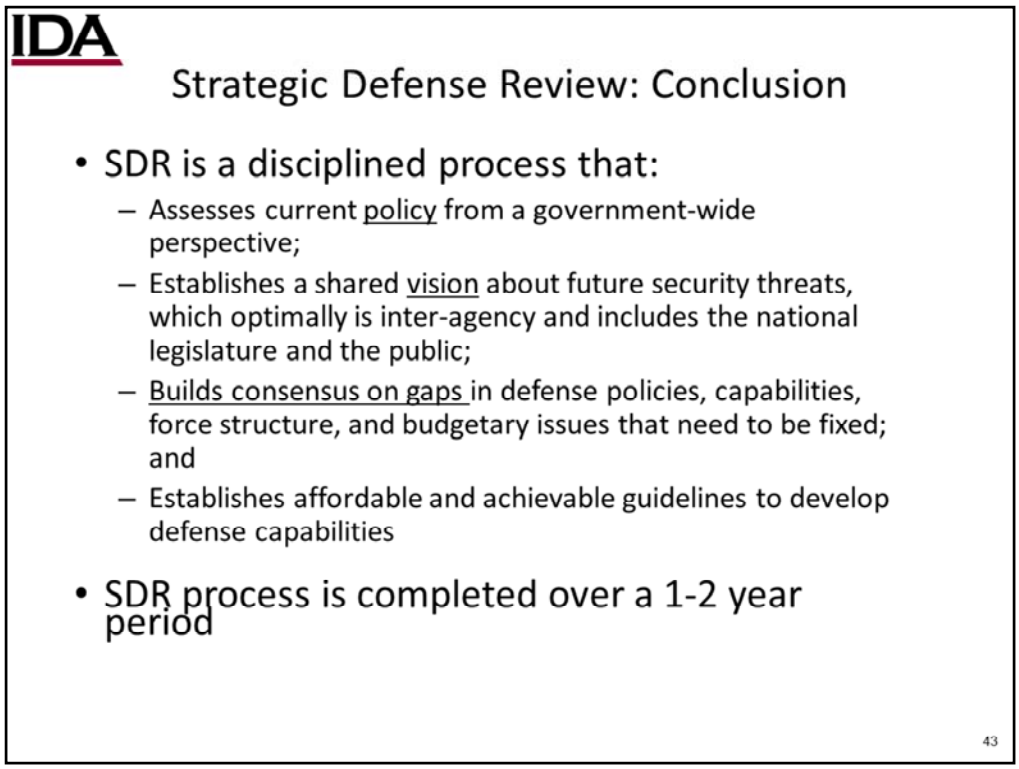
Phase 7: Announcements and Implementation – Key Activities to Occur

- Write and implement an internal national-level strategic communications plan
- Write and implement an external strategic communications plan
- Publish a directive or order that provides guidance and direction for implementation of the decisions made as a result of the SDR process
- Write a long-term implementation plan



On timing of an SDR: the most common time for an SDR to be undertaken is after a nation has experienced an unforeseen or significant change to its government or its security that requires the defense institutions and the armed forces to be reviewed in the context of government-wide priorities, policies, and resources. These events can be unforeseen (e.g., a severe economic downturn or a newly democratic country emerging from conflict) or they can be planned in advance. Examples of SDRs planned in advance are the United States, which requires a Quadrennial Defense Review (QDR) every four years, and the United Kingdom, which has stated plans to conduct a Strategic Defense and Security Review (SDSR) every five years.



The SDR process should produce prioritized recommendations consistent with the government's objectives. Just as important, the review must provide a plan to implement the approved recommendations, because implementation is where defense transformation takes place. Therefore, to ensure an SDR has a successful outcome, the process must encompass the implementation of decisions that result from the review.

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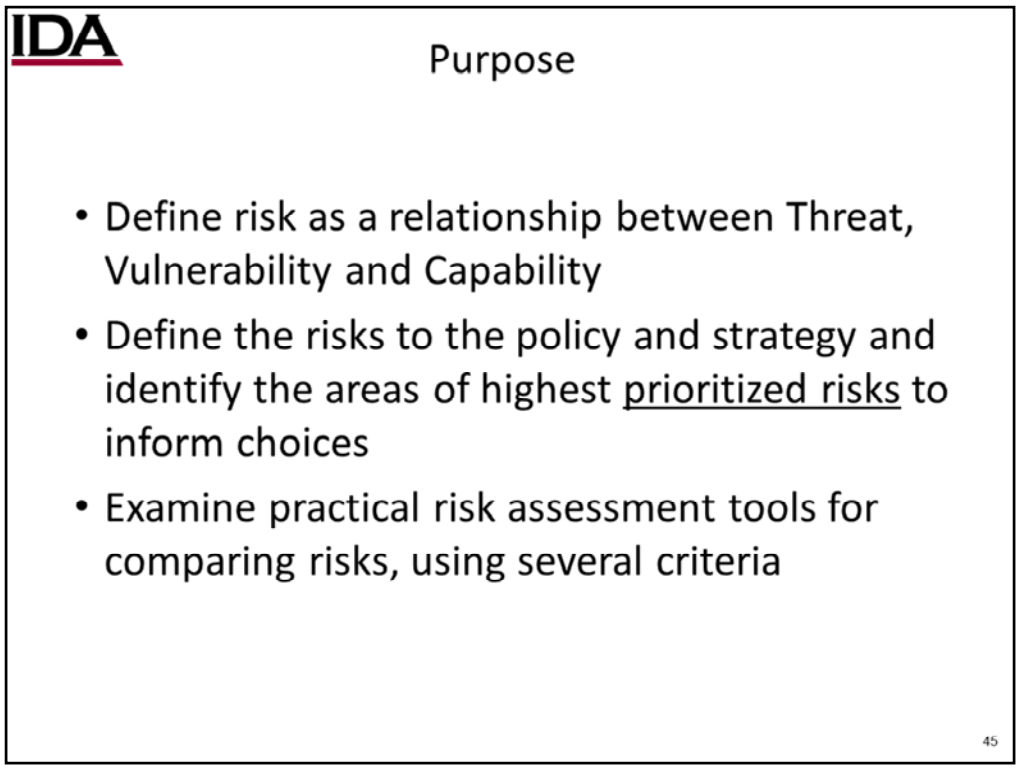
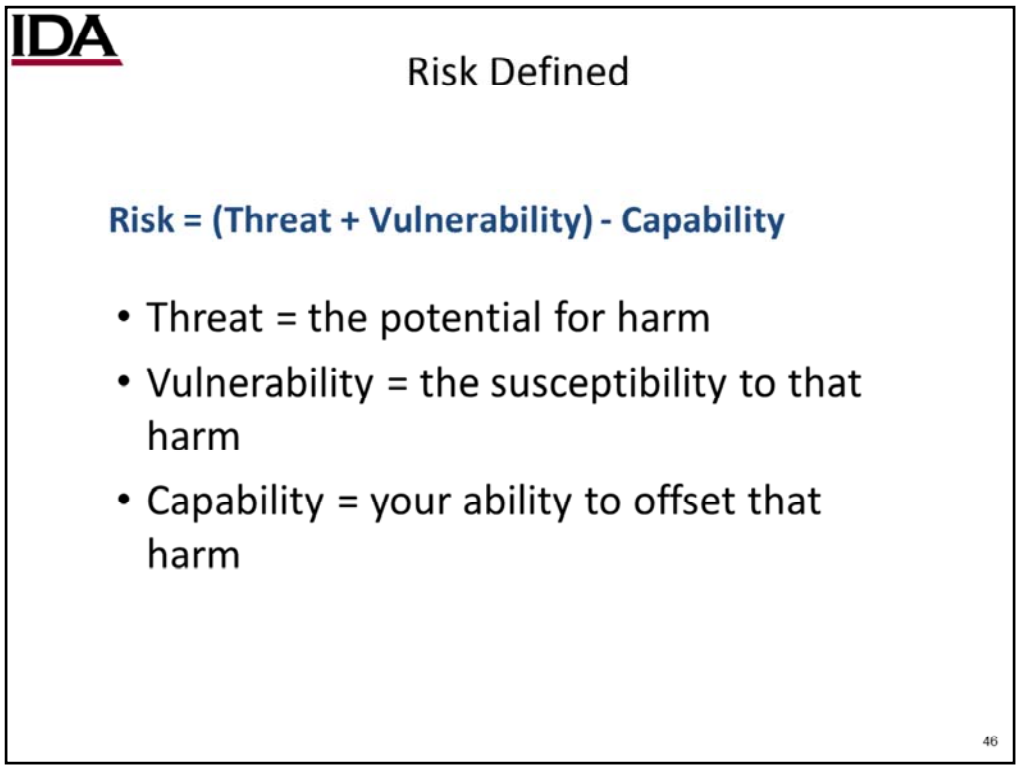
Component 3
Threat and Risk

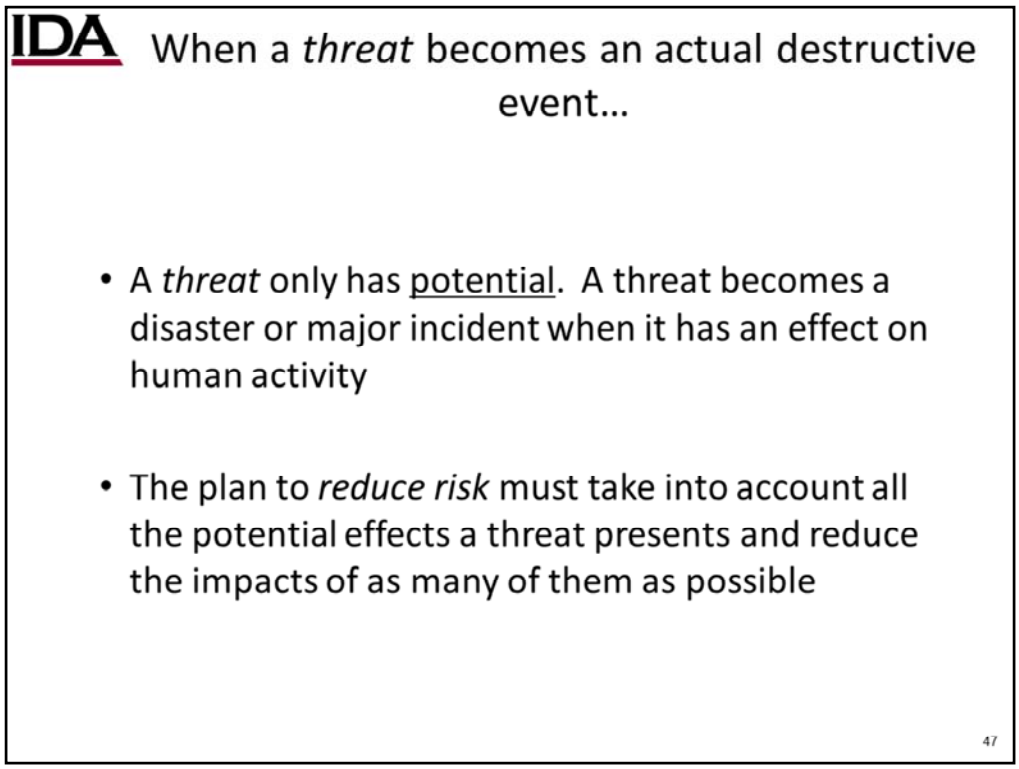


With insufficient resources to deliver the policy and strategy, it is important to understand the priorities and the attendant risks of the policy and strategy. The purpose of a risk assessment framework is to identify the areas of highest priority and to inform choices.

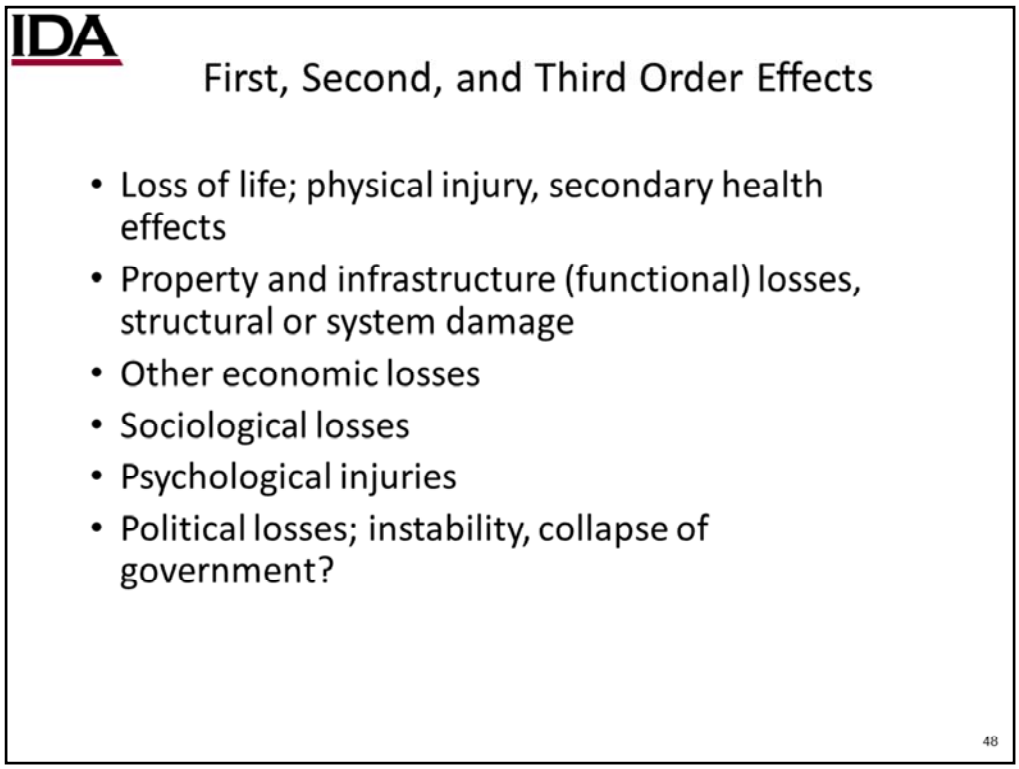
Note on Threat-Based and Capability-Based Planning: These materials represent best practices in Capability-Based Planning, which is a deliberate process that provides a coherent basis for (1) planning and implementing the major missions or objectives assigned to the armed forces by strategy and policy, (2) assessing the capability of the armed forces to accomplish assigned major defense missions or objectives, and (3) developing broadly stated non-materiel or materiel-related approaches that address the most important capability-related challenges. While the process begins with considering risks presented by threats, the overall thrust of the process is to present decision-makers with capabilities to respond to a myriad of threats in different scenarios, rather than a specific response to a specific threat.



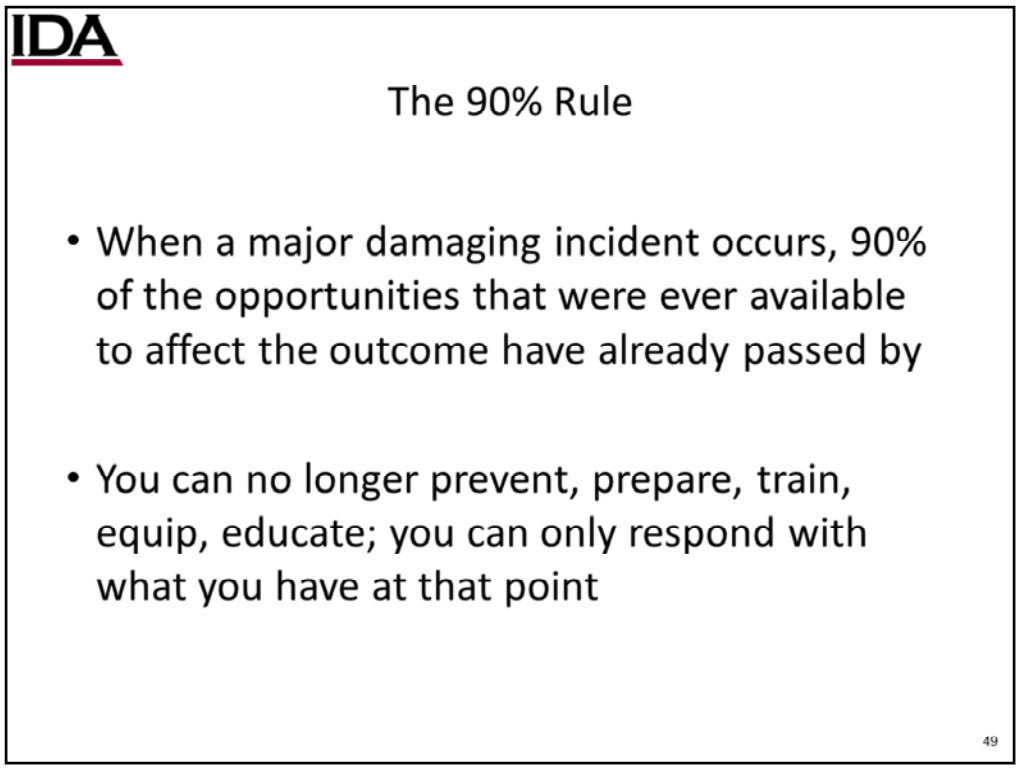
We don't use the term hazard here, but it is part of the terminology in the risk assessment. In a nutshell, threat tends to suggest a thinking enemy, while hazard is generic, including man-made and natural threats to society.



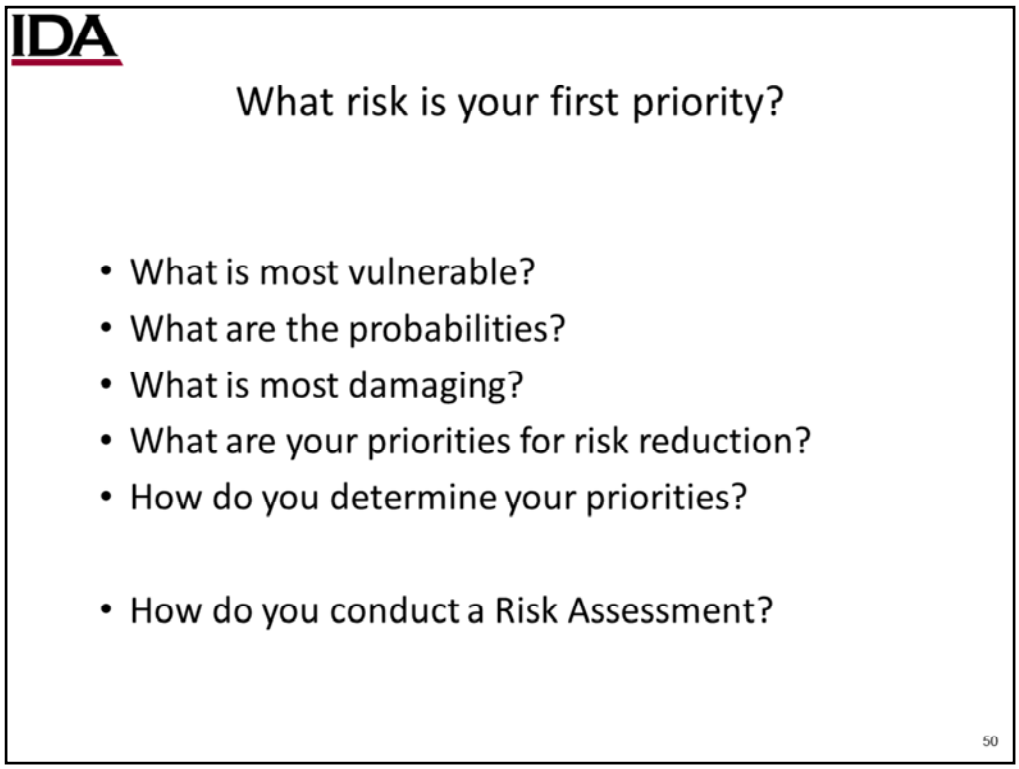
Risk has as specific meaning for security and defense forces – the potential to fail at the mission and to lose personnel. For the political level and at the societal level, the term is much broader, and it may be useful to bring that discussion into the room.



A good point of departure for discussion on the societal impact of the main Hazards and Threats to society. This is particularly useful for the discussion of the Criteria of Maximum Threat and Vulnerability in the risk assessment.

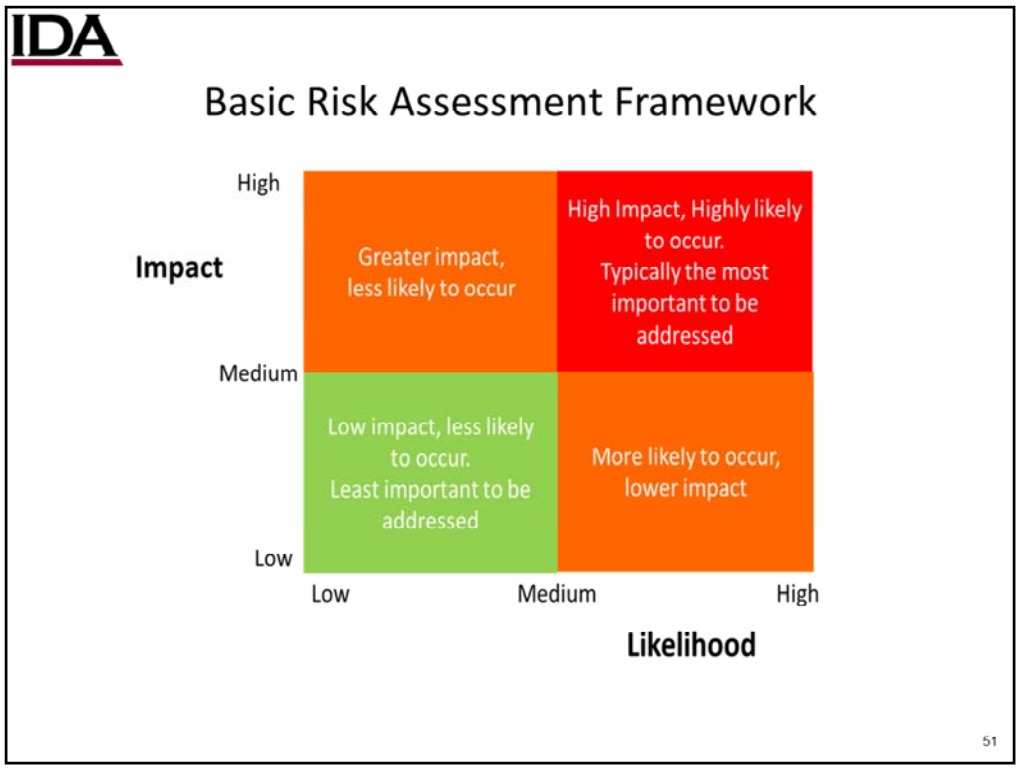


This is a foot stomp on the notion of the importance of planning and preparation. For many defense and security forces, aid to civilian agencies and aid to natural disasters is an unwanted mission. BUT, it will also come up, so it is best to embrace the mission area and do the most by beating the 90 Percent Rule.



With insufficient resources to deliver the policy and strategy, it is important to understand the priorities and the attendant risks of the policy and strategy. The purpose of a risk assessment framework is to identify the areas of highest priority and to inform choices.

We will introduce two ways to think about Risk Assessment.



In order to set priorities, a risk framework does not need to be overly complex.

A classic and effective framework considers two essential elements:

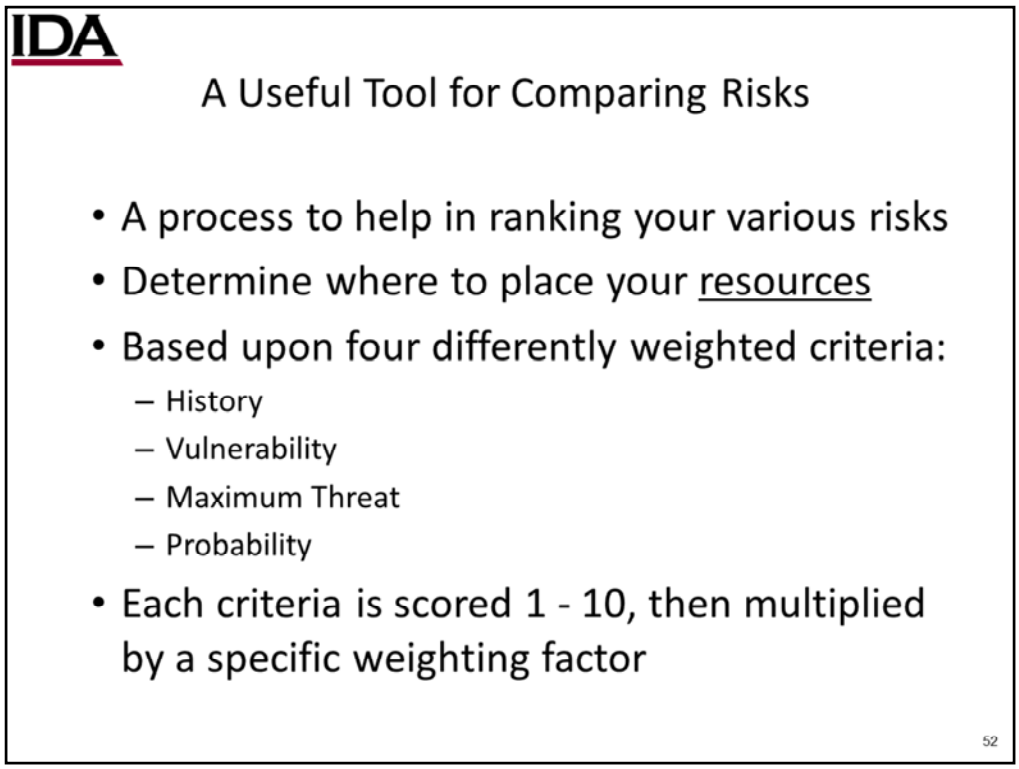
Likelihood – How likely is a particular event going to occur? While this can be informed by intelligence, it is largely a subjective assessment that is commonly scaled in terms of low, medium, and high.

Impact – What is the impact should a particular event occur? This also can be informed by intelligence, but is largely a subjective assessment as well, scaled in terms of low, medium, and high.

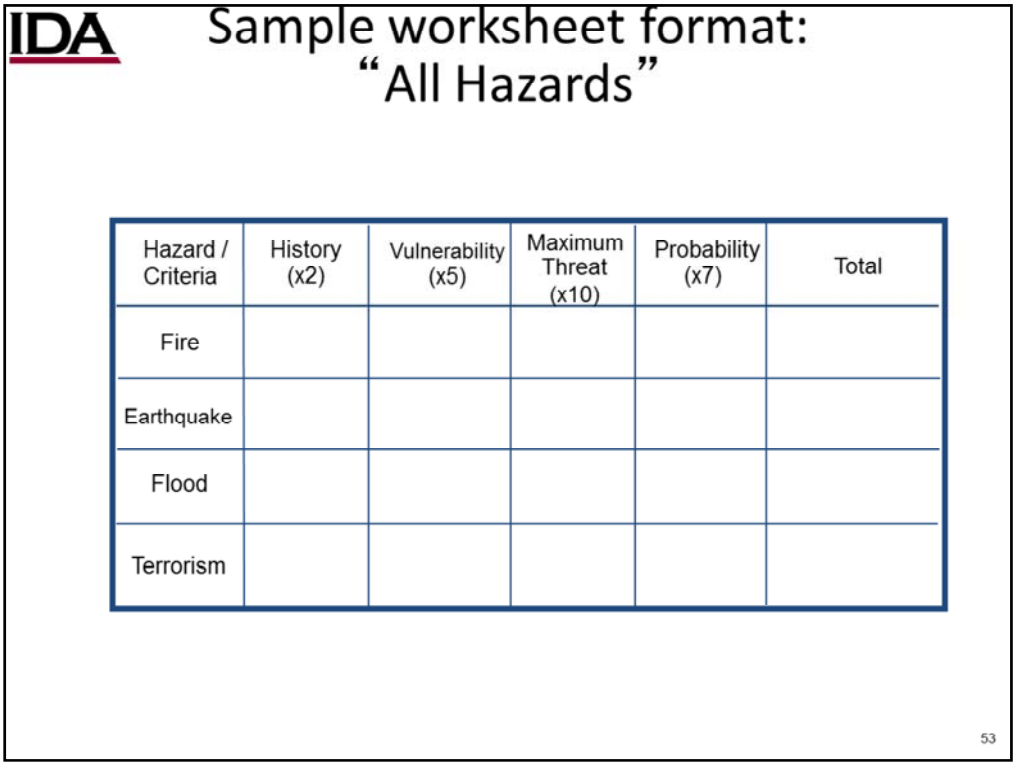
Clearly, the area in the top right (red) quadrant of this figure, represents the greatest risk as it is both likely to occur and have high impact.

A third element can be helpful in prioritizing within each quadrant – urgency. This is a more complicated element, as it considers when the risk might materialize and how long it will take to mitigate the risk, i.e., if a risk is not expected to materialize for 5 years and mitigation will only take 2 years, then it is not particularly urgent; if a risk will materialize in 3 years and mitigation will take 3 years, then it is urgent.

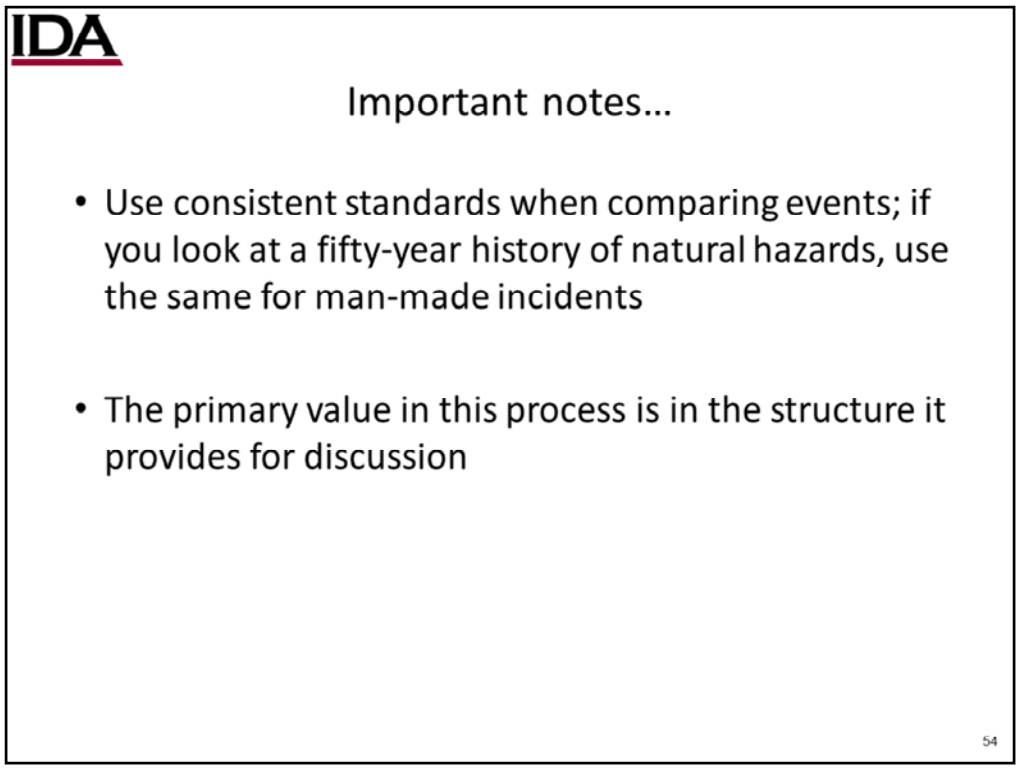
A risk assessment which considers all three elements – likelihood, impact, and urgency – **will be very helpful in determining the prioritization of the risk and the allocation of limited management and analytical resources – the very purpose of this process.**



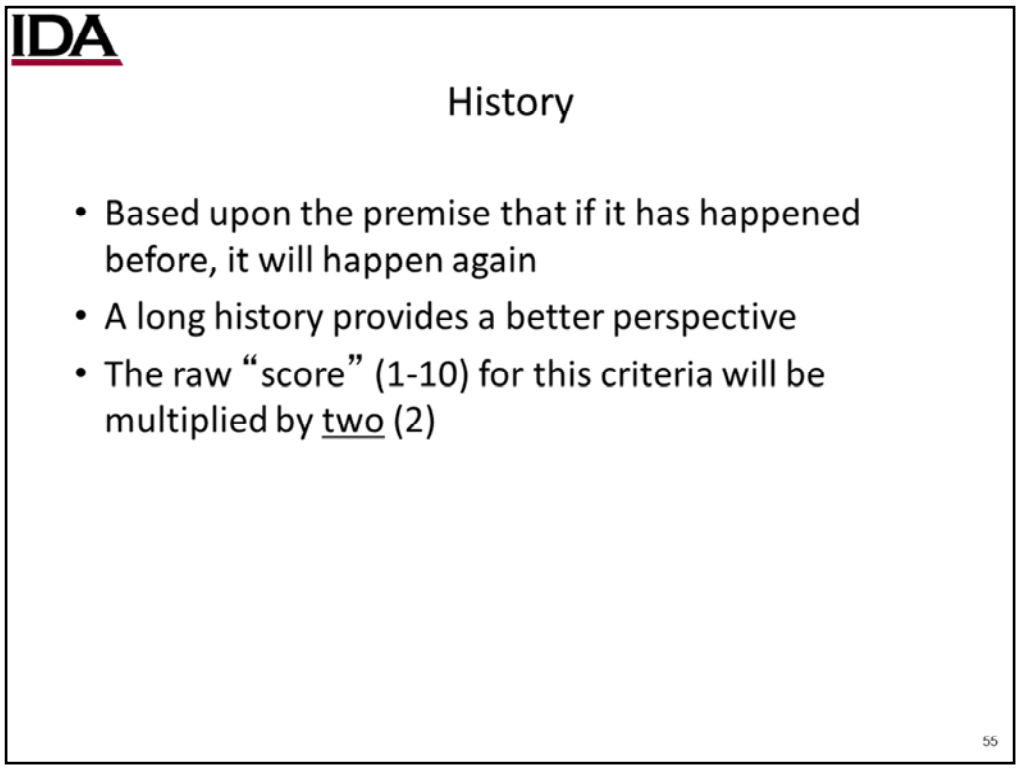
Another tool uses additional criteria to weigh the various risks, which also allows for a rational, unbiased approach to develop a prioritized list of risks to your society.



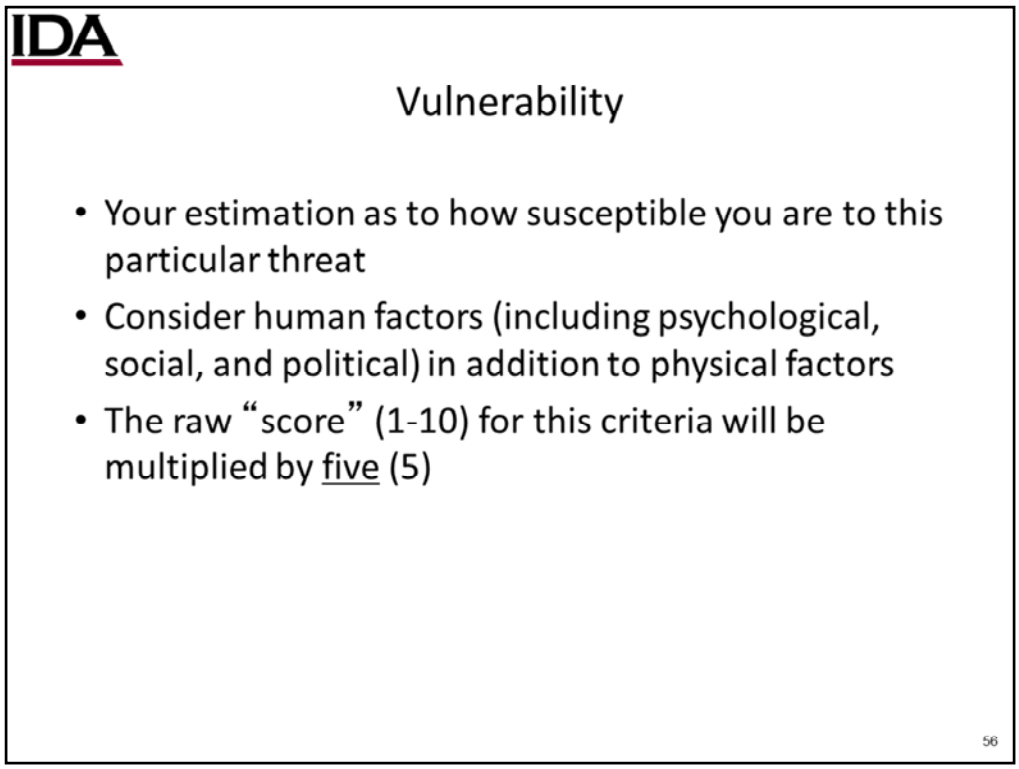
You can perform this exercise using "All Hazards," meaning natural and man-made threats, or you could simply do man-made threats or even focus on the subsets of one particular threat, e.g., terrorism (chemical, IED, biological, suicide, etc.).



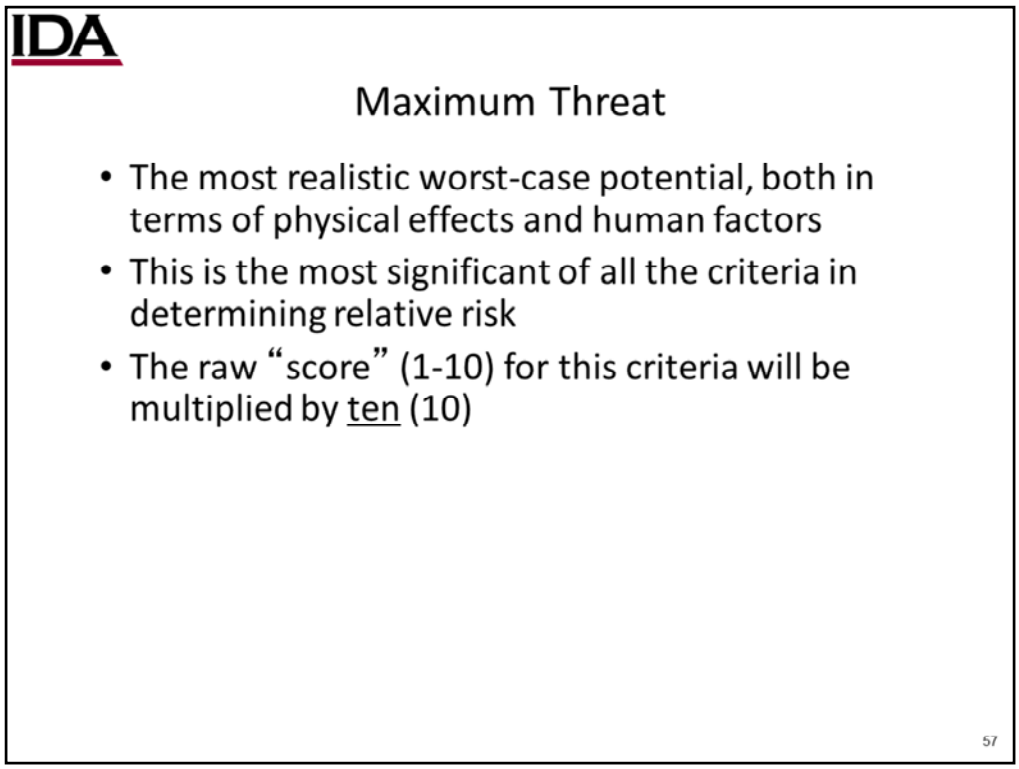
If you were to perform this exercise regularly, you would develop a clear rationale for each rating, AND you can use the results to show the change in relative risk posed by each Hazard.



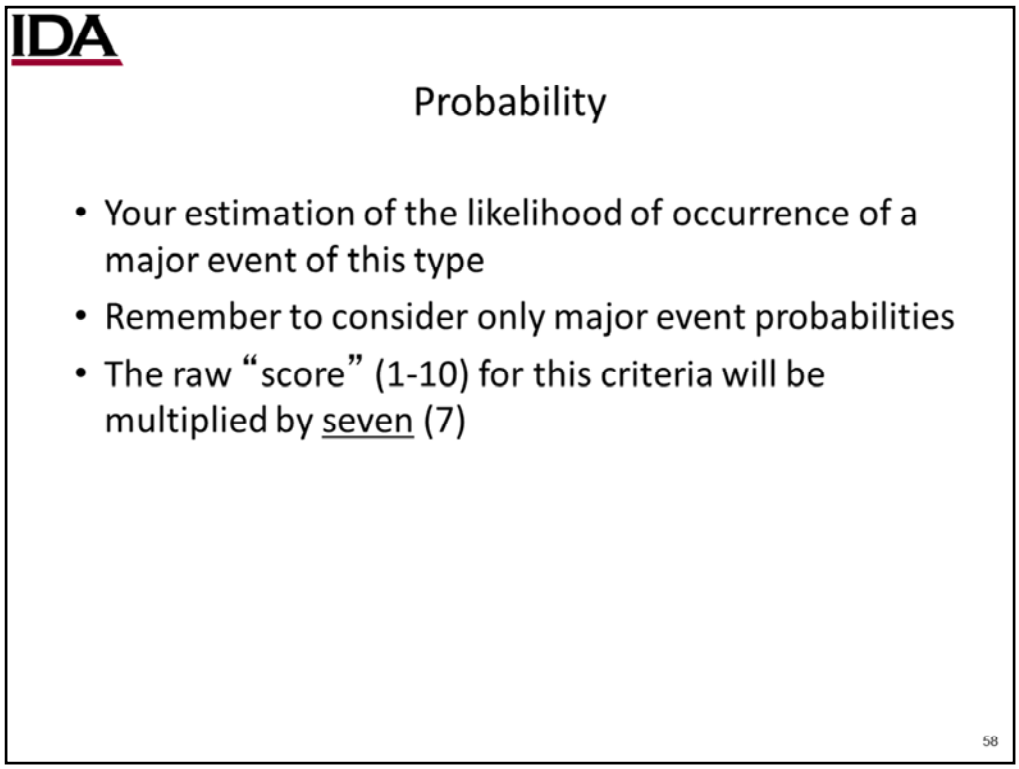
History is one of two criteria dealing with Time. The other is Probability, which is an evaluation of future events. Note that History is scaled with a 2, while Probability is weighted at 7, reflecting that planners and decision-makers have to think of how to put resources against future Probable threats.



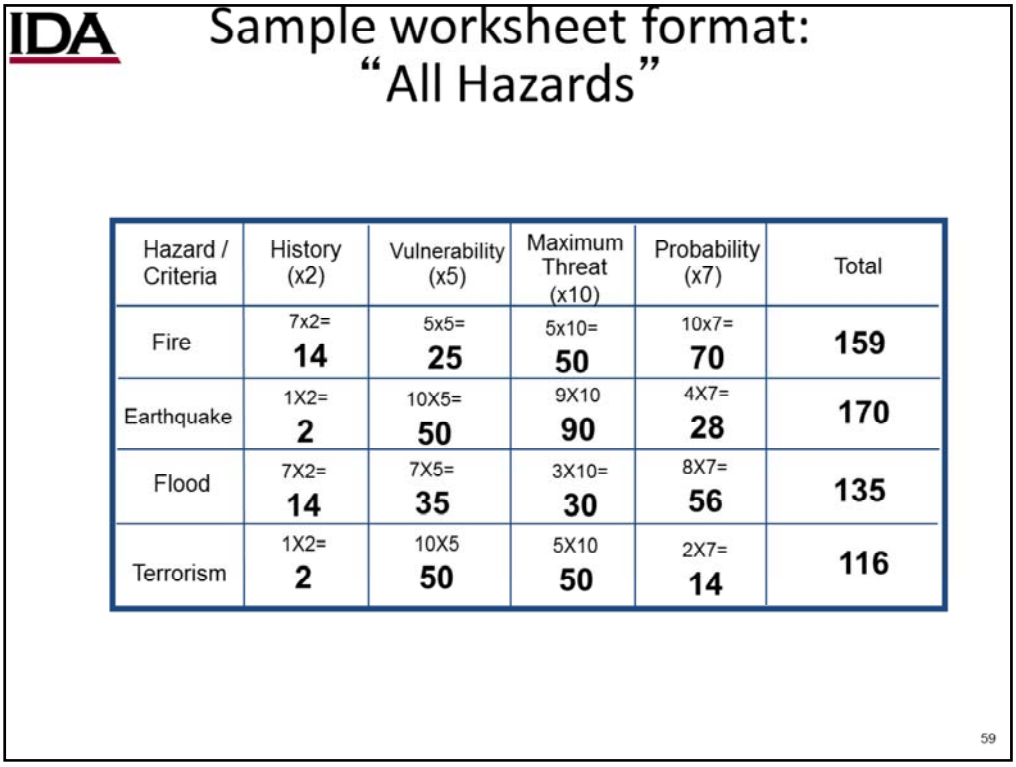
Second- and third-order effects are important considerations. Ensure participants understand the nature of this criteria. Vulnerability impacts my capacity to protect, prevent and mitigate against a threat. The more vulnerable I am, the less I am able to mitigate. When assessing vulnerability, assumptions about the future levels of capability to mitigate a threat should not be considered, unless there is a clear plan with resources put against the development of required capabilities.



This is the worst-case scenario. For most countries, a nuclear strike would be devastating, but the History and Probability criteria will drive this down as far as a likely threat.



This is the other criteria dealing with Time. Note that History is scaled with a 2, while Probability is weighted at 7, reflecting that planners and decision-makers have to think of how to put resources against future Probable threats.



Conducting the exercise:

Start by having the participants brainstorm quietly alone, developing lists of Hazards, without bias or notions of which is the most serious.

Get at least a dozen Hazards on the board and start the assessment. Members should not attempt to prioritize the threats – the numbers will drive out that ranking. Do not conduct the total until all the weighted numbers are input.

Some might have a challenge grasping hold of these four criteria and why they are weighted the way they are. Here are two approaches to the task:

-Some presenters have found it useful to go "across the rows," going through all four criteria for one threat.

-Another approach is to go down the columns for History and Probability (the two Time-oriented criteria) for each Hazard and then go down the columns again for Vulnerability and Maximum Threat. This may allow for a better link up for those who resist the Criteria and their ranks. The downside is that you have to revisit each Hazard more than once.

Total the numbers and investigate how certain Hazards fell or rose due to the various criteria.

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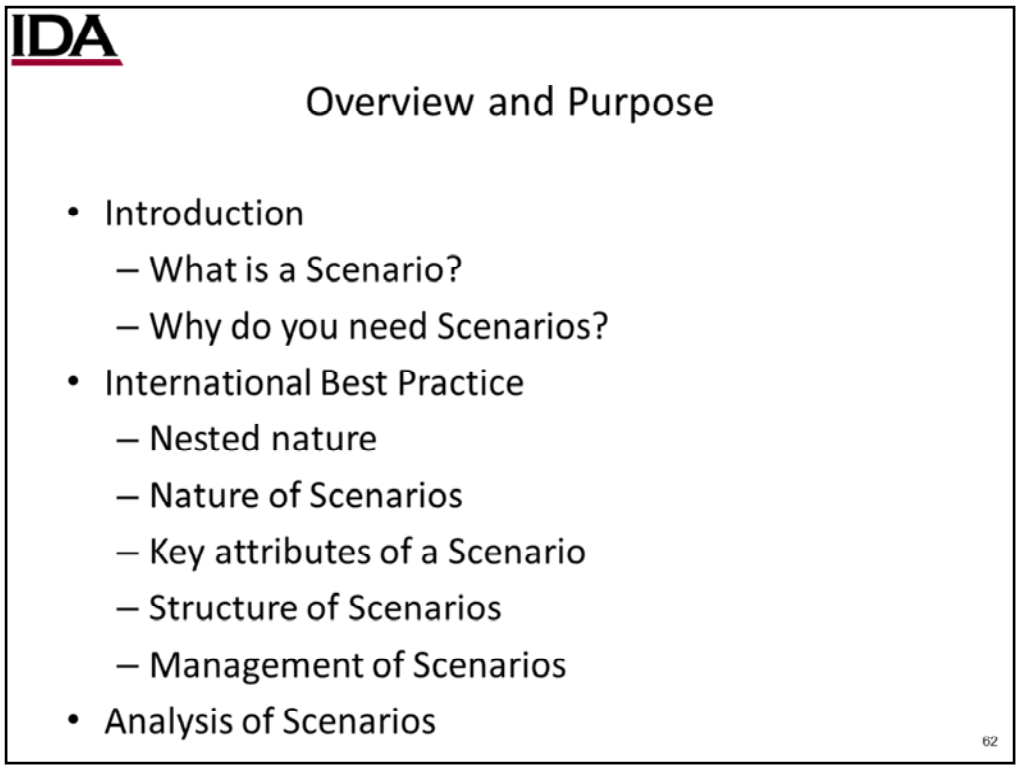
Conclusion: What do you do?

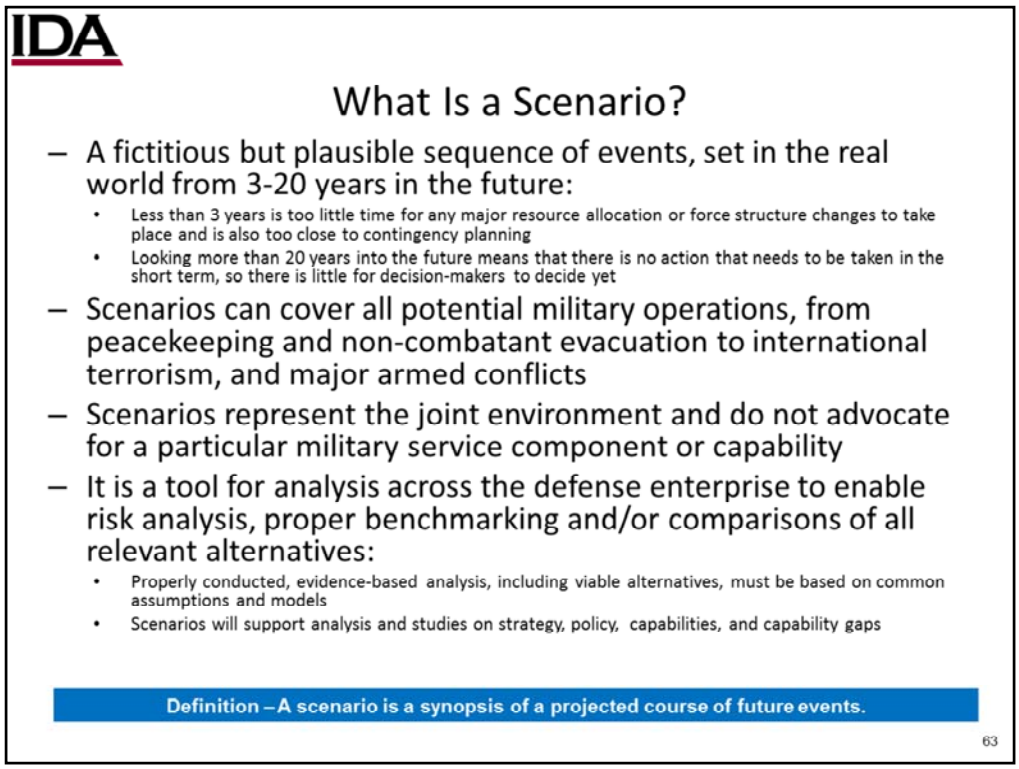
- With limited resources to deliver the policy and strategy, decision-makers need to know the risk to initiatives
- Risk-assessment frameworks allow us to identify the areas of highest priority
- Assessing the various hazards allows decision-makers to see the *relative* risk posed by very different hazards
- The *strategic* plan will identify the problems, both in threat and response capability, and then identify solutions
- The best plan will emphasize prevention and preparedness, and not just response to an actual incident

IDA

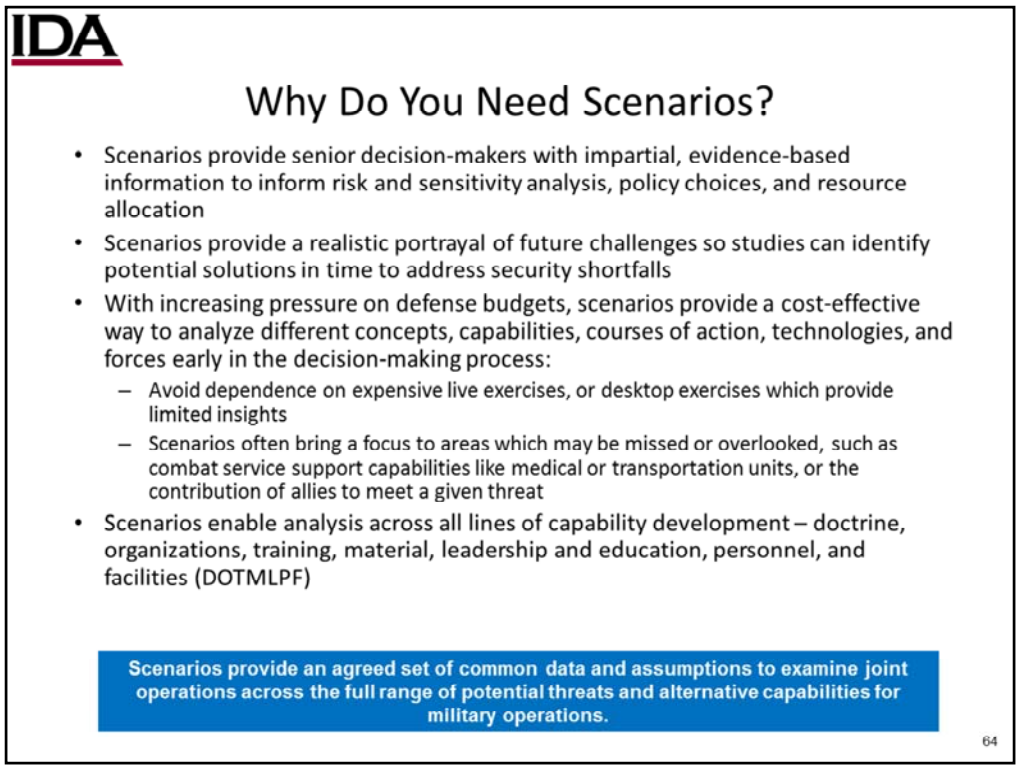
Component 4
Scenarios



The seminar starts with an explanation of the role of scenarios and why they are useful in defense planning and management. There is a pragmatic introduction into international best practice, including the identification and definition of the 5 key attributes to a scenario – relevant, reasonable, robust, reusable, and responsive. The seminar provides guidance on the structure of a scenario and the recommended means for managing the scenarios and their development. Finally, there is a series of slides to aid in the analysis of a foreign institution compared to best practice.



The plausibility of the scenario is essential to its credibility. An example of plausibility is a scenario wherein the sequence of events described that lead to military intervention is based on intelligence.



Scenarios provide an agreed set of common data enabling the study and analysis of different concepts, capabilities, courses of action, technologies, and force structures. The introduction and use of scenarios significantly reduce the dependence on expensive development activities and exercises.

For example, if a study needs to examine increased fire support, a scenario and its analysis could provide the basis to consider mortars, field artillery (cannon or rocket), attack helicopters, and/or close air support which is significantly less expensive than testing all these options in live fire exercises.

IDA

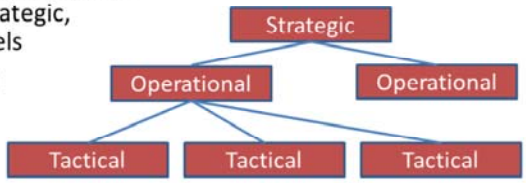
Overview

- Introduction
  - What is a Scenario?
  - Why do you need Scenarios?
- International Best Practice
  - Nested Nature
  - Nature of Scenarios
  - Key Attributes of a Scenario
  - Structure of Scenarios
  - Management of Scenarios
- Analysis of Scenarios

IDA

Nested Nature of Scenarios

- Scenarios must be compatible across the spectrum of operations – strategic, operational, and tactical levels
- Strategic scenarios establish the context from which operational-level scenarios are developed



- Operational scenarios provide the context for tactical scenarios:
  - Each strategic scenario could have several operational scenarios derived from it
  - An operational scenario could have several tactical scenarios derived from it
- Nesting ensures consistency with policy and promotes efficiency in their development
- Clarity and consistency in policy and other assumptions at all three levels is essential if analyses are to be comparable throughout the spectrum of operations

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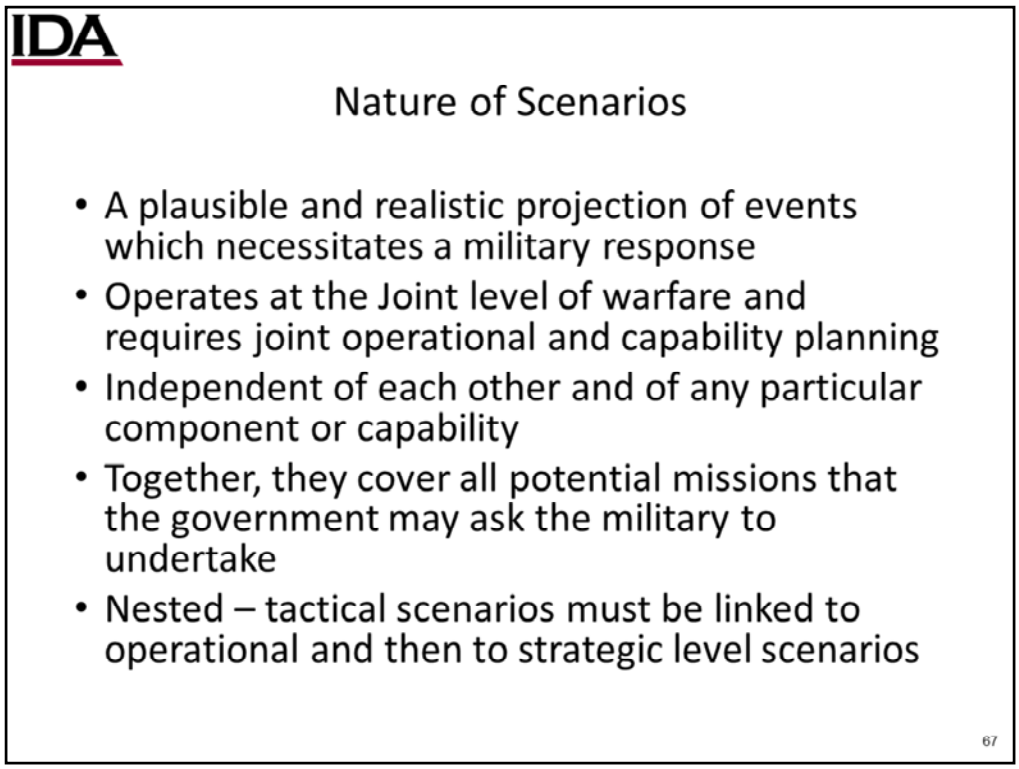
The role of a scenario is to provide a common framework for analysis to support decision-making consistent with current government policy. The connection to current policy is to ensure the scenario is relevant to challenges the current government wants the armed forces to be able to undertake in the future.



More: It is more important to produce quality scenarios rather than a large number of scenarios. A few well-written scenarios that correspond to the priority mission area challenges of the chief executive and defense leaders will have more utility than many scenarios that are too shallow for useful analysis. Ultimately, scenarios point armed forces leadership to capability planning and development. Given that most military capabilities are fungible, if capabilities are developed on the basis of well-written, carefully researched scenarios and their resultant joint concepts, then a nation is likely to be prepared to meet whatever challenges it may face.

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Key Attributes of a Scenario

- Relevant
  - Based on projected force structure and likely military missions
  - Designed to support senior decision-maker requirements for policy, force structure, analysis of alternatives, and resource allocation decisions
- Reasonable
  - Plausible and feasible, including assumptions
- Robust
  - Analytically sound and independent of individual component biases or pre-conceived solutions
- Reusable
  - Applicable and repeatable over a variety of studies and will be staffed and approved for intended use
- Responsive
  - Meets analytical and decision-making needs

IDA

Scenario Attribute - Relevant

- Projected force structure – scenarios should be designed to evaluate the risks associated with future development plans and their resultant resource allocation implications
- Military missions – each scenario should represent a type of mission which the government expects the armed forces to undertake; all potential missions should be covered
- Joint – each scenario should depict a joint campaign, joint forces, and joint tactics; not the parochial view of any one armed force's service component
- Timeframe – scenarios should be set 3 – 20 years in the future, in sufficient time to develop solutions prior to need
- Projected capabilities and concepts – the scenario should challenge the projected capabilities and current or planned concepts

IDA

Scenario Attribute - Reasonable

- Plausible – the hypothetical events leading to an armed forces response need to be feasible
- Credible – all assumptions, including those about the adversary, need to be reasonable, transparent, and based on intelligence
- Consensus – supported by all relevant stakeholders
- Concepts – the concept for both friendly and adversary forces should be consistent with planned doctrine, strategy, and concepts
- Environment – environmental conditions should be consistent with the geography and season

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Scenario Attribute - Robust

- Independent of component – there should be opportunities for multiple means of responding to the scenario; they should not be designed to advocate, promote, or "prove" the solution of any particular military service component
- Stressful – the environment and force ratios should be sufficiently challenging to identify potential weaknesses in strategy, doctrine, concepts, force structure, and systems
- Scrutiny – should be able to withstand review and assessment by independent analysts and advisors
- Measurement - effective in providing measurement space to assess capability in all its aspects (i.e., the DOTMLPF), challenges, opportunities, and potential solutions
  - Portrays a stressful situation or combat action that provides opportunity to identify shortcomings and potential solutions for closing capability gaps
- Coalition – if relevant to the scenario, reflects the force operating within the larger context of a coalition of nations

IDA

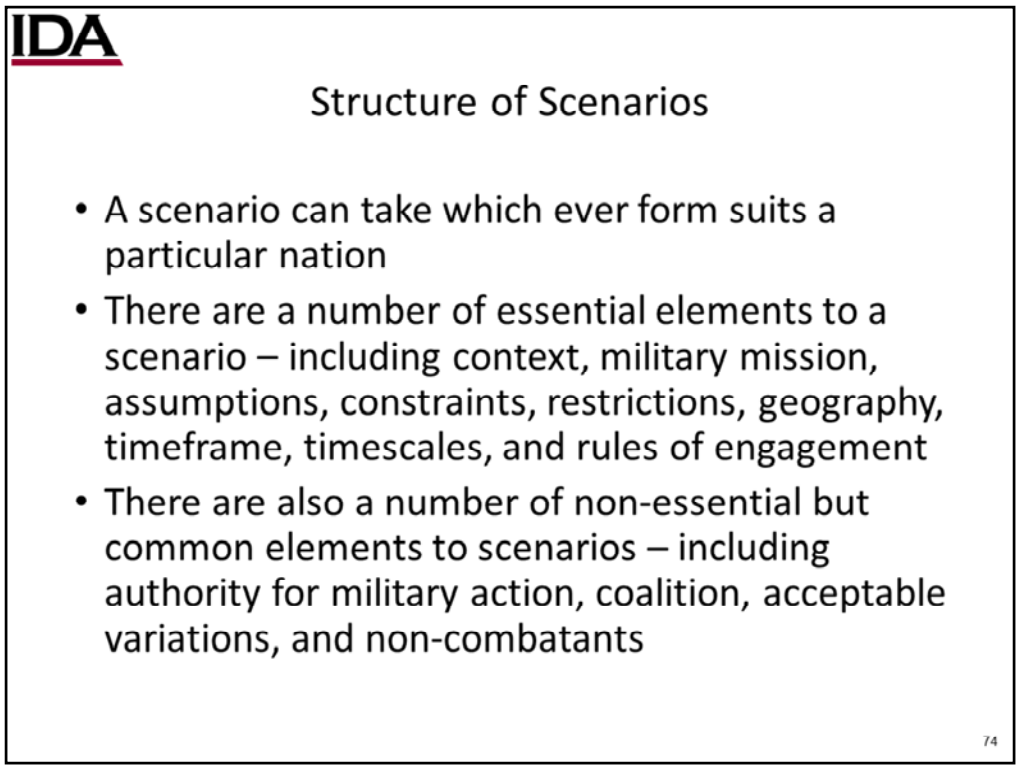
Scenario Attribute - Reusable

- Utility – each scenario should be applicable over a variety of studies and analyses
- Well documented – each scenario should be approved by the proper authorities for its intended use; each variation should be documented to ensure transparency and consistency
- Monitored – the use of the scenarios should be recorded and monitored to ensure proper use
- Breadth –no scenario can provide every environment, condition, or variable; however, the portfolio of scenarios should cover all potential military missions, environments, and other key variables.
- Nested – there should be a clear linkage from the strategic to tactical levels, including policy and assumptions

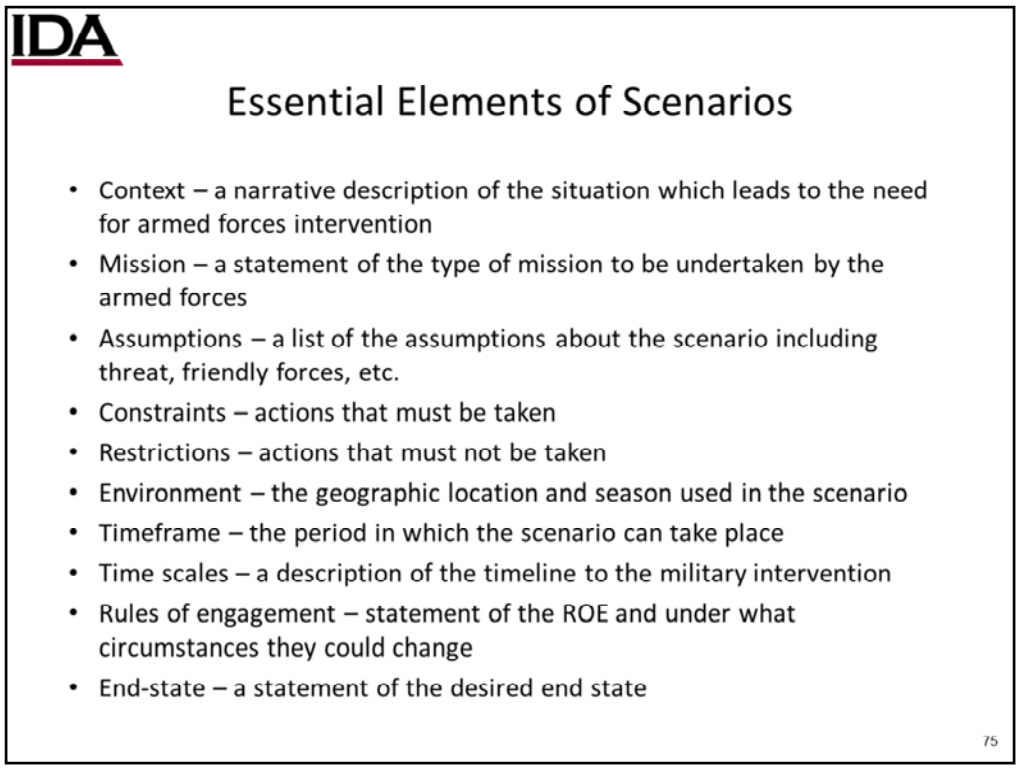
IDA

Scenario Attribute - Responsive

- Available - the scenario and its details are available when required
- Design – the design of the scenario(s) meets the analytical and decision-making needs of Senior leaders
- Flexible – the baseline of the scenario should be definitive, but allow for documented and reasonable sensitivity analysis and the internal analysis of alternatives, so long as it is documented, transparent, and reasonable



The structure of scenarios should fit the context; however, the following elements are time-tested and represent best practice.



Context: AKA situation or background

Mission: may be inter-service or inter-ministerial mission, depending upon context

Assumptions: what factors can be expected to appear in this scenario, including adversarial, neutral and coalition forces (as relevant), risk of escalation, etc.?

Constraints / Restrictions: also referred to as limitations

Environment: consider operational impacts of the geographic domains in play

End-state: a statement on the desired end state for the armed forces response; for example, all entitled non-combatants successfully evacuated, or the territorial integrity has been restored or terrorists' cells/capabilities destroyed.

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Non-essential but Common Elements of Scenarios

- Authority – statement of legal basis or authority for the military intervention taking place, e.g., UN resolution, NATO Article 5, etc.
- Coalition – a statement on the contribution from, and the role of, any coalition partner(s)
- Acceptable variations – list of acceptable variations to the scenario. These are essential for any sensitivity analysis or an analysis of alternative options.
- Non-combatants – a description of the role of non-combatants and any consequential assumptions or constraints

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Management of Scenarios

- Central management and ownership of the scenarios is vital:
  - Ensure adequate coverage of defense policy and mission areas
  - Ensure scarce development capabilities are focused on the leadership's priorities
  - Ensure plausibility and connection with intelligence and analysis of future strategic environment
  - Manage and police the use of scenarios by the armed forces components, providing configuration control
  - Ensure joint perspective throughout scenario use
  - Ensure development and use is open and transparent
- Management of the scenarios is normally assigned to a permanent office:
  - Will working under the authority of the senior leadership
  - Will have a mix of active military and civilians
  - Will create or update scenarios as necessary
  - Will manage the documentation and monitor use
  - Will work closely and cooperatively with other offices

IDA

Overview

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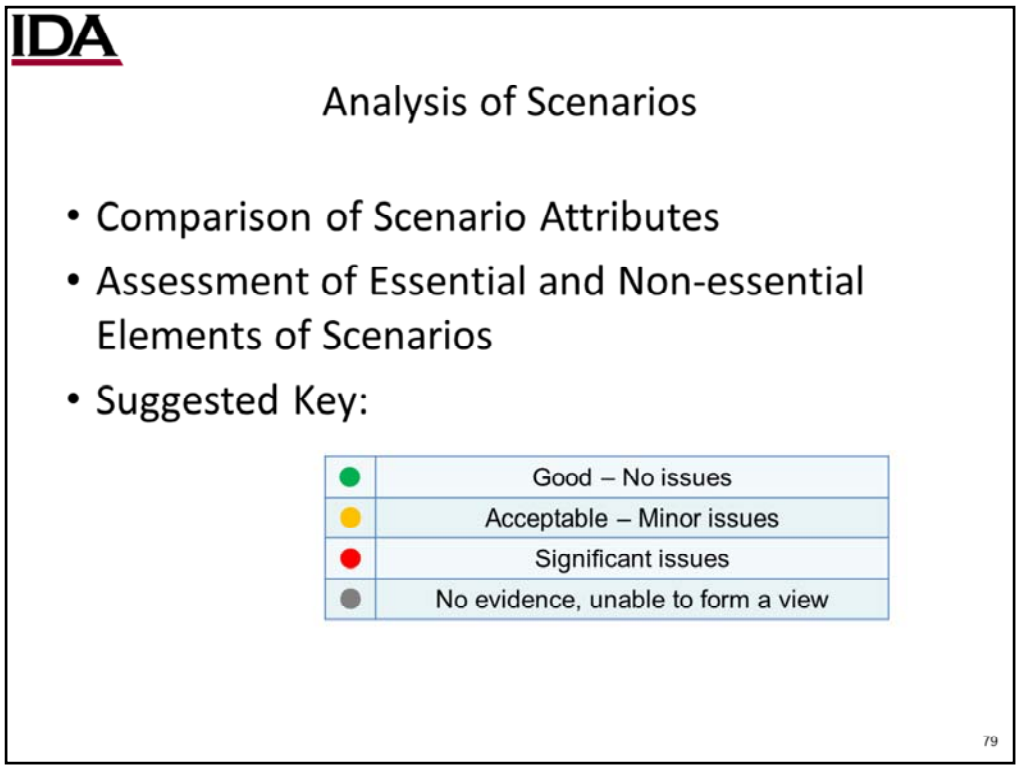

Analysis allows the working group to track and report these basic functions, using the stoplight symbols.

IDA

Comparison - Relevant

Attribute	Analysis
Projected Force Structure	
Missions	
Joint	
Timeframe	
Projected Capabilities and Concepts	

Comment:

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Comparison - Reasonable

Attribute	Analysis
Plausible	
Credible	
Consensus	
Concept of Operations	
Environment	

Comment:

IDA

Comparison - Robust

Attribute	Analysis
Independent of Component	
Stressful	
Scrutiny	
Measurement	
Coalition	

Comment:

IDA

Comparison - Reusable

Attribute	Analysis
Utility	
Well documented	
Monitored	
Breadth	
Nested	

Comment:

IDA

Comparison - Responsive

Attribute	Analysis
Available	
Design	
Flexible	

Comment:

IDA

Essential Elements of Scenarios

Essential Element	Analysis	Comment
Context		
Military Mission		
Assumptions		
Constraints		
Restrictions		
Environment		
Timeframe		
Time scales		
Rules of Engagement		
End-state		

Comment:

Non-essential but Common Elements of Scenario

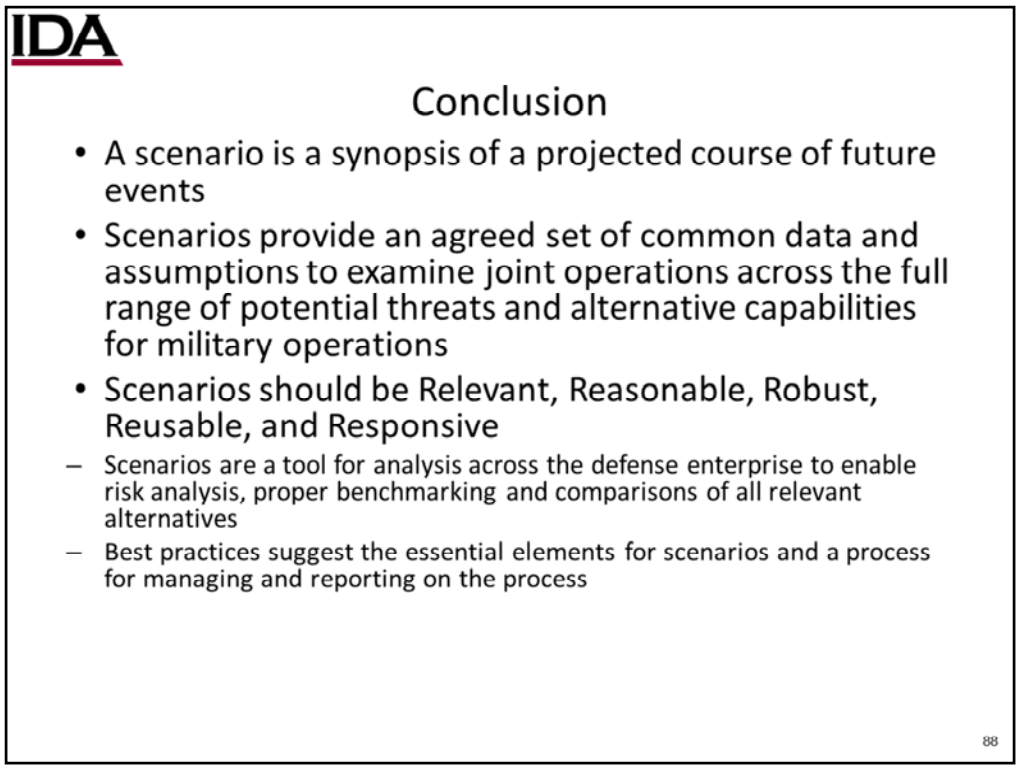
Essential Element	Analysis	Comment
Authority		
Coalition		
Acceptable Variations		
Non-combatants		

Comment:

IDA

Management of Scenarios

Issue	Analysis	Comment
Adequate coverage of defense policy and defense mission areas		
Focused on the leadership's priorities		
Plausible and connected with intelligence and analysis of future strategic environment		
Manage and police the use of scenarios by the armed forces service components, providing configuration control		
Joint perspective throughout scenario use		
Development and use is open and transparent		
Working under the authority of the Senior leadership		
Mix of active military and civilians		
Create or update scenarios as necessary		
Manage the documentation and monitor use		
Work closely and cooperatively with other offices		



Scenarios provide an agreed set of common data enabling the study and analysis of different concepts, capabilities, courses of action, technologies, and force structures. The introduction and use of scenarios significantly reduces the dependence on expensive development activities and exercises.

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Glossary

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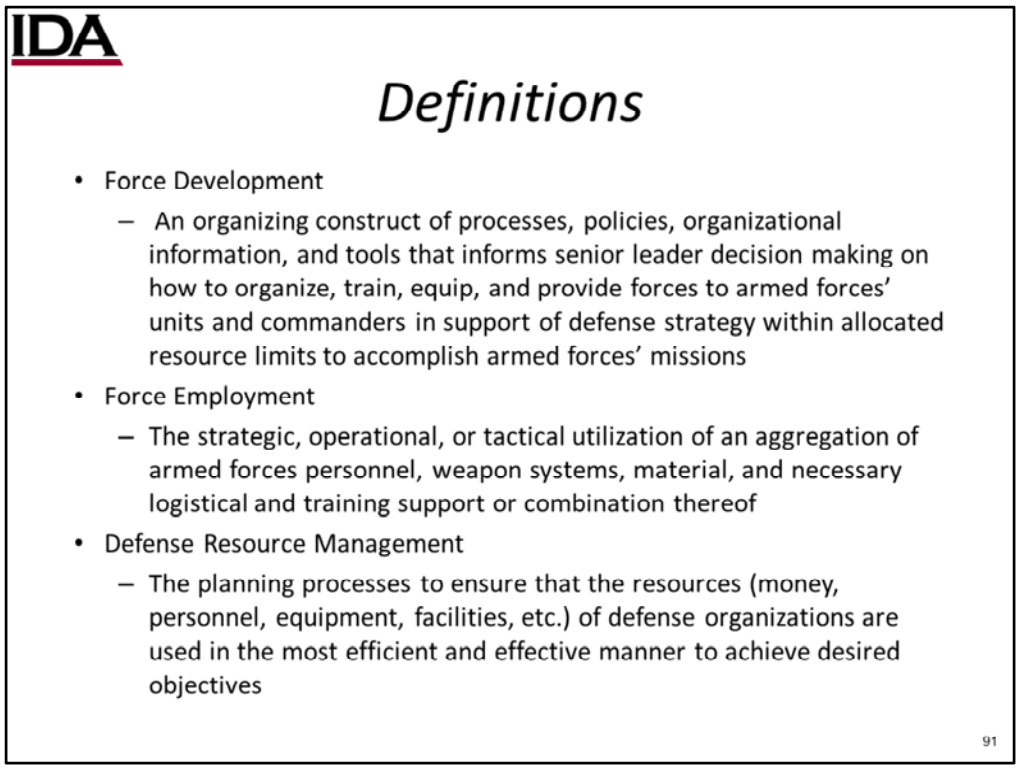
Definitions

- Policy
  - A purposeful and consistent course of action produced as a response to a perceived problem of a nation's citizens, formulated by a specific political process, and adopted, implemented, and enforced by a public agency (i.e. a Ministry of Defense)
- Strategy:
  - An approach to achieve policy objectives that provides a clear vision of success and a realistic look at how to employ resources, exploit strengths, and mitigate weakness
- Defense Strategy:
  - The art and science of coordinating the development and employment of armed forces to achieve national security objectives assigned to the defense sector by law and policy
- Defense Management:
  - The processes that align assignment, allocation, and apportionment of forces to units in support of defense strategy and the requirements of armed forces' commanders



It is inferred from the definitions that Force Development is pointing to a future state – what the armed forces will look like in the future. Force Employment is about today or the very near term. Given how the force's have been developed, how can they be effectively employed?

Within Force Development, Resource Management processes plan the development of required capabilities and plan the allocation of financial, human, and material resources to the force to develop capabilities. The planned allocation of resources is constrained by resource limits. For example, financial resources are limited by the budget allocated to defense, human resources are limited by the authorized size of the force and the ability to pay for personnel. Material resources are limited by the force's technical ability to operate and maintain equipment and the ability to pay for material.

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Definitions

- Capability
  - The ability to carry out a task under specific conditions (time, distance, environment, and readiness standards) and created as a result of a proper integration and balance of doctrine, organization, training, material & equipment, leadership & education, personnel, and facilities within a unit or organization
- Force
  - An aggregation of armed forces personnel, weapon systems, material, and necessary logistical and training support or combination thereof
- Force Posture
  - The pre-positioned location or locations of the force; a permanent garrison or encampment from which the force may mobilize and deploy

IDA

Definitions

- General Staff
  - Based on historical Prussian design, a general staff is a group of specifically trained military officers, divided along functional lines, to assist a single General Commander in wielding command authority over all aspects of the armed forces
    - Both the development and employment (Operational Command) of the forces are the responsibility of the General Staff's Commander
- Joint or NATO Staff (also known as the Continental Staff System)
  - Organized by Codes (1-9) under a leader responsible to provide unified military advice to the civilian head of the Armed Forces and to provide policy and guidance to shape the development of the Armed Forces
  - In different nations, the leader is the Chairman (US), Chief of the Defense Staff (UK), or Chief of Defense (most NATO nations)
- Joint Operational Command
  - A command responsible to organize and employ land, air, and maritime forces; assign tasks; designate objectives; and provide authoritative direction over all aspects of military operations, joint training, and logistics necessary to accomplish the missions assigned to the command

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Approved for public release; distribution is unlimited.

13. SUPPLEMENTARY NOTES

14. ABSTRACT

This two part paper is intended to assist United States government representatives in advising foreign defense institutions that seek to improve their defense governance and management capabilities. By defense institutions, we mean ministries of defense and the headquarters staffs of the armed forces and/or military services as well as other national level institutions responsible to plan for and manage the development and employment of armed forces. Part one's focus is on the conceptualization, development, and application of defense policy and strategy. Part two is a set of seminar materials provided as PowerPoint slides; some with annotated notes. These materials are for use by U.S. government representatives sent to educate or familiarize members of foreign defense institutions on the topics covered in part one. The slides are intended to be modular. Accordingly, a user is encouraged to adapt the seminar materials to the topics he or she wants to focus on and further modify based upon the audience.

15. SUBJECT TERMS

DIRI, DIB, DRMS, defense institution building, security cooperation, defense governance and management, defense strategy, defense policy, strategic defense review, scenarios

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