Introduction: ODP (Operational Design Process) fills a gap between the issuance of a policy objective, and the planning to achieve that policy objective. Contained within is a description of a way of framing a design for the purpose of proposing a problem, and then developing a theory of action. It is an interpretation and adaptation of the Operational Design Process (developed at SAMS and employed at the Army’s Unified Quest 2008 War Game and is itself an adaptation of Systemic Operational Design). It must be inclusive of not only the “out puts” or “products” of the process, but more importantly the interaction of the people who participate in the process, and who will go forward in planning and implementation / execution. The critical issue ODP highlights is that the right problem is identified and considered based on a thorough analysis to which a theory of action can be developed that can be scrutinized based on continuous interaction.

This is not planning. It is a process that should be done prior to planning, but can be continued through implementation in order to ensure the theory remains valid. Designing the Operational Frame by establishing a theory of reality and a theory of action helps the commander and staff to avoid the effects of cognitive dissonance. Cognitive dissonance is the effect where because a COA has been committed to in planning, all other relevant information which might contradict or conflict with the COA that has been committed to, or invested in, is ignored, bent to establish a fallacious causal relationship, or biased as to have the wrong weight. Cognitive dissonance can cause a commander and staff to see only what they wish to see, and make bad decisions. While all bias cannot be eliminated, the ODP can help mitigate the natural biases commanders and staffs have with regard to a chosen COA. It does this through its interactive nature which better represents reality, and by identifying many of the various potential outcomes, and establishing more explicitly how those outcomes might occur.

There are some non doctrinal terms used herein. The form of the ODP should follow the function of its design. As such it should not be a requirement that designers constrain themselves to a prescriptive process that inadequately addresses the design. What matters is that relevant information is made explicit so that it can be interacted with and explored to greater detail. Use what works. It may be an adaptation, interpretation, or amalgamation of existing ideas and concepts that better facilitates the design process, it may be something new. The use of the wargame within this paper was not originally part of the design process, but because of its use in UQ 08, there was tension in the scrutiny of the theory – as such its inclusion is an example of an adaptation.

The example used in this paper employs ODP to a set of conditions where Security Sector Reform plays a key role. In this example the SFA activities support development and reform within a SSR effort. There is no reason why the ODP cannot be applied to any conditions where the situation is complex and interactive. If the policy objective called for regime change, the design and all the components of the design should account for that. Nor does this paper seek to limit SFA activities to SSR, you could have SFA across the breadth and depth of full spectrum operations if so identified.

1. General  The operational environment in which SFA activities take place range from continued assistance to a well developed partner who is now on the cusp of extending assistance to new partners that cannot extend governance to or over its own population and borders. Some of these states will have underdeveloped areas or tools of governance, social and political challenges that make establishing what level of support or actions are needed on our part difficult to ascertain. In such environments, actions taken to assist one area of government can be contingent on development in another. They could be incongruent with an ongoing effort to develop that area creating “effort fratricide” where resources applied to a related problem negate or counter resources applied elsewhere.
It is critical that commanders and their staffs have a design framework to explore how proposed actions to solve a problem will interact with the various systems to either move closer to the desired endstate, or which possibly protract or worsen the problem. The staff could conduct ODP with representation from the other USG agencies, IOs (International Organizations), MNPs (Multi-National Partners), NGOs (Non-Governmental Organizations), and potentially MNCs (Multi-National Corporations) if applicable to the problem set. As the theory of reality takes shape, the range of the participants can be identified.

For a GCC (Geographic Combatant Command) that is required to produce and integrated theater campaign plan for the GEF (Guidance for the Employment of Forces), the possibilities of unintended consequences increase with the number of states & systems within its boundaries. The assistance allocated to a major regional player could actually cause broader regional instability if the considerations and possibilities associated with the consequences of that assistance are not evaluated or accounted for. For the JTF (Joint Task Force) sent in to achieve a policy objective where the key words are “partner” and “assistance”, there is a need to have a solid understanding of the Operational Environment. ODP will help mitigate the possibilities of a GCC or JTF embarking upon solving the wrong problem perfectly. The creation and exploration of a theory of action for the correct problem identified could be the measure that precludes them going down that road. There is also the need to define the nature of the problem and:

- decide if the best course of action may in fact be inaction (at least temporarily)
- decide if the problem is of a nature that it can be solved with military force alone
- decide if it is in fact a problem of the political, social, or economic nature which requires long term commitment of other then just military means, e.g. a holistic approach requiring the broader Inter-Agency, NGOs, IOs, MNPs and MNC investment that must be brought together for the purpose of unity of effort.

The steps below represent a way of developing an understanding of the environment and in developing a theory of action which can be explored and tested through staff interaction (similar to a staff war game). The steps here are not meant to be exclusive; they are an “approach” that allows the visualization and articulation of a theory. In this process the staff breaks down into the players representing the Host Government (Green), the Opposition Group(s) (Red) and the United States and its partners (Blue). More players/groups can be added as is representative of the equities involved with the problem such as multi-national corporations, transnational groups, regional and international players, etc.

While no staff may have infinite capacity to represent all the relative groups, those identified as having key interests in a particular event or objective may be inserted or withdrawn as required to account for their interactions to support or disrupt the event. This process should be iterative and adjudicated in order to get at the relevance of the theory. The form of the theory is of secondary importance to the richness of the discussion the iterative process engenders, however the theory must be complete enough to support the discussion. The desired outcome of this process is the creation of a learning model that creates knew knowledge and tests existing knowledge to better inform the planning process for civilian leadership who make policy, military commanders and their staffs, and the broader inter-agency, inter-governmental and multi-national partners who are charged with carrying out policy objectives.
Using ODP in SFA

- Assess the environment/system as it is
- Determine what the desired policy objective accomplishes optimally within the system
- Identify the Overall political objectives for all the players in the environment & consider their tolerances in the system
- Create a theory that frames the effort and creates objectives that can be realized
- Determine where there are interdependencies and frictions that may effect the design frame

Fig 2-1. A short outline of ODP captures the flexibility of the process. The form that the theory takes is less important than the function it serves. As long as the body of knowledge about the problem is enriched, making what was before limited to implicit knowledge into explicit knowledge, the participants are better prepared then they were, and the likelihood of solving the wrong problem perfectly is decreased.

2. Step 1 – Develop a Theory of Reality
   
   Step 1 Identify & Scope the Problem

   The World as we perceive it

   Theory to realize
   Policy objectives

   The World as we desire it

   Lens we use to view the problem
   • Natural biases
   • Subject to policy objectives
   • Subject to competing views

Fig. 1-2 Step 1. The first step is to develop a theory of reality that underpins your logic. This could take the shape of: “the government of X will change its behavior if it understands the requirement to do so to continue its survival”; “the Government of X will accept help of some kind”; “the insurgent groups of X have taken up violence to resolve their political disputes because there is no viable alternative”; “the states surrounding X will cooperate because they also understand that their own stability could be compromised if X continues on its current path”. This logic then serves the basis of
your theory of action, e.g. if you can leverage the relevance of your theory of reality, then your actions, reactions or inactions will move you closer to your policy objective.

Step 1A Assess the Green Perspective

**Assessment/Appreciation/Understanding of the OE**

**Understanding the nature of the state we are interacting with**

- Are the host state’s objectives for its Security Sector congruent with our policy objectives? Is there room for agreement?
- Are the host state’s policies for its Security Sector congruent with acceptable, legitimate government for its people?
- Are the host state’s objectives for its Security Sector going to put at risk the security of other states or groups?
- Will our SFA support to SSR in that state jeopardize the broader policy objective for that state or the region?
- Will our SFA support send an IO message that is incongruent with our broader objectives regionally and globally?
- What are the tolerance levels we have identified within the state which will cause it to modify its behavior? Are they predicated on U.S. cultural biases?

**Fig. 1-3 Step 1A.** Since a willing partner is key to building their capacity through security force assistance then establishing what that partner’s goals and objectives are, and if they are compatible with our policy objectives are critical. Identifying the character and the nature of the threat to the partner’s interests, and the goals we would like the partner to achieve need to be thought through. The long term effects beyond the immediate assistance to that state’s security forces should be considered. What will be the regional impact of our actions, or the potential future actions of our partner?

Step 1B Assess the Red Perspective

**Assessment/Appreciation/Understanding of the OE**

**Understanding the Opposition’s rational for Action**

- What is the Opposition’s political objective?
- What is the nature of the opposition’s (within the state) political and military actions?
  - Do they have a viable alternative to military action? If not why?
  - Are the differences reconcilable via political discourse?
  - How is the opposition seen by others (legitimate or illegitimate)?
  - Will U.S. SFA to SSR increase opposition? Why?
- Are our broader policy objectives more congruent with the opposition’s vs. the host state?
- Does our SFA to SSR further distance us from a potentially more healthy relationship with a post host state government in which the opposition has a lead or stronger role?

**Fig. 1-4 Step 1B.** The opposition represents another force that is interactive in the environment. It may limit the understanding of the environment to simply constrain your perspective of them to “the enemy”. If the government requires SFA to counter an insurgency, their long term health and viability as a partner may be contingent on the “other then military” solutions they employ in their counter insurgency efforts. If events occur where the opposition becomes the government, either through coup d’état or through some brokered power sharing arrangements, our previous actions may undermine our long term objectives. As such, understanding the opposition’s perspective is required to test your theory. It will also help define those groups or individuals that might be reintegrated vs. those that must be killed, detained or removed.
Assessment/Appreciation/Understanding of the OE

Understanding our rational for action

- Does the policy objective account for the interactive nature of a state?
  - i.e. is the policy objective oriented toward an endstate that is:
    - Congruent with the context of the environment the state must exist in?
    - Does it address the security challenges from the state’s perspective?
- Does the policy objective translate into a GCC/JTF CDR’s endstate that results in a state (or organization) that is capable of doing “X” as opposed to being “X” – e.g. “a state that can maintain safety and stability” vs. “a safe and secure” – the former accounts for interactive change, the other marks a static point in time.
- Are we willing or able to compromise on the policy objective when the endstate is irreconcilable or out of tolerance for what the host nation is willing or able to achieve?
- Is the SFA support to SSR contingent on actions/reactions within the host state or region which are out of tolerance for their normal behavior?
- Does our support create the conditions which protract a war or bad set of conditions, and support a regime that refuses to adapt to the necessary political conditions?
- Are we better served by withholding SFA to the host state until it either modifies its behavior to an acceptable level, or until the government has changed hands?

Fig 1-5. Step 1C. Just taking the policy objective as handed down from higher may not provide the level of detail required to account for U.S. long term interests, or to take advantage of opportunities that might arise in the near future. The policy objective should be considered in the context of the environment we are trying to implement it in order to achieve a greater level of acceptability, feasibility and sustainability. Often the impetus to act could jeopardize the objective or exacerbate conditions, generate consequences worse then the original problem and engender broader opposition to our goals.

Step 1D Identify the Zone of Tolerance

U.S. Political Objectives

Political Objectives of others

Fig 1-6. Step 1D. The zone of tolerance (ref. the above figure) is that area where U.S. policy interests and objectives are compatible with those of others, and where the strategy (ends, ways and means) is congruent to those interests and objectives. It could be those of our potential partners, those of
established allies, those of established competitors and enemies, or those of opposition groups with a state or region. Establishing what the compatible interests, objectives and the ends, ways, means to accomplish them does not constrain our actions, but they should inform them. If the policy objective or interest is of such importance that working within the zone of tolerance with some or all of those who have equities in the outcome is secondary, then that should be a conscious decision with the understanding of where those tolerances have been exceeded and why it was required.

There may be options and alternatives with regard to others that seem acceptable, suitable and feasible, but which for the United States are incompatible with its broader goals or its strategic culture. Understanding what is within a state’s tolerance may help the design framers avoid bad logic with regard to a theory of reality and a theory of action. It may also open up potential areas of cooperation previously unidentified not only in a bilateral sense, but in a multilateral one. Zones of tolerance may change with interaction and time. What was outside the zone of tolerance at one point may over time and events may change and become inside the zone. This could occur for the sitting government or group leadership through recognition of a new reality brought on by war or political change, or it could occur through physical changes in the makeup of the group or government by way of new leadership and direction.

It is also important to distinguish between what is tolerable with regard to policy objectives and interests, and the strategy (ends, ways and means) to accomplish those interests and objective. It may be that the parties with identified equities can agree on the interests and objectives, but disagree with regard to the ways on how to achieve them, or the means to do so. An example of this might be the willingness to accept aid through a third party such as a regional organization or government, or perhaps an IO or NGO, but not directly from the United States. This could be because to the partner, the idea of having the United States fully involved within its borders at this time, even under the best of intentions, jeopardizes its perception of its own credibility and sovereignty. In this example the theory of action may need to accommodate this and establish a more indirect approach.

Over time and events, the tolerance level for more direct U.S. involvement could change for that partner, or it could occur that the policy interests and objectives for the United States require a change. In another example, the United States may need to account for regional tolerances with regard to its interaction with a partner, e.g. will the new reality of a more capable U.S. partner change the regional dynamics? If so how, and what new realities has our interactions created? What changes within the broader environment have occurred? What regional and international policies may have to be adjusted or interacted with in order to bring them back into an acceptable tolerance? Again, this should not preclude our actions, just better inform them.

It may be found that on key issues there is no zone of tolerance, the incompatibility between the two or more positions is for the time being fixed, and inflexible. In this case the U.S. policy interests and objectives may need to be adjusted, along with the strategy for accomplishing them. This does not mean they cannot be pursued, just that achieving them may require more means, more will and more risk then previously allocated, or that the enabler for that policy objective may itself occur through other means and ways where there exist some mutual tolerances. In the end it comes down to how much value the U.S. has placed on a specific policy end, how much GREEN and RED have placed on their policy ends, and how flexible the are in them.

3. Step 2 - Develop a Theory of Action
The CDR & Staff’s theory of reality becomes the basis for the logic which underpins a theory of action. This theory is the basis for actions, reactions and inactions that move the current reality closer toward the objective reality. Here function out weighs form. Each problem may have unique conditions that require a modified form. The form must be understandable to the participants, account for the conditions, accept changes in terms of new information or events, engender and facilitate learning through dialogue and interaction. The same participants could use a different form with each new problem; different participants could use a different form for the same problem. It is the function the form serves which is important.

A. The form of the theory below is intended to be descriptive, not prescriptive. It uses some doctrinal terms, and some non-doctrinal terms. It uses some doctrinal terms in the original doctrinal context & it uses some in a modified doctrinal context. Its purpose is to describe the theory for action in a way it can be explored and used to generate knowledge. It is an example of how a form engenders function.

Fig. 1-7. Step 2A. Conducting a holistic assessment of the environment provides the social and cultural context within which the design will function. The objective of this step is to better understand the questions of: what is feasible for the environment; what is sustainable for the environment; and what is acceptable for the environment? By assessing the environment on the basis of identified criteria (in this example Feasibility, Sustainability and Acceptability) the Areas of Effort (AoEs) through which reform might be made, or capacity built in order to better enable and support the function of government within that state emerge.

The above example should not limit designers, the assessment and the criteria used will determine what emerges. The assessment tools may vary according to the comfort of the designers and
the applicability of the tool. It could be an adaptation of an inter-agency assessment tool such as the ICAF (Inter-Agency Conflict and Assessment Framework), or an adaptation of something used in military operations such as the ONA (Operational Net Assessment) or the COG (Center of Gravity) analysis tool. It could be some amalgamation of multiple tools as well. It depends on the type of environment being assessed, and the types of people involved the assessment. Whatever assessment tool is used, it should provide the basis for further development of the ODP by all the participants.

**Fig. 1-8. Step 2B.** Once the AoEs have been established, the areas or sectors which emerged from the assessment need to be assessed themselves. The designer can use the same criteria as was used for the broader environmental assessment, or a different set based on interests and objectives as informed by establishing the zone of tolerance. The assessment should inform the design process by considering the nature of the various AoEs. The assessment should include the points of friction and competition between the AoEs such as where the political interests of one group controlling one AoE may diverge from another, or where outside influences such as multi-national corporations have undue influence, etc. The assessment should also include areas where goals are compatible and congruent, e.g. the state’s monopolization on use of force may be more compatible with the interests of the economic sector. The assessment will help better frame the problem.
Fig. 1-9. Step 2C. The AoEs can be thought of as systems within a system. These systems do not exist independently of each other; they exist within the context of the social, cultural and political system. As such these systems interact with the overarching environment, each other and with the systems contained within them.

It may benefit the designers to consider which operational objectives within the AoEs will develop or reform the AoE closer the criteria and toward the political objectives and interests that were identified as being in the zone of tolerance. The identification of these objectives may serve the designers in establishing LOEs (Lines of Effort) which can be used to further examine and evaluate the subsystems within the AoEs, and will serve to inform planning and implementation considerations.

The objectives are not meant to be fixed themselves, they may occur over a greater or lessened period of time, and they may occur out of sequence, or as a result of an secondary or unknown action. As more is learned about the AoEs and about the various systems they interact with, or as events unfold which affect the behavior of the system, it may become necessary to add, subtract or modify objectives. The objectives should not be a slave to the original design. The idea is to create a learning model that recognizes interaction, is adaptable and continues to produce knowledge that informs the process.
Determine where there are dependencies and inter-dependencies in the system where sustainable development/reform in one sector may be contingent upon development/reform in another, and where the dynamic of being mutually responsible to and sharing a common set of principles with others exist.

**Fig. 1-10. Step 2D.** Once the AoE Objectives have been identified, the designers should begin to look for: dependant objectives where before reform and/or development can occur in one AoE, it may first have to occur, or occur simultaneously in another AoE; as well as objectives within the AoEs that are interdependent, e.g. opportunities or improvements in one may facilitate or serve as a basis for development or reform in another. In this example, the bulk of the Security Force Assistance objectives may be found in the SSR AoE; however, the SSR AoE does not exist independent of the environment, so those dependencies and interdependencies must be accounted for.
From the Area of Effort Objectives, Lines of Effort can be identified and created to better resource, synchronize and focus across the breadth & depth of the design.

Fig. 1-11. Step 2E. If it fits the design, LoEs may be derived from the AoE objectives. This is not a requirement, but may help further examine the subsystems within an AoE and provide better understanding of how the system works. Determining LoEs also assists with considering how U.S. policy interests and objectives, as well as U.S. strategy may line up develop or reform those AoEs. Whatever method is used to illustrate the design at various levels, it should inform the process, and facilitate interaction to determine the possible outcomes from actions or inaction by the various equities. While there is no specific LoEs or AoEs for strategic communications or information, there is a requirement to consider what communications and messages will result from interaction with and between the systems and build into each area, line or objective that recognition.
Fig. 1-12. Step 2F. As with establishing objectives within the AoEs, the establishment of objectives in the LoEs is a method of examining with greater detail the LoE as a system by assessing what must be done within that LoE to move it toward the established criteria (feasibility, sustainability, and acceptability). Also as with the objectives identified in the AoEs, these are not meant to be rigid or fixed. They might be better thought of waypoints than sign posts – they are the current best route to the policy goal and interest. They must be flexible based on conditions, and must be adaptable to inevitable political interactions that will occur within the system. It may be that through some new condition and opportunity to achieve an objective thought to be distant becomes available where as one thought near draws out of reach due to personalities and politics. It could also be that an objective thought to be simple, becomes complex by revealing itself as key to a personality or office. Many of the objectives at this level involve personal decisions by key people, and as such subject to greater non-linearity.
Fig. 1-13. Step 2G. As outlined in Step 2F above, the designer can better understand the system by identifying its friction points and where its behavior is incongruent by looking at the behavior of the subsystems. These are biological systems of people; the framework may be an organizational bureaucracy, but it is people that animate that system, or allow it to remain inanimate. At this level political intelligence on how people behave matters. It could be at a cultural or sub cultural level (e.g. tribal), but the better the intelligence (such as right down to HUMINT on a minister or political party head) the better the designers understanding of the system for that moment. This informs the expectations with regard to potential outcomes, and what events might affect the behavior of that system and the systems it interacts with. In an AoE where uneven development in a subsystem might retard or inhibit overall development or reform and possibly jeopardize the system as a whole, e.g. military forces become so overdeveloped that the system shifts from a fledgling democracy to a repressive military dictatorship, the need to recognize those points of failure becomes critical. As personalities move or events occur, an existing friction point may become benign, or a point of facilitation; whereas one that was previously thought not to be an impediment, or to be a facilitator, becomes a source of resistance.

Fig. 2-14. Step 2H. While “war game” is used to describe this step because it is culturally well known by commanders and staffs, this is really the test of the design logic both in the theory of reality and in
the theory of action. This is the step that actually captures the richness of the interactions within the systems and builds knowledge throughout the design team that can be capitalized on in planning and implementation. While the example above is limited to the SSR AoE, the interaction should not be limited to only one system within a larger system. The same logic as was applied throughout the design process should be applied to the war game in order to capture the complex interactions that may produce a range of potential outcomes. The war game should expose the tension within the system(s), where interaction with one system or a part of the system also disturbs those systems that are connected to it in ways that we can further explore. This helps us learn and improve our theory.

It is recommended that sequence of turns be derived based on an assessment of who actually has the initiative, e.g. if BLUE (U.S. and potentially its close coalition partners) assistance is contingent upon GREEN (ex. the Host State or some component of that system), then GREEN may have the initiative. With regard to RED, it may be more useful in some cases to list them as the opposition to the Host State vs. the enemy – context matters. While RED may be illegitimate opposition in the eyes of GREEN, their political interests and objectives may not make them the “enemy” in our eyes. Theoretically you could have as many “players” represented in the war game as required to enrich the learning process on which the design is founded, e.g. you could have multiple shades of Red and Green as well as looking for ways to represent third parties with equities such as MNCs, or regional and international players. During the war game participants should look to:

Conduct continual assessment of framework based on Green/Red/Blue war gaming
- Look for requirements to reframe - e.g. the green, red or blue tolerances will not accommodate the objective(s)
- Identify decisions, identify unseen opportunities, contingencies, and risks

The experience and knowledge of the participants in the war game inform on how much knowledge it generates. While an all uniformed effort may be successful in generating knowledge, its recommended that certain skills sets be brought into the war game such as: those with “Red Teaming” skills; backgrounds in domestic and foreign policy; backgrounds in reform and development; backgrounds in the local culture; backgrounds in SFA (FMS, SC, FID, etc.), backgrounds in anthropology, psychology or sociology; those with backgrounds education, government services, etc. The requirement does not have to be one where someone has served in that background as much as it is the ability to “think” critically about how those areas inform the process. The ability to think may come from experience, education or exposure.

4. Summary

ODP is not planning, it is a theory of reality that informs a theory of action upon which a campaign design can be built and tested through interaction. ODP fills a gap between the issuance of a policy objective, and the planning to achieve that policy objective. This is founded on assessing the environment as holistic, interactive, biological system which recognizes that there are critical subsystems within. These subsystems of people often interact in non-linear ways with produce non-linear outcomes. As a process, it seeks to test the underpinning logic to which we ascribe rationality, with the recognition that although we might consider an act as irrational, the cultural, sociological and political conditions in which the system exist may make the same act plausible, rational or even likely. This process engenders that it is better to think in terms of tolerances and relevance then in absolutes. This process recognizes that as long as there are people and politics there will remain interaction, and as such tolerances and relevance can change over time. ODP can be applied wherever there are complex interactive problems.