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"Adapting C2 to the 21st Century"

Topic: C2 Technologies and Systems

Title: COMPOEX Technology To Assist Leaders in Planning And Executing Campaigns In Complex Operational Environments

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14. ABSTRACT
The Defense Advanced Research Projects Agency is developing transformational technologies to enhance the capability of military commanders and their civilian leaders to plan and conduct campaigns in a complex operational environment. Leaders must understand the operational environment, develop campaign plans that include multiple lines of effort such as security, governance, political-economic development, rule of law and employ all elements of national and international power. The Conflict Modeling, Planning and Outcomes Experimentation (COMPOEX) Program is developing an integrated set of decision aids to assist leaders in planning and executing campaigns. A powerful family of interacting models, developed in the most appropriate paradigm and able to be modified by the user, describes the operational PMESII environment. The Option Exploration tool enables multiple, concurrent actions in different domains to be executed and a range of possible outcomes identified. It can be used in the development of plan as well as evaluation of courses of action. The Campaign Planning tool provides a framework to develop, visualize and manage the comprehensive campaign plan. Leaders can see the interconnections between different lines of effort, understand the impact of actions across the entire plan and assess and modify the plan based on measured performance on the ground.

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Abstract

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The Conflict Modeling, Planning and Outcomes Experimentation (COMPOEX) Program is developing an integrated set of decision aids to assist leaders in planning and executing campaigns. A powerful family of interacting models, developed in the most appropriate paradigm and able to be modified by the user, describes the operational PMESII environment. The Option Exploration tool enables multiple, concurrent actions in different domains to be executed and a range of possible outcomes identified. It can be used in the development of plan as well as evaluation of courses of action. The Campaign Planning tool provides a framework to develop, visualize and manage the comprehensive campaign plan. Leaders can see the interconnections between different lines of effort, understand the impact of actions across the entire plan and assess and modify the plan based on measured performance on the ground.

1. Introduction

The Defense Advanced Research Project Agency (DARPA) in association with the U.S. Joint Forces Command (JFCOM) is developing transformational technologies to enhance the capability of leaders and staffs to plan and execute campaigns[1] in a complex operational environment. They must visualize, understand and effectively operate in the complex Political, Military, Economic, Social, Information, Infrastructure (PMESII) environments and employ a whole of government approach to planning and executing these campaigns. Leaders explore possible actions to determine the range of plausible effects, and plan long range campaigns, encompassing various political, military, economic, social, infrastructure lines of effort to achieve national objectives.[2]

The Conflict Modeling, Planning and Outcomes Experimentation (COMPOEX) Program combines DARPA technology development with JFCOM operational expertise to accomplish these tasks. Together we conduct periodic experimentation to guide technology development and influence development of concepts. Specifically:

JFCOM provides:

- Concepts for campaigning and tool usage
- Subject matter expertise for domains and processes
- Experimentation facilities and personnel

DARPA provides:

- User oriented tools that support decision making
- Baseline knowledge bases and models
- Drop-in software that augments current capabilities in existing environments

COMPOEX: A DARPA, JFCOM Partnership

- A DARPA and JFCOM sponsored effort
- Objective: decision aids to support leaders in designing and conducting future coalition-oriented, multi-agency, intervention campaigns employing unified actions, or a whole of government approach to operations
- *The decision aids do not make decisions;*
  they enhance the human's ability to make decisions
- Focus: military and civilian leaders at the operational-level

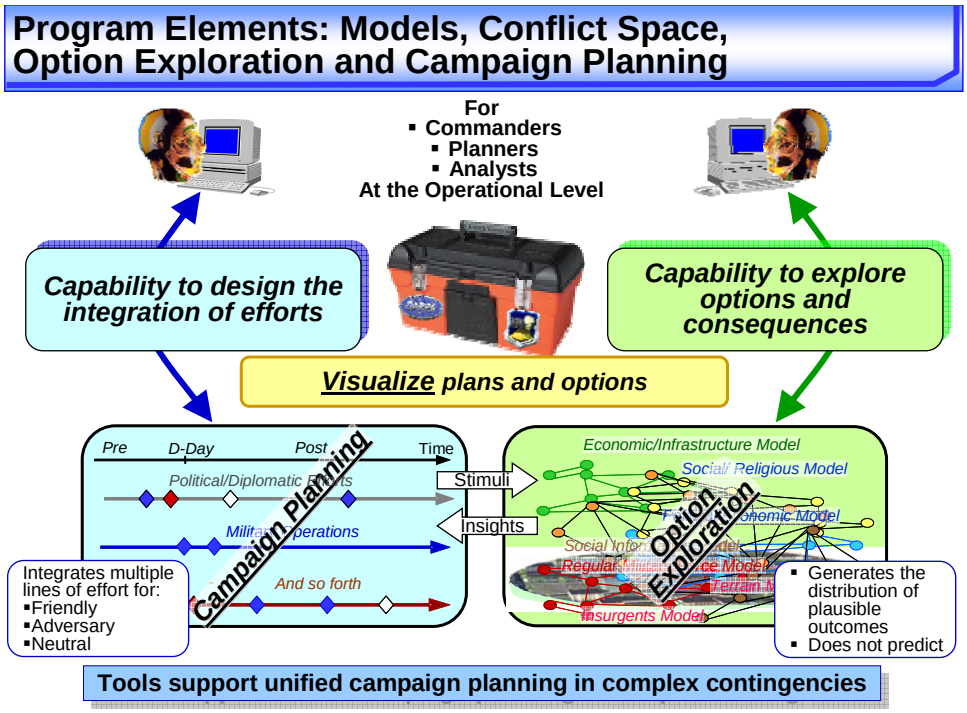
JFCOM provides:	DARPA provides:
• Concepts for campaigning and tool usage • Subject matter expertise for domains and processes • Experimentation facilities and personnel	• User oriented tools that support decision making • Baseline knowledge bases and models • Drop-in software that augments current capabilities in existing environments

- Periodic experimentation and intensive user interaction guides technology development
- JFCOM and Services sponsor transitions

Combining DARPA Technology and JFCOM Operational Expertise

The DARPA technology development provides tools to support leaders in conducting future, complex, multi-dimensional, coalition-oriented, campaigns. This includes a comprehensive suite of decision support tools that can automate and greatly facilitate the human actions in command and control. This capability is web-based and will be hosted on servers that allow many different components of the government to participate in the planning and execution of the campaigns. Specific tools of the COMPOEX program include:

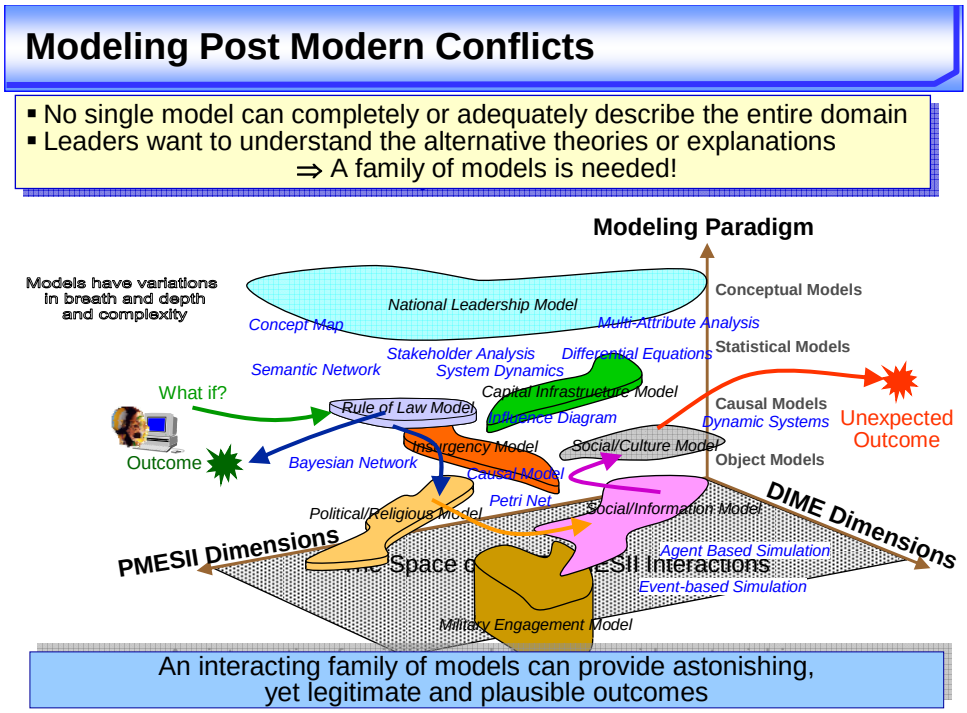
- **Family of Models:** A powerful family of interacting models, developed in the most appropriate paradigm and able to be modified by the user, describes the operational PMESII environment.
- **Conflict Space:** Provides the ability to search databases, organize information and assist leaders to develop the concepts of the conflict.
- **Option Exploration:** Enables multiple, concurrent actions in different domains to be executed and a range of possible outcomes identified. It can be used in the development of a plan as well as in the evaluation of courses of action.
- **Campaign Planning:** Provides a framework to develop, visualize and manage the comprehensive campaign plan. Leaders can see the interconnections between different lines of effort, understand the impact of actions across the entire plan and assess and modify the plan based on measured performance on the ground.



2. COMPOEX Technologies

2.1 Models

The suite of COMPOEX tools is built on a family of interacting models. The models describe the various individual environments within the complex operational environment and help portray systems dynamics, behaviors, relationships and power. No known implemented model or modeling technology is capable of describing the full range of interactions that occur within a nation-state or alliance of nation-states. A multitude of models is required in order to completely span the environment defined by all of the DIME and PMESII dimensions; a family of models is needed as illustrated below.



Each model in the family may represent its portion of the domain in a manner and level of fidelity quite different from other models; this is illustrated by the "modeling paradigm" dimension. The various Modeling Paradigms that are used include techniques such as: concept maps, social networks, influence diagrams, differential equations, causal models, Bayes networks, Petri nets, dynamic system models, event-based simulation, and agent based simulation. These models use disparate mechanisms and a variety of indices, parameters and metrics for their input and output. Some models are broad in scope but thin in depth while others are thick in depth and narrow in scope.[3]

No one modeling paradigm is truly applicable to the entire domain. They are incapably of modeling the entire domain spanned by the DIME and PMESII dimensions. The different domains of knowledge simply do not lend themselves to being represented by one universal paradigm such as an agent based simulation.

A family of interacting models has the potential to produce surprisingly unanticipated results due to the effects of cascading. One may investigate the impact of an action and a model may suggest a primary outcome. However, that outcome may stimulate another model that suggests an outcome that stimulates another model and in a cascade reaction, the family of models, in a symbiotic manner, may suggest many another potential outcomes. Such cascading can produce astonishing results because, while a human may grasp and master a single model, it is unlikely that a human can comprehend the potential, complex interactions between lots of models.

There can never be a family of predetermined models that fully and accurately describe an emerging situation. The models have to be understood modified by the staff to more accurately describe the situation as it develops. The COMPOEX program is developing

a family of generic models, with the entities and the behaviors you would expect to see in each of the environments.

The COMPOEX models are open, extendable, modifiable and traceable. Leaders and staffs must have confidence that their view of the situation is adequately represented within the models. The leaders, staffs, as well as supporting experts, will take the generic models and instantiate them to fully represent the current situation. The models are flexible enough so that the same models can be configured differently to reflex different reflect operational leaders vision of the conflict. Parameters that describe entities and actions within individual models must me open and able to be modified. Leaders and staff should challenge and modify assumptions and model parameters to look at the situation from all angles and truly see the range of possible outcomes from their actions.

Since, we cannot predict where, when and the nature of every future crisis, the system has the ability to seamlessly integrate new models that better describe a portion of the environment. Models are added or removed based on the operational situation so that the family of models developed to span the whole domain. There are mechanisms to enable diverse models to automatically interact so as to suggest the full distribution of plausible activities and outcomes.

All of these are to ensure that the complex operational environment is reflected as accurately as possible in the models and interactions between models

2.2 Conflict Space

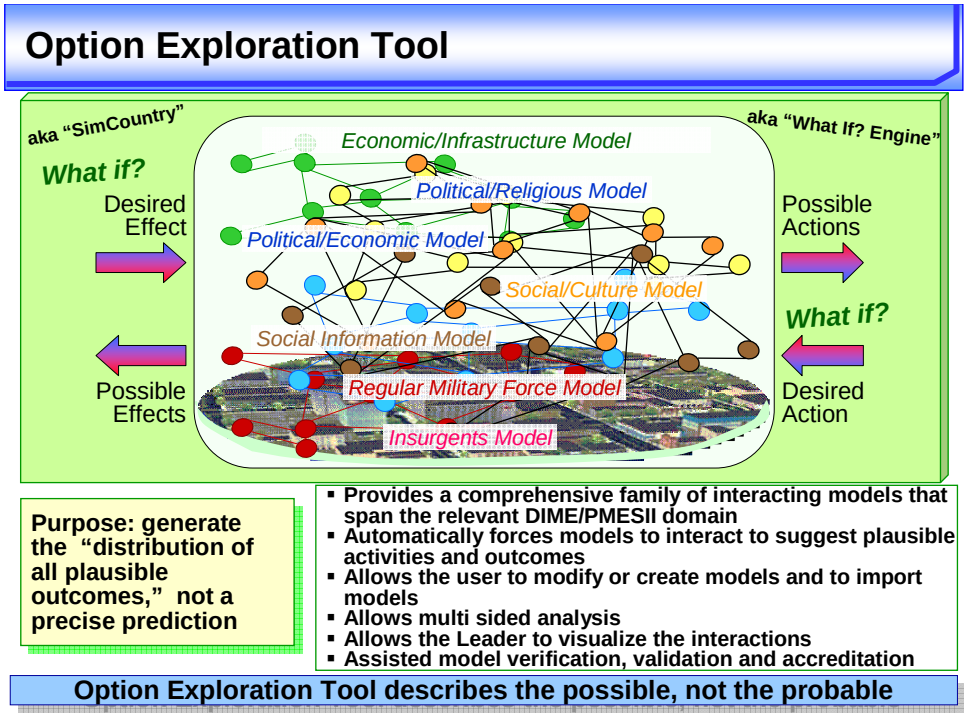
The Conflict Space tool provides several capabilities that assist leaders, staff and experts to visualize the underlying drivers of instability and develop concepts of conflict. It allows various databases to be searched, with relative information identified, retrieved, categorized and displayed. The document retrieval and graphical indexing supports of development of concepts of the conflict by displaying with supporting information, centers of power, relationships, influence, and interconnections between PMESII environments.

The Conflict Space provides a white board capability to support development of conceptual models. It incorporates a simple model to manipulate power structures, relationships and influences between key elements. This capability better illustrates the possible conflicts of the conflict and allows comparison with what is currently modeled by the family of models for option exploration. It serves as a direct feed into development of more detailed models for option exploration.

2.3 Option Exploration

The COMPOEX Option Exploration tool allow leaders and staff to generate and evaluate the effects that might result from an action or the actions that could be employed to achieve a desired effect. These tools do not predict exactly what will happen, but only what might happen; generating the distribution or range of all plausible outcomes. The tools are essentially a "What If Engine." and employ a large family of models. They allow leaders and staff (not computer scientists) to find and integrate models into the family and to modify, customize, and tailor models to a particular military campaign -- on-the-fly -- as the campaign unfolds.[4]

The enables the exploration of multiple, simultaneous actions and provides the range of plausible outcomes throughout the planning process. It provides a comprehensive family of interacting models that span the relevant DIME/PMESII domain. This allows the exploration of series of actions in different environments, sequences and strength to see the range of possible outcomes. Generates a set of plausible outcomes, not a precise prediction. Enables "What-if" analysis and answers the "Why" questions of effects generated.



The first step in utilizing the option exploration capability is to establish baseline conditions. Model parameters are modified to reflect the current situation on the ground or the projected conditions. From here, actions can be implemented to see changes, trends and possible outcomes.

Individual and multiple actions are taken in each of the individual lines of effort. There are hundreds of individual effects that can be seen from these actions. Those effects

that are considered relevant in each line of effort are identified by leaders and staff. As these relevant indexes change, either expected or unexpected, as a result of actions, they are displayed. Thus the staff can begin to explore individual and multiple actions within a single line of effort and the effects of those actions seen in multiple PMESII environments. These effects in secondary and tertiary environments provide new and many times surprising results. The ability to see the impact in other environments, multiple actions, varying the strength and sequence of actions provide a capability not available from current operations or software.

The COMPOEX Option Exploration enables leaders and staff to model the complex operational environment based on their vision of the conflict. It provides a whole of government approach to operations where leaders and staff can explore employing multiple, sequential or simultaneous US, NATO and other governmental diplomatic, information, military and economic actions to determine the range of plausible effects.

The campaign plans are made up of multiple actions across multiple lines of effort. The combination effect of these actions, at times produces synergetic effects that are different and many times greater than the additive effects of individual actions.

2.4 Campaign Planning

Campaign Planning in a Complex Operational Environment requires a detailed understanding of multiple operational environments; political, social, economic, military, etc. and the ability to employ all elements of power; diplomatic, informational, military, economic and others. An evolving concept is the notion of an integrated campaign plan comprised of multiple lines of effort. This is presented in the Joint Chief of Staff's *Capstone Concept for Joint Operations*, Version 2.0, dated August 2005. Here there is recognition of the need for interagency and multinational involvement to include: policy coordination, resources, security operations, infrastructure development, economic development, governance, and rule of law. The Capstone describes the need for a planning framework that considers the use of very integrated and interdependent activities, organized into simultaneous lines of effort which by a series of objectives are able to reach a common end state. Several interdependent lines of effort, each with a strategy, are needed to transform the conflict and bring about the desired end state. Intermediate next states are established at intervals where planners expect key milestones to be achieved on the path toward the desired end state. Next state planning helps leaders and staffs deal with the inherent uncertainty that confronts any planning effort by establishing a formal process to periodically reassess the situation, revalidate or revise assumptions, refine measures of effectiveness, refocus intelligence collection resources and update or revise strategies and plans. [5]

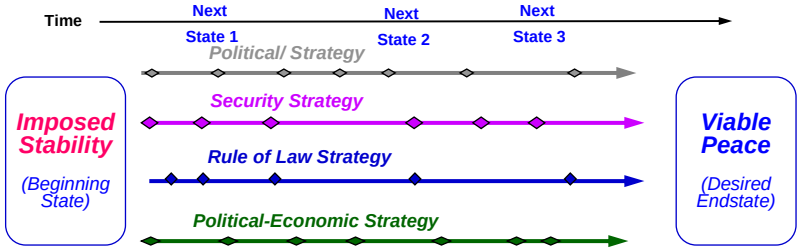
Campaign Planning in a Complex Operational Environment

•Establishes a Conceptual Framework of "Conflict Transformation". Intent is to increase the power of legitimate institutions while reducing the power of obstructionist

•Utilizes an effects based approach to develop a "desired endstate" and intermediate "next states"

•Develops interdependent lines of effort, each with a strategy

•Employs unified US Government, coalition and other actions to achieve desired next states



Whole Of Government Approach To Campaign Planning

The campaign planning process begins with a mission, desired endstate to achieve, higher level guidance and a concept of the conflict. Guidance includes assumptions and critical uncertainties, resources available, next states and possible actions. Actions are generated based on ideas which connect those actions with expected outcomes. In Complex Operational Environments, these ideas must be explicitly articulated, and grounded in established understandings about how political systems, economic systems, and social systems function. Leaders and staffs use this information to establish their concept of the conflict and begin campaign planning.[6]

The Campaign Planning Tool provides a framework to develop, visualize and manage comprehensive campaign planning in a complex environment. It provides leaders and staffs a means to see the interconnections between different lines of effort, understand the impact of actions across the entire plan and assess and modify the plan based on measured performance on the ground. There are two versions available. One, the light campaign planning tool provides a frame work to develop the whole of government plan. The full campaign planning tool is linked to the option exploration models and is able to provide the range of plausible outcomes and be adjusted at each next state based on observations on the ground.

The tool is a means to simplify the display of an inherently complex operation. It uses symbols to represent various elements of the plan such as assumptions, actions, resources, etcetera, with supporting screens that more fully describe those activities. The framework is designed such that plans can be developed separately in modules or as a single plan. It can be used either with models and simulations or as a stand alone tool.

Actions are specific operations undertaken to achieve a desired effect. Actions can be taken by friendly elements, neutrals, outside groups or the opposition. Actions will have a decision point, required resources to execute the action, an expected duration and a desired effect or effects. The timing and/or strength of an action could be conditional based on the effects produced by related actions or validation of key assumptions on which that action was based. The strength of the tool is the underlying information with supporting screens that more fully describe and track those activities. Those screens include information on the actions, assumptions, resources, duration of actions, expected effect and relationships with other actions and effects.

At each next state during execution of a campaign plan, progress achieved on the ground should be compared with expected results to determine progress toward achieving successive next states and the desired end state. Metrics that can be collected on the ground are identified in the plan. At key decision points in the campaign, normally associated with achieving a next state, they are collected and decisions made to the refine the plan. Changes could include reallocating resources; reevaluating assumptions and interdependencies; adding, deleting or modifying actions and redefining subsequent next states.

When models are linked to the Campaign Planning Tool, the metrics measured on the ground should be translated to measures of performance that are used by the supporting computer models. The models can then be adjusted to more accurately reflect the realities on the ground. Modifications could include changes to model parameters, starting conditions or other easily modified components. When competing models are used, decisions could be made as to which more accurately represents reality and that one used to support subsequent planning. he desired end state of a campaign is achieved by achieving intermediate “Next States”. These are described as a set of effects, across several lines of effort that describe a desired state. The next state is normally at a point in the campaign plan where performance can be measured in one or more lines of effort.[7]

The campaign planning tool aids leaders and staffs in constructing the sequence of synchronized actions, necessary to support interdependent lines of effort. It supports users in authoring the plan and capturing assumptions and dependencies. The framework is such that portions of the plan can be “cut and pasted” into the plan and it automatically detects and manages interdependencies. It provides capabilities to visualize the plan with all of the dependencies and interdependencies and supports monitoring the status of the plan and measuring success.

3. PLANNING AND EXECUTING CAMPAIGNS WITH COMPOEX TOOLS

3.1 Developing and Instantiating Models

The COMPOEX suite of tools enable campaigns in a complex operational environment that incorporate a whole of government approach, thorough analysis and developed in significantly more detail employing all elements of power. Models of the Political, Military, Economic, Social, Information, Infrastructure, Rule of Law, Governance and other areas are available to begin planning of an operational plan. These generic series of models provide typical behaviors and can be modified and instantiated with specific knowledge of the problem and situation. This enables the staff to develop a more accurate simulation that represents the dynamics of the complex operational environment.

If this is a new area or situation that has not been expected, the generic models would be examined to determine how well they can describe the situation. Areas requiring modeling, if needed, are identified and developed. The currently generic models are instantiated to represent the current crisis. This instantiation is done by leaders in the area, experts in individual disciplines, and the agencies and staffs responsible for developing the campaign.

It is expected that with the COMPOEX suite of tools and models having proliferated through the COCOMS and Government Agencies, that there will be more specific models already developed for different areas of the world and possible violable situations. The models and concept of the conflict to represent these situations would have already been developed. If this is the case then the process to of examining models to determine how well they can describe the situation should be greatly reduced. Expect that the key elements would already be modeled and it would be more of a fine tuning the parameters that describe different elements of the models.

3.2 Developing the Concept of the Concept

The COMPOEX suite of tools enables the leaders and staff to develop an understanding of the situation and discuss the underlying causes of the conflict. The Conflict Space tool would search data bases and displayed information so the leaders can develop various concepts of the conflict. It graphically depicts the concepts of the conflicts that are developed. These are various visions of the underlying causes of the conflict, identifying key centers of power, leaders and the connections between the key elements. Underlying assumptions and different views are maintained.

The graphical depiction of the concepts of the conflict is then compared with the current depiction of the situation in the simulation. This allows the staff to quickly see where he differences and begin a dialogue with the staff and modeling support. These discussions are critical so that the leaders and staff can drive the development and

instantiation of models and understand the assumptions and parameter values that are in the models.

The Conflict Space tool allows the leaders and staff in many agencies and distributed location to see and understand the vision that the leaders of the conflict. They can also contribute their view of the conflict. These are used to refine the underlying for the option exploration and development of the campaign plan.

3.3 Option Exploration

The option exploration tool is used with any planning process and multiple times within the planning process. This enables leaders and staff to adapt to any situation. In experimentation we found that the various staffs utilized the option exploration tool very differently. One staff began with no preconceived actions and started with making large changes, one had a plan and only took actions using that guidance and another staff executed a planning process that was a variant of both. Regardless all were able to use the tools effectively to greatly enhance their planning.

We will use the process that began with preconceived actions to illustrate how the option exploration tool can be used campaign planning. The staff used the concepts of the conflict and proposed effects developed using the Conflict Tool and models that had been modified to more accurately replicate their view of the situation. As part of the concept of the conflict discussion they identified the Lines of Effort or Major Mission Elements, as describe by State CRS, and used them divide the planning effort. The leaders and staff split the effort alone those lines and each team took major actions in the entire region and in individual sections. They looked to see if these large actions had an effect in their specific areas as well as secondary effects in any of the other lines of effort. These positive and negative effects were for each action were recorded and served as the foundation for further refined exploration. Those more precise actions looked at specific focused actions to achieve the desired effects while avoiding unintended consequences.

The results of the individual work was then brought together into a more combined analysis. They were all inserted into the Campaign Planning tool in a logical sequence and the proposed plans were executed in the Option Exploration tool. Again the results were reviewed across the full spectrum of environments. The strength, and timing and sequence of actions were adjusted to refine results and achieve the desired effects.

It is important to remember that the Option Exploration tool provides the range of possible outcomes. Thus the campaign plan being developed is a first cut of what the possible outcomes could be if everything goes according to our assumptions and plans, an incredibly optimistic estimate at best. The next step is to run the alternate concepts of the concepts with the identified actions to expand the range of possible outcomes. After this, challenge the underlying assumptions, change then and run the original concept and alternate concepts of the conflict to see the impact of false assumptions.

Then incorporate a red team to take actions that you would expect an adversity or indigenous groups to take.

All of these option exploration runs are taken into account as the leaders and staff determines the campaign plan that they will develop.

3.4 Campaign Planning Tool

The campaign planning tool enables the campaign plan that is chosen to be laid out in a logical sequence with all of the interconnections between actions identified. As the plan is being developed, either in components or together, the actions are put on the planning tool. The ability graphically display and understand relationship between implementing the various actions allowed all the staff to see disconnects and manipulate the timing of actions for maximum effect. Thus different components of the plan are developed separately and then brought together and refined. The final campaign plan is used for execution, but alternate concepts of the concept, plans and assumptions are maintained.

The campaign planning tool allows the plan to be evaluated against what is actually happening on the ground. Metrics that describe each “next state” of progress on the ground are linked to many effects and parameters in the models. Thus as the campaign unfolds, progress is measured against what the campaign plan expected. This allows leaders and staff to assess progress and modify the plan, reallocate resources or modify desired effects. At the same time, they are reassessing the concept of the conflict and assumptions used to develop the plan to see if models or methods need to be modified to better represent reality on the ground.

4. Way Ahead

The DARPA COMPOEX program is continuing to develop and under go experimentation. The DARPA-JFCOM objectives over the next year include:

- Development of generic models so there is a full family of generic models with typical behaviors
- Refine and expanded COMPOEX tools. This includes expansion of the light campaign planning tool, increased capability of the Option Exploration tool and fully linking to the full campaign planning tool
- Host COMPOEX Tools on the appropriate government servers and make them available Combatant Commands and Government Agencies. This makes the web based capability available as the individual COMPOEX tools mature
- Continue experimentation with the COMPOEX technology with JFCOM and Combatant Commands
- Transition of COMPOEX to the field and a Program of Record

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[4] Dr. John G. Allen, Mr. Peter S. Corpac, LtCol Kevin Frisbie, "Integrated Battle Command Program: Decision Support Tools for Planning and Managing Unified Campaigns in Complex Contingencies", *CCRTS Paper and Presentation, June* 2006

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Technology To Assist Leaders in Planning And Executing Campaigns In Complex Operational Environments

Conflict Modeling, Planning and Outcomes Experimentation Program (COMPOEX)

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19 June 2007

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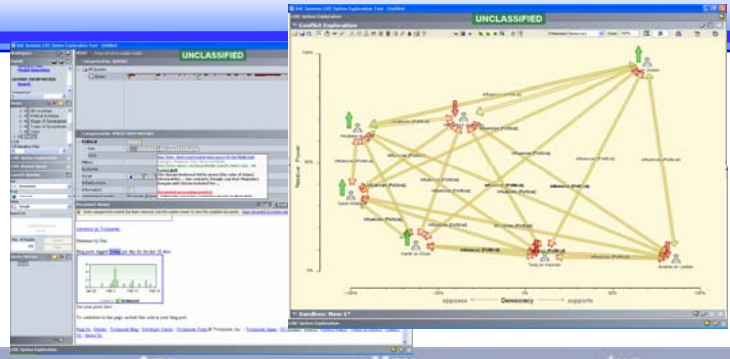
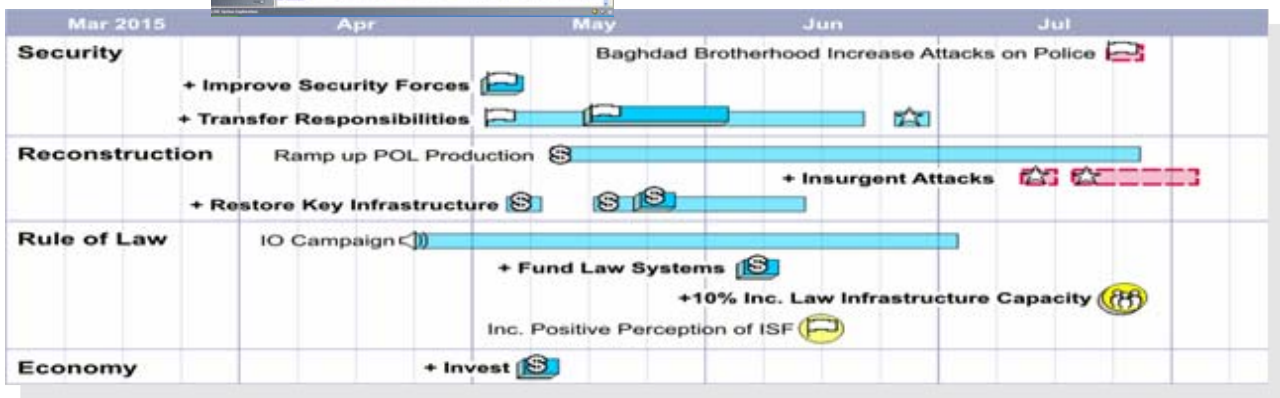
Combining DARPA Technology and JFCOM Operational Expertises

COMPOEX Tools

1. Conflict Space Tool provides leaders and staff the ability to explore and map sources of instability, relationships and centers of power to develop their theory of the conflict.

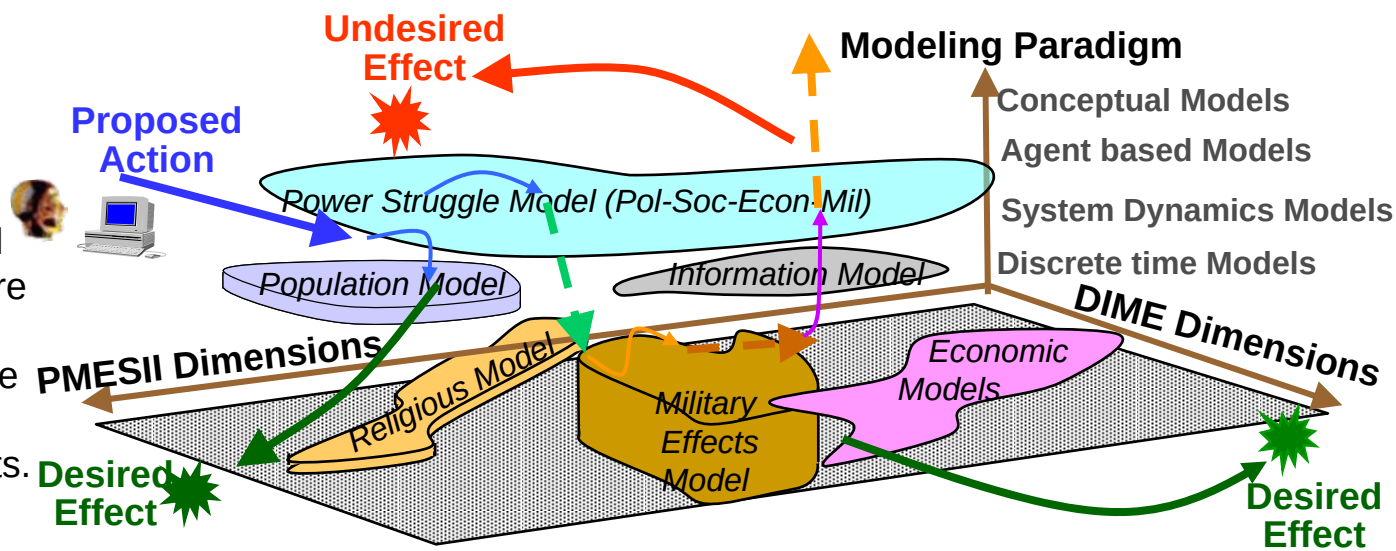


2. Campaign Planning Tool is a framework to develop, visualize and manage a comprehensive campaign plan in a complex environment.

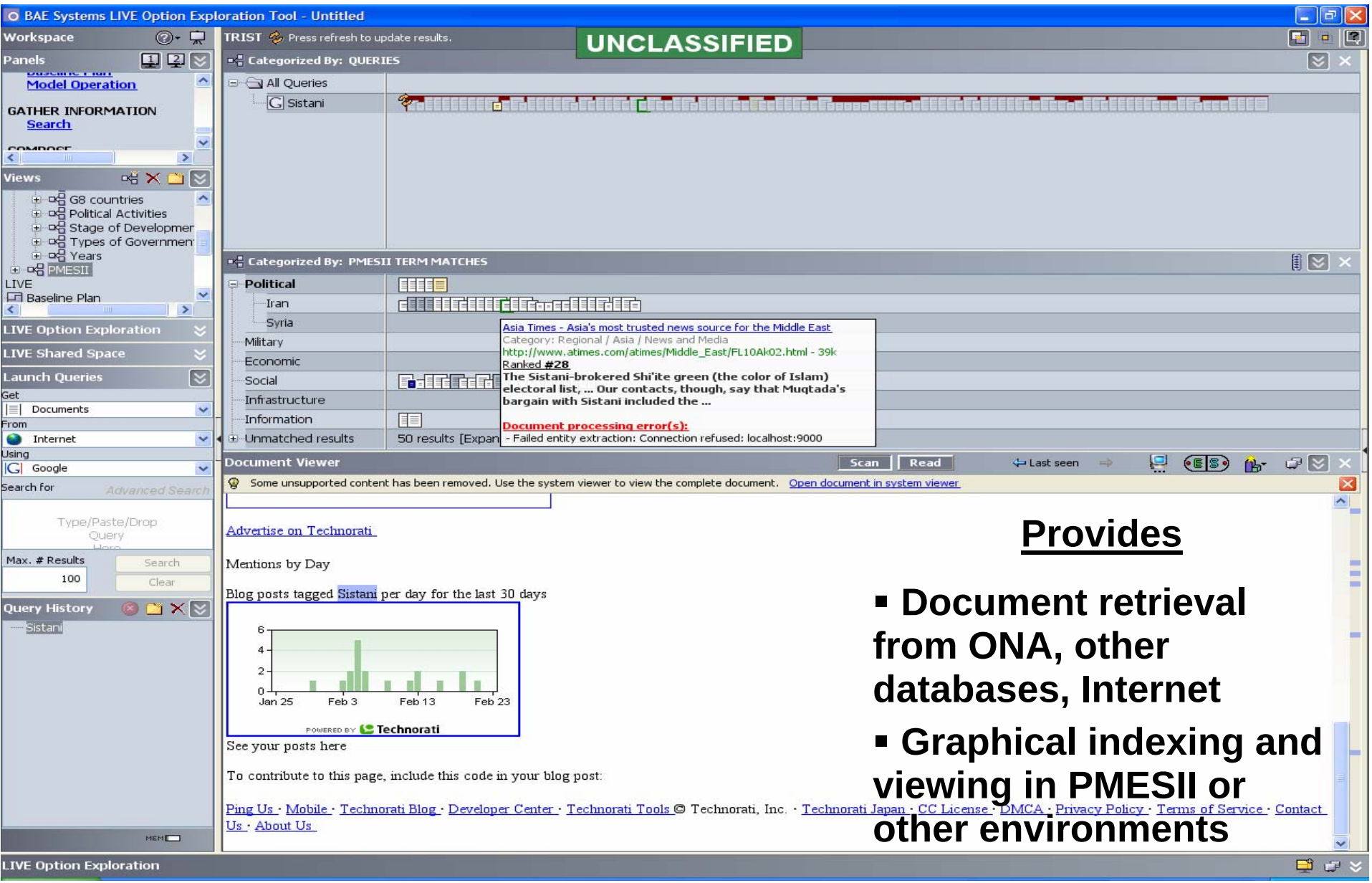


3. Family of models instantiated for the current problem and additional models to more accurately represent the operational environment.

4. Option Exploration Tool that enables a staff to explore multiple series of actions in different environments to see the range of possible outcomes in all environments.



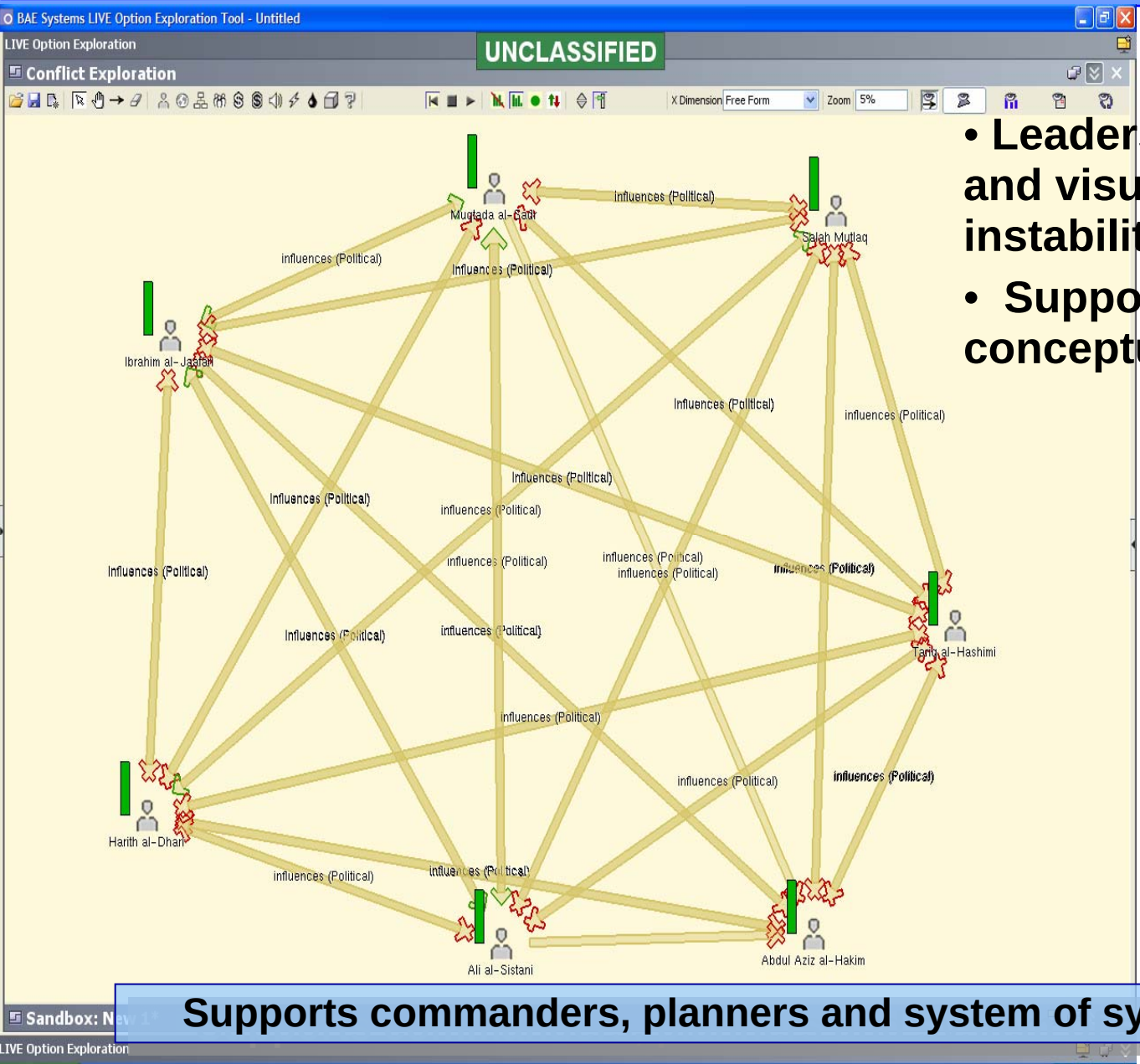
Conflict Space: Enables Staff to search and sort documents and data bases for critical information



Provides

- **Document retrieval from ONA, other databases, Internet**
- **Graphical indexing and viewing in PMESII or other environments**

Conflict Space: Enables leaders to develop an understanding of the conflict and its key drivers



- **Leaders and staff develop and visualize the drivers of instability**
- **Supports development of conceptual models**

Provides

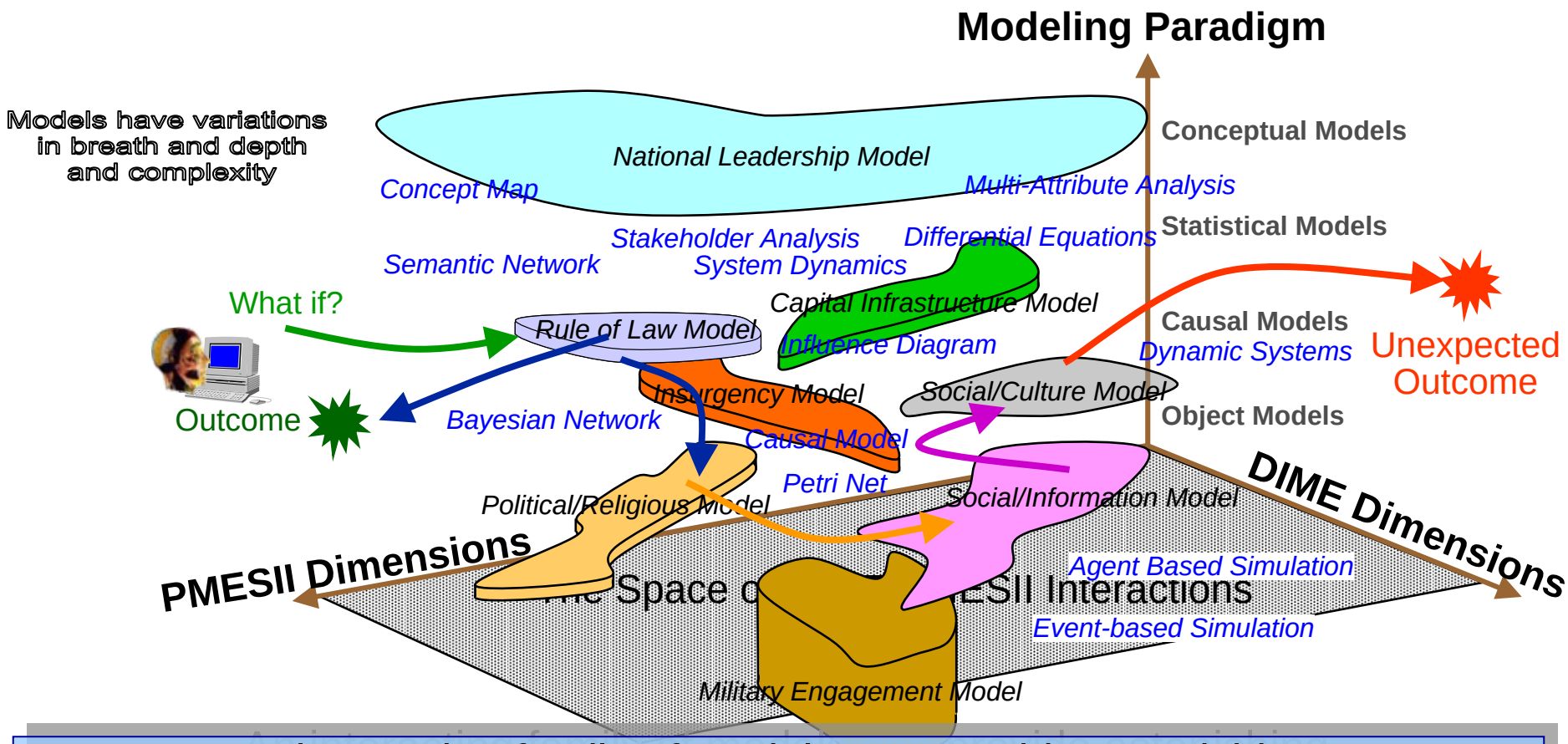
- **Direct feed into more detailed models**
- **White board capability**
- **Document retrieval**
- **Graphical indexing and viewing**

Supports commanders, planners and system of systems analysts

Modeling Post Modern Conflicts

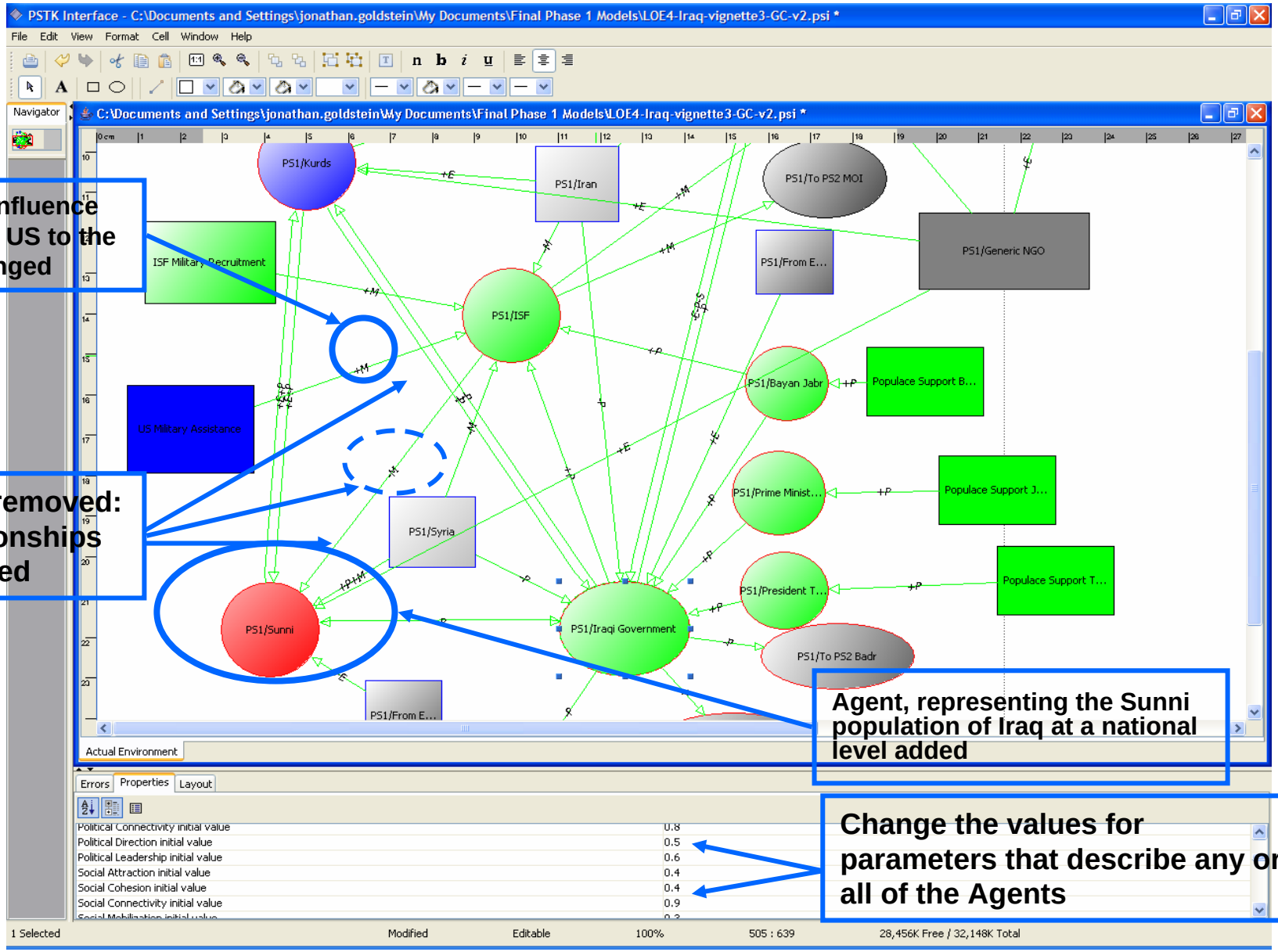
- No single model can completely or adequately describe the entire domain
- Leaders want to understand the alternative theories or explanations

⇒ A family of models is needed!



An interacting family of models can provide astonishing, yet legitimate and plausible outcomes

Models: Linkages, Relationships, Nodes are modified by the Operational Staff



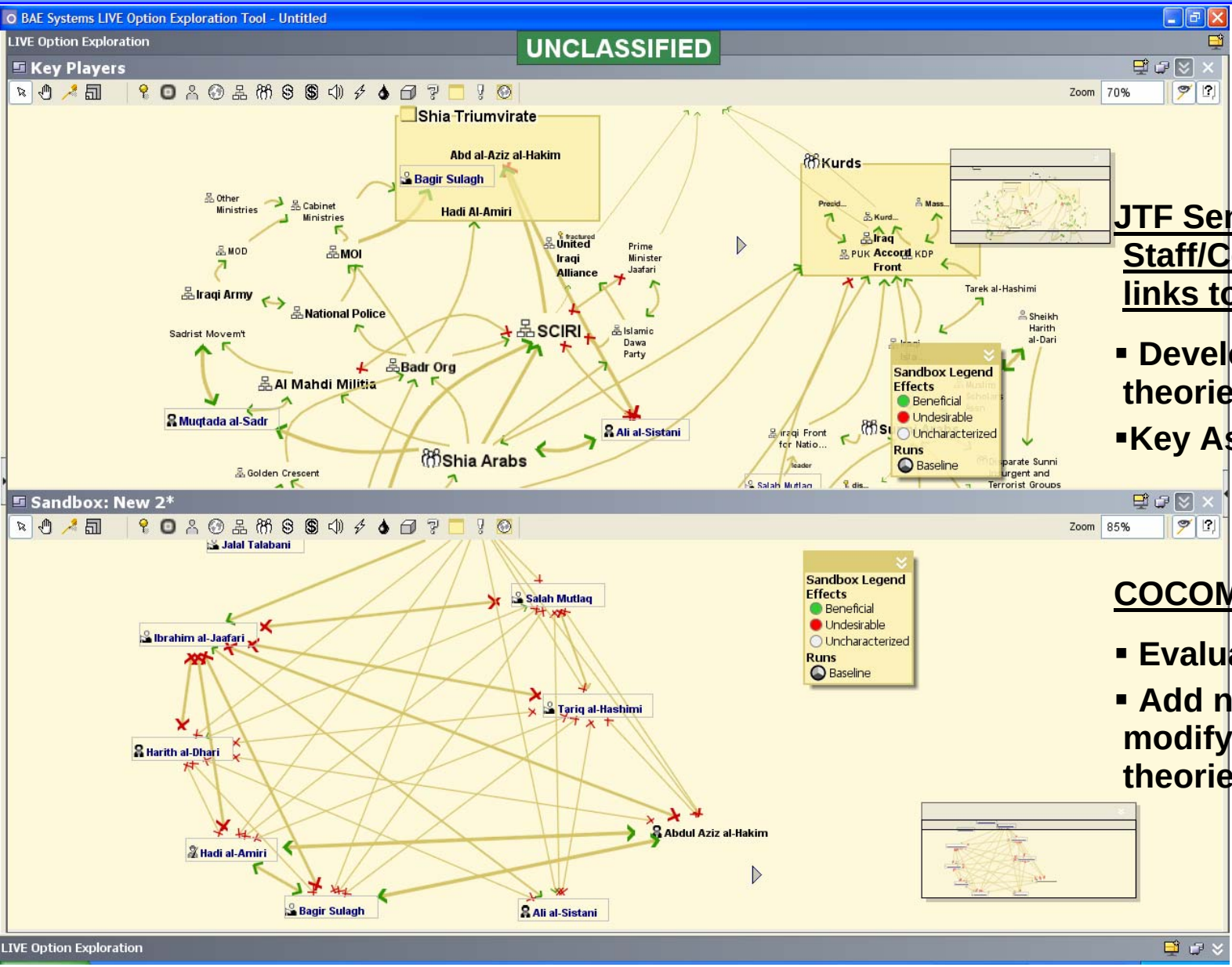
Line of influence from the US to the ISF Changed

Syria removed: Relationships changed

Agent, representing the Sunni population of Iraq at a national level added

Change the values for parameters that describe any or all of the Agents

Compare Leaders Vision(s) Of The Conflict with Models



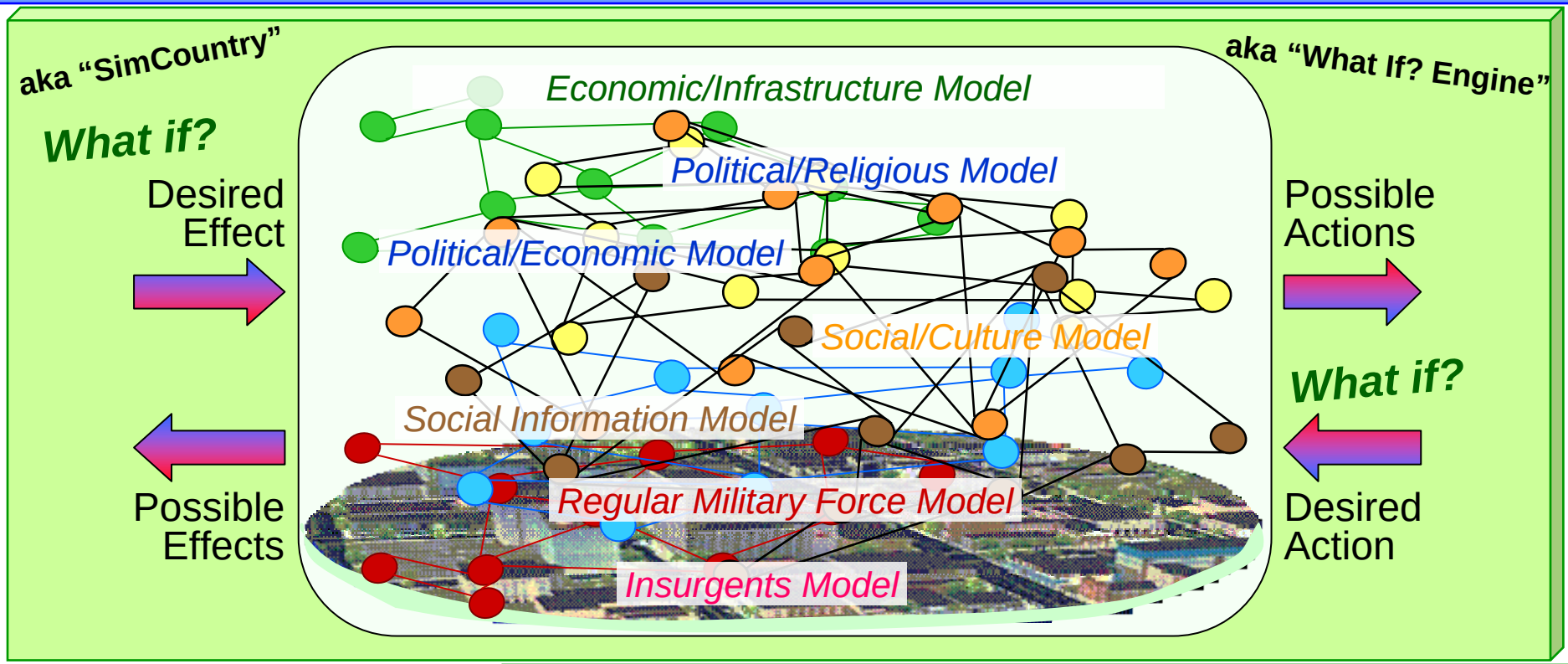
JTF Senior Staff/Country Team links to Agencies

- Develop different theories of the conflict
- Key Assumptions

COCOM or Gov Staff

- Evaluate models
- Add new models and modify existing to fit theories of conflict

Option Exploration Tool

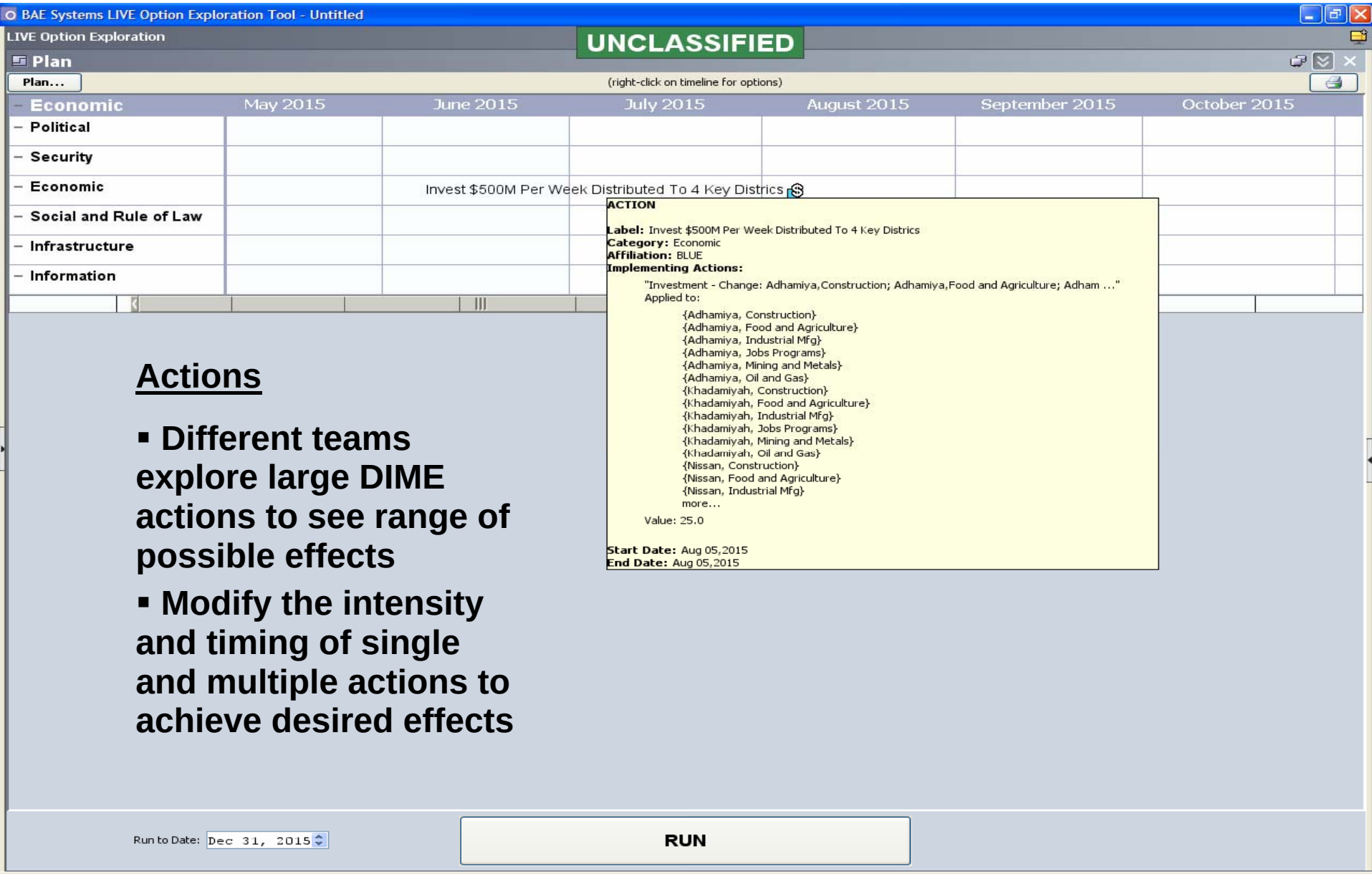


Purpose: generate the "distribution of all plausible outcomes," not a precise prediction

- **Provides a comprehensive family of interacting models that span the relevant DIME/PMESII domain**
- **Automatically forces models to interact to suggest plausible activities and outcomes**
- **Allows the user to modify or create models and to import models**
- **Allows multi sided analysis**
- **Allows the Leader to visualize the interactions**
- **Assisted model verification, validation and accreditation**

Option Exploration Tool describes the possible, not the probable

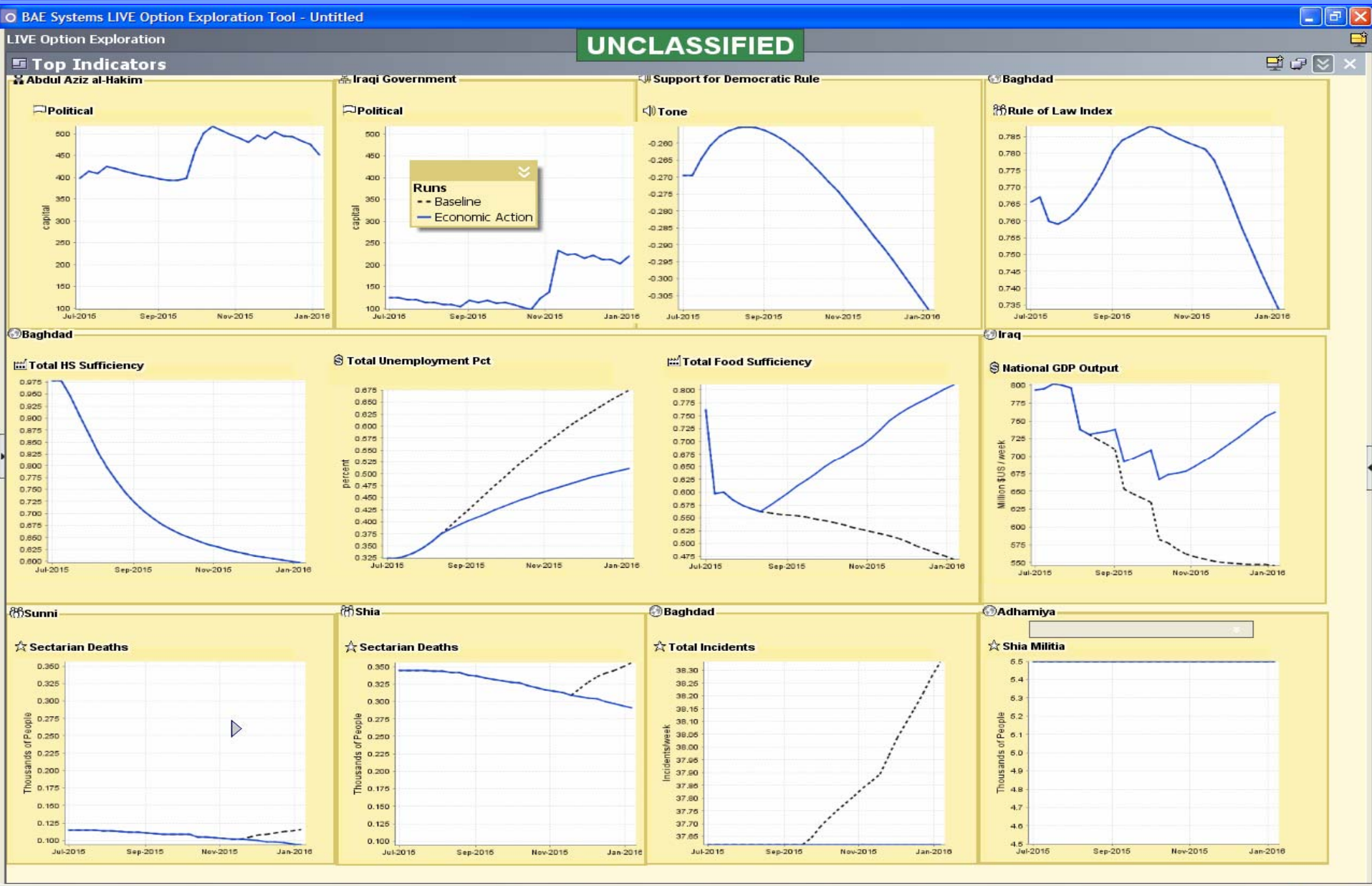
Explore Impact of Actions
Economic Action Increasing Investment



Actions

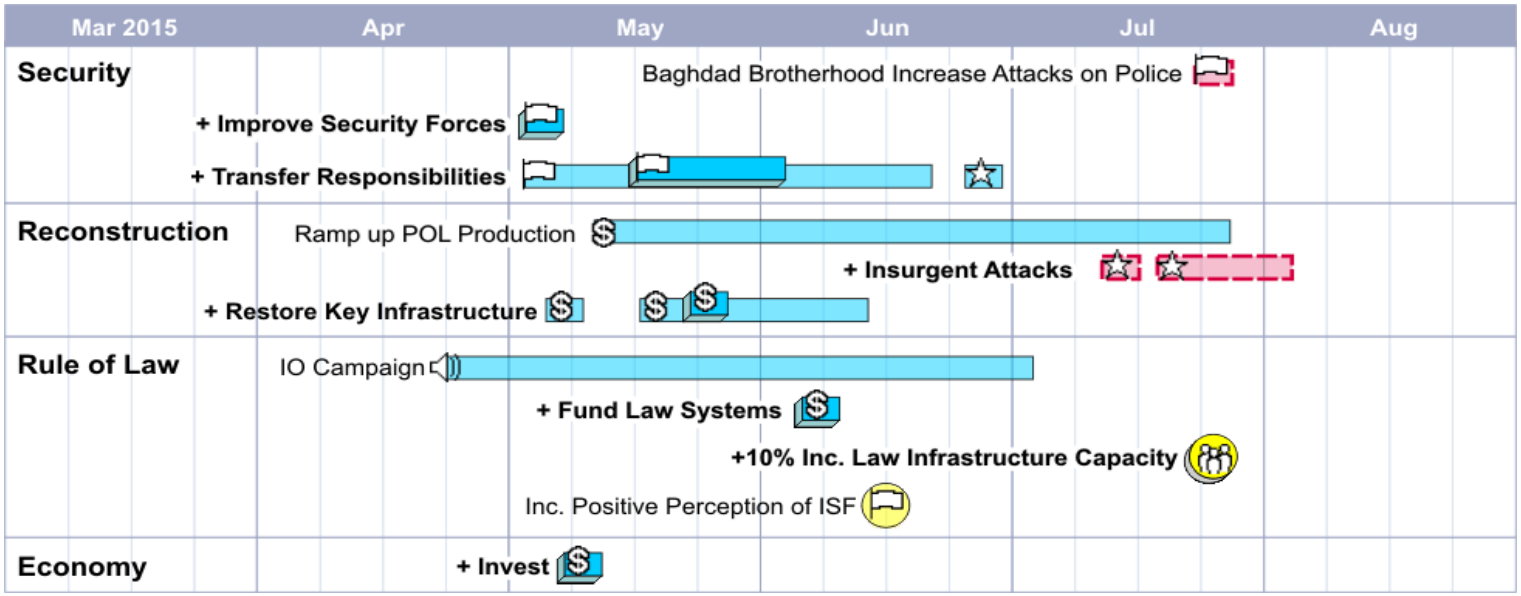
- Different teams explore large DIME actions to see range of possible effects
- Modify the intensity and timing of single and multiple actions to achieve desired effects

Effect of Economic Action



Campaign Planning Tool supports a whole of government approach to planning

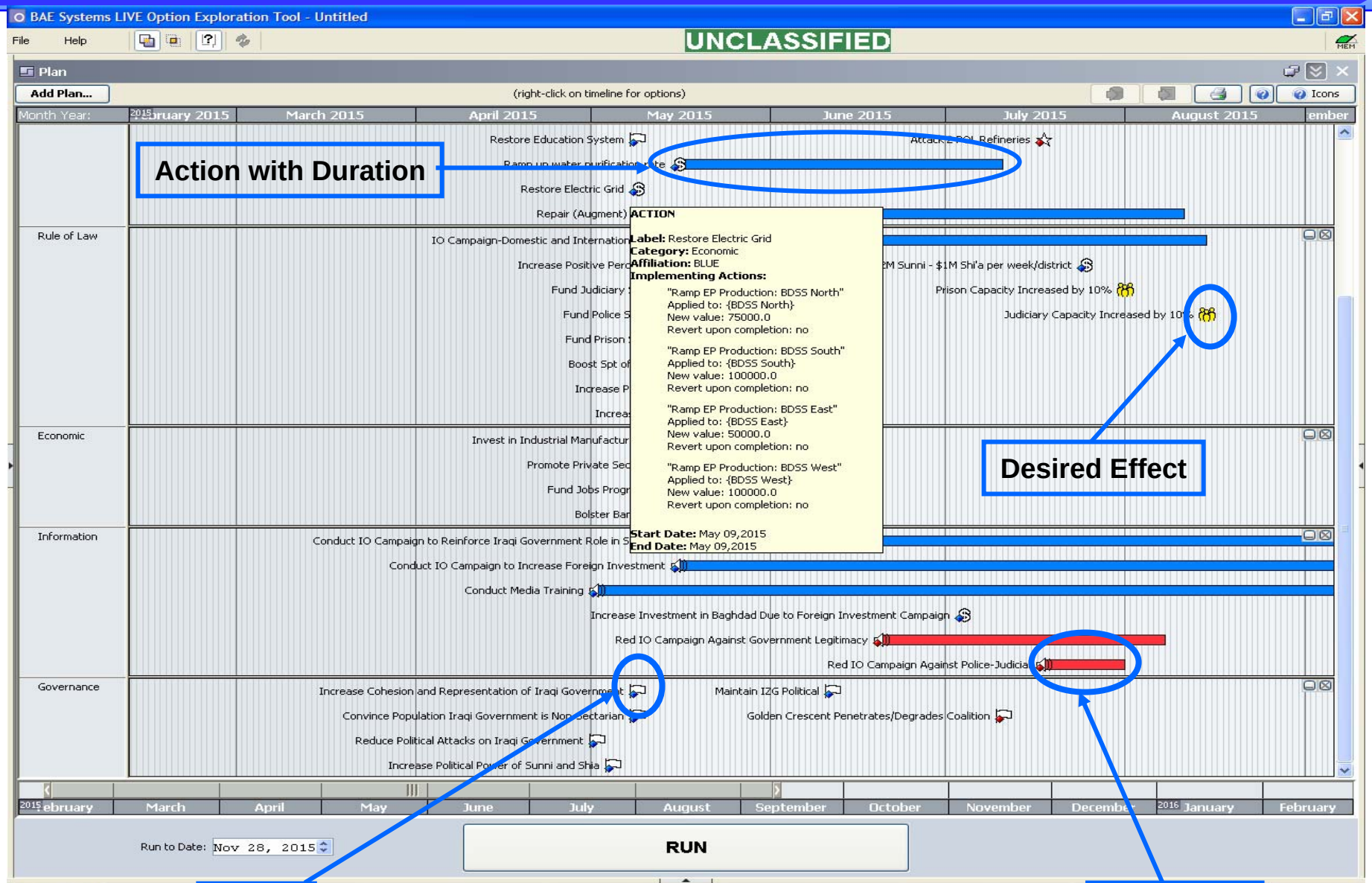
- Enables modular development of multiple lines of effort
- Automatically detects and displays interdependencies, assumptions, resources, actions, duration of effects, metrics and next state
- Ability to modify plans, actions, interdependencies, models and next states based on measured performance



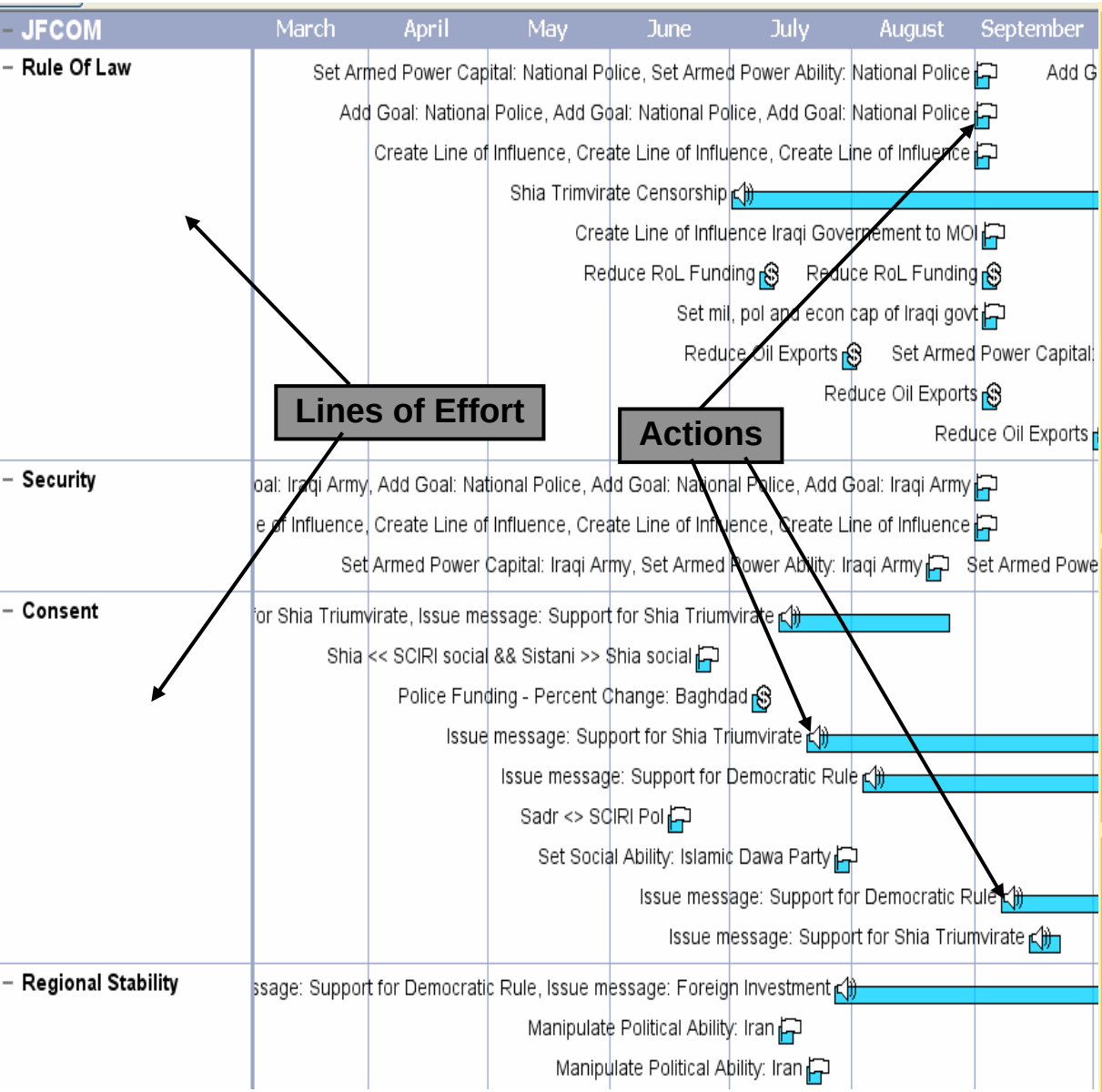
- Specific Information for Each Action

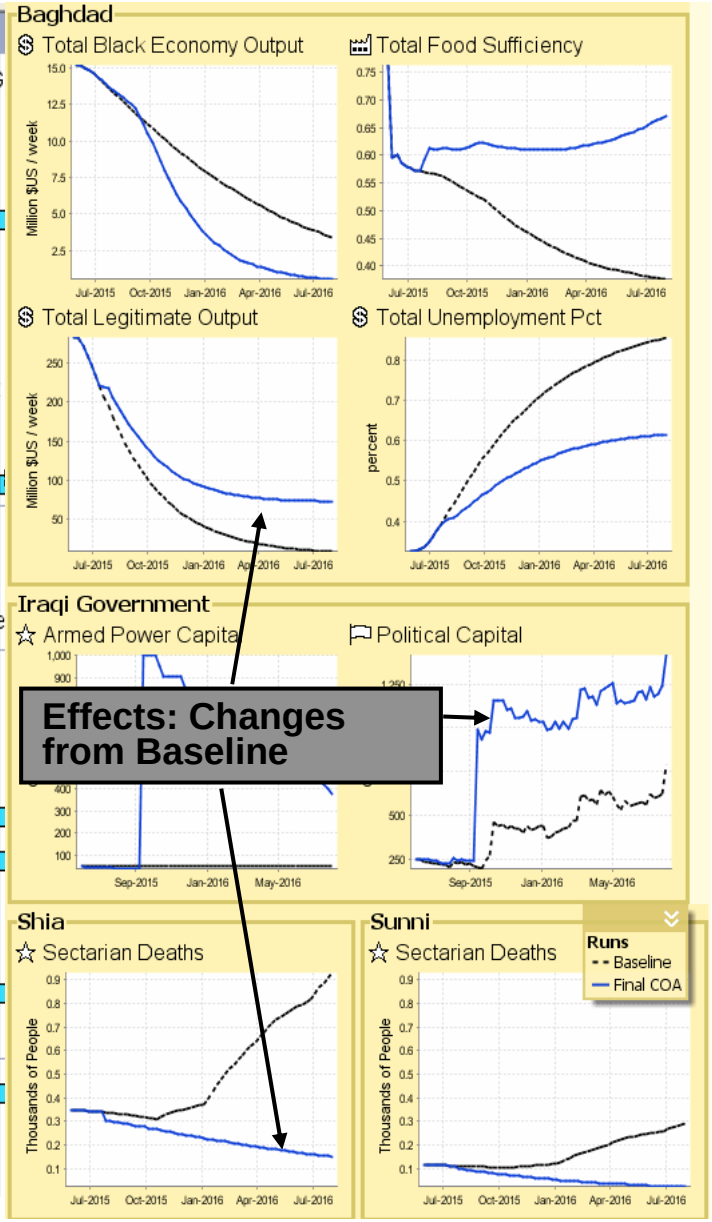
Allows the leader to visualize and manage complex plans

Campaign Planning Tool: Displays an operational campaign plan utilizing all elements of power



Campaign Plan involves multiple actions across multiple lines of effort





Campaign Plan Development

- Initial Operations
  - Refinement of Theories of Conflict
  - Development of Lines of Effort, Objectives, Effects, Next States
  - Exploration of significant DIME actions to understand the effects in all of the PMESII environments
- Initial Development
  - Exploration and refinement of actions by line of effort or PMESII system
- Plan Development
  - Building of multiple, complex actions within lines of effort
  - Combining of lines of effort
- Plan Refinement and Exploration
  - Development of alternative courses of action
  - Execution of all courses of action through each MRM
  - Challenging of key assumptions
- Final Plan
  - Primary campaign plan: metrics
  - Alternate plans

Way Ahead

- Continued development of generic models so there is a full family of generic models with typical behaviors
- Refine and expanded COMPOEX tools. This includes expansion of the light campaign planning tool, increased capability of the Option Exploration tool and fully linking to the full campaign planning tool to
- Host COMPOEX Tools on the appropriate government servers and make them available and Combatant Commands Government Agencies.
- Move to operational experimentation with staffs using the COMPORX tools to build campaign plans to meet current objectives
- Transition COMPOEX to appropriate Combatant Commands, Government Agencies and program of record