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# SMART POWER



MITRE



**SMART  
POWER**

A MITRE Corporation Initiative



## Welcome from the President and CEO

Welcome to the inaugural issue of the MITRE Smart Power newsletter, and to the launch of MITRE's Corporate Initiative in Smart Power. This new program encompasses a broad range of activities unified by the notion of a whole-of-government approach to national security—one that skillfully blends conventional military “hard” power with other forms of power, including international diplomacy, development, and strategic communication.

As an organization with deep ties to the defense and intelligence communities, MITRE recognizes this new movement as a call to expand our outreach to the diplomatic and development communities, and other important centers of power. This might take on a variety of forms, from facilitating interagency communication, and partnership to identifying new methods and technologies for anticipating, and responding to 21<sup>st</sup> century national security challenges.

Starting with this newsletter and its companion website ([www.mitre.org/smartpower](http://www.mitre.org/smartpower)), we hope not only to share information, but to spark fruitful conversations, and foster valuable engagements that will advance a comprehensive, collaborative approach to national security, and foreign policy. With that in mind, I encourage you to contact the Director of our Smart Power Initiative, Dr. Mark Maybury, and share your ideas, comments, or questions as to how we might practically implement the smart power perspective.

We look forward to continuing the conversation.

**Alfred Grasso**  
President and CEO

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# Introduction

## MITRE Smart Power Initiative

From the Secretary of State’s confirmation remarks to military field manuals, there is a growing awareness of the need for integrated, whole-of-government strategies for national security. Despite this unprecedented momentum, implementing a “smart power” approach is an enterprise-scale endeavor where integration among services, agencies, and partners is as challenging as it is necessary. Recognizing this need, MITRE has launched a corporate initiative in smart power that envisions the coordination and amplification of all instruments of national power through a combination of innovative strategies, methodologies, tools and relationships. Our primary objectives include:

- Providing government leaders—including those in public diplomacy, public affairs, strategic communication, intelligence, and operations—with methods, and tools for global, persistent, multilingual monitoring, and response to the full range of international events, media, and strategic communication campaigns
- Helping ambassadors, commanders, development agency managers, and government strategic communicators to plan, and coordinate all-of-government actions across the Diplomatic, Information, Military and Economic (DIME) spectrum
- Enabling the acquisition community to design effective, affordable, and resilient smart power systems

We are pursuing this vision through a wide range of research, outreach and systems engineering activities. For example, MITRE is currently acting as the systems engineer for the Human Social Culture Behavior (HSCB) Program, a multi-year Office of the Secretary of Defense (OSD) research and development program. In this capacity, MITRE is helping the Department of Defense (DoD) and its industry partners develop the next generation of analytical and simulation tools, and we are helping to transition these resources to operational users and defense Programs of Record. MITRE is also sponsoring a Smart Power Lecture Series, which hosts talks from defense, diplomatic and development leaders. Finally, we have launched an internal research program, Measuring and Guiding Engagement, focused on developing innovative methods for monitoring the dynamics of foreign populations, including their perceptions, attitudes, and behaviors. In the pages that follow, you will learn more about some of these efforts, which represent just a few of the ways we are partnering across the U.S. government to make smart power a reality.

We look forward to partnering with you.

### The Smart Power Cube

The smart power logo represents the essence of whole-of-government solutions to today’s pressing national security concerns. The cube’s multicolored facets illustrate the complementary instruments of diplomacy, development, and defense interlocking to form a balanced approach to today’s global challenges.

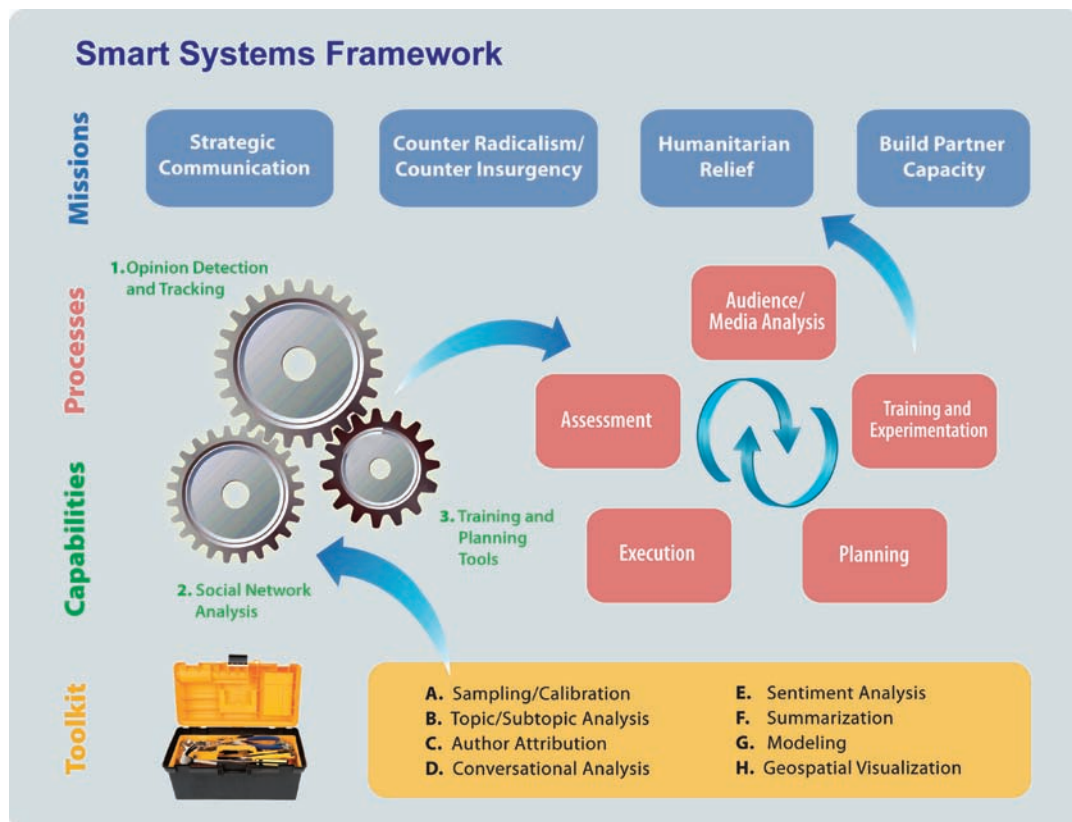
“We must use what has been called smart power; the full range of tools at our disposal—diplomatic, economic, military, political, legal, and cultural—picking the right tool or combination of tools for each situation. With smart power, diplomacy will be the vanguard of foreign policy.”

**Hillary Rodham Clinton**  
 Secretary of State

*Speaking at Senate Confirmation Hearing  
 January 13, 2009*

## Engineering Smart Systems for Smart Power

Twenty-first century societies are driven by a complex world of opinion and pressure, one in which numerous publics and organized groups interact and vie for attention. It is vital that U.S. interests are equipped with smart systems to succeed in this challenging environment. MITRE's enterprise systems engineering perspective and integration of advances in the social sciences and information technology promise effective methods to support smart power. As the figure below illustrates, MITRE is developing automatic and semi-automatic methods for **population sampling and calibration, topic analysis, attribution** of blog and social media authors, **conversational analysis** of communications and group dynamics, **sentiment analysis** to identify and classify individual and group attitudes and opinions, **multilingual summarization** of websites, blogs, and newspapers, **modeling** of a broad range of social, cultural, and behavioral phenomena, and **geospatial and temporal analysis, and visualization**.



These tools and technologies enable a number of capabilities such as opinion detection, and tracking, social network analysis, and tools for training, and planning. These capabilities can be integrated into systems that enable various smart power processes such as audience, and media analysis, training, and experimentation, DIME course of action planning and execution, and assessment of effects of smart power engagements. MITRE's internal research, and development strategy includes exploring how innovative technologies, systems, processes, and partnerships enable a broad range of missions, including strategic communication to countering violent extremism, counterinsurgency efforts, humanitarian relief, and building partner capacity. As we discover new knowledge, we will share our innovations, systems solutions, and lessons learned across services, agencies, and departments.

# Measuring and Guiding Engagement for Smart Power

## MITRE's Internal Innovation Program

MITRE's initial contribution for realizing the smart systems vision is a new and innovative internal research program called Measuring and Guiding Engagement. For Fiscal Year 2010, MITRE is funding a diverse portfolio of research and development initiatives that will produce tangible progress toward the development of systems for international monitoring and engagement. Moreover, this work will extend beyond the analysis of media, and strategic communication to address other crucial concerns, such as emergency preparedness. Funded programs include:

**Sentiment Analysis for Strategic Communication Assessment (SASCA).** Sentiment analysis using natural language processing to monitor attitude, and behavior trends in key strategic areas of operation.

Principal Investigators: Dr. David Day and Dr. John Boiney

**Forum and Blog Threaded Comment Analysis (FABTAC).** Analysis of forum comment threads (e.g., YouTube comments, blogs) to provide interactive visualizations, and thread summaries for intelligence and operations.

Principal Investigator: Dr. Christine Doran

**Public Opinion Polling by Proxy (POP/P).** An exploration of the ability of social media (e.g., Twitter) to serve as a proxy for traditional opinion polling methods.

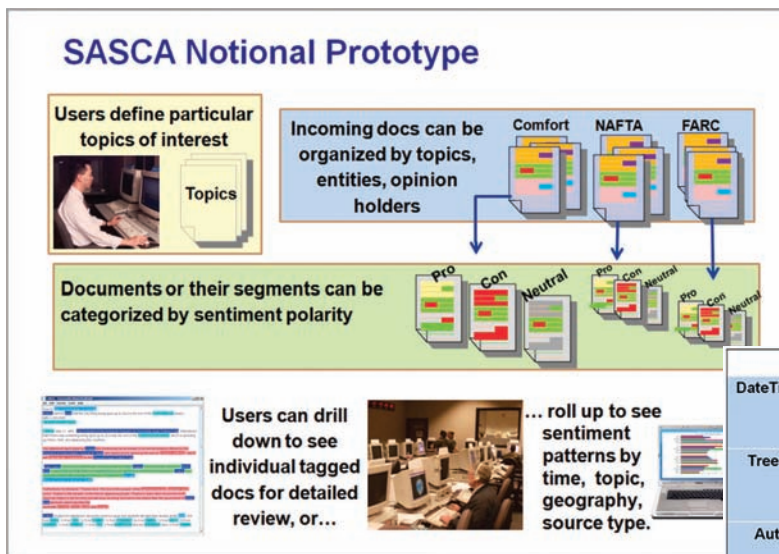
Principal Investigator: Dr. John Henderson

**Exploring Soft Power in Weblogistan.** Developing foundational Farsi and Dari language processing tools, to enable analysis of large volumes of foreign language blog, and social media content.

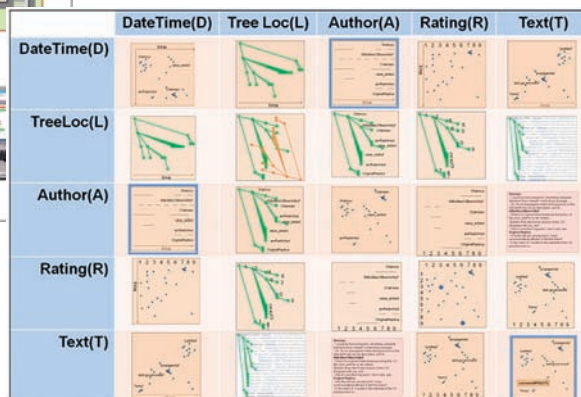
Principal Investigator: Dr. Karine Megerdooomian

**Assessing Health Cognitions.** Integrating nationally-representative survey data into agent-based models of H1N1 virus transmission to assess the combined effects of individual health-protective attitudes (e.g., vaccination), behavioral intentions, and federal and local public health guidance.

Principal Investigators: Dr. Jill Egeth and Dr. Jennifer Mathieu



## Forum and Blog Threaded Comment Analysis



“We’re seeing today a convergence of technical, political, and diplomatic developments that point to dramatic changes in the way communication is viewed as an instrument of U.S. policy and power. There is a new vocabulary emerging to describe the new approach: partnership, listening, alliances, and, in particular, engagement and smart power.”



**Dr. Jeremy Curtin**

Coordinator, Bureau of International Information Programs, State Department

Speaking at the inaugural MITRE Smart Power Lecture, May 27, 2009

## Smart Power, New Media, and Public Diplomacy

On May 27, Dr. Jeremy Curtin delivered the first talk in MITRE’s Smart Power Lecture Series. A Career Minister of the Senior Foreign Service, Dr. Curtin was appointed Coordinator of the State Department’s Bureau of International Information Programs in April 2007, having previously served as Principal Deputy Coordinator and Acting Coordinator. Below are some excerpts from his lecture.

### New Media and the Marketplace of Ideas

*New media does give us greater range, but new media also breaks down the hierarchies of authority that we’re used to in the communication field. By putting something on **Wikipedia** or a video on **YouTube**, you can reach more people than the **New York Times** and for them have more authority than the **New York Times**. So, we in government and other organizations constantly have to re-establish our authority. We have to develop a voice that people find credible and will listen to.*

### The Notion of Engagement

*Engagement is a key to the concept of smart power. We’re talking about smart, we’re talking about engaging, with all aspects of foreign audiences, all aspects of decision-making, both here and abroad. For public diplomacy, the attitude of engagement that underlies smart power is formative ... One person talking to another. That is engagement.*

### Engagement in the Web 2.0 Era

*So, we’re experimenting. We’re using **Facebook**, **Twitter**, **Second Life** ... mobile programs. We’ll try almost anything to discover the best avenue to get our information out and engage with foreign audiences. We’ll always have to keep reminding our staff of this, **Twitter**, and **Facebook**, and the rest are only tools. They’re not ends to themselves ... Too often, especially now, new media is so new that people think the newness in itself is a goal. But it is not. The goal is to communicate.*

### Measuring Engagement

*This open, democratic, and ever-changing new media also puts a premium on metrics and a disciplined approach to analytics. So, we not only have to create good programs, good content, but we have to do more to understand our audiences, how to reach them. Now a lot of good work is being done in this field ... but I believe we are still just beginning. We need better capabilities to understand how our information flows through cyberspace and especially when we deal with third-party platforms. We ... need better ways to know what happens to our information when it comes out. Is it really reaching the people we want to reach? Is it really having the impact that we want to have?*

To learn more about the new media projects Dr. Curtin oversees, visit [www.state.gov/r/iip](http://www.state.gov/r/iip) and [www.america.gov](http://www.america.gov). To learn more about Dr. Curtin, visit [www.state.gov/r/pa/ei/biog/72946.htm](http://www.state.gov/r/pa/ei/biog/72946.htm).

## Further Reading

While smart power is still an area under development, a number of quality readings have emerged addressing soft power, strategic communication, and the analysis of human dynamics, including:

*Report of the Defense Science Board Task Force on Strategic Communication*, January 2008.

*Report of the Defense Science Board Task Force on Understanding Human Dynamics*, March 2009.

*Stavridis, James G. "Strategic Communication and National Security." Joint Force Quarterly* 3rd Quarter, 2007, p. 4.

*Integrating Instruments of Power and Influence: Lessons Learned and Best Practices*. 2008. RAND.

*Nye, Joseph. Soft Power: The Means to Success in World Politics*. 2004.

Additional materials can found at the MITRE Smart Power website: [www.mitre.org/smartpower](http://www.mitre.org/smartpower).

## About MITRE

Founded in 1958, The MITRE Corporation is a not-for-profit systems engineering organization chartered to work solely in the public interest. MITRE currently manages four independent, Federally Funded Research and Development Centers (FFRDCs), including centers for the Department of Defense, and the Department of Homeland Security. As a national resource and trusted adviser to the U.S. government, we apply our expertise in systems engineering, information technology, social-behavioral sciences, human language technology, and enterprise modernization to address our sponsors' critical needs. MITRE also supports an independent research, and development program that explores new technologies, and approaches that have current, and future application to sponsors' challenges. With principal locations in Bedford, Massachusetts, and McLean, Virginia, and numerous sites around the world, MITRE's staff includes 7,000 scientists, engineers, and support specialists—65 percent of whom have master's or Ph.D. degrees.

"Over the long term, we cannot kill or capture our way to victory. Non-military efforts—these tools of persuasion and inspiration—were indispensable to the outcome of the defining ideological struggle of the 20th century. They are just as indispensable in the 21st century—and perhaps even more so."

**Dr. Robert Gates**  
*Secretary of Defense*

*Speaking at the U.S. Global Leadership Campaign  
Washington, D.C.  
July 15, 2008*



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