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Inter-Organizational Collaboration: Addressing the Challenge

Susan Page Hocevar, Erik Jansen, and Gail Fann Thomas

9/11 and Hurricane Katrina exposed the United States' vulnerabilities within and across organizational and jurisdictional boundaries. A number of breakdowns in collaboration were evident: a lack of information sharing among agencies, confused inter-organizational relationships, competing roles and responsibilities, and shortcomings in leadership.

In response to these inadequacies in collaboration, scholars have engaged in theoretical and empirical work in hopes of preventing another 9/11 and enhancing overall national security. Studies about the need to collaborate have been the most prevalent. Less prevalent are studies about the "how" of collaboration. To address the "how" of collaboration, we wanted to better understand the enablers and barriers to effective inter-agency collaboration. To address this question, we queried and conducted surveys with homeland security managers across a broad range of organizations and agencies to find out what factors contribute to effective collaboration and what factors inhibit collaboration. The

resulting model of collaborative capacity is presented here.

INTER-ORGANIZATIONAL COLLABORATIVE CAPACITY (ICC) MODEL

The response planning and prevention for both man-made and natural disasters are complex problems that require the capabilities of many disciplines that have both aligned and competing interests and usually function without an over-arching command authority. Because of the lack of an integrating hierarchy, organization theory would define this as an "under-designed system." As such, it requires leadership engagement to guide, motivate, and structure the collaborations needed to be successful in the complex homeland security environment.

We define Inter-organizational Collaborative Capacity (ICC) as "the capability of organizations (or a set of organizations) to enter into, develop, and sustain inter-organizational systems in pursuit of collective outcomes." [1]
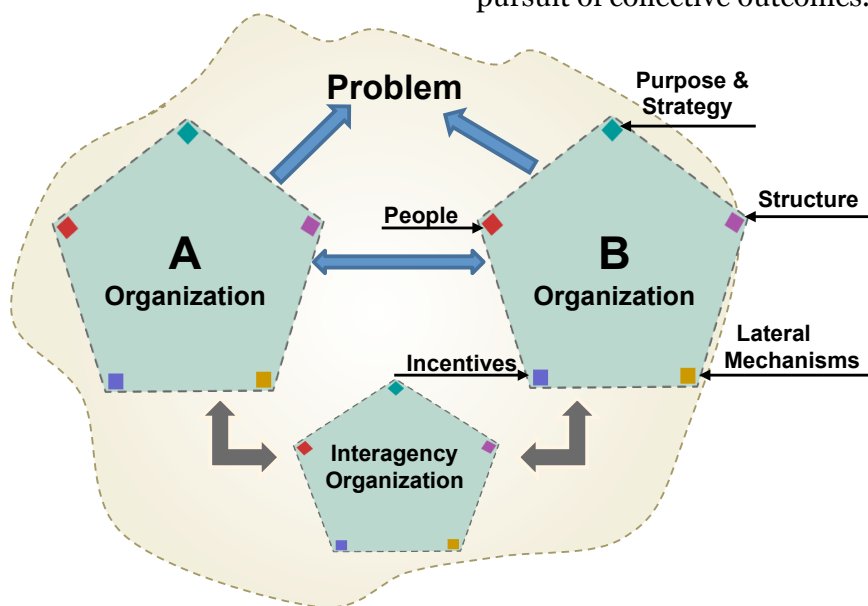

Figure 1: Organizations in a Common Problem Space [2]

Figure 1 illustrates the simplest image of a collaborative context with two participating organizations and an inter-agency organization that share an interest in a problem space. The inter-agency organization can be a temporary task force, convened for a specific time-limited purpose, or a more formally established structure such as an intelligence fusion center. All three organizations depicted have a collaborative capacity that impacts how effectively the problem is addressed. A key assumption of this model is that building collaborative capacity requires deliberate leadership attention and the alignment of organizational design elements toward collaboration. The ICC model provides a mechanism to assess different factors that contribute to an organization's capacity to collaborate with other organizations. It can serve as a framework to diagnose current collaborative capabilities and provide data to guide organizational changes to improve those capabilities. The model is comprised of five organizational domains: Purpose and Strategy, Structure, Rewards and Incentives, People, and Lateral Mechanisms. There are thirteen factors measured by the ICC diagnostic survey that are distributed across the domains of the organizational system as illustrated in Figure 2.

Organizational Domains & Factors

Purpose & Strategy
- Need to Collaborate
- Strategic Action for Collaboration
- Resource Investments

Lateral Processes
- Collaborative Learning
- Collaborative Tools & Technologies
- Social Capital
- Information Sharing

Incentives & Reward Systems
- Incentives & Reward Systems

Design Factors for Inter-Organizational Collaborative Capacity

Structure
- Structural Flexibility
- Support for Individual Collaborative Efforts
- Metrics
- Collaboration Structures

People
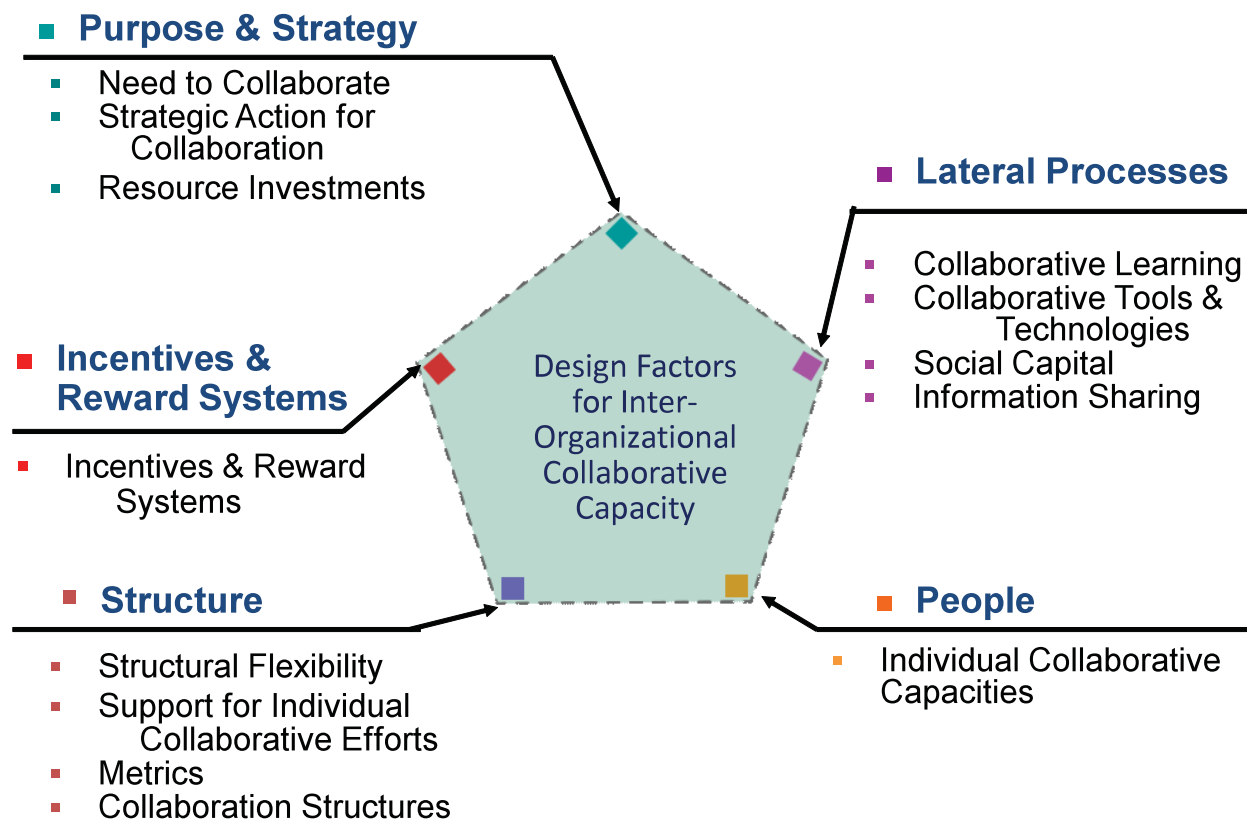- Individual Collaborative Capacities

Figure 2: Inter-Organizational Collaborative Capacity Model: Domains and Factors

The ICC model has three factors in the domain of **Purpose and Strategy**: *Felt Need* is the organization's recognition of interdependence with others and the acknowledged need to collaborate in order to effectively accomplish its mission and goals. Felt Need can be derived from a perceived threat or problem and thus emphasizes response capabilities; or it can be motivated by opportunity for pro-action or prevention. *Strategic Actions* include goals for collaboration, demonstrated senior leadership commitment, and the willingness to consider other organizations' interests in planning. The third factor assesses the extent to which the organization makes adequate *Resource Investments* (e.g., budget, personnel) in collaboration. Felt Need to collaborate is typically the initiating factor; but without the additional leadership, planning, and resource commitments, there is inadequate strategic emphasis for building collaborative capacity.

The **Structure** domain is comprised of four factors. *Collaboration Structures* can include liaison roles, participation in inter-agency teams and task forces, clearly established roles for each participating organization, and internal processes that enable effective inter-organizational collaboration. *Structural Flexibility* allows partnerships to adapt as requirements change, demonstrates willingness to adjust procedures to facilitate coordination, and responds to the requirements of other organizations. *Metrics* include established criteria and performance standards for evaluating inter-organizational efforts, and routine mechanisms for assessing outcomes. *Support for Individual Collaboration Efforts* has two facets. The first is how clearly individual collaborative work is structured in terms of clear goals, constraints, and authorities. The second is the strength of the link between personnel in boundary-spanning roles working directly with other organizations and the strategic leadership of their own organization. This is reflected in the extent to which the organization follows through on recommendations of these boundary spanners.

The ICC model focuses on ways organizations align different internal design elements to improve collaboration; thus the

Incentives and Reward Systems domain considers *Reward Systems* as they impact the organization's personnel. Are employees rewarded for investing time in building collaborative relationships with other organization members and for successful collaborative results? Are collaborative talents and achievements considered when people are reviewed for promotion? There are, of course, external factors that motivate an organization to engage in collaboration (e.g., mandated requirements or financial awards through grants); but these incentives come from the larger organizational context or environment rather than the "managed" reward system inside the organization in the ICC model.

There are four factors that constitute the **Lateral Mechanisms** domain representing both the "hard" and the "soft" aspects of lateral coordination. *Social Capital* represents the social and professional relationships that organizational members have with counterparts in other organizations. It is a basis for awareness and trust building. *Collaborative Tools and Technologies* provide the technical mechanisms for collaboration such as inter-operable information systems and collaborative planning tools. The *Information Sharing* factor represents the organization's norms and values that support information sharing, and the adequacy of access that other organizations have to information relevant to their success in the collaborative activity. *Collaborative Learning* is demonstrated in several ways – joint training, learning about the interests and capabilities (and limitations) of other organizations, and systematic assessment of lessons learned to improve future collaborations.

The **People** domain has only a single factor – *Individual Collaborative Capabilities*. These include the attitudes, skills, knowledge, and behaviors of individual organizational members that impact the organization's ability to collaborate. Examples are conflict management skills, willingness to engage in shared decision-making, respect for the expertise of those in other organizations, and knowledge and understanding of how other organizations work.

SUPPORTING EVIDENCE FOR COLLABORATIVE CAPACITY FACTORS

Many other scholars have studied the issues contributing to or preventing collaboration. Paul Stockton and Patrick Roberts summarize the findings from a 2008 forum on homeland security convened by Stanford University's Center for International Security and Cooperation (CISAC). They acknowledge the absence of hierarchy that uses a top-down centralized approach to homeland security planning and conclude that the relevant stakeholders (including federal, state, local, and private sector organizations) need to: collectively identify a shared motivation, need and purpose; formulate goals that they will jointly pursue; and use a consensus process for planning the means to accomplish those goals through unity of effort. They also recommend structural mechanisms like an integrated staff organization and the development of doctrine to guide and coordinate operations.[3]

Sharon Caudle cites a study that found the most effective inter-governmental cooperation occurs when participating bodies acknowledge a high level of vulnerability and interdependence and establish formalized partnerships with clear authorities, roles and procedures. She describes additional enabling factors that include: leadership to champion commitment to partnership; governing and decision-making structure; policies, processes and partnership norms; activities to build personal relationships across organizations; strategic goals with designated measures and clearly defined roles, responsibilities and resource commitments; and a performance management system for both organizational and individual-level performance.[4]

Finally, Amy Donahue and Robert Tuohy studied how to better learn from the lessons of disasters. They identify a number of repeating "lessons" that include failed communications, weak planning, uncoordinated leadership, and resource constraints. They propose three recommendations to strengthen the learning process toward actual changes in disaster planning and response practices: (1) recast exercises as learning activities where failures are not punished but used to focus critical

analysis; (2) develop robust nation-wide capability to gather, validate, analyze and disseminate information from incidents; and (3) establish incentives to "institutionalize lessons-learning processes at all levels of government."[5]

In 2005, the U.S. General Accountability Organization reported on a study conducted to identify practices to "Help Enhance and Sustain Collaboration among Federal Agencies." It documented the following recommendations:

- Define and articulate a common outcome;
- Establish mutually reinforcing or joint strategies;
- Identify and address needs by leveraging resources;
- Agree on roles and responsibilities;
- Establish compatible policies, procedures, and other means to operate across agency boundaries;
- Develop mechanisms to monitor, evaluate, and report on results;
- Reinforce agency accountability for collaborative efforts through agency plans and reports; and
- Reinforce individual accountability for collaborative efforts through performance management systems.[6]

These eight practices can all be mapped to one of the five domains and thirteen factors of the ICC model. The two domains that are not explicitly included in this list are the Individual Collaborative Capacities and Lateral Mechanisms. However, a more recent GAO report cites four actions that agencies should take to enhance interagency collaboration for national security:

- Develop and implement overarching strategies
- Create collaborative organizations.
- Develop a well-trained workforce.
- Share and integrate national security information across agencies.[7]

These four recommendations repeat the need for attention to strategic and structural requirements for collaboration, and now include two – information sharing and individual capabilities – that represent Lateral Mechanisms (information sharing) and the personnel capabilities specified in the People domain of the ICC model.

TRENDS IN INTER-ORGANIZATIONAL COLLABORATION

The most significant post-9/11 trend related to this essay is the increasing attention, of scholars and practitioners, to the importance of inter-organizational collaboration for homeland defense and security. As the 2005 GAO report states, "the 21st century will be difficult, if not impossible, for any single agency to address alone."[8] One initial response to heightened awareness of the need for collaboration was to establish requirements through mechanisms such as the *National Infrastructure Protection Plan*. But establishing requirements does not automatically instill the participating organizations with the designed systems, motivation, norms, individual competencies, or strategic appreciation necessary for successful collaboration. So an important related trend is the emphasis on the need for organizational leaders to deliberately attend to the development of collaborative capabilities across all aspect of their organization including strategy, structure, reward systems, lateral mechanisms, and people.

The types of organizations viewed as critical partners for homeland security are expanding. The initial focus was primarily on domestic government agencies at local, state, tribal and national levels. But recent DHS reports emphasize the importance of strengthening collaborative capabilities with the private sector, non-governmental organizations, and international partners.[9] The scope of issues that are seen as pertinent to national security has also expanded to include such concerns as cyber-space, climate change, and the global economy. These new domains require the development of new goals, strategies and linkages with an even broader set of stakeholders. Another recent focus has been on citizen involvement in homeland security. Community Emergency Response Teams (CERT) and America's Waterway Watch offer both prevention and response capabilities that need to be integrated into local and regional collaboration planning and information systems.

A potentially significant challenge moving forward is the resource-constrained environment resulting from the economic downturn. The organizations expected to participate in collaborations are also competing for federal and local funds to support their organization-level operations. To the extent that collaboration is seen as an additional cost that is secondary to the core mission of an organization, commitment to collaboration may wane. A related question raised by Sheryl Jardine's research is whether current regional collaborations will be sustained if and when federal grants for regional planning are reduced or eliminated. Her sample of homeland security managers reported an increased appreciation for the value of regional planning and benefits gained through partnerships that had not previously existed. This is as a direct result of federal funding requirements or support. However, the participating managers also acknowledge the costs and challenges of collaboration. Perhaps the strongest indicator of concern is that a number of the managers said they would not continue in regional collaborations if funding or requirements ended.[10] This is clearly a question that needs further investigation.

The rise of Web 2.0 technologies has suggested the potential for e-government, which in terms of the ICC model, offers potential new tools and technologies that can be harnessed in the critical domain of Lateral Mechanisms. The collaborative efficiencies within and across boundaries resulting from new interactive, Internet technologies can improve information sharing and provide a means of integrating and making sense of information more quickly. Indeed, the new platforms are often called "collaborative technologies." However, the technology investment decisions, which include the technical infrastructure of software, hardware and systems as well as the training and skills to develop, deploy and maintain

those systems, will be a substantial challenge. The new technology has the promise of reaching beyond boundaries to invite new types of collaboration for increased efficiencies and collaboration, but there are few current case studies.[11] Determining the tradeoffs, threats and opportunities of the rapidly changing domains of Internet and mobile technologies represents a major area of interest for practice and research.

CONCLUSION: WHERE DO WE GO FROM HERE?

What has become evident is just how difficult it is to achieve effective collaboration. In an era of increasing interdependence among organizations and the problems they face, the challenges and opportunities for building inter-organizational collaborative capacity are not going to go away. At least in the near term, the resources available to US government organizations and many of their non-government and international partners are likely to decrease, creating pressures and potential barriers for collaboration. At the same time, the technical systems for enabling collaboration suggest the potential for possible new innovations. If homeland security and defense managers are to be successful in building the inter-organizational collaborative capacity necessary to navigate these new waters, they will need to align the design of their organizations in the critical domains of strategy, structure, lateral processes, reward systems, and people. There may be no greater challenge or opportunity for engaging the complex, uncertain problems that will face us.

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³ P.N. Stockton and P.S. Roberts, "Findings from the Forum on Homeland Security After the Bush Administration: Next Steps in Building Unity of Effort," *Homeland Security Affairs* IV, no. 2 (June 2008), http://www.hsaj.org/?article=4.2.4.

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⁵ A.K. Donahue and R.V. Tuohy, "Lessons We Don't Learn: A Study of the Lessons of Disasters, Why We Repeat Them, and How We can Learn Them," *Homeland Security Affairs* II, no.2 (July 2006), http://www.hsaj.org/?article=2.2.4.

⁶ U.S. Government Accounting Office (GAO), *Results-Oriented Government: Practices That Can Help Enhance and Sustain Collaboration amount Federal Agencies,* GAO-06-15 (October 2005), www.gao.gov/new.items/d0615.pdf.

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⁸ GAO *Results-Oriented Government*, 1.

⁹ Department of Homeland Security *Bottom-up Review Report* (July 2010), http://www.dhs.gov/xlibrary/assets/bur_bottom_up_review.pdf ; Department of Homeland Security *Quadrennial Homeland Security Review Report: A Strategic Framework for a Secure Homeland* (February 2010), http://www.dhs.gov/xlibrary/assets/qhsr_report.pdf.

¹⁰ S. Jardine *The Impact of Incentives and Requirements on Group Collaboration* (master's thesis, Naval Postgraduate School, September 2010). Jardine's sample was gathered from the Urban Area Security Initiative (UASI) program managers professional group. Of the forty-four voluntary participants, 21 percent said they would not continue collaboration if requirements or funding stopped.

¹¹ For two case studies at opposite ends of the spectrum, see: B.S. Noveck, *Wiki Government (*Washington, DC: Brookings, 2009); M. Zook, M. Graham and S. Taylor, "Volunteered Geographic Information and Crowdsourcing Disaster Relief: A Case Study of the Haitian Earthquake," *World Medical & Health Policy* 2, no. 2 (2010): 7-33.