

ASCE | *The newspaper for members of the  
American Society of Civil Engineers*

# news

## ASCE Workshop Brings Together Participants in Iraq Rebuilding Efforts

**By Mark Fitzgerald**

Following months of reviewing Department of Defense capacity development requirements concerning the transfer of information and skills to the Iraqi people, ASCE hosted an all-day workshop entitled “Partnering in Iraq Reconstruction Capacity Development” on December 16 at its headquarters, in Reston, Virginia. With the goals of highlighting the responsibility of contractors to provide training to Iraqis and of taking full advantage of the ability of U.S. engineering associations to offer educational programs and delivery systems in Iraq, the workshop brought together officials from the Iraq Projects and Contracting Office (PCO), the Department of State, the U.S. Agency for International Development, and the U.S. Army Corps of Engineers, as well as a variety of building and design contractors and a wide range of members and representatives of professional societies and international organizations.

Henry J. “Hank” Hatch, P.E., a retired army lieutenant general, a former commander of the U.S. Army Corps of Engineers, and an honorary member of ASCE, acted as moderator. He began the proceedings with a definition. Capacity building, he said, is “the building of human, institutional, and infra structure capacity to help societies develop secure, stable, and sustainable economies, governments, and other institutions through mentoring, training, education, physical projects, the infusion of financial and other resources, and most importantly, the motivation and inspiration of people to improve their lives.” Recognizing the need for long-term, self-sustaining development in Iraq, Hatch underscored the importance of training and technology in rehabilitating and maintaining that country’s infrastructure.

Charles Hess, the director of the PCO in Baghdad, was the first of a series of speakers who were able to offer firsthand perspectives and assessments of Iraq's training needs. "We need to give the Iraqi people the kind of facility training that helps them move along the pathway of sustainable infrastructure," said Hess, who previously directed the operations and response division of the U.S. Department of Homeland Security. With a diverse staff of professionals from the fields of construction, program and financial management, information technology, logistics, and security, Hess currently manages a budget of more than \$18 billion and directs rebuilding activities in connection with the PCO's reconstruction of Iraqi infrastructure.

Hess pointed out that many of Iraq's plants and facilities had been run without regard to monitoring or periodic assessments. For this reason, he said, the PCO is emphasizing the importance of training in the areas of preventive and life-cycle maintenance. After acknowledging the physical challenges posed by the insurgency in Iraq, he went on to extol the motivation exhibited by Iraqis and their willingness to learn.

"These folks are very smart and very eager to learn," added Hess. "Based upon what I've seen from many of the Iraqi subcontractors, these folks do have an understanding of the basic principles and methodologies of engineering and construction, but what they need is some fine-tuning, some updating, and some solid coaching and mentoring." According to a recent PCO report, 1,167 construction projects in Iraq are currently in progress, and more than 100,000 Iraqis are employed on projects in which the PCO is involved.

Describing how his team in the United States supports Hess's team in Baghdad, James M. Crum, P.E., the director of the co in Washington, discussed his office's goals, expectations, and contract requirements. "The PCO has a mission to accomplish in Iraq," Crum said. "But capacity development and capacity building in Iraq will continue long after we're done with our mission." According to the "Interface Plan Objective," a PCO document that addresses reconstruction and capacity development, the primary responsibilities and goals of the PCO include devising an effective project handover and transition plan, working with Iraqis to create an asset management system with "preloaded" project data, transforming the co logistics infrastructure, providing training, and supporting the development of Iraqi professional and engineering organizations.

"We need a strategy that will be complementary to long-term involvement in Iraq," said Crum, who emphasized the need for co contractors to quickly turn over to the Iraqis the responsibility for managing completed projects, to impart the necessary skills and transfer the necessary tools, and to generate business and employment opportunities for Iraqis. "We not only have to consider private investment, but also the public sector, the contractors, the follow-on growth that the Iraqis will have, and primarily the Iraqis themselves." Crum added that a capacity development plan was of cardinal importance to the PCO and its contractors and that involvement and participation, especially on the part

of professional associations, could lead to independent roles in public and private Iraqi ventures.

In a conference call from Baghdad, Roliff Purrington, a member of the Iraq Reconstruction Management Office (IRMO) and a senior adviser to the Ministry of Construction and Housing, called attention to several areas that would have to be addressed in turning over responsibility to the Iraqis. "What this ministry is interested in first and foremost is practical course training," said Purrington. "The ministry would like to see some sum of money devoted to bringing trainers to Baghdad and to have a consistent, predictably scheduled array of courses available." As he saw it, the ministry was particularly interested in training in the areas of project management, construction management, construction quality assurance, quality control, cost estimating, scheduling, value engineering, budgeting, mechanical inspection, and general construction inspection. In addition, training would be needed in applying various computer programs and in negotiating claims and change orders.

The keynote speaker, Carl A. Strock, P.E., a lieutenant general who heads the U.S. Army Corps of Engineers, thanked ASCE for its involvement in reconstruction efforts and for raising awareness about the deterioration of infrastructure in the United States. "ASCE'S [Report Card for America's Infrastructure] has done much to draw attention to this nation's need to improve its infrastructure," he said. "As an agency that's constantly involved with infrastructure, it's refreshing to point to others who are making the case rather than having to make the case ourselves, which might make us appear self-serving."

After recognizing the importance of collaborative efforts involving governmental and nongovernmental bodies and the private sector, Strock described the Corps's unique ability to build infrastructure in both tranquil and hostile environments. "Given our domestic mission, we are very much a civil part of government, but we're also very clearly a military instrument," Strock said. "To the degree to which we can create stable and prosperous societies around the world, we contribute to regional stability, and regional stability contributes to global stability, which in turn contributes to our national security."

Strock went on to laud the capacity building efforts in Iraq, paying special tribute to the thousands of Iraqis who are working to restore their country's infrastructure. "The Iraqi people are confident, committed, and most of all they are courageous," said Strock, calling attention to the intimidation that Iraqi workers face and the danger of kidnapping or assassination. Given the deprivation caused by 12 years of sanctions, the suffering that was part and parcel of life under a brutal dictator, and the widespread looting that followed the fall of Baghdad, "the Iraqi people are really hungry to get back into a civilized community of nations and catch up with technology," said Strock.

Before discussing the role of private investment, Strock stressed the importance of the immediate employment of Iraqi contractors and workers to help plan, finance,

develop, and advance their infrastructure. “With our current role of overseeing construction in Iraq, we have included incentives in our contracts, and the contractors have built capacity building into their efforts,” Strock said. “But we recognize that no one government agency has the capacity to do what we have done with PCO, and only if we bring in the private sector to help us set priorities and develop projects will we be at all successful.”

The workshop continued with insights and perspectives from various professional societies, among them the Associated General Contractors of America, the Construction Industry Institute, the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, and the American Society of Mechanical Engineers, on how to meet capacity development needs. “ASCE wants to be able to contribute to building stability and security in Iraq,” said Larry Roth, P.E., ASCE’s deputy executive director. “We want to assist in creating a sustainable nation, to help integrate Iraqis—particularly Iraqi civil engineers—back into the world community.”

After noting that ASCE had recently donated 30 CD-ROMS (each of which was valued at \$1,800 and contained five years’ worth of 30 ASCE technical journals) to various Iraqi universities and Iraqi professionals, Roth highlighted ASCE’s status as the world’s largest publisher of civil engineering information and its ability to offer access to the latest technology and best practices. “We publish fifty thousand pages per year of civil engineering information,” Roth said, noting that ASCE has 30 technical journals, more than 1,500 books in print, and an online reference library of journal articles and proceedings papers. Additionally, Roth noted that ASCE’s wide range of continuing education offerings, among them seminars, specialized on-site training programs, and distance learning courses, “could with very little tailoring be used quite effectively in Iraq.”

Representatives from the Fluor Corporation, the Louis Berger Group, Inc., and CH2M HILL brought the workshop to a close with a panel discussion that focused on various options that contractors might consider in training the Iraqis. “We need skilled labor to reconstruct Iraq,” said Julie Haines, an environmental scientist with the Louis Berger Group, Inc., who noted that her firm was working with Iraq’s Ministry of Labor and Social Affairs (MOLSA) to establish employment and vocational training centers throughout the country. “We are going to be training tens of thousands of workers over the next two years, but we have to work with MOLSA to build the capacity so they can take over the project when the money is gone and the Americans are gone—so we really need to look at things from a long-term sustainable development paradigm.”

Workshop participants plotted future steps and discussed how they could best work together in reconstructing Iraq. They requested IRMO to assume the task of consolidating training needs and providers and to prepare a summary of key findings for Ambassador William Taylor, who directs that office. They also emphasized the need to set up a task force on training that would bring together the public and private sectors and

determine how such Iraq institutions as the University of Baghdad could assist in providing training. Moreover, the participants stressed the importance of establishing a forum to clearly define the goals of capacity development.

Sponsored by both ASCE and the American Association of Engineering Societies, the workshop was the latest in a series of ASCE events and initiatives on capacity building. In December 2003 ASCE conducted a Web seminar with more than 100 Iraqi civil engineers, the latter assembled at the Baghdad Convention Center, to explore how it could help rebuild the civil engineering profession in Iraq. In March 2004 Roth and Patricia D. Galloway, P.E., then ASCE's president, were invited by Paula J. Dobriansky, the U.S. undersecretary of state for global affairs, to the Department of State to meet with Nesreen M. Seddeek Berwari, Iraq's minister of municipalities and public works. That meeting dealt with capacity building in Iraq and ASCE's role in the country's reconstruction.

As part of its 2004 annual conference, held in Baltimore in October, ASCE hosted an international roundtable that brought together delegates from Bangladesh, China, Columbia, Egypt, Finland, Ghana, Japan, the Philippines, Poland, South Africa, South Korea, and the United Kingdom for a discussion of the role that technology can play in making new infrastructure systems more robust.