Complexity in a Changing World

By Admiral Thad Allen

I would like to talk about the changing world in which we try to render public service. Three dramatic forces have begun to combine and conflate in today’s world, making it difficult to govern any kind of nation state. Indeed, they put a premium on the intellectual capacity and preparedness for our public administrators and the public service at large.

The first is the rapid advance of technology. Any generation in the history of the world can claim that it was the most technologically advanced, and that may be true. The pace and acceleration of technology are the difference now. Personas are being built, data stored and avatars used by a variety of business enterprises. I am not sure we understand the implications in terms of how we live our lives and how we interact with our communities, government servants and other countries. My concern is the widening gap between the ingestion of technology and deploying it. We have to revisit how we acquire technology and deal with the private sector.

The second trend is the increasing intersection between the natural and built environment and its consequences, plus the fact that we have more events of greater consequence that increase the complexity of the responses. In many cases, we face novel and unprecedented challenges, which means there is no clear statutory framework for the response or a clear flow of money to fund it.

For the third, I am going beyond globalization. We are moving from heterogeneity in cultures and countries to homogeneity, with trends and cultures becoming mixed. That is good. It represents inclusion. But, we are starting to run into reactions based on concerns about other cultures when you do not understand them. It is the shifting trends of how populations interact and, in some cases, oppose each other. We must understand that we are moving from a geographically and physically described border to a virtual one. The Internet. Weather. Germs. They all present challenges and do not come with anybody who can be held accountable for them under the law. Yet they must be dealt with.

These three factors result in a convergence that is creating complexity on a scale we have never seen. We must start to understand what it means to deal with complexity—complexity to the point that it starts to defeat statutory authorities, doctrine, standard operating procedures, training tactics and procedures. How do we create capabilities and competencies in our academic programs and our practitioner skills to equip us to confront it?

We also must look at co-production, blurring the boundaries between the public and private sector. None of the issues with which we are concerned can be addressed by a single agency, entity or organization. Complexity requires something
continuity of government if they are still standing. Deepwater Horizon was different. The oil spill took place 45 miles offshore. State jurisdiction ends at mile three, so this clearly was a federal issue. Additionally, while we had steps in place to reduce the risk of future tanker accidents, we had not addressed drilling, which had gone offshore and deep. The Deepwater Horizon oil well was on the seabed, 5,000 feet deep. The oil reservoir was 12,000 feet deeper. For a surface vessel or drilling rig on the surface, it was three miles to the oil and no human access.

In that situation, only the federal government could solve the crisis, but we had the problem of co-production. The means of production to fix the problem lay in the hands of BP functionally and under the Oil Pollution Act of 1990 legally. Things can begin to break down when they get complex. Nobody at the highest levels of our government believed BP could be consequential in fixing the problem. My counsel was to cap the well and stop the oil. I knew BP was going to court and would get hammered. We did not have to say the oil spill was an existential threat to the company. Its legal limits of liability were $10 million, obviously not enough. BP waived the limits and, keeping the pressure on and working with it, we built something that had never been constructed before and capped the well in 85 days. Not good—oil was spewing into the Gulf—but extraordinary if you think about the engineering that had to be done.

My biggest challenge was translating the role of the public and the private sector in terms of who does what. When you get into that area, there are always the significant challenge and reality of political leaders who must be relevant to their constituents. If you lack technical knowledge to solve a problem, how do you make political leaders relevant? I needed to make sure that the government did what it was supposed to do, political leaders had a relevant role and the public had confidence in what we were doing.