

OPINION

## **CBRN Security, Human Factor, and the New Focus on Security Culture**

Seema Gahlaut

*Center for International Trade and Security, University of Georgia, USA*

*E-mail: sga@uga.edu*

Security analysts worldwide are increasingly concerned that terrorist groups, in pursuit of more stupefying shows of strength and resolve, might seek access to CBRN materials. Of these, nuclear (N) materials, as a rule, are far better protected than the others. Yet, much of the concern about materials security revolves around nuclear rather than radiological (R), chemical (C) or biological (B). In part, this benign neglect of dangers from B, R, and N materials stems from the fact that we are surrounded by them in their civilian/industrial forms, and are comfortable and familiar with them in everyday life.

Hospitals with medical equipment that includes radiological materials may follow safety procedures rigorously, but have little concern about its security. Chemicals in R&D labs and in manufacturing are mere inputs into the experiment or the production process, and personnel are expected to follow safety guidelines. To the extent that export or import of some of the chemicals may need to be reported to the National Authority – Chemical Weapons Convention (NA-CWC), more stringent inventory procedures may be applied. But vulnerability assessments of facility security and transportation security are, by and large, not as common as one would expect. This is especially true for small and medium sized operations worldwide. Similar situation exists with regard to biological materials: biosafety at the lab and at the manufacturing facility may be strict, but security protocols often do not go beyond guards and gates. In sum, when it comes to CBRN materials, we focus most of our attention and resources on keeping humans safe from them. We spare far less attention and fewer resources to keep the materials safe from irresponsible human behaviour.

This attitude is also reflected in international and national policies and guidelines. While the nuclear and radiological domain has numerous international treaties, agreements, conventions, and guidelines covering both safety and security, there are far fewer regulatory or

practical guidelines on the security of chemical and biological materials.

Interestingly, even on the nuclear/radiological side, we have discovered that while facilities routinely establish security procedures, compliance with these is not routine. Indifference, complacency, occasional by-passing, 'cutting corners' and outright violation are far more common than one would expect. The role of the human factor in security compliance, therefore, has come to the forefront of international security discussions, i.e., the concept of 'security culture' within user organisations. In brief, it focuses on identifying beliefs, values, attitudes and perceptions of the management and the employees regarding two issues: is the security threat real? Is compliance with security procedures my responsibility?

The International Atomic Energy Agency (IAEA) has done pioneering work to provide a framework of 'nuclear security culture' and developed practical guidelines to assess security culture in nuclear organisations. The Center for International Trade and Security at the University of Georgia (CITS/UGA) in the United States has been a partner in this IAEA effort and has successfully assisted several nuclear/radiological organisations in conducting self-assessments of nuclear security culture. We are now engaged in a two-pronged effort: adapting this methodology to chemical and biological spheres, and designing a common CBRN security culture methodology. The overall goal is to design a practical tool that can go beyond standard security audits based on checking-off the existence of compliance procedures and security equipment, and identify if management and personnel voluntarily and routinely comply with these procedures, because they genuinely believe that doing so mitigates security risks to their organisation.

We welcome input from policymakers and user-organisations from around the world, including from India and especially from Defence Research and Development Organisation (DRDO), to help refine our research and make it practical and user-friendly.