## **Preface to Social Infrastructure Security Technology**



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THE criteria for assessing the safety and security of social infrastructure systems are changing a lot. Different threats with various forms are happening in the 21st century such as natural disasters, pandemics, and other accidents that could endanger our life on a global scale; terrorist or cross-border military attacks; and cyber-attacks on information systems. The need to protect systems from these threats and ensure that the systems can maintain their operations and services is growing.

However, social infrastructure systems are becoming more complex and the threats we face are more diverse. It is very difficult to anticipate when, what, and how these threats are attacking us, and to take proper measures against all possible threats. We have to make preparations against events or accidents that might exceed what we have experienced and anticipated. One of the important things for this is how to link actions during normal times with those during an emergency seamlessly. In other words, this means conducting regular exercises to imagine and simulate emergency situations, and taking appropriate crisis response actions by integrating command and control with accurate situation assessment capabilities. The success of the Japan Self-Defense Forces in the Great East Japan Earthquake is a good example of how exercises conducted in normal times can lead to accurate decision-making in the field.

Hitachi has experience and expertise in the construction, maintenance, and operation of social infrastructure systems. This issue of Hitachi Review describes Hitachi technologies, products, and solutions that ensure the safety and security of our social infrastructure systems. The articles include explanations on how to adopt defense sector concepts in crisis management in order to make a flexible response to unanticipated events, and on how to make the best use of regular exercises in an emergency.

Numerous factors are involved in the safety and security of social infrastructure systems. The articles in this issue focus on topics from Hitachi's activities in recent years.

These include: (1) crisis management systems that protect the public from events such as natural disasters or terrorist activity, (2) cyberspace security for preventing attacks on networks and other information systems, (3) global environmental protection and the securing of energy supplies to resolve energy problems while also protecting the global environment, and (4) special systems that support the activities of people in harsh environments.

I hope that this issue will provide you with a more concrete understanding of the safety and security initiatives advocated by Hitachi, and help with safety in your business and the world.