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## Preface

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While rapidly progressing globalization is encouraging vibrant interaction and movement among people and goods, the challenges facing society are becoming increasingly complex and diverse, including how to deal with environmental and resource problems and how to protect against various different threats. Through our Social Innovation Business, which combines advanced information technology (IT) with a variety of infrastructure technologies, Hitachi is seeking to offer solutions to these mounting challenges. In April 2015, Hitachi introduced a major restructuring of its research and development (R&D) organization to enhance its capacity for delivering solutions to societal challenges. The new organization for conducting customer-oriented global R&D is based on three strategies.

The first is “collaborative creation with customers.” This involves seeking to develop genuine solutions while working with customers to sketch out desirable scenarios for the future and to uncover latent needs. At four centers around the world, in Tokyo, North America, China, and Europe, we are utilizing proprietary service design methods to identify challenges and solve them.

This is underpinned by the second strategy of “technology innovation.” The diversity of Hitachi’s businesses and products means that we have accumulated technologies and other know-how from a wide range of fields. Along with enhancing and further developing our specific technologies in the fields of Energy, Electronics, Mechanical Engineering, Materials, Systems Engineering, Information and Telecommunications, Controls, Production Engineering, and Healthcare, we are laying the foundations for the creation of new value through the organic fusion of these ingredients.

Furthermore, anyone involved in research should never forget that their fundamental role is to look toward the future with a long-term perspective. The third strategy of “exploratory research” is the embodiment of this fundamental purpose of R&D. With a focus on the four fields of physical sciences, life sciences, information sciences, and “frontier,” R&D at Hitachi is preparing the ground for open innovation while also adopting a free-thinking approach to pioneering new fields.

This issue of *Hitachi Review* presents examples of the major solutions and research work undertaken in accordance with this new R&D organizational structure and strategy. I hope these articles will help you become more familiar with what we are doing here at Hitachi.



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