

**Recent Research and Development of Signaling and
Telecommunications Technologies**

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This paper outlines the recent research and development of the signaling and the telecommunication system from the view point of applying ICT. It describes that the concept of radio based train control has a possibility to bring innovations not only to the signaling system but also to the other fields, and introduces a new concept that realizes precise and adaptable train control by integrating functions of the traffic control system and the signaling system. It also describes the maintenance support system for point machine as an example of applying sensing and data analysis. Finally, it describes a basis of information network which will be able to be used commonly by various fields of railway in the future.