Fundamental Study on a Decision-making Support Method for Railway Transportation Recovery Strategy after Large-scale Disasters

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Nowadays, the concept of resilience , which is to flexibly recover while minimizing damage even if an unexpected disaster is encountered, is drawing attention. In the railway business as well, from the viewpoint of enhancing business continuity, recovery strategies are becoming important more and more for quick railway transportation recovery from damage to normal conditions after a disaster. In this paper, firstly, the mathematical algorithm for calculating a railway network recovery plan, which is built as the planning and decision support method of a railway transportation recovery strategy after a large-scale disaster, is reported. Secondly, the outline and results of the recovery simulation after a disaster in the virtual railway network, which is conducted to verify the feasibility or validity of this algorithm, are reported. Finally, the aim and summary of future development of the proposed recovery decision support method are described.