

**Methods of On-Demand Transport Scheduling and Their Application  
to Railway Freight Services**

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In order-type tramper allocation in coastal shipping, an operator receives orders for transport from cargo owners and prepares a shipping schedule to execute all the orders completely. We developed an optimization algorithm, which optimizes the tramper allocation in terms of fuel consumption as part of efforts for maritime logistics to address global warming issue. This paper presents the algorithm and demonstration results of it, and discusses a possibility that application of an on-demand transportation scheduling similar to the tramper allocation to the railroad logistics might improve the transportation costs and the convenience.