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Partial linearization method for network equilibrium problems with elastic demands

Konnov I., Pinyagina O.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Springer International Publishing Switzerland 2016. We suggest a partial linearization method for network equilibrium problems with elastic demands, which can be set-valued in general. The main element of this method is a partially linearized auxiliary problem. We propose a simple solution method for the auxiliary problem, which is based on optimality conditions. This method can be viewed as alternative to the conditional gradient method for the single-valued case. Some results of preliminary calculations which confirm efficiency of the new method are also presented.

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Keywords

Elastic demand, Network equilibrium problem, Partial linearization, Set-valued demand