Exact solution approaches for the Multi-period Degree Constrained Minimum Spanning Tree Problem

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PII: S0377-2217(18)30388-6
DOI: 10.1016/j.ejor.2018.05.010
Reference: EOR 15123

To appear in: *European Journal of Operational Research*

Received date: 5 April 2017
Revised date: 19 March 2018
Accepted date: 3 May 2018

Please cite this article as: Rosklin Juliano Chagas, Cristiano Arbex Valle, Alexandre Salles da Cunha, Exact solution approaches for the Multi-period Degree Constrained Minimum Spanning Tree Problem, *European Journal of Operational Research* (2018), doi: 10.1016/j.ejor.2018.05.010

Highlights

- It is shown that finding optimal multi-period minimum spanning trees is NP-hard
- A new formulation, at least as strong as the one in the literature, is introduced
- New valid inequalities introduced here strengthened our formulation even further
- Two exact methods combining Lagrangian Relaxation and Branch-and-cut are introduced
- Numerical results show that the new inequalities improve the algorithms' performance