Railway Track Allocation: Models and Methods

Efficiently coordinating the movement of trains on a railway network is a central part of the planning process for a railway company. This paper reviews models and methods that have been proposed in the literature to assist planners in finding train routes. Since the problem of routing trains on a railway network entails allocating the track capacity of the network (or part thereof) over time in a conflict-free manner, all studies that model railway track allocation in some capacity are considered relevant. We hence survey work on the train timetabling, train dispatching, train platforming, and train routing problems, group them by railway network type, and discuss track allocation from a strategic, tactical, and operational level.

General information
State: Published
Organisations: Operations Research, Department of Management Engineering, University of Auckland
Contributors: Lusby, R. M., Larsen, J., Ehrgott, M., Ryan, D.
Pages: 843-883
Publication date: 2011
Peer-reviewed: Yes

Publication information
Journal: OR Spectrum - Quantitative Approaches in Management
Volume: 33
Issue number: 4
ISSN (Print): 0171-6468
Ratings:
BFI (2019): BFI-level 1
Web of Science (2019): Indexed yes
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Scopus rating (2017): CiteScore 2.23 SJR 1.232 SNIP 1.618
Web of Science (2017): Impact factor 2.052
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 2.23 SJR 1.578 SNIP 1.648
Web of Science (2016): Impact factor 1.557
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 1.92 SJR 1.53 SNIP 1.345
Web of Science (2015): Impact factor 1.395
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 1
Scopus rating (2014): CiteScore 1.72 SJR 1.338 SNIP 1.496
Web of Science (2014): Impact factor 0.987
BFI (2013): BFI-level 1
Scopus rating (2013): CiteScore 2.22 SJR 1.921 SNIP 1.857
Web of Science (2013): Impact factor 1.09
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): CiteScore 1.91 SJR 1.778 SNIP 1.541
Web of Science (2012): Impact factor 1.41
ISI indexed (2012): ISI indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): CiteScore 2.49 SJR 2.665 SNIP 2.158
Web of Science (2011): Impact factor 1.233
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 1.948 SNIP 1.694
Web of Science (2010): Impact factor 2.03