**عنوان مقاله:**

Disruption Management in Railway Transportation Using an Innovative Train Rescheduling Model

**محل انتشار:**

پانزدهمین کنفرانس بین المللی مهندسی حمل و نقل و ترافیک (سال: 1394)

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**خلاصه مقاله:**

In real-time conditions, an un-foreseen railway event may disrupt a train timetable and thereupon results in monetary compensations due to the delays imposed to bothpassenger and freight trains. A train rescheduling system should be able to revise the schedule and find a new conflict-free timetable compatible with the real-time status. In this paper, the disruption management in double-track railways is considered. We focus on a train rescheduling problem, when an un-foreseen incident over a specific time horizon occurs. We solve the problem by utilizing a rescheduling techniquenamed Bi-Operational approach. An incident-based Mixed-Integer rescheduling model is proposed which is solved using CPLEX software to automatically generate optimal solutions. An experimental analysis, on Bafgh-Sirjan double-track corridor of Iranian railway network, indicates that applying Bi-Operational approach leads to widely decrease in train delays.

**کلمات کلیدی:**
Disruption Management, Train Rescheduling, Incident, Mixed-Integer Model

**لینک ثابت مقاله در پایگاه سیویلیکا:**

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