**Tentative Outline**

**Special Thematic Issue for The Open Transportation Journal**

**Title:** Advanced optimization and operations research in transportation systems

**Guest Editor:** Milos Milenkovic

**Aims & Scope:**
Transportation represents highly dynamic and competitive market with strong requirements for reliability, cost, flexibility, lead time and visibility. Rationalization of transport solutions, cost minimization, reduction of travelling time and reliability represent the main preconditions for reduction of costs and increasing of efficiency of entire transport chain.

Increasing of efficiency and sustainability of transportation system with high performances in multimodal logistics industry represents a vision of all actual strategies for development of transportation sector in the future. One of the ways for fulfilling this vision is better utilization of available resources through optimization of entire system. This includes improvement of transport system design and operation through better planning. Having in mind that existing planning standards are not very high, a significant potential for optimization exists. In economic sense, effective and efficient allocation of resources should increase transportation performances of entire transportation system whereas from operational point of view this means increasing of service level in accordance with traffic demand.

The main objective of this special issue is to attract high quality research aiming to demonstrate the importance and possibilities of advanced optimization approaches and operations research for building the sustainable transportation system. Papers which are closer to the practice or describe applications of advanced optimization approaches in transportation field are strongly encouraged.

The focus of this special issue is application of operations research, computer science, control theory, artificial intelligence, econometrics and multicriteria decision making in planning, design, management, control, operation and maintenance of transportation systems. These topics are highly recommended but the special issue is not limited to these topics.

- **Keywords:** transportation, operations research, optimization

**Subtopics:**
The subtopics to be covered within this issue are listed below:

- Continuous and discrete optimization in transportation;
- Heuristics approaches for transportation optimization;
- Optimization of transportation systems under uncertainty;
- Machine learning approaches and its applications to transportation optimization;
- Multiple criteria decision making for improving the performances of transportation systems;
- Decision support systems in transportation;
- Application of advanced optimization approaches to complex real world transportation systems;

**Schedule:**
- Manuscript submission deadline: 15.10.2020.
Peer Review Due: 15.11.2020.
Revision Due: 15.12.2020.
Announcement of acceptance by the Guest Editors: 15.01.2021.
Final manuscripts due: 01.02.2021.

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