

Editorial

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For many years already public mass transit companies have been in the midst of structural changes mainly triggered by external factors such as privatization and deregulation. They are in contest for passengers in competition with private transit, and the room for fiscal manoeuvre within public budgets is restrictive. Therefore, a general framework has to be developed by the suppliers of transit services enabling them to survive and succeed in competition with private transit—a priority that is imperative given the environmental issues especially in congested urban areas.

The aim of public transit bodies has to be an improved design of the service level to the public primarily realizing not yet exhausted economic potentials. As practical experiences have shown, public transit efficiency and therefore the competitiveness towards motorized individual traffic could be increased by using an integrated approach based on modern information technology in planning and operational control as well as advanced electronic equipments. Though, to obtain the necessary long-term efficiency, further steps in this direction are essential. In many operational aspects, information technologies and special devices not only within passenger information are also among the necessities encountered in public transport.

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With this we are in line with the intended achievements of major conferences which have evolved in this area over time under the acronym of, for instance, “Computer-Aided Scheduling of Public Transport” (CASPT), and many of its fore-runners. The CASPT conferences can be seen as a series of international workshops and conferences presenting recent research and progress in computer-aided scheduling in public transport. Over a span of more than three decades the scope and purpose of the conference has broadened significantly, and over time it also showed a pressing need of a new journal in the field covering the many research opportunities and cases in the area of public transport.

Consistent with current practices we expect papers in the above key areas along several lines of research as outlined above. A primary focus is around the topic of vehicle and crew scheduling, highlighting significant advances in both areas, but also illustrating that very useful and computationally efficient methods are being developed for integrated vehicle and crew scheduling. Next we expect to consider vehicle routing and timetabling where methods are developed and advanced for establishing public transport timetables for railways, ferries, and school buses etc. For many of these cases, new vehicle routing methods must also be devised to enhance the vehicle scheduling process. Moreover, we see a growing interest in transport service and performance monitoring, operations management and control, and dispatching. These topics reflect recent improvements of transport operations through the use of decision support tools. Additional aspects concern planning of public transport services on all levels. Topics covered in these areas include network design, optimal fare and tolling policies, line planning, fleet sizing, information management and the level of service for special transit services such as demand-responsive systems.

This new journal focuses on high quality papers in all areas of public transport. That is, this journal is dedicated to all areas of research and practice in public transport planning, operations, control and management. At its core, it serves the primary mission of advancing the state of the art and the state of the practice in computer-aided systems and scheduling in public transport. Key areas of focus are, but not limited to, the following:

- Network, route and timetable planning
- Vehicle scheduling, crew scheduling, and rostering
- Operations monitoring and management
- Information management
- Practical experience with scheduling and public transport planning methods

These and other common themes of the journal should go along the use of computer-aided methods and techniques from various areas such as, for instance, operations research and information systems to improve the above mentioned key areas of focus. With this we aim at the benefit of individuals from various areas including transport operators, consulting firms and academic institutions involved in research, development or utilization of computer-aided scheduling methods in public transport. The journal aims at the benefit of individuals from transport operators, consulting firms and academic institutions involved in research, development or utilization of computer-aided planning and scheduling in public transport.

The focus of the journal should have theoretical papers as well as case studies and applications; for the latter (case studies and application reports) the refereeing will be slightly different from the usual peer review used for theoretical papers. This should allow practitioners to use our journal, too, and papers will be assessed appropriately. We hope to fill some need and hope for high quality submissions, interested readership, and theoretical as well as practical recognition.