

Editorial

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This special issue presents some innovative methodological and application OR approaches generated by the members of the Section for Operations Research of the Slovenian Society Informatika (SDI-SOR) and their colleagues and collaborators from abroad. In particular during economical crisis is it important to emphasize that the mathematical, statistical and informational theories and methods to analyze and optimize complex situations can contribute to responsible decision making, planning, and efficient use of the resources, and that there is a growing need for such approaches in many fields of our society.

The call for papers for the special issue of CEJOR was launched during the 12th International Symposium on Operations Research, SOR' 13, that took place in Dolenjske Toplice, Slovenia, in September 2013. The call was not restricted to the participants of the conference, however we found the symposium an excellent opportunity for the call to be answered by a sufficient number of high quality submissions. There were 71 participants at the symposium from 15 countries (Slovenia, Croatia, Poland, Austria, France, Serbia, Slovakia, Switzerland, Bosnia and Herzegovina, Italy, Spain, Hungary, The Netherlands, Singapore, and The United Arab Emirates) who gave four invited plenary talks and 56 contributed presentations. Short conference versions or extended abstracts of papers co-authored by 102 authors were published in the proceedings volume available at the time of the conference ([Zadnik Stirn et al. 2013](#)). A selection of six refereed journal versions of papers were collected and are already

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published in a special issue of Business Systems Research Journal (Dumičić et al. 2014).

The second post-conference volume is the present special issue of CEJOR. Altogether we have received 16 manuscripts, mainly extended journal versions of the works presented at the conference. Each manuscript was reviewed by two or three anonymous reviewers, and after some rounds of peer reviewing, nine papers were accepted. The papers in this issue show that operations research at SOR is regarded as a broad research field covering both a wide spectrum of applications and theoretical studies of general methods. In the first paper, a case study of missing person investigation (Agrež and Damij 2015) emphasizes the importance of knowledge dynamics in complex organizational systems. A practical scheduling problem from the Czech and Slovak educational systems is regarded in Cechlarova et al. (2015), providing theoretical results and practical solutions. In Dumičić et al. (2015), statistical methods are used to analyse the internet banking system in European Union countries. A new method for decision making under uncertainty is proposed in Gaspars-Wieloch (2015). Fuzzy set theory and integer programming methods are used in the computational study (Janaček 2015) of a public service systems design with uncertain parameter values. In Kovačič et al. (2015), extended material requirements planning (EMRP) model is applied to transportation of agricultural products, illustrated on a case study of Spanish baby food industry. The paper (Dalpasso and Lancia 2015) provides an unusual application of the integer linear programming techniques in estimating the strength of poker hands. An emergency medical service system, the problem of allocating and relocating a fleet of ambulance cars, is studied in Moeini et al. (2015), providing a nearly optimal solution to a practical instance of the problem. A conjecture regarding $L(3, 2, 1)$ labelings of graphs is proved in Vesel and Zehui (2015), providing a theoretical solution to a problem motivated by the optimization of wireless communication in different network scenarios.

This issue also hosts three papers (Hunjet et al. 2015; Nguyen and Chassein 2015; Rudec and Manger 2015) that were accepted for publication in the journal by the Editorial board of the Central European Journal of Operations Research.

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