THEMATIC SESSION: TS02

Title: Optimization models and methods in logistics

Conference associated Topic: Information and Decision Systems for Supply Chain Management

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Abstract: Optimization is a crucial to stand competition in rapidly evolving markets. While information technology allows to store impressive amounts of data and makes powerful computational services available at reasonable cost, decision making in such logistics problems as depot or facility location, vehicle routing, service pricing etc. poses challenging questions to managers and operators. Those problems, in fact, cannot be solved by simply collecting "more data": they also require an important part of information technology that consists (i) of sophisticated models to filter really relevant data and to describe objectives and constraints, (ii) of efficient algorithms to organize the problem data and to elaborate high quality solutions. The session calls for contributions to modelling real optimization problems in logistics and supply chain and to suggesting efficient solution algorithms.

The main focus of the session is on quantitative models, so computational evidence and/or complexity analysis of the methods proposed are warmly welcome.

Keywords: Optimization Models (location, vehicle routing, pricing etc.), Mathematical (linear, non-linear, integer) Programming, Algorithm Complexity







