

Stochastic Inventory Routing Problem with Transshipment Recourse Action

Evangelia Chrysochoou

PhD Student, Department of Mechanical Engineering, University of Thessaly, Volos, Thessaly, Greece, email: echryso@certh.gr

Prof. Athanasios Ziliaskopoulos

Professor, Department of Mechanical Engineering, University of Thessaly, Volos, Thessaly, Greece, email: ziliasko@gmail.com

Abstract

Evolution of emerging technologies of Freight ITSs requires research and development of new models and algorithms that can incorporate their advantages. Stochastic vehicle routing is considered as a methodological approach that seems to be the most promising to account for inherent uncertainties to the freight system. In this context this paper proposes a stochastic programming model with recourse for the VRP. Feasibility and optimality considerations are discussed. The importance of incorporating randomness in the model is considered and the expected value of perfect information is evaluated.

Acknowledgements

This research has been co – financed by the European Union (European Social Fund – NSF) & Greek national funds through the Operational Program “ Education and Lifelong Learning” of National Strategic Reference Framework(NSRF) Research Funding Program:HeracleitusII. Investigation in knowledge society through the European Social Fund.



Ευρωπαϊκή Ένωση
Ευρωπαϊκό Κοινωνικό Ταμείο



ΥΠΟΥΡΓΕΙΟ ΠΑΙΔΕΙΑΣ & ΘΡΗΣΚΕΥΜΑΤΩΝ, ΠΟΛΙΤΙΣΜΟΥ & ΑΘΛΗΤΙΣΜΟΥ
ΕΙΔΙΚΗ ΥΠΗΡΕΣΙΑ ΔΙΑΧΕΙΡΙΣΗΣ

Με τη συγχρηματοδότηση της Ελλάδας και της Ευρωπαϊκής Ένωσης



πρόγραμμα για την ανάπτυξη
ΕΥΡΩΠΑΪΚΟ ΚΟΙΝΩΝΙΚΟ ΤΑΜΕΙΟ



26TH EUROPEAN CONFERENCE ON OPERATIONAL RESEARCH

ROME 1-4 JULY, 2013

- Home
- Abstract submission
- Search abstract
- Topic keywords
- Schedule
- Program
- My Program
- Help

Treat abstract

EURO-Online login

Username:
Password:

- New to EURO? Create an account
- I forgot my username and/or my password.
- Help with cookies (important for IE8 users)

A stochastic vehicle routing model and its specifications

Invited abstract in session **HB-16: Practical Routing Problems under Uncertainty**, stream **Routing Problems**.

Area: Location, Logistics, Transportation

Thursday, 10:30-12:00

Room: G5-7

Authors (first author is the speaker)

1. **Evangelia Chrysohoou**
Mechanical Engineering, University of Thessaly
2. **Athanasios Ziliaskopoulos**
Mechanical Engineering, University of Thessaly

Abstract

Evolution of emerging technologies of Freight ITSs requires research and development of new models and algorithms that can incorporate their advantages. Stochastic vehicle routing is considered as a methodological approach that seems to be the most promising to account for inherent uncertainties to the freight system. In this context this paper proposes a stochastic programming model with recourse for the VRP. Feasibility and optimality considerations are discussed. The importance of incorporating randomness in the model is considered and the expected value of perfect information is evaluated.

Keywords

- Programming, Stochastic
- Routing
- Transportation and Logistics

Status: accepted