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SÉMINAIRE CONJOINT AVEC / JOINT SEMINAR OF

La Chaire de recherche du Canada en distributique et
La Chaire de recherche du Canada en logistique et en transport

The Canada Research Chair in Distribution Management and
The Canada Research Chair in Logistics and Transportation

LE MERCREDI 28 JANVIER 2009, À 10H30
WEDNESDAY, JANUARY 28, 2009, AT 10:30

SALLE 5441 / ROOM 5441

Pavillon André-Aisenstadt Building
Campus de l'Université de Montréal Campus
2920, chemin de la Tour

CONFÉRENCIERE/SPEAKER
FRANCESCO FERRUCCI
University of Wuppertal, Allemagne/Germany

TITRE/TITLE
Real-time distribution of perishable goods using past request information to forecast future demand

RÉSUMÉ/ABSTRACT
In this talk, a specific real-world variant of the well-known Dynamic Vehicle Routing Problem (DVRP) is considered. In this variant of the DVRP, the considered goods have to be delivered under extreme time pressure because of their high perishability. Moreover, tour planning has to make particular effort in providing high quality service. Consequently, the minimization of *service time*, i.e., the time difference between request arrival and request delivery, has to be integrated into the objective function. Clearly, this applies to various applications in business such as managing the subsequent delivery of newspapers or real-time dispatching of repair men. In order to solve this problem, a new real-time approach for an efficient distribution of perishable goods is proposed. A dynamic tour planning procedure is applied which uses information about past requests. Specifically, forecasted demands are integrated into tour planning by the generation of artificial (dummy) requests. Hence, vehicles are led to local areas where the occurrence of future requests is likely. The efficiency of the applied instruments is analyzed using computational experiments. Furthermore, currently open questions will be presented and may be discussed with the audience.

RESPONSABLE/ORGANIZER
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