



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 18 MARS 2009, À 10H30 /
WEDNESDAY, MARCH 18, 2009, AT 10:30**

SALLE 5441 / ROOM 5441

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

CONFÉRENCIER / SPEAKER

Aliaksandr Shyshou

Molde University College, Norvège/Norway

TITRE / TITLE

A simulation study of the fleet sizing problem arising in offshore anchor handling operations

RÉSUMÉ / ABSTRACT

A fleet sizing problem arising in anchor handling operations related to movement of offshore mobile units will be presented. Typically the intensity of these operations is unevenly spread throughout the year. The operations are performed by dedicated vessels, which can be hired either on the long-term basis or on the spot market. Spot rates are frequently a magnitude higher than long-term rates, and vessels are hired on the spot market if there is a shortage of long-term vessels to cover the ongoing anchor handling operations. Deciding the cost-optimal fleet of vessels on the long-term hire to cover future operations is a problem facing offshore oil and gas operators. This decision has a heavy economic impact as anchor handling vessels are among the most expensive ones. The problem is of highly stochastic nature as durations of anchor handling operations vary and depend on uncertain weather conditions. Moreover, future spot rates for anchor handling vessels are extremely volatile. The objective of the talk is to describe a simulation model for the fleet sizing problem. The study was initiated by the largest Norwegian offshore oil and gas operator and has received considerable acceptance among the planners. The talk is based on a joint work with Irina Gribkovskaia and Jaume Barceló.

RESPONSIBLE / ORGANIZER: Gilbert.Laporte@cirrelt.ca, 514 343-6143