

# **6th International Conference on Computational Logistics**

Delft, The Netherlands, Sept. 23-25, 2015 -- http://realtimelogistics.info/

## **TECHNICAL SESSIONS PROGRAM**

(version: September 14, 2015)

Eligius Hendrix, Karin Pauls-Worm, Roberto

Rossi, Alejandro Alcoba and Rene Haijema

Note: A session slot is 25 minutes (for presentation + questions)

#### Wednesday, September 23, 2015

4

service level constraint

session	slot	title	authors
1a	1	Bootstrap estimation intervals using bias corrected accelerated method to forecast air passenger demand	Rafael Carmona-Benitez and Maria Rosa Nieto
Internal Coordination 1	2	On a pooling problem with fixed network size	Dag Haugland and Eligius Hendrix
chair: Beelaerts	3	Optimizing constraint test ordering for efficient automated stowage planning	Zhuo Qi Lee, Rui Fan and Wen Jing Hsu
	4	The value of unmanned aircraft operations for the transport of high time- value cargo	Bastiaan Hoeben, Wouter Beelaerts van Bloklan and Sicco Santema
2a	1	Probabilistic analysis of online stacking algorithms	Martin Olsen and Allan Gross
Internal Coordination 2	2	Survey on operational perishables quality control and logistics	Xiao Lin, Rudy Negenborn and Gabriel Lodewijk
chair: Hendrix	3	Improving the estimation of arrival times along a vehicle route	Alexander Kleff

3a	1	A branch-and-price algorithm for the multi-compartment vehicle routing problem	Samira Mirzaei and Sanne Wøhlk
VRP 1	2	Considering lost sale in inventory routing problems for perishable goods	Samira Mirzaei and Abbas Seifi
chair: Maestre	3	Problem-specific state space design for anticipatory vehicle routing with stochastic customer requests	Ninja Soeffker, Marlin W. Ulmer and Dirk Mattfe

A sample-based method for perishable good inventory control with a

<mark>4a</mark>	1	Scheduling locks in sequence with an emission objective	Ward Passchyn, Dirk Briskorn and Frits Spieksma
Water 1	2	Cooperative distributed collision avoidance based on ADMM for waterborne AGVs	Huarong Zheng, Rudy Negenborn and Gabriel Lodewijks
chair: Duviella	3	Improvement of the navigation conditions using a model predictive control - The Cuinchy-Fontinettes case study	Klaudia Horváth, Eric Duviella, Lala Rajaoarisoa, Rudy Negenborn and Karine Chuquet

session	slot	paper	authors
1b	1	Social welfare in repeated task allocation in transportation	Qing Chuan Ye and Yingqian Zhang
External Coordination 1	2	A new modelling approach of evaluating preventive and reactive strategies for mitigating supply chain risks	Abroon Qazi, John Quigley, Alex Dickson and Barbara Gaudenzi
chair: Ye	3	Order management in the offshore oil and gas industry	Henrik Andersson, Eirik F. Cuesta, Kjetil Fagerholt, Nora T. Gausel and Martine R. Hager
	4	Materials flow control in hybrid make-to-stock/make-to-order manufacturing	Silvio Carmo-Silva, Nuno Fernandes, Guilherme Pereira, F. Rocha, L. Dias, Â. Lopes and E. Silva
2b	1	Learning maritime traffic rules using potential fields	Ewa Osekowska and Bengt Carlsson
Computational Intelligence	2	Reducing port-related truck emissions: Coordinated truck appointments to reduce empty truck trips	Frederik Schulte, Rosa Guadalupe González Ramirez and Stefan Voss
chair: Halabi	3	Multiple trips combination for maximizing cost saving and minimizing empty trips in a containerized logistic networks	Claudia Caballini, Ilaria Rebecchi and Simona Sacone
	4	Computational intelligence to support cooperative seaport decision- making in environmental and ecological sustainability	Ana Halabi, Jairo Montoya-Torres, Deborah Richards and Nelson Obregon
3b	1	Yard crane dispatching to minimize total weighted vessel turnaround times in container terminals	Shell Ying Huang and Ya Li
Inter Terminal Transport	2	A two phase approach for inter-terminal transport of inland vessels using preference-based and utility-based coordination rules	Shijie Li, Rudy Negenborn and Gabriel Lodewijk
chair: Pacino	3	A survey on the ship loading problem	Cagatay Iris and Dario Pacino
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4b	1	Capacity analysis of freight transport with application to the Danish an southern Swedish railway	d Line Reinhardt, David Pisinger and Susanne Nordholm
Capacity	2	Application of discrete-event simulation to capacity planning at a commercial airport	L. Douglas Smith, Liang Xu, Ziyi Wang, Deng Pan, Laura Hellmann and Jan Fabian Ehmke
chair: Carmona-Benitez	3	Site selection of the New Mexico City Airport from the perspective of maximizing social benefit	Rafael Bernardo Carmona-Benitez, Octavio Fernandez and Esther Segura

## Thursday, September 24, 2015

session	slot	title	authors
5a	1	A review of intermodal rail freight bundling operations	Qu Hu, Francesco Corman and Gabriel Lodewijks
Intermodal 1	2	Impact of foresight in online-heuristic based shunting yard operations	Nikola Ilo, Benno Hüttler and Manfred Gronalt
chair: Nabais	3	Pricing intermodal freight transport services: A cost-plus-pricing strategy	Le Li, Xiao Lin, Rudy Negenborn and Bart De Schutter
	4	Cooperative relations among intermodal hubs and transport providers at freight networks using an MPC approach	João Nabais, Rudy Negenborn, Rafael Bernardo Carmona Benitez and Miguel Ayala Botto

6a	1	Ant metaheuristic with adapted personalities for the vehicle routing problem	Nicolas Zufferey, Jaime Farres and Rémy Glardon
VRP 2	2	An ant colony-based matheuristic approach for solving a class of vehicle routing problems	Umman Mahir Yildirim and Bülent Çatay
chair: Fagerholt	3	A combined LNG routing and deteriorating inventory management problem	Yousef Ghiami, Tom van Woensel, Marielle Christiansen and Gilbert Laporte
	4	A decision support model for routing and scheduling a fleet of fuel supply vessels	Marielle Christiansen, Kjetil Fagerholt, Nikolaos Rachaniotis, Ingeborg Tveit and Marthe Øverdal

7a	1	Consolidation of residual volumes in a parcel service provider's long-haul transportation network	Martin Baumung and Halil Guenduez
Internal Coordination 3	2	Scheduling trucks in a cross-dock with mixed service mode dock doors	Peter Bodnar, Kaveh Azadeh and René de Koster
chair: Mes	3	Design of an efficient algorithm to determine an optimal location of parking areas for dangerous goods in the European road network	Maria Caro, Eugenio Fedriani and Angel Tenorio
	4	Dynamic multi-period freight consolidation	Arturo Pérez Rivera and Martijn Mes

# Friday, September 25, 2015

session	slot	title	authors
8a	1	The round-trip ridesharing problem with relay stations	Kamel Aissat and Ammar Oulamara
VRP 3	2	A hierarchical model for cash transfer system design problem	Engin Topaloglu, Abdullah Dasci and Mehmet Hasan Eken
chair: Kopfer	3	An approximate dynamic programming approach to urban freight distribution with batch arrivals	Wouter van Heeswijk, Martijn Mes and Marco Schutten
	4	Emission vehicle routing problem with split delivery and a heterogeneous vehicle fleet	Benedikt Vornhusen and Herbert Kopfer

9a	1	Synchromodal container transportation: an overview of current topics and research opportunities	Bart van Riessen, Rudy Negenborn and Rommert Dekker
Intermodal 2	2	Cloud-based intelligent transportation system using model predictive control	Leonard Heilig, Rudy Negenborn and Stefan Voss
chair: Voss			

session	slot	paper	authors
5b	1	Discrete speed in vertical flight planning	Zhi Yuan, Liana Amaya Moreno, Armin Fügenschuh, Anton Kaier, and Swen Schlobach
External coordination 2	2	An approach for the coordination in the Supply Chain using collaborative and cooperative mechanisms	Armando Guarnaschelli, Lorena Bearzotti and Cecilia Montt
chair: Reis	3	Supply chain simulation: A hybrid approach combining system dynamics and agent-based modeling	Reza Hesan and Behzad Behdani
	4	A novel hybrid simulation model to improve the order picking performance: Case study of an automated warehouse	Francisco Faria and Vasco Reis
6b	1	A review of real time railway traffic management during disturbances	Wenhua Qu, Francesco Corman and Gabriel Lodewijks
Transit & Maintenance	2	Model predictive control for maintenance operations planning of railway infrastructures	Zhou Su, Alfredo Nunez, Ali Jamshidi, Simone Baldi, Zili Li, Rolf Dollevoet and Bart De Schutte
chair: Corman	3	Designing bus transit services for routine crowd situations at large event venues	Jiali Du, Shih-Fen Cheng and Hoong Chuin Lau
	4	Rescheduling railway traffic taking into account minimization of passengers' discomfort	Francesco Corman, Dario Pacciarelli, Andrea D'Ariano and Marcella Samà
7b	1	A hybrid reactive tabu search for liner shipping fleet repositioning	Mark Becker and Kevin Tierney
Water 2	2	Risk analysis of the cargo-ship transportation based on the real-time observation	Kiyotaka Ide, Loganathan Ponnambalam, Akira Namatame, Fu Xiuju and Rick Siow Mong Goh
chair:Brouer	3	A branch-and-price method for a ship routing and scheduling problem with stowage constraints	Magnus Stålhane
	4	A matheuristic for the liner shipping network design problem with transit time restrictions	Christian Vad Karsten, Berit Dangaard Brouer, Guy Desaulniers and David Pisinger

session	slot	paper	authors
8b	1	Characterization of the Portuguese SSS into the Europe: a contribution	Teresa Pereira, José Telhada, José Rocha and Sameiro Carvalho
Water 3	2	Trajectory tracking control for underactuated surface vessels based on nonlinear model predictive control	Chenguang Liu, Huarong Zheng, Rudy Negenborn, Xiumin Chu and Le Wang
chair: Bittner	3		Shuo Xie, Chenguang Liu, Xiumin Chu and Xue Ouyang
	4	Automatic track-keeping of inland vessels	Ralph Bittner

b	1	An auction with a rolling horizon and virtual pricing of shipping capacity for urban consolidation centers	Chen Wang, Hoong Chuin Lau and Yun Fong Lim
nternal coordination 4	2	MILP model for integrated cross-dock scheduling and assignment	Arpan Rijal, Marco Bijvank and René de Koster
hair: Rijal			

3/4

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# PLENARIES PROGRAM

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## Wednesday, September 23, 2015

session	title	authors
1	On trends and developments in synchron	nodal logistics Prof. Albert Veenstra (DINALOG)
chair: Corman		

## Thursday, September 24, 2015

session	title	authors
2	On shippers' demands from supply chains	
3	On the importance of big data in logistics	Hugo Fonseca (MAEIL) Prof. Cathy Macharis (Vrije Universiteit Brussel)
chair: Lodewijks		· · · · · · · · · · · · · · · · · · ·