

FREIGHT TRANSPORT MODELLING

Colloquium in memory of
Prof. Marvin L. Manheim

4 – 6 October 2012
University of Antwerp

Colloquium organised by the
Department of Transport and
Regional Economics (TPR)
University of Antwerp

Freight Transport Modelling

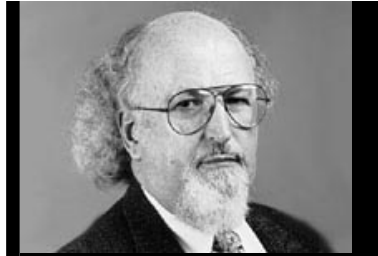
The ongoing globalisation and importance of flexibility in modern businesses have made transport, together with business logistics, one of the major functional domains of companies, comparable to finance, accounting, and marketing. This evolution is also fully reflected in transport research, which is vivid, innovative and attracting more and more attention.

Transport growth is a sine qua non for a continuous economic growth but is not without problems. External effects such as pollution, congestion, accidents and damage to infrastructure generate considerable social costs which impose a heavy burden on society.

Solving soundly and significantly those problems asks for a new and broader analysis of transport. This was already highlighted by the late Prof. Marvin L. Manheim during his opening speech of the 8th World Conference on Transport Research (Antwerpen 1998) and in quite a few of his publications. This colloquium will strive to elaborate his message in a number of lectures by international experts in the field and to push forward frontiers in modelling freight transport.

Target group

The colloquium is intended for researchers active in transport economics in general, and in freight transport modelling in particular. It guarantees value added for experienced researchers and doctoral students. The new evolutions in freight transport modeling will also be of interest to transport decision-makers in both government and industry.



Marvin L. Manheim was the William A. Patterson Distinguished Professor of Transportation at the Kellogg Graduate School of Management at Northwestern University from 1983 until his death in August 2000. Prof. Manheim was also associated with Northwestern's McCormick School of Engineering and Applied Science, Transportation Center, Steel Resource Center, Institute for Learning Studies, and Center for the Study of United States/Japan Relations, and taught executive management programs at Kellogg's James L. Allen Center. Prior to joining the Kellogg School, he held faculty positions at the Massachusetts Institute of Technology.

Prof. Manheim's major area of interest was information technology and its uses strategically, competitively, and organizationally. It included strategy formulation and implementation processes; the management of globally competing organizations; and international transportation and logistics. He was also interested in computer assistance to human problem solving and decision making, including decision support systems (DSS) and artificial intelligence.

Prof Marvin L. Manheim served as the first chairman of the WCTRS, the World Conference on Transportation Research Society. He gave the opening lecture at the 8th WCTR. While organising this conference, the Department of Transport and Regional Economics got quite a lot of help from Prof. Manheim.

Programme

Chair: *Thierry Vanelander*

Thursday 4 October 2012

- 19.00 Welcoming
- 19.15 Opening speech: Recent Developments in Freight Transport Modelling
Moshe Ben-Akiva, Hilde Meersman, Eddy Van de Voorde
- 20.00 Opening Dinner (*separate registration required, see back*)

Friday 5 October 2012

Global/ International

- 09.00 The relationship between economic activity and freight transport - *Hilde Meersman and Eddy Van de Voorde*
- 09.30 A multimodal elastic trade coefficients MRIO model for freight demand in Europe - *Ennio Cascetta, Vittorio Marzano and Andrea Papola*
- 10.00 The Aggregate-Disaggregate-Aggregate (ADA) freight models system - *Moshe Ben-Akiva and Gerard de Jong*
- 10.30 *Coffee/Tea*
- 11.00 Dynamic optimization and differential games as tools for logistics and freight transport modeling - *Terry Friesz and Amir Meimand*
- 11.30 Truck drivers' behavior, with a focus on the choice of toll roads - *Moshe Ben-Akiva and Tomer Toledo*
- 12.00 *Lunch*

Regional

- 14.00 A comparison of conjoint, multi-criteria, conditional logit and neural network analysis for rank-ordered preference data - *Michel Beuthe, Christophe Bouffioux, Cathérine Krier and Michel Mouchart*
- 14.30 Capacity utilization of vehicles for road freight transportation - *Ole Kveiborg and Megersa Abera Abate*
- 15.00 Valuation of transport time and improved reliability in freight transport in CBA - *Inge Vierth*
- 15.30 Dynamic network simulation - *Hani Mahmassani*
- 16.00 *Coffee/Tea*
- 16.30 Freight transport pricing models - *Siri Strandenes*
- 17.00 Risk management measures of companies in logistics and transportation models - *Hanno Friedrich*
- 17.30 Logistics managers' stated preference for freight service attributes - *Eduardo Marcucci*

- 18.00 The value of quality attributes in freight transport: evidence from a SP-experiment in Switzerland – *Rico Maggi and Lorenzo Masiero*

Saturday 6 October 2012

Local / Urban

- 08.30 Modelling behavioral aspects of urban freight movement - *Francesco Russo*
- 09.00 Urban freight tour models - *José Holguin-Veras*
- 09.30 Modelling for public policies inducement of urban freight business development - *Rosario Macario*
- 10.00 An urban goods and services model for London - *John Polak*
- 10.30 *Coffee/Tea*
- 11.00 Urban freight distribution: urban supply chains and transportation policies - *Romeo Danielis, Lucia Rotaris, Elena Maggi and Eva Valeri*
- 11.30 Making real-time fleet management decisions under time dependent conditions in urban freight distribution - *Jaume Barcelo, Jesus Arturo Orozco, Hanna Grzybowska*
- 12.00 Tactical/operative city logistics: freight vehicle flow modeling - *Agostino Nuzzolo and Antonio Comi*
- 12.30 Modeling of maritime container trailer route choice behaviour by traffic application of oversize/overmass vehicle - *Tetsuro Hyodo, Yasukatsu Hagino, Kotaro Endo and Yui Miyahara*

Speaker affiliations:

Moshe Ben-Akiva / Massachusetts Institute of Technology - USA
Jaume Barcelo / Technical University of Catalonia - Spain
Michel Beuthe / UCLouvain – Mons - Belgium
Christophe Bouffieux / UCLouvain – Mons - Belgium
Ennio Cascetta / Università degli studi di Napoli 'Federico II' - Italy
Antonio Comi / University of Rome 'Tor Vergata' - Italy
Romeo Danielis / University of Trieste - Italy
Gerard de Jong / Significance, ITS Leeds and CTS Stockholm – The Netherlands- UK - Sweden
Kotaro Endo / LITEC Co., Ltd. - Japan
Hanno Friedrich / Technische Universität Darmstadt - Germany
Terry Friesz / Pennsylvania State University - USA
Hanna Grzybowska / NICTA and University of New South Wales - Australia
Yasukatsu Hagino / The Institute of Behavioral Sciences - Japan
José Holguin-Veras / Rensselaer Polytechnic Institute - USA
Tetsuro Hyodo / Tokyo University of Marine Science and Technology - Japan
Catherine Krier / KPN Group - Belgium
Ole Kveiborg / COWI A/S - Denmark
Rosario Macario / Technical University of Lisbon - Portugal
Elena Maggi / University of Molise - Italy
Rico Maggi / Università della Svizzera italiana - Switzerland
Hani Mahmassani / Northwestern University - USA
Edoardo Maruccci / University of Roma Tre - Italy
Vittorio Marzano / Università degli studi di Napoli 'Federico II' – Italy

Lorenzo Masiero / Università della Svizzera italiana - Switzerland
Hilde Meersman / University of Antwerp - Belgium
Amir Meimand / Pennsylvania State University - USA
Yui Miyahara / CTI Engineering Co., Ltd. - Japan
Michel Mouchart / UCLouvain – Louvain-la-Neuve - Belgium
Agostino Nuzzolo / University of Rome 'Tor Vergata' - Italy
Jesus Arturo Orozco / IPADE Business School - Mexico
Andrea Papola / Università degli studi di Napoli 'Federico II' - Italy
John Polak / Imperial College London - UK
Lucia Rotaris / University of Trieste - Italy
Francesco Russo / University of Reggio Calabria - Italy
Siri Strandenes / University of Bergen - Norway
Tomer Toledo / Technion - Israel Institute of Technology / Israel
Eva Valeri / University of Trieste - Italy
Eddy Van de Voorde / University of Antwerp - Belgium
Inge Vierth / Swedish Road and Transport Research Institute (VTI) and Centre for Transport Studies
Stockholm - Sweden

Practical information

<u>Date:</u>	Thursday evening, 4 th , until Saturday, 6 th October 2012
<u>Place:</u>	UA city campus (Prinsstraat 13, Antwerp)
<u>How to reach:</u>	Public Transport: Antwerp Central Station (10 minutes' walk) Paid Parking: Sint-Jacobsmarkt and Molenbergstraat (5 minutes' walk) www.ua.ac.be/route
<u>Hotel accommodation:</u>	more information about hotel accommodation in Antwerp is available at the end of this section, and more information about Antwerp: http://www.visitantwerp.be .
<u>Price:</u>	Registration without Thursday night dinner: 195 EURO Thursday night dinner: 65 EURO Student registration (no dinner and no lunch included): 30 € Student registration (with lunch): 65€
<u>Registration:</u>	Register online through http://www.ua.ac.be/tp . Please register before October 1, 2012
<u>Payment modalities:</u>	Registration fee is payable into account n° 735-0086977-53 of the University of Antwerp with reference SC201225 + name. Bank address KBC Bank, Eiermarkt 20, 2000 Antwerp, Belgium. Foreign participants should also mention BIC code: KREDBEBB and Iban code: BE53 7350 0869 7753
<u>Cancellation:</u>	There will be no refund of the registration fee for cancellations after September 15 th , 2012.
<u>Further information:</u>	
• Colloquium secretary	Ms Patsy Geurts University of Antwerp Prinsstraat 13 – B437 B-2000 Antwerp Belgium Tel. +32-(0)3-265 40 44 Email: patsy.geurts@ua.ac.be
• Scientific information	Prof. Hilde Meersman Tel. +32-(0)3-265 41 19 Email: hilde.meersman@ua.ac.be Prof. Eddy Van de Voorde Tel. +32-(0)3-265 41 57 Email: eddy.vandevoorde@ua.ac.be

List of hotel suggestions in Antwerp

The prices mentioned on the list date from 2011 and are only directive. Normally these hotels allow a special tariff for reservations in the framework of events organized by the university, but because of the multitude of other events going on in Antwerp at the time, these reductions won't be applied in most cases.

Astoria*** (25' walking) – PREM Group – 66 rooms

Korte Herentalsestraat 5 – 2018 Antwerpen

T +32 3 227 31 30 – F +32 3 227 31 34

www.astoria-antwerp.com

info@astoria-antwerp.com

Standard room single 79 euro - double 89 euro, breakfast incl.

Deluxe kamer single 109 euro – double 119 euro, breakfast incl.

Wireless internet: free

Hotel All Seasons - Antwerpen City Center (budget hotel) (10' walking) – 79 rooms

Koningin Astridplein 43 - 2010 ANTWERPEN

Hotel code : 8023 - **Tel**: (+32)3/6094444 - **Fax** : (+32)3/6094499

E-mail : H8023@accor.com - **GPS** : N 51° 13' 7.76" E 4° 25' 14.60"

www.accorhotels.com/nl/hotel-8023-all-seasons-antwerpen-city-center/index.shtml

20 rooms are held in option for this conference. At booking please mention the University of Antwerp and name of the Conference

COLOMBUS*** (6') – 32 rooms

Frankrijklei 4 - 2000 Antwerpen

T +32 3 233 03 90 - F +32 3 226 09 46

www.colombushotel.com

colombushotel@skynet.be

Standard room single 83 euro - double: 95 euro, breakfast incl.

Wireless internet free and free admission to swimming pool

10 rooms are held in option for this conference. At booking please mention the University of Antwerp and name of the Conference

CROWNE PLAZA**** (bus 17 to stop Paardenmarkt + 7') – 264 rooms

Gerard Le Grellelaan 10 – 2020 Antwerpen

T +32 3 259 75 00 – F +32 3 216 02 96

www.antwerp.crowneplaza.com

reservations@cpantwerp.com

Standaard single en double: 115 euro, incl. breakfast buffet

Superior single en double: 135 euro, incl. breakfast buffet

Wireless internet: free

DE KEYSER Hotel**** (10') – 115 rooms

De Keyserlei 66-70 – 2018 Antwerpen

T +32 3 206 74 60 – F +32 3 232 39 70

www.dekeyserhotel.be

reservations@dekeyserhotel.be

Standard single 92 euro - double 112 euro, breakfast incl.

Superior single 107 euro – double 127 euro, breakfast incl.

Internet: rooms: 17 euro/24 hours, 88 euro/week – free in lobby & bar.

FIREAN Hotel**** (45' walking or bus 27 to stop F.Rooseveltplaats + 10') – 15 rooms

Karel Oomsstraat 6 – 2018 Antwerpen T +32 3 237 02 60 – F +32 3 238 11 68

www.hotelfirean.com

info@hotelfirean.com

Classic room single 143 euro – double 167 euro, breakfast incl.

Wireless internet: free

HILTON Antwerp**** (15') – 140 rooms

Groenplaats 32 – 2000 Antwerpen

T +32 3 204 12 02 F +32 3 204 86 88

www.antwerp.hilton.com

reservations.antwerp@hilton.com

Hilton guest room single en double: 150 euro, excl. breakfast (15 euro, buffet: 25 euro)

Hilton Deluxe room: 190 euro, excl. breakfast (15 euro, buffet: 25 euro)

Hilton Executive room: 250 euro, incl. admission Executive Lounge, incl. breakfast, noon and evening snacks & drinks

Hilton Junior suite: 300 euro, incl. admission Executive Lounge, incl. breakfast, noon and evening snacks & drinks

Internet: forr 24 uren: 15 euro (low speed) or 35 euro (high speed)

Free admission to fitness club

HOLIDAY INN EXPRESS ANTWERP CITY NORTH*** (12') – 69 rooms

Italielei 2a - 2000 Antwerpen

T +32 3 221 49 40 - F +32 3 221 49 44

www.hiexpress.com

reservations@hiexpress-antwerp.com

Single of double: 82 euro, breakfast incl.

Wireless internet: free

Hyllit Hotel Antwerp**** (10') – 200 rooms

De Keyserlei 28-30 – 2018 Antwerpen

T +32 3 202 68 00 – F +32 3 202 68 90

www.hyllit.com

deryck@hyllithotel.be

single executive room 139 euro, double executive room 159 euro, breakfast incl.

junior suite single 159 euro, double junior suite 178 euro, breakfast incl.

Highspeed Wifi: free

Free admission to swimming pool, sauna, Turkish bath and fitness room

IBIS Antwerpen Centrum*** (15') – Accor Group – 150 rooms

Meistraat 39 - 2000 Antwerpen

T +32 3 231 88 30 – F +32 3 234 29 21

www.ibishotel.com - www.accorhotels.com/be

H1453-SB@accor.com

Single 87 euro - double 95 euro, breakfast incl.

High speed internet room: 4,5 euro/hour*, 10 euro/3 hours, 15 euro/10 h,

9,90 euro/24 uren*

*To be used within 24 hours

Free internet in lobby

LEONARDO HOTEL ANTWERPEN*** (15') - 105 rooms twinbeds

De Keyserlei 59 – 2018 Antwerpen

T +32 3 232 14 43 – F +32 3 233 08 35

www.leonardo-hotels.com

info.antwerpen@leonardo-hotels.com

single 70 euro – double 80 euro, breakfast incl.

Wireless internet in room: 8 euro/hour, 13 euro/24 hours

Internet in lobby: free

LEOPOLD HOTEL**** (15') – PREM Group – 127 rooms

Quinten Matsijslei 25 – 2018 Antwerpen

T +32 3 231 15 15 – F +32 3 225 30 90

www.leopoldhotelantwerp.com

res.antwerp@leopoldhotels.com

Standaard single 114 euro – double 129 euro, ontbijt incl.

Junior suite single 165 euro – double 180 euro, ontbijt incl.

Executive suite single 205 euro – double 220 euro, ontbijt incl.

Wireless internet: free

LINDNER HOTEL & CITY LOUNGE ANTWERPEN**** (25') – 173 rooms

Lange Kievitstraat 125 – 2018 Antwerpen

T +32 3 227 77 02 – F +32 3 227 77 01

www.lindner.be

reservations.antwerpen@lindnerhotels.be

Single of double 104 euro, breakfast excl. (18 euro/pp)

Breakfast incl.: single 119,50 euro – double 137,50 euro

Suite: 229 euro, breakfast excl. (18 euro/pp)

Wireless internet: 9 euro/24 hours

MERCURE ANTWERPEN CENTRUM OPERA **** (5') – 47 rooms

Molenbergstraat 9-11 - 2000 Antwerpen

T +32 3 232 76 75 – F +32 3 231 67 07

www.demahotels.be

residence@demahotels.be

Single 95 euro - double: 115 euro, breakfast incl.

Wireless internet: free

MONDO ACC ANTWERPEN **** (15')

Appelmansstraat - 2000 Antwerpen

T +32 3 203 54 00 – F +32 3 203 40 60

www.mondohotels.eu/mondo-hotels_hotel-informatie-reservatie.asp?taal=en&rID=JOFNRNOOO

reception.acc@mondohotels.eu

€80 Single room (incl. tax, breakfast and wireless internet) €95 Double

room (incl. tax, breakfast and wireless internet) €115 triple room (incl. tax, breakfast and wireless internet)

PARK INN ANTWERPEN*** (10') – 59 rooms

Koningin Astridplein 14 - 2018 Antwerpen

T +32 3 202 31 70 - F +32 3 202 31 71

www.antwerpen.parkinn.be

reservations.antwerpen@rezidorparkinn.com (Reservations only PCR-ID number)

Standaard single en double: 104 euro, breakfast excl. (16 euro/pp)

Business single 129 euro, double 139 euro, breakfast incl.

Wireless internet: free

PLAZA HOTEL ANTWERPEN**** (20' walking or tram 2 of 15 to stop

Meir) – 81 rooms

Charlottalei 49 - 2018 Antwerpen

T +32 3 287 28 70 - F +32 3 287 28 71

www.plaza.be

book@plaza.be

Superior single and double: 99 euro, breakfast incl.

Deluxe single and double 109 euro, breakfast incl.

Junior suite single en double 119 euro, breakfast incl.

Wireless en wired internet: free

PRINSE**** (2') – 32 rooms
Keizerstraat 63 - 2000 Antwerpen
T +32 3 226 40 50 - F +32 3 225 11 48
www.hotelprinse.be

a.van.der.vorst@skynet.be of hotel-prinse@skynet.be
Single 108 euro - double 128 euro, breakfast incl.
Wireless internet: free

RADISSON BLU ASTRID HOTEL**** (12') – 247 rooms
Koningin Astridplein 7 - 2018 Antwerpen
T +32 3 203 12 34 - F +32 3 203 12 51
www.radissonblu.com/astridhotel-antwerp
info.astrid.antwerp@radissonblu.com (reservation only with PCR-ID number)
Standard single en double: 120 euro, excl. breakfast (22 euro/pp)
Business single 170 euro - double 180 euro, breakfast incl.
Wireless internet: free

RADISSON BLU PARK LANE HOTEL**** (20') – 174 rooms
Van Eycklei 34 - 2018 Antwerpen
T +32 3 285 85 85 – F +32 3 285 85 86
www.radissonsas.com
meeting.antwerp@radissonsas.com
Single en double deluxe 126 euro, breakfast incl.
Single en double superior 156 euro, breakfast incl.
Wireless internet: free
Free entrance to Health & Leisure Centre

SANDTON HOTEL EMPIRE*** (15') – 66 rooms
Appelmannsstraat 31 – 2018 Antwerpen
T +32 3 203 54 00 – F +32 3 233 40 60
www.sandton.eu/antwerpen
info@sandtonempirehotel.be
Single 78 euro – double 88 euro, breakfast incl.
Internet: 10 euro/hour, 17 euro/24 hours

SIR PLANTIN ANTWERP***(designhotel) (bus 17 to stop Paardenmarkt + 5') – 176 rooms
Plantin & Moretuslei 136-140 – 2018 Antwerpen
T +32 3 271 07 00 – F +32 3 272 38 00
www.sirplantin-antwerp.com
sales@sirplantin-antwerp.com
Single en double 79 euro – « grab & run »-breakfast, minibar (1 water, 1 beer, 1 softdrink), incl.
Extensive breakfast buffet: 15 euro/pp
Wireless internet: free in rooms and public space

Best Western Hotel TER ELST**** (bus 32 to stop F.Rooseveltplaats + 10') – 53 rooms
Kattenbroek 1 - 2650 Edegem
T +32 3 450 90 00 - F +32 3 450 90 90
www.terelst.be
info@terelst.be
Single 99 euro - double/twin: 110 euro, breakfast, use of sauna en fitness incl.
Wireless internet: free

THEATER Hotel** (10') – 127 rooms**
Arenbergstraat 30 - 2000 Antwerpen
T +32 3 203 54 10 - F +32 3 233 88 58
www.vhv-hotels.be
reservations@theater-hotel.be
Standaard single 112 euro - double 132 euro, breakfast incl
Superior single 127 euro – double 147 euro, breakfast incl
Internet: 5 euro/24 hours
Budget hotels:

Internationaal Zeemanshuis (10')
Falconrui 21 - 2000 Antwerpen
T+32 3 227 54 33 - F +32 3 234 26 03
www.zeemanshuis.be
reservatie@zeemanshuis.be
Single 42 euro, double 65,50 euro, breakfast incl.
Internet: free

ETAP Hotel Antwerp City Central Station (15')
Lange Kievitstraat 145 – 2018 Antwerpen
T +32 3 202 50 20 – F +32 3 202 50 21
www.etaphotel.com
h6192@accor.com
single, double en triple 49 euro/room excl. breakfast (7 euro/pp)

Hotel RUBENSHOF (tram 4 to stop Keizerstraat + 5' walking) – 22 rooms
Amerikalei 115-117 – 2000 Antwerpen
T +32 3 237 07 89 – F +32 3 248 25 94
www.rubenshof.be
hotel@rubenshof.be
single – only washbowl 33 euro, shower and toilet 55 euro
double – only washbowl 52 euro, shower and toilet 76 euro
incl. taxes & breakfast