WEATHER – WEATHER EXTREMES, ASSESSMENT OF IMPACTS ON TRANSPORT SYSTEMS AND HAZARDS FOR EUROPEAN REGIONS

WORKSHOP 3:
ADAPTING TRANSPORT TO WEATHER EXTREMES

BACKGROUND

The research project WEATHER (Weather Extremes – Impacts on Transport Systems and Hazards for European Regions) funded under the 7th RTD Framework Programme of the European Commission aims to quantify the impacts of weather extremes on European transport systems and to identify appropriate and efficient adaptation solutions. Please check our website for details: WWW.WEATHER-PROJECT.EU.

THE ADAPTATION WORKSHOP

After having successfully organised the first two out of three thematic workshops on vulnerability issues and crises management, we are now approaching the third workshop. Our objective is to identify and assess suitable adaptation strategies for various modes of transport, including infrastructures and services, and across several severe weather phenomena.

With this event we would like to set up a creative working environment by following a two step approach: Prior to the workshop, we will provide you with a short summary of our preliminary findings and suggestions, while we will collect your ideas, assessments and feedback in the succeeding evaluation phase.

Please find overleaf the draft program, which has emerged out of the replies so far. Besides the high level contributions we would like to draw your attention on the room for discussions in the parallel afternoon sessions. In these sessions we would like to make use of your expertise by contributing to structured discussion on adaptation options along technologies, management and policy issues.

FURTHER MATERIALS

A structured input paper will be available together with the final agenda and discussion guidelines. For further issues, please find our contact details below.

PRELIMINARY PROGRAMME

20 May 2011, 9:00 – 16:30
STC-Events Conference Centre
Lloydstraat 300, 3024 JC Rotterdam, The Netherlands

	09:00	Registration and welcome coffee	
	9:15 **Morning Plenary 1**	Claus Doll, Fraunhofer ISI/ Riccardo Enei, ISIS / Anestis Papanikolaou, CERTH **Introduction: The WEATHER project and the workshop concept** Pekka Leviäkangas, VTT **European Vulnerability and Adaptation Scenarios: Preliminary Findings of the EWENT Project** Chris Baker, University of Birmingham **Relationships between extreme weather and transport disruption**	
	10:45	Coffee break	
	11:00 **Morning Plenary 2**	Enno Wiebe, Alex Veitch, UIC **Adapting Rail Infrastructure: Findings of the ARISCC Project and UIC activity "Winter and Railways"** Michel Ray, EGIS Group **Adaptation Strategies in Road Infrastructure** Henrik Ammoser, TÜV Rheinland Intertraffic GmbH **Curtailing the impact: approaches for recovery management in transport systems** Jonathan Köhler, Claus Doll, Fraunhofer ISI **Resume of the plenary session and introduction to the afternoon program and objectives**	

	12:30	Lunch break	
	13:30 **Parallel Session 1:** **Infrastructures and transport planning**	Paul Arnold, Network Rail **UK Railways and weather phenomena** Rinske van der Meer, Rotterdam Port Authority **Rotterdam Port Authority's Adaptation Measures to Meet with Extreme Weather Events and Climate Change** Structured discussion about measures and their assessment with regard to infrastructures and transport planning along the guiding material provided by the project team. Aim: consensus on final list of measures and assessment principles. Chair: *Stefan Klug (Fraunhofer ISI) and Georg Förster (Fraunhofer IVI)*	
	13:30 **Parallel Session 2:** **Vehicles and system operations**	Feliks Mackenthun, ISL Bremen **Logistics under the Challenges of Climate Change** Rachel Burbidge, Eurocontrol **Update on Eurocontrol ATM Climate Adaptation Work** Structured discussion about measures and their assessment with regard to vehicles and system operations along the guiding material provided by the project team. Aim: consensus on final list of measures and assessment principles. *Chair: Jonathan Köhler (Fraunhofer ISI) and Hedi Maurer (NEA)*	
	15:30	Coffee break	
	15:45 **Plenary session**	Chairs of the parallel sessions **Reporting from parallel sessions** Claus Doll, Fraunhofer **Conclusions and post-processing of the workshop**	
	16:30	Closure of the meeting	

CONTACT ADDRESSES FOR SCIENTIFIC AND ADMINISTRATIVE ENQUIRIES:

Fraunhofer Institute for Systems and Innovation Research ISI
Breslauer Str. 48
76139 KARLSRUHE
GERMANY
Fax: +49 721 6809-135

Direct contacts for scientific enquiries:

Dr. Claus Doll
Phone: +49 721 6809-354
E-mail: claus.doll@isi.fraunhofer.de

Dr. Stefan Klug
Phone: +49 721 6809-410
E-mail: stefan.klug@isi.fraunhofer.de

Direct contacts for administrative enquiries:

Monika Silbereis
Phone: +49 721 6809-224
E-mail: monika.silbereis@isi.fraunhofer.de

ABSTRACTS:

Baker, Chris
The author is currently leading a major project consortium for the FUTURENET project, sponsored by the UK Adaptation and Resilience to Climate Change (ARCC) programme. One of the aspects of this project is to model the resilience of transport in a major UK corridor to extreme weather events and climate change. To enable this modelling to take place, relationships are needed between climatic variables and road and rail disruption and delays. This talk will report on a number of pieces of work that are underway or have recently been completed, that have sought to obtain such relationships for the UK road and rail networks, for both passenger and freight sectors. It is shown that, at a local level, precise relationships between weather conditions and accident numbers, disruption, delay etc are very difficult to find, although firmer relationships do appear from the data when significant temporal and spatial averaging is carried out (i.e. monthly or annual summed data over large regions). This is partly due to the inadequacy of the traffic data that is available, and partly due to the fact that the transport links in question are rarely collocated with meteorological measurement sites. This conclusion has implications for the type of modelling that can be developed, and, in practical terms, on the development of early warning systems.

Wiebe, Enno; Veitch, Alex
Since the last decades many railways in the world have been more and more challenged by weather conditions impacting their daily train operations and the availability of their railway infrastructure severely. The problem that occurred shows clearly that the railway system is sensitive to all kind of whether conditions. The sector is currently facing extreme winter and summer conditions and at the same time prepares for the impact of climate change. The goal is developing a robust and sustainable railway system including stock, infrastructure and their interfaces ensuring the reliability and availability of railway services in future.
The UIC initiatives "ARISCC" and "Winter and Railways" aim at proving good practice for its members and a roadmap to improve the rail system's overall robustness.

Ray, Michel; Fadeuilhe, Jean-Jacques; Ennesser, Yves
Climate change, whatever its sources, will affect all countries and impact all economic and human activity, notably the road infrastructure sector. Therefore the demand for investment due to the consequences of climate change will be significant. The often unfortunate consequences of inter-sectorial decisions taken under the pressure of events make anticipation essential; development of adapted new investment strategies (specially for the existing network) and implementation of investment plans spanning several decades are necessary. This presentation describes various possibilities of specific strategies for existing road networks.

Ammoser, Henrik
Transport and communications play a special role in relation to disasters. The impact of local or regional events can harm large system structures as in case of extreme weather situations. Such impact on transport networks will be demonstrated in the presentation. Aspects will be discussed that could explain the increasing vulnerability of man-made structures. These gaps lead to a high potential for research and development. An example will be given by a research project which was finished in March

2010 at Dresden University of Technology. The project dealt with the August Floodings of 2002 in Central Europe. Scientific methods like causality analysis and the adaptation of planning and logistics software had been used to find better ways to curtail the impact of floodings on urban transport networks. Beyond modelling and software development another important aspect of curtailing the impact will be discussed: The necessity to find ways towards a risk culture in the daily life of transport and communications.

Arnold, Paul
Paul Arnold is the National Weather Strategy Specialist for Network Rail, a post that he has fulfilled since 2006. He has 18 years professional experience within the UK mainline operational rail industry and has been instrumental in coordinating autumn and winter mitigation plans on a regional and national level since 2000. He is the Professional Head of the UK Seasons Management Team; Deputy Chair of the Adhesion Working Group, an industry collective established in 1992 to address low adhesion issues at the wheel / rail interface; and a Member of the National Task Force Operators Group, uniting industry Operations, Safety, & Performance Directors.
He has designed and delivered 10 national rail industry conferences to a total delegation of over 2,000 – including suppliers, forecasters, and frontline operational staff. He created an industry dedicated weather forecasting web site that is now an embedded process utilised by over 70,000 personnel in over 30 different rail companies. Paul also liaises proactively with media representatives to ensure positive and accurate dialogue is communicated to customers in time of severe weather disruption. This more recent work has resulted in published articles in Rail, Railways Illustrated, and Railnews – leading industry publications. He is the author of the UIC "Weather Management" fact sheet, and is currently designing a pan European communications forum focussing on severe weather incident management.

Van der Meer, Rinske
Rinske van der Meer works at the Port of Rotterdam as a project manager for the environment department. For the last five years her main focus used to be climate change adaptation. And as the Dutch way of policy making is done by 'polderen' she also worked on several national climate adaptation projects for example: Knowledge for climate, The Dutch Deltaprogramme. Currently she combines the climate change adaptation projects with sustainability projects like the Port of Rotterdam's CO2-footprint and sustainable real-estate.

Mackenthun, Feliks
At first the presentation deals about the expectations of the logistics cluster in the Metropolitan region Northwest (Germany). An empirical study has been the basis of the research within the project realised by the ISL. This included the identification of vulnerabilities in the logistics sector as well as the detection of adaptation measures. Additionally the ISL initiated the dialogue between theory and practice which means that workshops have been organised to discuss solutions regarding the climate change with experts of logistics companies, research institutes and the members of the public sector e.g. As a result, some vulnerabilities and few adaptation measures already exist in the region but if the climate will change intense more measures could be needed to ensure freight transports etc.

PARTICIPANTS:

in alphabetical order

Arnold, Paul (Network Rail)
Paul.Arnold@networkrail.co.uk

Ammoser, Hendrik (TUEV Rheinland InterTraffic GmbH)
hendrik.ammoser@de.tuv.com
34, married, two children
Transport Engineer
Specialist on ITS and Critical Infrastructures
at TUEV Rheinland in Cologne
1998-2003 Studies of Transport Engineering and Telematics at "Friedrich List" Faculty of Transport and Communications Sciences, Dresden University of Technology
2004-2007 Scientific Worker at the Dresden Institute of Economics & Transport, research on disaster management and logistics and the role of transport systems in disaster management / recovery; involved to the research project: "Computer based analysis of causality networks and simulation of evacuation in case of disasters with regard on the August-floodings of the River Elbe in 2002 in Central Europe"
Since 2007 Technical Consultant on Intelligent Transport Systems, Intelligent Mobility and Tolling, System Technology incl. System Protection and Recovery
2010/2011 member the organization board of the "DVWG Forum Notfallmanagement" (Forum Disaster Management of the German Association of Transport Science) – next one upcoming in July 2011.

Baker, Chris (University of Birmingham)
c.j.baker@bham.ac.uk
Prof Chris Baker, University of Birmingham (CI) - Prof. Baker is Professor of Environmental Fluid Mechanics in the School of Civil Engineering at the University of Birmingham and Director of the Birmingham Centre for Railway Research and Education, with wide ranging research interests in the fields of wind engineering, wind/crop interaction, vehicle aerodynamics agricultural aerodynamics, pollution dispersion and transport climate change adaptation. Since 1982, when he began his academic career at the University of Nottingham, he has held research grants from a variety of bodies - EU, EPSRC, BBSRC, NERC, BRE, Royal Society, DETR, MIRA etc. He is a past Chairman of the UK Wind Engineering Society (1997-1999) and is one of five fellows of the Society. He was until recently the European and African Regional Co-ordinator on the Executive Committee of the International Association of Wind Engineering. He is a member of the BSI committee 525 (loading) and the UK representative on the working group that is revising the ISO wind loading coding. He chairs a UK DfT committee on Climate change effects in the Rail Industry. In addition, Prof Baker is currently PI for grants of the order of £1.5million from EPRSC, EU and industry sources. These include SWERVE (Severe WEather Resilience Vulnerability Estimator) project (funded by EPSRC) and on the FUTURENET (FUTUre REsilient transport NETworks) project, (EPSRC ARCC), the flight of wind borne debris (EPSRC) and AEROTRAIN – Aerodynamic research for Interoperability on European railways (EU).

Beuck, Nils (CLECAT)
beuck@clecat.org
Mr Beuck is a German-Norwegian national, who has worked as a policy adviser for CLECAT, the European Association for forwarding, transport, logistics and customs services, for the last 4 1/2 years. In CLECAT he deals mainly with air and maritime transport, as well as supply chain security and sustainable logistics. Mr Beuck made his first and second state exam in law in Dresden and Berlin, Germany respectively. He also holds a MSc in International and European Relations from the University of Linköping, Sweden.

Doll, Claus (Fraunhofer ISI)
claus.doll@isi.fraunhofer.de
Dr. Claus Doll has finalised his studies at the University of Karlsruhe, Germany, with a diploma in Business Engineering in 1996. Since then he was employed as researcher and project manager at the Institute for Economic Policy Research (IWW) until January 2005.In February 2004 he has passed his PhD in transport infrastructure cost allocation and game theory at the Faculty for Economics of the University of Karlsruhe (TH). From February 2005 on Claus Doll is employed at the Competence Center Sustainability and Infrastructure Systems of the Fraunhofer Institute for Systems and Innovation Research ISI. Here he will intensively carry on his activities in the field of transportation system analysis, scenario development assessment.

Ennesser, Yves
Yves ENNESSER is an environment specialist at Egis Bceom International with strong academic background and considerable experience in environmental studies in particular in the context of infrastructure projects.
With more than 30 countries of work experience, Yves ENNESSER is familiar with the actual environmental issues of both developed and developing countries. At Egis Bceom International, he has developed several methodological skills, especially in the field of environmental impact assessment (EIA), strategic environmental assessment (SEA) and climate change adaptation. Coordinator of the activities related to climate change adaptation in the Egis Group, he is especially in charge of the development of GERICI, a tool and methodological approach for managing climate change impacts in the transport sector. Member of the World Road Association (Technical Committee on Operational Risks Management), he is currently team leader of a World Bank project on climate change adaptation and natural disasters preparedness in the Coastal Cities of North Africa.

Leviäkangas, Pekka (VTT)
pekka.leviakangas@vtt.fi

Mackenthun, Feliks (ISL)
mackenthun@isl.org
Feliks Mackenthun started working in the ISL – besides studying economics at the University of Bremen – in 2006. As a student assistant he participated in international consulting and research projects regarding the feasibility of logistics centers' development, the logistics planning of regions and the integration of regions into European transport. His task was also to assist the managing director of

the German Freight Village Association (roof organization of the German Freight Villages) in different projects and promotion concerning intermodal transport topics.
After graduating as an economist ("Diplom-Ökonom") in 2008, he started working for the ISL as a scientific assistant and project manager. Various projects concerning Green Logistics and Impacts of Climate Change on Logistics as well as Urban Logistics and the conception of intermodal freight networks are since then part of his field of responsibilities. Another task is the assistance of the managing director of the German Freight Village Association (Deutsche GVZ-Gesellschaft mbH).

Ray, Michel (EGIS Group)
michel.ray@egis.fr
Egis Director for technical affairs and innovation
Egis is a Consulting / Engineering Group with:

- 11 000 employees,
- 800 M€ turn over
- 50 % outside France
- Infrastructure / Water / Environment / Building

- Member of ECTP-HLG (European Construction Technology Platform High Level Group)
- President of the French "Advancity Cluster" on "Sustainable City, Mobility and urban eco-technologies" (200 M€ of R&D / Innovation projects; more than 220 member organisations)
- Co-author of French and EFCA White Paper on "Consulting Industry and Innovation"
- Chairman of FIDIC Innovation Task Group
- Member of the Steering Committee on "Sustainable Cities" of National Research Agency (ANR – France)
- 1988-1995 World Bank Task manager
- 1982-1988 Division Chief, pavements and earthworks at SETRA (French Directorate of Highways)
- 1979-1982 Technical Advisor to the Infrastructure General Director, Public Works Ministry, Algeria
- 1972-1979 LCPC, Central Laboratory for Roads - Concrete an Cement Div. Chief
- 1967-1972 Ecole Polytechnique and Ecole Nationale des Ponts et Chaussées

Reck, Ron (VKT)
reck@vkt-gmbh.de
After graduating as a Transportation Engineer at the Technical University of Dresden, Ron started his career in Transportation Research at the Fraunhofer IVI in 2001. Moving to London in 2005 and working as a Senior Transport Engineer for Atkins Global Ltd, he was deeply involved in and managed a number of transportation projects in and around London. Broadening his international experience, Ron moved to Dornier Consulting in Abu Dhabi, UAE, in 2008, advising the on development control and developing new transportation approval procedures with the Abu Dhabi Municipality and the Department of Transport Abu Dhabi. He is now working for VKT GmbH in Frankfurt am Main, Germany.

Ubbels, Barry (NEA)
bub@nea.nl
Dr. Barry Ubbels is an economist and graduated in the field of transport and regional economics at the Free University Amsterdam. His research interests include many transportation and regional economic issues, but especially pricing and financing of (urban) mobility and infrastructure. Barry is now consultant at NEA Transport Research and Training where he works on different transport economic projects. One of these European projects is Ecconet where climate change and the impact for inland waterway transport is studied.

Van der Meer, Rinske
RAE.Meer@portofrotterdam.com
Port Climate Action in Rotterdam

The port of Rotterdam is situated at a delta where the rivers Rhine and Meuse meet the North Sea. Where in many cases a delta is vulnerable for sea level rise caused by climate change, this is not so much the case for the Port of Rotterdam. The Netherlands have a long term history of coping with low laying land, storm surges and high river discharge. The port has therefore been build far above the sea level and for extra safety of the region a storm surge barrier has been build. This does not mean that the Port of Rotterdam considers itself 'Climate Proof'.

The consequences of climate change are divers and potentially far reaching, also for the functioning of a port. Extensive research pointed out the five main climate challenges for the Port of Rotterdam.

1. Sustainable growth (mitigation)
   CO_2 emissions will be strongly reduced by the Rotterdam Climate Initiative (RCI) programme. Main reduction will be achieved by Carbon Capture Transport & Storage (CCS), the use of sustainable energy and energy efficiency at the industry.
2. Port area adaptation strategy to cope with higher water levels (adaptation)
   The current chance of flooding is small. The process of climate change is gradually evolving therefore the port can and should slowly adjust at times when opportunities occur. Extensive research has been done on current and future chances and consequences of flooding of the port areas. Furthermore, together with the public stakeholders a toolbox has been developed in order to prevent casualties and social disorder due to flooding. Coming up is a communication plan for the port industry.
3. Guarantying 'inland transport capacity' during low river discharge (adaptation)
   The port of Rotterdam is blessed with it's natural hinterland connections the river Rhine. Barge is taking up an increasing percentage of the modal split. Low river discharge (meaning low water levels) cause lower capacity of the waterway. Early awareness creates opportunities for timely and innovative solutions.
4. Guarantying fresh water supply (adaptation)
   High sea water levels in combination with low river discharge causes salt intrusion. This conflicts with fresh water users in the western part of the Netherlands (also the port industry). Although there is still enough fresh water available, the reliability could be less in the future. Currently reliability of the fresh water source for the industry is studied and optimised.
5. Open access
   Issues like flooding and salt intrusion may threaten the open access of the Port of Rotterdam. A conservative and even Dutch approach is building dams; there are better and more flexible solutions. Together with our public stakeholders we are looking for these flexible solutions.

When these five challenges have been tackled, in our view, the Port of Rotterdam can be considered 'Climate Proof'. In conclusion, the Port of Rotterdam is very well equipped to meet the challenges caused by climate change. The previous points out that doing nothing is not an option, we have to take action.

Vanelslander, Thierry (University of Antwerp, Faculty for Applied Economics)
thierry.vanelslander@ua.ac.be
Thierry Vanelslander (°1975) graduated as a doctor in Applied Economics at the University of Antwerp in 2005. He currently is holder of the BNP Paribas Fortis chair on transport, logistics and ports. Until halfway 2009, he was director of the Research Centre on Commodity Flows hosted by the Department of Transport and Regional Economics, to which he still is a promotor now. In his academic career, he took off as a researcher at the University of Antwerp for several research projects in the field of transport and regional economics. He is currently course co-ordinator for the courses Bachelor Proof, Industry Location, Advanced Transport Economics and Maritime Technology. He is also involved in the Marie Curie and Asia Link training programmes at the Department. His research focuses on business economics in the port and maritime sector, and in land and air transport and logistics. His Ph.D dealt with co-operation and competition in sea-port container handling.

Veitch, Alex (UIC)
VEITCH@uic.org
Alex Veitch joined the UIC environment team in January 2011. He is responsible for working with the UN on environmental issues, and manages research projects on climate change and sustainability. Alex has worked in the environment and transport fields for the last 10 years, in both the USA and the UK, as a campaigner and lobbyist for environmental NGOs, and subsequently for the UK climate change agency, the Energy Saving Trust. Before joining UIC, Alex was Integrated Transport Manager at ATOC, the Association of Train Operating Companies in the UK.

Wiebe, Enno (UIC)
WIEBE@uic.org
Enno Wiebe has been seconded from Deutsche Bahn's Rolling Stock Procurement Department to UIC in Paris since 2007. His main working field is the European rolling stock standardisation (in particular UIC/UNIFE Technical Recommendations (TecRec)) and collaborative European rail research projects with the main responsibility for dissemination and training. He had been the Hyrail coordinator (Hydrogen for the railway sector) and has been in charge for the dissemination of GREEN (Diesel engines), Railenergy (Energy Efficiency for the rail sector), CREAM (Freight project) and Cleaner-D (Stage IIIB for the rail sector). In 2010 he coordinated the UIC activity "Winter and Railways".

HOTEL INFORMATION

1. Inntel Hotel Rotterdam Centre
Schiedamsedijk 140
3011 EA ROTTERDAM
THE NETHERLANDS
Phone: +31 10 413 413 9
Fax: +31 10 413 32 22
http://www.inntelhotelsrotterdamcentre.nl/website/?docid=1&setlanguage=_en

This hotel is at walking distance from STC, where the meeting will be held. It can be reached by Metro, or by Tram from Rotterdam Central Station.
The Hotel holds a limited block of guest rooms, room rate € 150 (excl. breakfast + 4.5% tax)..

2. Ocean Paradise (Single room 60 – 90 €)
Parkhaven 21
3016 GM ROTTERDAM
THE NETHERLANDS
Phone: +31 10-4360256
Fax: +31 10-4366952
E-mail: info@degoudenwokrotterdam.nl

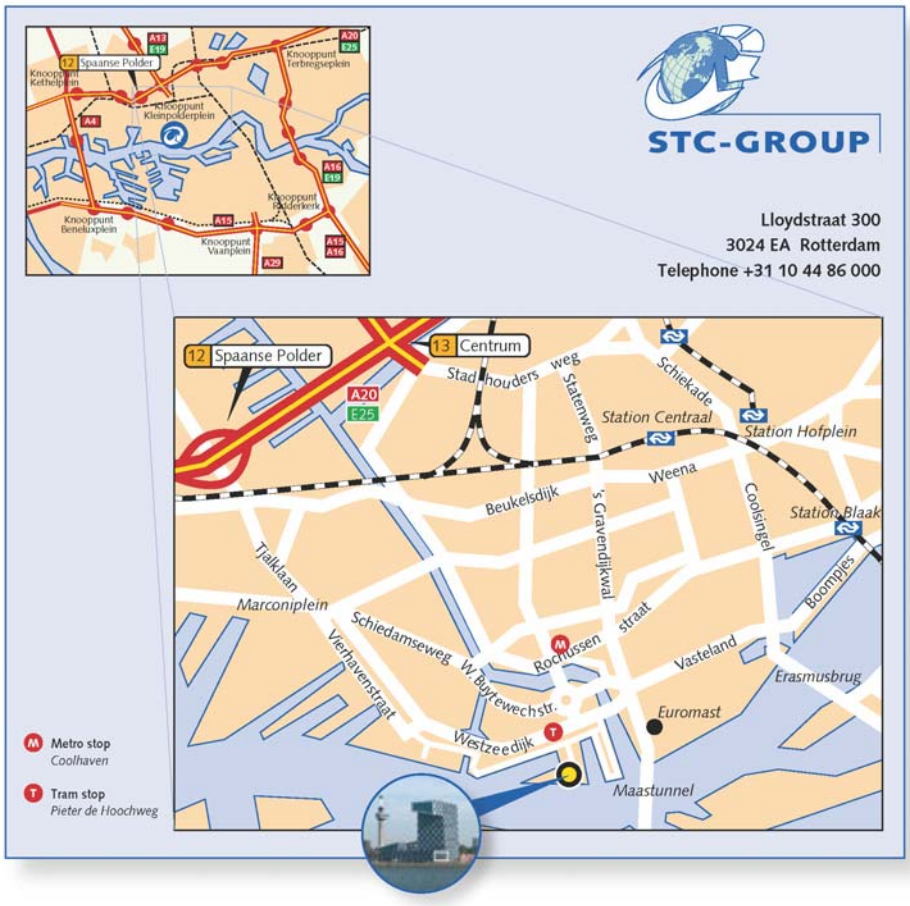
3. The Port Rotterdam Hotel (Single Room 70 €)
Pieter de Hoochweg 115
3024 BG ROTTERDAM
THE NETHERLANDS
Phone: +31 (0) 10 4779628

4. Maritime Hotel (Single Room 70 €)
Willemskade 13
3016 DK ROTTERDAM
THE NETHERLANDS
Phone: +31 (0) 10 411 92 60
Fax: +31 (0) 10 411 9262
E-mail: info@maritimehotel.nl
http://www.maritimehotel.nl/

5. Hotel BAAN (85 €)
Rochussenstraat 345-A
3023 DH ROTTERDAM
THE NETHERLANDS
Phone: +31 (0) 10-4770555
Fax: +31 (0)10-4769450
E-mail: info@hotelbaan.nl
http://www.hotelbaan.nl

6. Hotel Stroom Rotterdam (133 €)
Stroom Rotterdam
Lloydstraat 1
3024 EA ROTTERDAM
THE NETHERLANDS
Phone: +31(0)10 22 14 060
Fax: +31(0)10 22 14 061
E-mail: info@stroomrotterdam.nl
http://www.stroomrotterdam.nl

APPROACH TO STC-EVENTS CONFERENCE CENTRE



By Car

From Den Haag (A13): At junction Kleinpolderplein A20 follow Hoek van Holland • Take exit (afrit) 12 Spaanse Polder/Delfshaven (havens 200-500) →
From Utrecht (A20): At junction Terbregseplein A20 follow Hoek van Holland • Take exit (afrit) 12 Spaanse Polder/Delfshaven (havens 200-500) →
From Dordrecht (A16): At junction Terbregseplein A20 follow Hoek van Holland • Take exit (afrit) 12 Spaanse Polder/Delfshaven (havens 200-500) →
From Hoek van Holland (A20): Take exit (afrit) 12 Spaanse Polder/Delfshaven (havens 200-500) →
From Maasvlakte (A15): At junction Beneluxplein follow A4 direction Hoek van Holland/Den Haag • At junction Ketelplein follow A20 direction Den Haag/Utrecht • Take exit (afrit) 12 Spaanse Polder/Delfshaven (havens 200-500) →
From Antwerp through Bergen op Zoom/Roosendaal (A17/A59/A29): At junction Hellegatsplein follow A29 direction Rotterdam • At junction Vaanplein follow A15 direction Europoort • At junction Beneluxplein follow A4 direction Hoek van Holland/Den Haag • At junction Ketelplein follow A20 direction Den Haag/Utrecht • Take exit (afrit) 12 Spaanse Polder/Delfshaven (havens 200-500) →

→ Drive straight on cross Marconiplein follow the signs Delfshaven Centrum (havens 200-500) • On Westzeedijk, at tram stop Pieter de Hoochweg, turn right (at traffic lights) • Turn right at the end of the street • The 2nd street on the left is Lloydstraat

Public Transport

From Utrecht by train:
Get off at Rotterdam Alexander • Metro direction Marconiplein • Get off at stop Coolhaven • Walk (12min) see map

From Zeeland/Brabant by train:
Get off at Rotterdam Blaak • Metro direction Marconiplein • Get off at stop Coolhaven • Walk (12 min) See map

From Amsterdam/Den Haag by train:
Get off at Rotterdam Centraal Station • Tram number 8 direction spangen • Get off at stop Pieter de Hoochweg • Walk (5 min) See map
Or
metro direction Slinge/Spijkenisse, transfer at Beurs direction Marconiplein • Get off at stop Coolhaven • Walk (12 min) See map