INTernational Symposium
Information on Ships
ISIS 2011
Hamburg, Germany
15 - 16 September 2011

Programme

German Institute of Navigation
Deutsche Gesellschaft für Ortung und Navigation e. V. (DGON)

In cooperation with

German Society for Maritime Technology
Schiffbautechnische Gesellschaft e. V. (STG)
Introduction

Conference Objectives and Scope

The 8th International Symposium ISIS 2011 „INFORMATION ON SHIPS“ will address the benefits and challenges of up-to-date information technologies on board of ships, the proper use of information, practical experiences using new information systems and the role of human being in the information-loaded environment.

Technologies, applications, and projects should be presented under the aspects: What is new and in progress? What is possible and designable? What should be done? What are the challenges?

Steering Board

Dr. Müller, Reinhard
Chairman
University of Technology, Business and Design, Warnemünde

Callsen-Bracker, Hans-Heinrich
Federal Ministry of Transport, Building and Urban Development, Bonn

Hintzsche, Wolfgang
German Shipowners' Association, Hamburg

Dr. Jonas, Mathias
Federal Maritime and Hydrographic Agency, Rostock

Klindt, Holger
SIGNALIS GmbH, Bremen

Dr. Köhler, Volker
Consulting Engineer Buxtehude

Lauck, Ralf-Peter
Raytheon Anschütz GmbH, Kiel

Mahnke, Holger
SAM Electronics GmbH Hamburg

Preuss, Ralf-Dieter
Federal Maritime and Hydrographic Agency, Hamburg

Dr. Sandler, Martin
Innovative Navigation GmbH Kornwestheim

Strenge, Rainer
Traffic Technologies Center Koblenz

Dr. Subklew, Christian
Maritime Pilots’ Association Wismar – Rostock – Stralsund Rostock
Thursday, 15 September 2011

08:00  Conference Registration

09:00  Conference Address
Welcome and Opening Remarks by a Representative of the Free and Hanseatic City of Hamburg

09:15  Conference Opening
Prof. Dr.-Ing. Reinhard Müller
Conference Chairman

SESSION 1
Human Integration

Chairman:  Wolfgang Hintzsche

09:30  Usability Heuristics – Friend or Foe in Maritime Navigation Instrument Design?
Erik Styhr Petersen, Thomas Porathe, Margarethe Lützhöft, SAM Electronics GmbH, Hamburg, Germany

09:55  The Research Project ‘Simulatortraining’: Steps toward a Rational Use of Simulation for Training Purpose Basic Components of “rational” Simulator Training Concepts
Klaus E. Mehl, Carl von Ossietzky University Oldenburg, Germany
Pawel Bednarz, Interschalt, Hamburg, Germany
Christoph Wand, Jade University of Applied Sciences of Elsfleth, Germany

10:20  Coffee Break

10:50  Effects of Nautical Simulator Training on Ship Management Attitudes
Stefan Röttger, Saskia Seidack, Andreas Koch, Jens Kowalski, German Naval Medical Institute, Kronshagen, Germany

11:15  Learning from Maritime Accidents by Applying Connectionism Assessment of Human Reliability
Karsten Loer, Germanischer Lloyd SE, Hamburg, Germany
Jacqueline Holz, Georgios Athanassiou, Oliver Straeter, University of Kassel, Germany

11:40  Lunch

Session 2
Operational Integration

Chairman:  Holger Mahnke

12:40  Route Planning and Monitoring for Optimal Manoeuvring by Fast Time Simulation
Knud Benedict, Sandro Fischer, Michael Gluch, Matthias Kirchhoff, University of Technology, Business and Design, Warnemünde
Michael Baldauf, S.Klaes, World Maritime University, Malmoe, Sweden

13:05  Simulation of Numerical Ship Navigation in Meteorology in Coastal Sea Area
Shigeaki Shiotani, Taisuke Soda, Hidenari Makino, Youichi Shimada, Kobe University, Kobe, Yokohama, Japan
Navigation with Virtual Aids to Navigation – Taking Cross Current Effect into Consideration
Hua-Zhi Hsu, Chan-Chuan Wen, Ann-Bai Liu, National Kaohsiung Marine University, Kaohsiung, Taiwan

Coffee Break

Session 3
Functional Integration

Chairman: Holger Mahnke

An Approach to Enhanced Integrity Monitoring for Integrated Navigation Systems
Thomas Holzhüter, HAW Hamburg, Germany,
Hendrik Schwab, Raytheon-Anschütz GmbH, Kiel, Germany

Overview of the IEC 61162-450 “Light Weight Ethernet” Ship Bridge Data Network
Ørnulf Jan Redseth, MARINTEK Trondheim, Norway
Morton Jagd Christensen, Thrane & Thrane, Lyngby, Denmark
Kwangil Lee, Electronics and Telecommunication Research Institute, Daejeon, R.O. Korea

Two new support functions for collision avoidance
Junji Fukuto, Yasuyuki Niwa, Makiko Minami, Kenjiro Hikida, Kenji Yoshimura,
Masayoshi Numano, National Maritime Research Institute, Tokyo, Japan

Coffee Break

Session 4
E-Navigation

Chairman: Volker Koehler

Developments on e-Navigation
Javier Yasnikouski, IMO, London, UK

The Shipboard Integrated Navigation System (INS) and the Shore-Provided Maritime Service Portfolio(s) – the Key Stratic Twins for e-Navigation
Jan-Hendrik Oltmann, German Federal Waterways and Shipping Administration, Kiel

Investigations into an e-Navigation Related Approach for Onboard Decision Support for Person Overboard Accidents
Michael Baldauf, S. Klaes, World Maritime University, Malmö, Sweden,
K. Benedict, S. Fischer, Hochschule Wismar, University of Applied Sciences, Warnemünde, Germany,
D. Meißner, Institute for Ship Safety, Rostock-Warnemünde,
E. Wilske, SSPA Sweden, Göteborg
V. Lander, STENA Line, Germany

End of Session

Symposium Dinner
Hotel Hafen Hamburg
Restaurant Port
Friday, 16 September 2011

Session 5
Sensors, Components and Technologies

Chairman: Ralf-Dieter Preuss

08:30 Long-Range Identification and Tracking of Ships (LRIT)
Javier Yasnikouski, IMO, London, UK

08:55 Galileo and the Potentials of Satellite Navigation
Ulrich Reinfried, Federal Ministry of Transport, Building and Urban Development, Berlin

09:20 Optimisation of FFT Algorithms for the Acquisition of Modernised GPS L2C Signals
Jayakodi Osanna, Hindustan University, Chennai, India

09:45 Partitioned Covariance Intersection
Marc-Andre Beyer, Raytheon Anschütz GmbH, Kiel, Germany
Arne Petersen, Christian Albrechts University, Kiel, Germany

10:10 Coffee Break

10:40 Installation of an Experimental Galileo GBAS at Research Port Rostock
David Minkwitz, Angelika Hirrlé, Jamila Beckheinrich, DLR Institute of Communication and Navigation, Neustrelitz, Germany

11:05 Visual and Electronic Aids to Navigation Systems
Ian Burgess, Tideland, UK

11:30 Small Target Detection and Sea Surface Surveillance with Radar
Hubert F. Wentzell, Rutter Technologies Inc., Canada

11:55 Lunch

Session 6
Visions, Strategies and Innovative Features

Chairman: Reinhard Müller

13:00 Vision of Maritime Communications – What can we learn & transfer from Aeronautical Communications?
Simon Plass, German Aerospace Center (DLR), Oberpfaffenhofen, Germany

13:25 Shipowners’ Requirements and Demands under the e-Navigation Strategy
Wolfgang Hintzsche, German Shipowners’ Association, Hamburg

13:50 Features and Perspectives of Fleet Management Systems – A Market Survey on Software Applications for Ship Managers
Carlos Jahn, Ole John, Torsten Münsterberg, Hamburg University of Technology, Germany

14:15 Final Discussion and Closing Remarks
Prof. Dr.-Ing. Reinhard Müller
Conference Chairman

14:45 Termination of ISIS 2011
Administration

Venue
Hotel Hafen Hamburg
Seewartenstrasse 9
20459 Hamburg
Germany

Conference Office
The Conference Office will be open as follows:
Thursday  15 Sep 2011  07:30 - 18:00 hrs
Friday    16 Sep 2011  08:00 – 15:00 hrs

Phone:  + 49 - 40 31 11 3-0
Fax:     + 49 - 40 31 11 3-70 601
Fax-Messages should be marked:
“(Name of Delegate) c/o ISIS Conference”

Conference Language
English

Registration
All delegates including authors, chairpersons and exhibitors are requested to complete the published
Registration Form (www.dgon.de) as soon as possible

Fees
Authors, Chairpersons  550 €
Members of DGON, STG, EUGIN  600 €
Non-Members  800 €
Retired Members of DGON  350 €
Students (proof required in advance)  50 €
The fee includes participation in the conference, documentation, soft drinks, coffee and snacks during
the breaks, luncheon buffet, and participation in the “Symposium Dinner”.

Technical Exhibition
Members of DGON, STG, EUGIN  900 €
Others  1200 €
The fee covers the rental of space for the exhibition for the duration of the conference and the fee for
one delegate.

Equipment/ systems available or in development with respect to the topics of the symposium may be
demonstrated and/ or displayed during the conference. Interested companies/ organizations who wish
to exhibit or demonstrate may request further information from the
German Institute of Navigation
attn: ISIS 2011
dgon.bonn@t-online.de

Cancellation/ Refund Policy
Cancellations must be made in writing. For cancellations received prior to 12 Aug 2011 the fee will be
refunded, deducting 40 € handling charge. No refunds will be made for cancellations received after 12
Aug 2011.
**Methods of Payment**
All charges are in EURO (€). Upon return of the completed Registration Form, an invoice will be mailed to each delegate. Payment should be made in € by bank transfer through the following bank:

Commerzbank AG Bonn  
Maximilianstr. 12  
53111 Bonn  
Germany

Account Name: DGON  
Account Number: 1 081 199 00  
BCN: 380 400 07  
IBAN: DE19 3804 0007 0108 1199 00  
SWIFT/ BIC: COBADEFF380

All transfers should be marked: “ISIS 2011” with invoice number and name of delegate. Payment with credit cards (Master or VISA) is possible at the registration desk only.

**Symposium Proceedings**
Proceedings will be prepared in print/ CD and distributed at the beginning of the symposium. Authors/ presenters are therefore requested to submit the “Full Papers” to DGON by e-mail, not later than 19 Aug 2011.

**Public Transportation**

- **From Hamburg Airport**
  
  Take the suburban train “S 1” to “Wedel” or “Blankenese” and leave at “Landungsbrücken”. Travelling time is about 30 minutes.

- **From Hamburg Main Railway Station**
  
  Take the suburban train “S1” to “Wedel” or Blankenese” or “S 3” to “Pinneberg” and leave at “Landungsbrücken”. Travelling time is about 6 minutes.

On leaving the station you will see the Conference Hotel (Hotel Hafen Hamburg) on the right hand side. A flight of stairs just below the building will take you up to the hotel.

**Impressum**

**German Institute of Navigation**

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Conference coordinator: Gerd Gronemann

Programme is subject to change.
Registration Form
International Symposium INFORMATION ON SHIPS
ISIS 2011

Name: __________________________________________

First Name: ______________________________________

Title/ Grade ______________________________________

Organization/ Company ________________________________

Mailing Address ______________________________________

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Tel./ Fax- No ______________________________________

☐ I will attend the “International Symposium INFORMATION ON SHIPS” – ISIS 2011 - at Hamburg, Germany, 15/ 16 September 2011

☐ I would like to exhibit at the ISIS 2011. Please send information for exhibitors

Date __________________________________________ Signature __________________________________________

☐ Member of DGON, STG, EUGIN* ☐ Non-Member

☐ Author, Chairperson ☐ Retired Member of DGON

☐ Student*

* copy of membership card/ student photo identity card required