KONGRESS 2016 KRAKÓW

WORKSHOP:
CYBER RISIKEN IN DER BINNENSCHIFFFAHRT

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WORKSHOP 12 May 2016

WORKSHOP: CYBER RISIKEN IN DER BINNENSCHIFFFAHRT

Das elektronisch gesteurte Binnenschiff und dessen potenziellen Risiken.

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Presentation by:
Capt. Jacek J. Goszczyński, M.Sc. Eng., MIIMS, MNI

WORKSHOP ON CYBER RISIKEN IN DER BINNENSCHIFFFAHRT

NEUE INFORMATIONS- UND KOMMUNICATIONSTECHNOLOGIE ALS REVOLUTION IN DER COMPUTER ERA:

- Das Schiff als Potenzial für Cyberrisiken – Gründe eines zugenommenen Interesses für Cyberkriminelle
- Vergleich der Technologie und der an Bord verwendeten Systeme
- Einführung von RIS - Binnenschiffsinformationsdienste
- Impact elektronischer Systeme an Bord von Schiffen
- Die Zukunft – unbemanntes Schiffskonzept

CYBERRISIKEN (AN BORD) VON SCHIFFEN

Reputations-schaden

Haftung gegenüber Dritten

Falsch gelieferte Ladung

Security breach

Nautischer Übergriff

Verlust persönlicher Daten

Operationeller Übergriff

Arrest des Schiffes

Verlust vertraulicher Unternehmensdaten

Diebstahl der Ladung

Gesetzesverletzung

Vertragsverletzung

Verspätung

Falsch deklarierte Ladung

Umweltschäden

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TARGET SYSTEMS – POTENTIALLY VULNERABLE SYSTEMS

- Communication systems
- Bridge systems
- Propulsion & machinery management and power control systems
- Cargo and balast management systems
- Passenger servicing and management systems
- Core infrastructure systems
- Access control and surveillance systems
- Administrative, passenger and crew welfare systems

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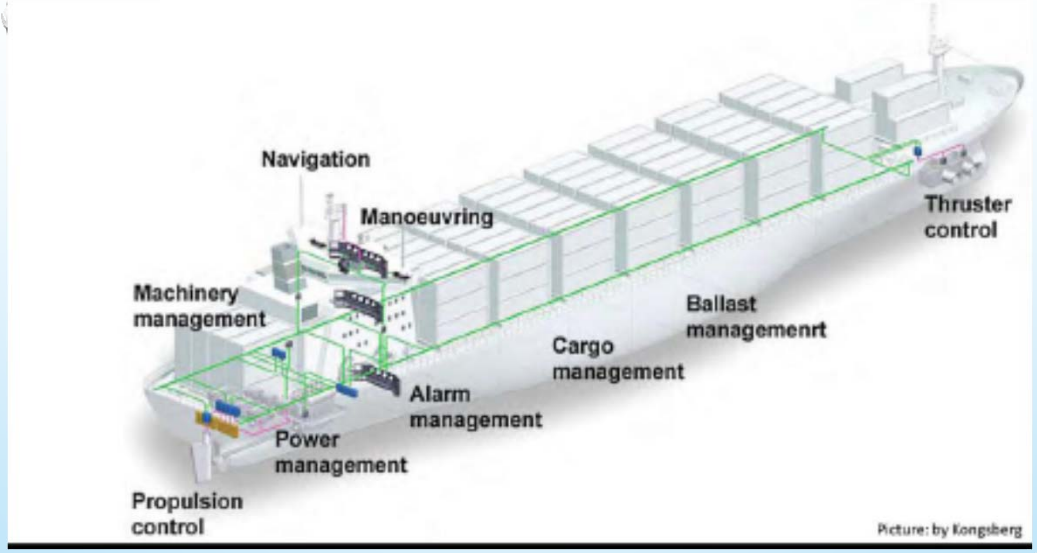
SCHIFFSYSTEME DIE ÜBER ABSTAND BEDIENT WERDEN KÖNNEN



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CYBERRISIKEN IN DER BINNENSCHIFFFAHRT IN POLEN

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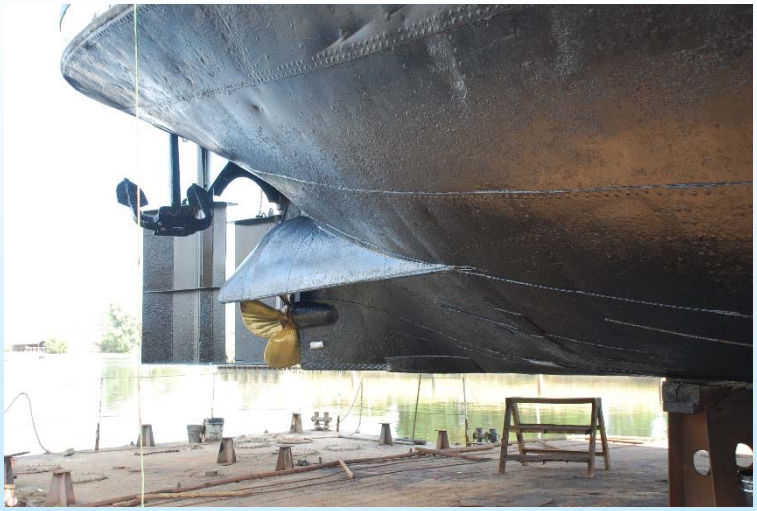
CYBERRISIKEN IN DER BINNENSCHIFFFAHRT IN POLEN



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CYBERREVOLUTION AUF DER BRÜCKE

Normales Equipment an Bord von Binnenschiffen: Radar, Autopilot, GPS, Touch screen zur Bedienung sämtlicher auf dem Schiff befindlichen Einrichtungen, VHF (Funkgerate), Computerüberwachung des Lade und Löschvorgangs, Kameras, Internet zugang .

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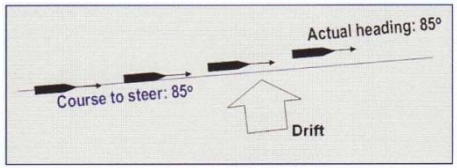
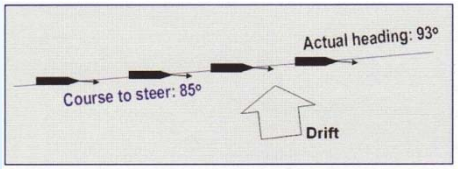
WORKSHOP ON CYBER RISKS IN INLAND NAVIGATION

FOCUSING ON THE BRIDGE SYSTEMS: AUTOPILOT



In Heading Control the course over ground line is affected by drift and wind



In Course Control the vessel stays on its course over ground line independently of drift and wind

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FOCUS AUF DIE BRÜCKENSYSTEME: ECDIS

Ein computerbasiertes Navigationssystem, das elektronische Navigationscharts, Positionsinformation über das Global Positioning System (GPS) und andere Navigatiossensoren wie Radar, Echosounder und Automatische Identifikationssysteme (AIS) bietet

Route planning is done on ECDIS and NP 5000 ensures accurate track steering

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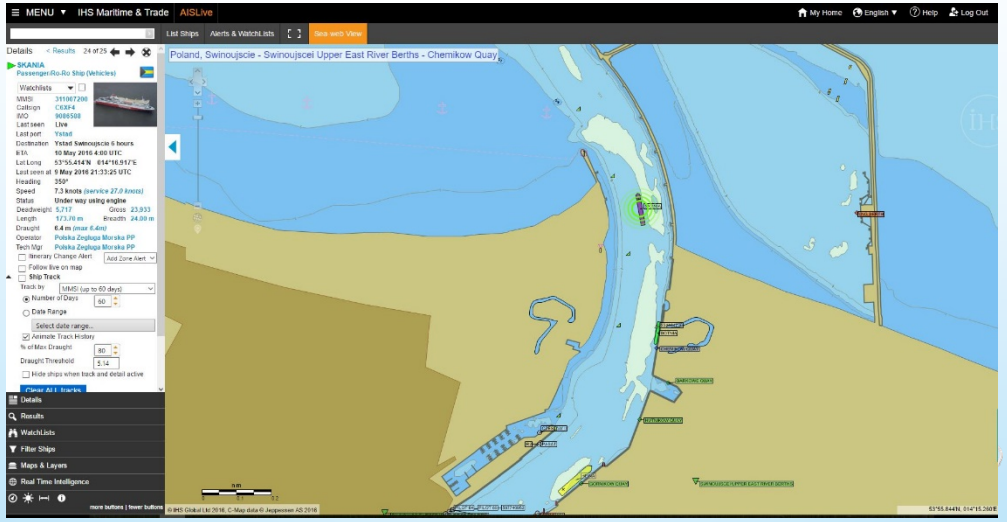

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Schutz gegen Cyberrisiken

1. Allgemeine Empfehlungen: Identifikation der kritischen Systeme

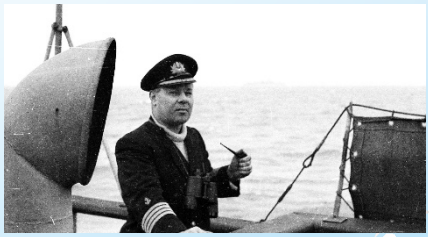
2. Menschliche Betrachtungen und Einflüsse

3. Netzwerk und Kommunikationsbetrachtungen

4. Softwarebetrachtungen

5. Datenschutzbetrachtungen

6. Cybersicherheitsbetrachtungen



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Decken die heutigen Transportversicherungen Cyberrisiken?

Die Grosszahl der Versicherungspolicen die Schiffs- und Ladungsrisiken decken, beinhalten eine Cyberattack Exclusion Klausel (CL380 10/03) die folgendermassen lautet:

1.1 Subject only to Clause 1.2 below, in no case shall this insurance cover loss damage liability or expense directly caused by or contributed to by or arising from the use or operation, as a means for inflicting harm, of any computer, computer system, computer software program, malicious code, computer virus or process or any electronic system.

1.2 Where this clause is endorsed on policies covering risks of war, civil war, revolution, rebellion, insurrection, or civil strife arising therefrom, or any hostile act by or against a belligerent power, or terrorism or any person acting from a political motive, Clause 1.1. Shall not operate to exclude losses (which would otherwise be covered) arising from the use of any computer, computer system computer software program, or any electronic system in the launch and/or guidance system and/or firing mechanism of any weapon or missile.

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KÜRZLICH ERSCHIENENE VERÖFFENTLICHUNGEN ZU DIESEM THEMA:

- LR Cyber-enabled ships – first Edition Feb 2016
- Cyber Risk - Joint Hull Committee paper – September 2015
- Look – Out 2016 Maritime Domain Cyber: Risks, Threats & Future Perspectives – Lampe & Schwarze Group
- The Guidelines on Cyber Security Onboard Ships – BIMCO, ICS, INTERCARGO, INTERTANKO – February 2016
- Cyber Risks in the Marine Transportation System (U.S. Coast Guard)
- DNV-GL publications on Cyber Risk

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  - Experts of the Polish Chamber of Forwarding & Logistics
  - Certified surveyors by International Institute of Container Lessors
  - Certyfied safety advisors DGSA / ADR / RID / IRU
  - Certified by DNV-GL in Accident Investigation, Risk Assessment & HAZOP.
  - ISO / ISM / ISPS/ MLC / OHSAS 18001 Auditors
  - Flag state inspectors for Antigua & Barbuda, Liberia, Luxemburg, Marshall Is., Vanuatu
  - Members of the ITIC

- **LOSS ADJUSTERS * AVERAGE AGENTS * HAVARIEKOMMISSARE**
  - Acting for major underwriters: AGCS (Claims Agent for Poland)
  - Global networks : IIMS, WK Webster & Co. , Dolphin Maritime, WECOX Claims Group
  - Average Agents of CESAM Paris

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MEET THE TEAM

Capt. Jack Goszczyński, M.Sc. - ISO/ISM/ISPS/MLC lead auditor, flag Sworn expert of the Polish Chamber of Commerce, Full member of the International Institute of Marine Surveying. Sworn Court Expert on Transport and Shipping. Member of the Nautical Institute of London.

Dariusz Plażuk, M.Sc. Eng. IICL courses in Antwerp. ISO 9001 internal auditor. Flag state inspector. DGS Advisor .

Dominik Kowalewski – An experienced cargo surveyor in general commodities and container cargoes. Certified surveyor of agricultural products.

Capt. Mariusz Lapinski, M.Sc. ISO / ISM / ISPS Lead Auditor, flag state inspector. Expert of the Polish Chamber of Commerce and Court Witness. Full member of the International Institute of Marine Surveying. DGS Advisor (ADR/RID).

Bartek Jaworski, ISO 9001:2008 Lead Auditor. Attended a HAZMAT course and a container course at the IICL in Antwerp. Manages our Warsaw office.

Bartłomiej Bączek, Eng. Cargo surveyor in general commodities and container cargoes. Carries out loading supervision. OHSAS 1800 Auditor

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THANK YOU FOR YOUR KIND ATTENTION

VIELEN DANK FÜR IHRE AUFMERKSAMKEIT

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