

Maritime Safety in German Waters

Joint Presentation By

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Agenda

- Aspects of Crisis Prevention: Organisation of pilotage in Germany
 - German Maritime Pilotage System
 - Pilotage Brotherhoods
 - Pilots in Germany
 - Pilot Transfer System
 - Traffic in German Waters
- Aspects of Crisis Response: Central Command for Maritime Emergencies
 - Facts and figures
 - Organisation
 - Operation modes
 - The „Complex Emergency Situation“
 - Competencies
 - CCME relies on its partners
- Case Study: Grounding of the ULCV „CSCL INDIAN OCEAN“



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Crisis Prevention

Organisation of Pilotage in Germany



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German Maritime Pilotage System

- German Maritime Pilotage System is part of the German Coastal Safety Concept
- narrow and shallow waters + high traffic density = need for local and navigational advisors at all times to guide shipmasters safely through sensitive areas



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Pilotage Brotherhoods

- pilots are organized in so-called brotherhoods
- brotherhoods are corporations under public law
- members are freelance pilots
- each pilot is appointed for the respective pilotage area
- each brotherhood is responsible for a different section of the German coast



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Pilots in Germany

- 805 maritime pilots in 7 brotherhoods
 - Pilotage brotherhood Elbe
 - Pilotage brotherhood NOK I (Brunsbüttel)
 - Pilotage brotherhood NOK II (Kiel/Lübeck/Flensburg)
 - Pilotage brotherhood Weser I (Bremen)
 - Pilotage brotherhood Weser II/ Jade (Bremerhaven)
 - Pilotage brotherhood Ems (Emden)
 - Pilotage brotherhood Wismar/Rostock (Warnemünde)
- approx. 150,000 pilotages per year
- 98 harbour pilots in 2 brotherhoods
 - 2 Hamburg Port Pilotage Brotherhood
 - Bremerhaven Harbour Pilots' Association



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Pilot Transfer System

- ensures that the pilots can safely get on and off the ships to be piloted
- all times of the day / all days of the year.
- Provided by the “Lotsenbetriebsverein” (LBV)
 - 460 employees
 - 39 transfer vessels (all under German flag)
 - 16 onshore pilot stations
 - 3 offshore pilot stations



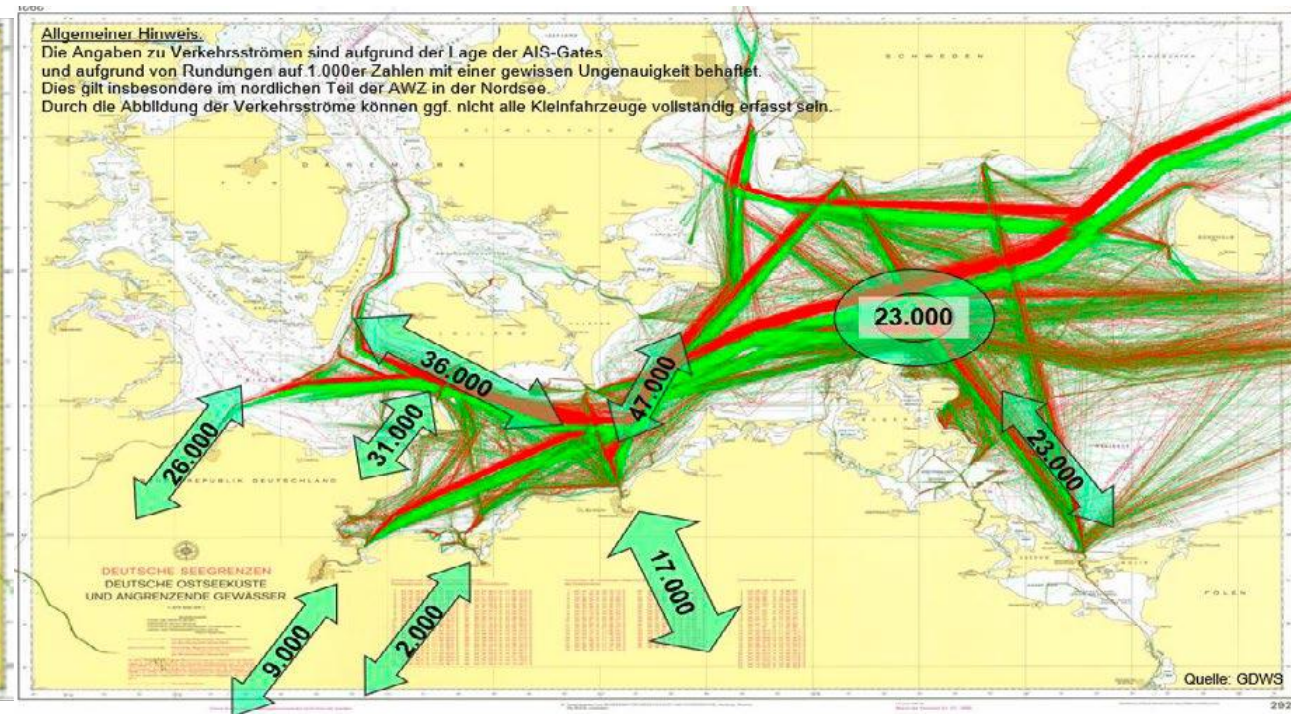
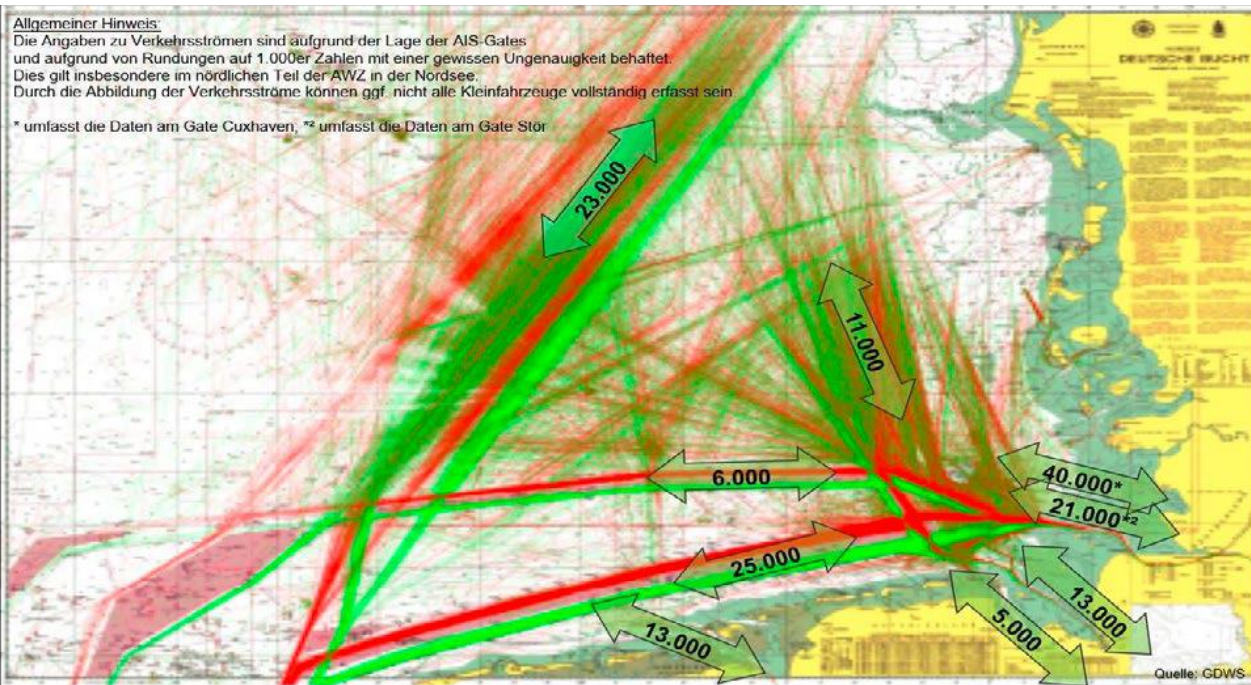
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Traffic in German Waters*

North Sea

Baltic Sea



*Vessels w/ length > 50 m; traffic density measured by AIS gates and rounded to full thousands



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Crisis Response

The Central Command For Maritime Emergencies



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Central Command for Maritime Emergencies

- Joint facility of the Federal Government and the coastal States
- One central institution to...
 - ...respond to maritime emergencies at disaster level (or near to it)
 - ...bundle capabilities of various organisations
 - ...act effectively and fast in case of an emergency
 - ...avoid conflicts of competence



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CCME facts and figures

- Established in 2003
- 50 employees
- HQ in Cuxhaven (near Hamburg) at the North Sea
- > 100 exercises and trainings per year
- 90 emergencies in 20 Years
 - until now min. 2 / max. 9 cases per year
 - approx. 500 days in emergency operation mode



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Organisation



Fire Fighting, Rescue and Medical Response



Maritime Emergencies and Marine Pollution Response



Maritime Emergency Reporting and Assessment Centre



Marine Pollution Response Inshore



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CCME Operation modes

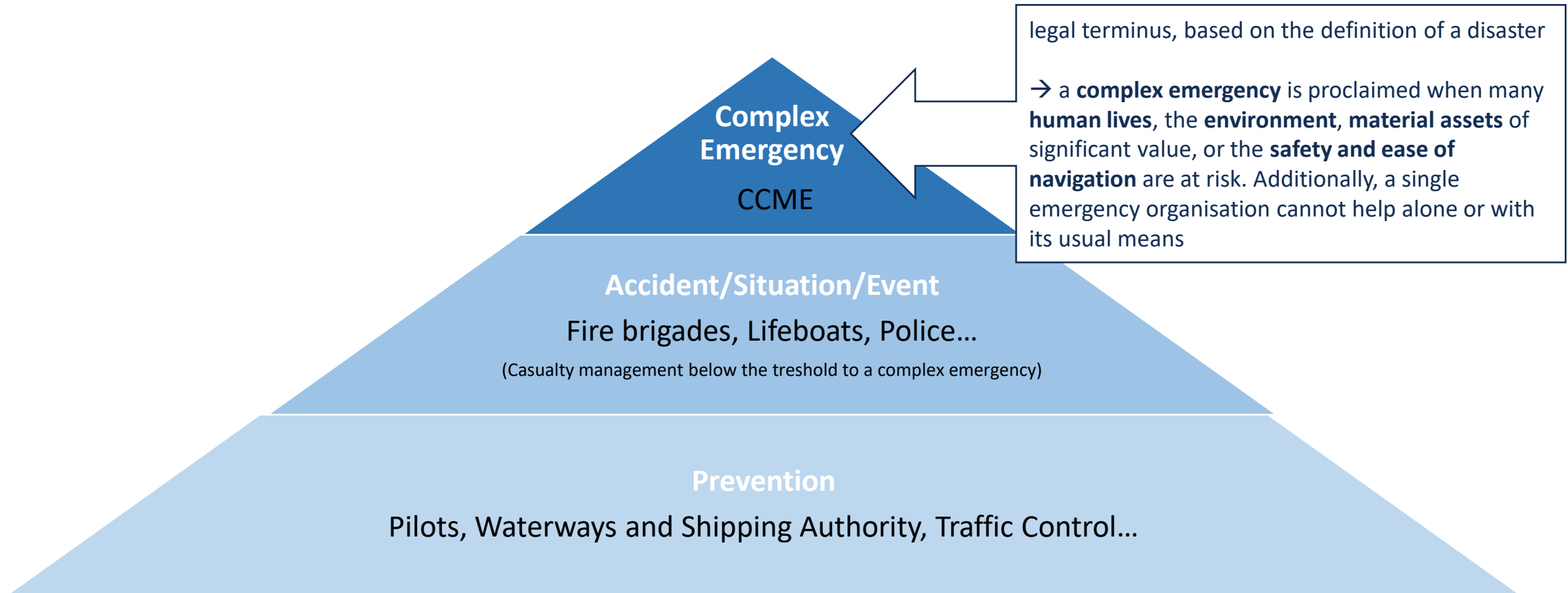
- In the case of an emergency
 - staff mode
 - classic operational organization
- In day-to-day operations
 - competence center
 - conceptual work, preliminary thinking, simulations games, concept development and updating, networking, cooperation, training, lectures...



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Complex Emergency Situation



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Competencies in the case of an emergency

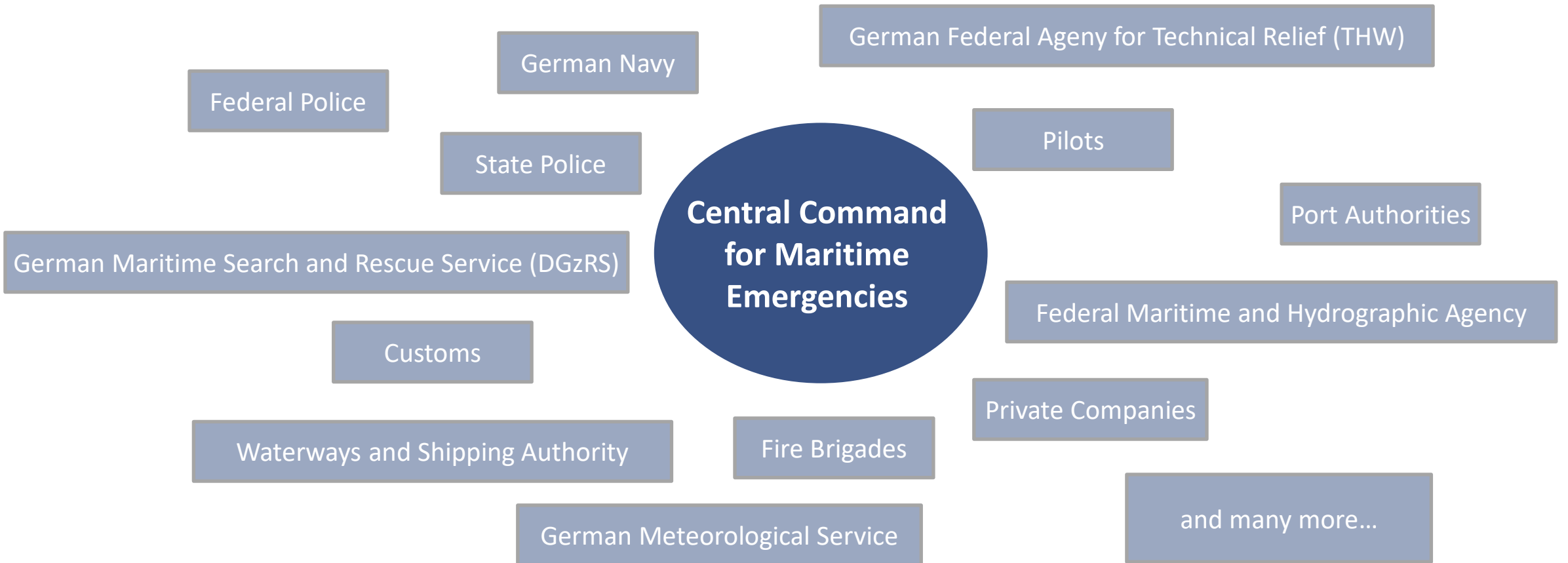
- Overall operational command
- Access to the partners' forces and resources
- Independence from instructions to the greatest possible extent
- Right of the final decision



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CCME relies on its partners



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Case Study

Grounding of the ULCV „CSCL INDIAN OCEAN“ – February 2016



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CSCL INDIAN OCEAN

- L: 339.67 Metres, B: 58.6 Metres, flag: Hong Kong (China)
- Grounded on the River Elbe on February 3rd 2016
- CCME took over mission control on February 4th



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CCME Strategy

- „know“
 - Recording of the ground by sounding vessel
 - aerial views provided by Pollution Control aircraft (DO 228)
- „prepare“
 - pumping down fuel and water ballast (6505 tons)
 - removing ground (especially on starbord side) by dredgers
- „act“
 - 12 tugboats with a total bollard pull of 1085 tons on scene
 - towing attempt on Febuary 9th (2 am) was sucessful



Pilots' various roles and tasks

- Pilots' role in prevention
- Pilots' role during the actual incident
- Pilots' role in planning the final salvage
- Pilots' role in the salvage
- Pilots' role during the accident investigation in his function as a nautical expert



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Pilots' role in prevention

- Two pilots on board for a ship of this size
- Third pilot in the VTS to give advice to the Pilots onboard



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Pilots' role during the actual incident

- Rudder did not react, pilot recommended stop engine – then full astern
- Man the anchor, activate the bow thruster, inform traffic
- Rudder engine was restarted, reacted again
- Decision not to drop the port anchor to avoid tearing up the bottom
- Ship was brought safe aground
- Radar advice supporting VTS



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Pilot's role in planning the final salvage

↓ Meanwhile, tourists are visiting the scene ↓

- CCME in charge for the overall operation
- represented by On-Scene-Coordinator
- CCME convenes a panel of experts, especially salvage experts and tugmasters;
- Pilots also participants of the panel as advisors



Good business with
beer and sausage

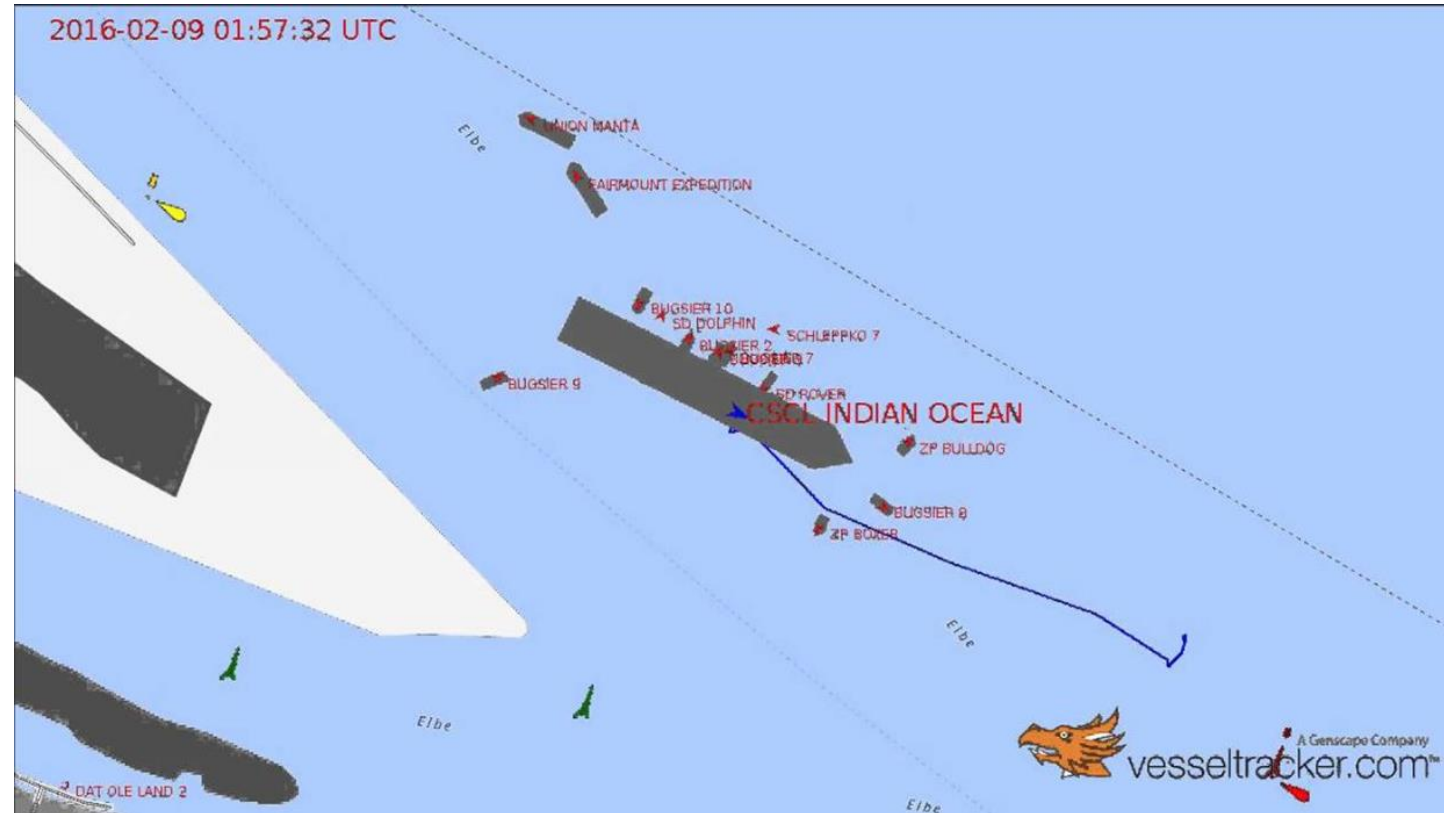


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Pilots' role in the salvage

- CCME in charge for the salvation manoeuvre
- Salvage master coordinating the various tugs
- Pilots taking over the advice to the captain after salvage tugs where let gone



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Pilot's role during the accident investigation in his function as a nautical expert

- MAIB in charge for the investigation
- Pilots involved giving testimonies
- Pilot trainers supporting investigation officers

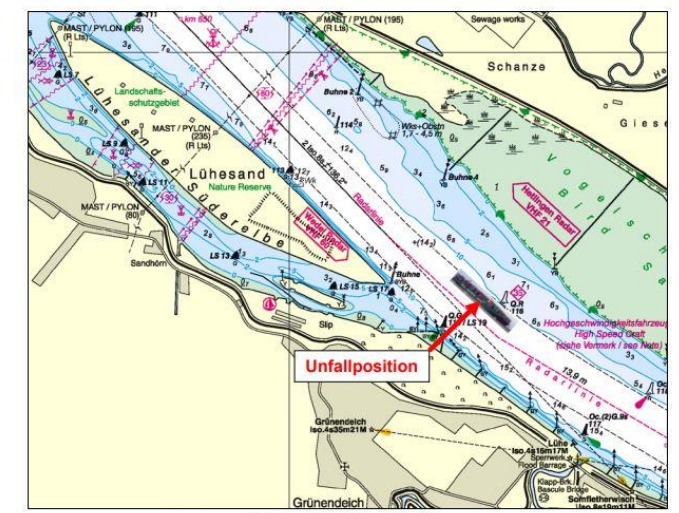


Abbildung 3: Seekarte - detailliert

2.5 Einschaltung der Behörden an Land und Notfallmaßnahmen

Beteiligte Stellen:	Havariekommando Cuxhaven
Eingesetzte Mittel:	Verschiedene Schlepper, Bagger
Ergiffene Maßnahmen:	Mehrere Schleppversuche, Baggerarbeiten
Ergebnis:	Freikommen des Schiffes



Summary

- successful four-day operation
- INDIAN OCEAN was transferred to Hamburg Port
- vessel was found fully functional
- 26 vessels and 1 aircraft
- 65 000 m³ of ground removed (riverbed was restored afterwards)
- Over 6 500 tons of fuel and water ballast pumped down
- good co-operation between various organisations



Thank you for your interest!

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