

# ELECTRIC VEHICLE FIRE SAFETY AT SEA (AND ONCE IN PORT)



**DSM 2023**  
Donsö Shipping Meet  
August 30th, 2023



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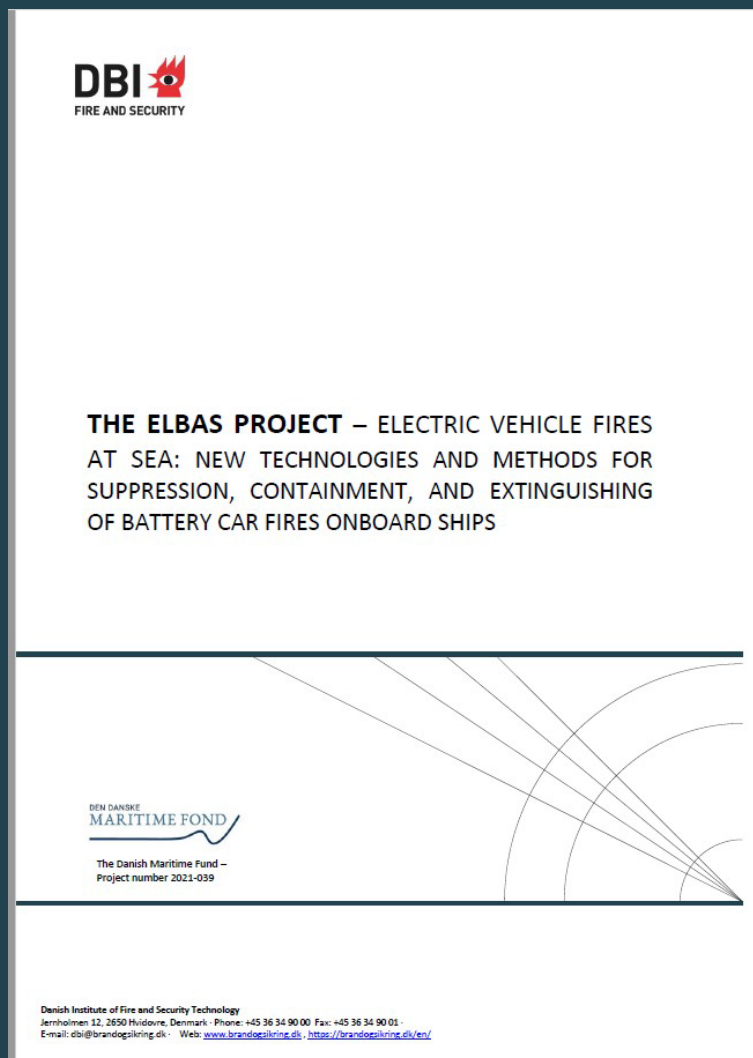


# EV FIRE SAFETY AT SEA (AND ONCE IN PORT)

- Increasing number of EV and APV being transported onboard Ferries
- *'Modern Vehicles'* pose new risks and challenges for Fire Safety
- **Updated Fire Safety Strategies** - review of current safety practices, fire response procedures & preparedness
- Focus on **containment and limitation of fire spread** onboard until additional shore-based emergency services can assist
- **Realistic Fire Response training**
- **Increased Coordination** between shipboard and shoreside emergency response



# ELBAS - (ELECTRIC VEHICLE FIRES AT SEA)



## DBI ELBAS Report

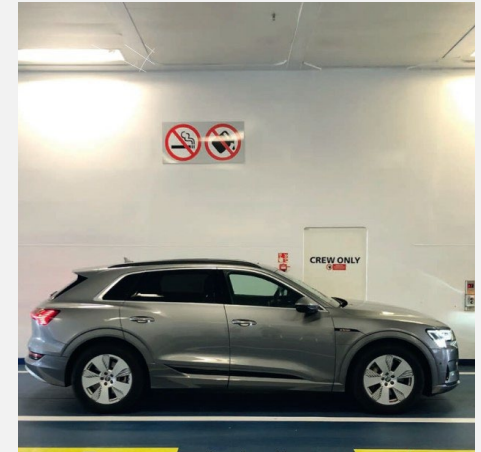


## DBI ELBAS Report - Full Final (rev. 1) –

<https://brandogsikring.dk/en/research-and-development/maritime/elbas/>



**ELBAS** - Focus on identifying practical solutions, which can be implemented in the near term to address increasing number of EVs transported on board ferries.



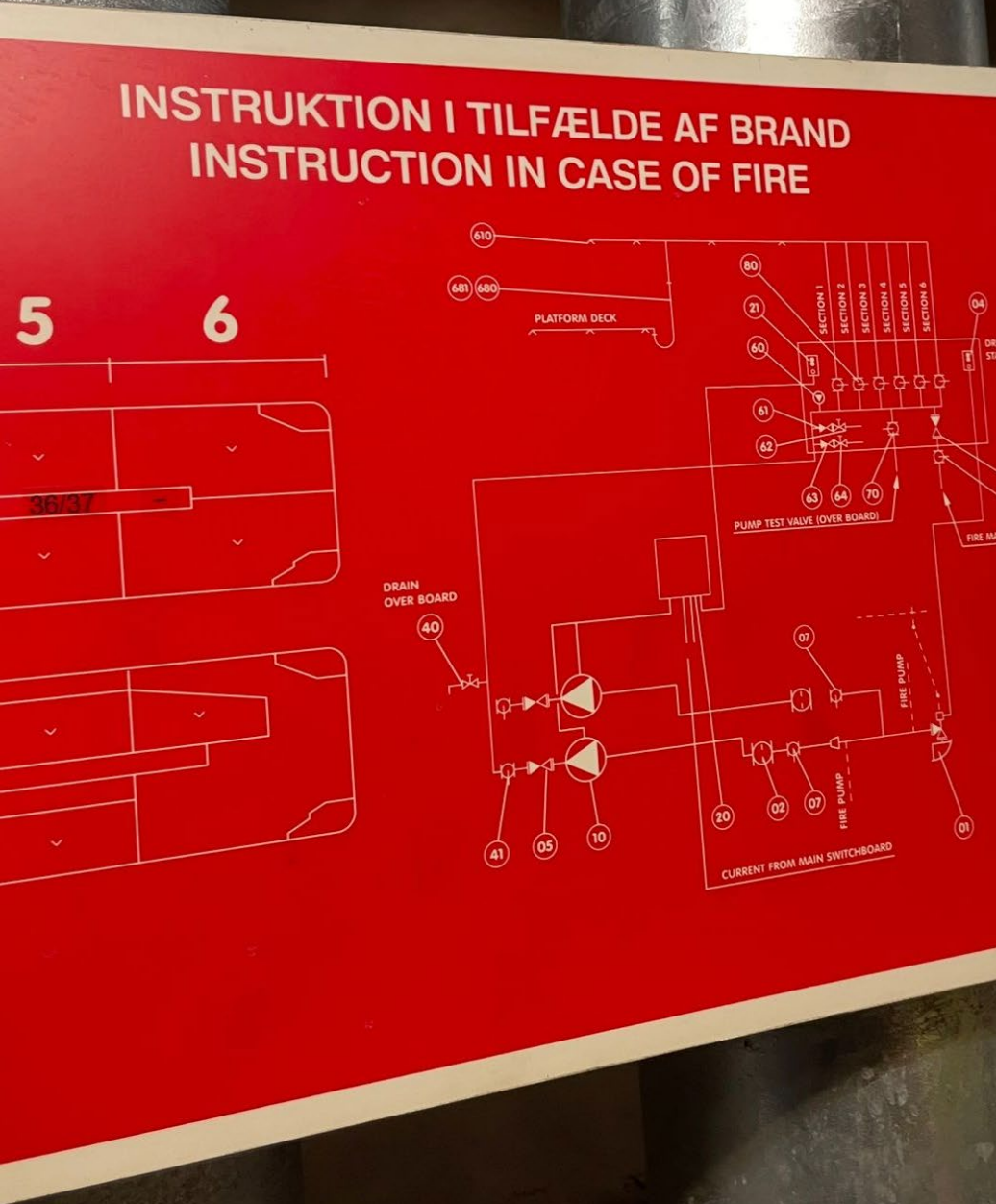
# AREAS OF INVESTIGATION

- Human Elements
- Technological Aspects
- Fire Simulations & Live Fire Tests
- Training, Drills & Joint Exercises



# EV FIRE SAFETY – PRACTICES PROCEDURES & PREPAREDNESS

- Do *current safety procedures* adequately address fire safety risks?
- Is *realistic training* being conducted with the crew?
- Have *new hazards and risks* been identified, and fire safety strategies been revised?
- Are *joint drills and large-scale exercises* regularly preformed together with other external parties and land-based emergency services?



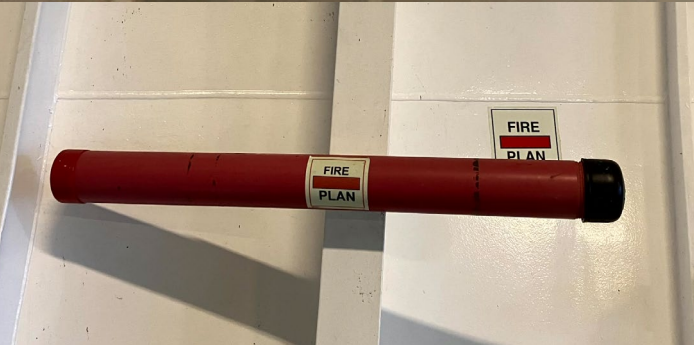
# ELBAS - (ELECTRIC VEHICLE FIRES AT SEA)



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# FIRE DRILLS, TRAINING & JOINT EXERCISES –



**Realistic Training – Live Fire on a Vehicle Deck Setup**

**Joint Exercises – Shipboard & Shore Response**



# FIRE DRILLS & TRAINING



# JOINT EXERCISES



# ELBAS – SUMMARY OF CONCLUSIONS & RECOMENDATIONS

- **No 'One size fits all' solution** - Requires a Combination of Solutions, depending on the individual voyage/ship – active, passive, automatic fixed systems or manual ff tools
- **Requires individual risk assessments** - modification of procedures, No two ships, routes and port facilities, crews, company safety procedures are completely the same
- **Enhanced Safety Training for fire on vehicle decks** - with a focus on EV or 'modern' cars, realistic training set-up including live fire
- **Increased collaboration with Shore-based Emergency Services** – incl. joint exercises, knowledge sharing & incident response planning



# EV FIRE SAFETY AT SEA



THANK YOU  
FOR YOUR  
ATTENTION

QUESTIONS ?

FOR MORE INFORMATION,  
PLEASE SCAN



## Contact



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**DBI FIRE AND SECURITY**

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