



**ITS, KNKT and SAFEMODE Consortium**  
cordially **invite you** to the

# SAFEMODE SYMPOSIUM

24 OCTOBER 2022

**GRAND MERCURE KEMAYORAN  
JAKARTA**

**HUMAN  
FACTORS  
IN MARITIME  
SAFETY**



**SAFEMODE**



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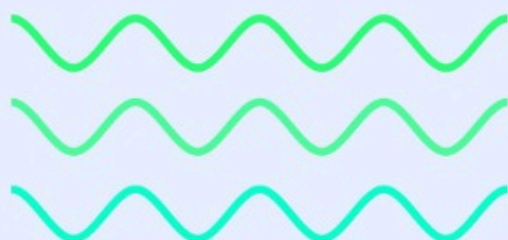
# **SAFEMODE**

## TRAINING+WORKSHOP

25 OCTOBER 2022

**GRAND MERCURE KEMAYORAN  
JAKARTA**

**HUMAN  
FACTORS  
IN MARITIME  
SAFETY**



**SAFEMODE**

# SAFEMODE SYMPOSIUM

Jakarta, 24-25 October 2022



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N°814961.

# 1. BACKGROUND

## Brief portrait of Indonesia's maritime safety

Connecting 3,000 populated islands out of its 17,000 islands in total, a fleet of 21,000 vessels of various sizes show the importance of marine transportation for Indonesia. Shipping is the workbone for the economy. In the last ten years, maritime infrastructure development has been boosted. It has led to an increase in transport activities and trade. The downside of these developments is, unfortunately, the number of ship accidents remains a huge concern.

Fire, capsizing/ sinking and collision are dominating types of accidents. The finding shows that 77% of accidents contributed by the control or oversight of ship operations, which are in turn highly related to the human factors issues. Accidents and incidents reveal a pattern. If we do not learn the lessons from an incident, it will likely happen again.

## Safemode research project

Safemode is a three-year research project conducted by a consortium from the whole safety value chain. Manufacturers, service providers, regulators, academia and small-medium enterprises have been collaborating to integrate Human Factors into safety and deliver safer transport systems. The main aim of the project is to promote safety learning culture for the shipping industry.

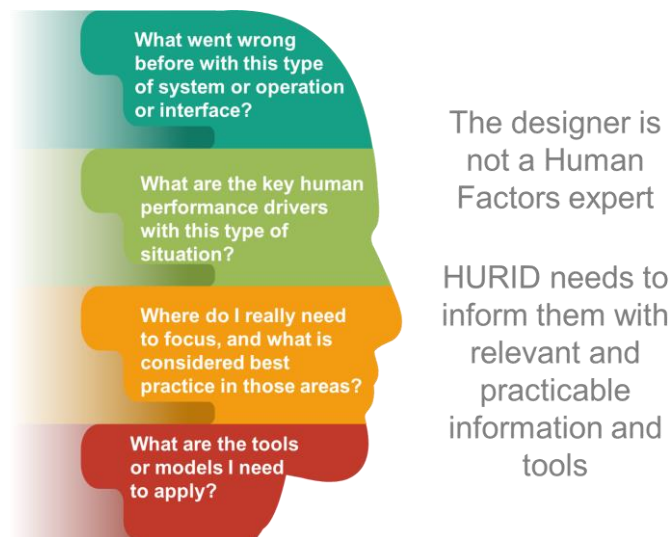
A novel Human Risk Informed Design (HURID) framework has been developed in order to identify, collect and assess data for Human Factors in a systemic way. HURID offers a toolkit for designers and risk assessors, enabling them to take human factors risk-based considerations when designing transport systems and operations. This ambitious project strengthens synergies between the aviation and maritime transport sectors in order to create shared methodologies for capturing Human Factors.

## HURID

HURID is a risk-informed framework meant to support Human Factors analysis in design and operations. Its goal is to provide tools for designers and risk assessors to use daily for addressing gaps in current design and operational processes, as far as the consideration of HF risks is concerned.

HURID adopts a multi-levelled approach, focusing on specific design, operational or system-wide issues. It ensures that all the tools and guidance and solutions are linked together, to inform all the phases of design and operations with human risk-based considerations. Thus, whenever real-world examples or data are needed, the Human Assurance Toolkit linked with the SHIELD database.

HURID include guidance and tools to address typical challenges faced by system/operations assessors, and regulators, answering questions as addressed in the following figure



## SHIELD

SHIELD (Safety Human Incident & Error Learning Database) is a means to improve Safety Learning, and to prevent incidents repeating and turning into accidents. To do this, a taxonomy has been developed. A taxonomy is a set of terms that are precise, unambiguous and meaningful.

The SHIELD taxonomy helps understanding: “How could this have happened?”. It enables learning: “How can we prevent from happening again?”. The SHIELDdatabase supports safety management: “What are similar cases? How often does it happen? What are the key contributory factors? What are effective mitigating measures?”, And the database supports safe design: “What designs have led to problems? What are effective improvements?”

SHIELD (Safety Human Incident & Error Learning Database) Open Data Repository is a core element of the SAFEMODE project. This database and its taxonomy enables systematic analysis and collection of Human Factors elements in safety occurrences (incidents/accidents) in transportation, especially for aviation and maritime operations. Data queries using SHIELD will provide feedback to system and operation designers, to safety management, and to quantification of human components in safety risk models.

The database is structured according to three levels:

- Occurrence facts, describing facts of the occurrence, such as location, date, injuries, type of vehicle, involved actors, and contextual conditions;
- Occurrence assessment, describing the classification of the severity and the types of human factors that contributed to the occurrence;
- Safety positive actions and learning, describing actions of human operators and/or technical systems that prevented occurrences getting worse (accident prevention) or that limited the consequences of an accident (consequences mitigation), and describing lessons learnt following a safety occurrence, e.g. changes in system design, training or procedures.

The database and taxonomy in SHIELD supports the goal of understanding how Human Factors aspects contribute to safety occurrences. This includes answering questions like what happened, how did it happen, why did it happen, how can it be prevented.

## **SAFEMODE CONSORTIUM**

The Safemode research project started in 2019 is conducted by a consortium lead by Deepblue, Italy, consisting of 34 research partners from countries in Europe and Asia, <https://www.safemodeproject.eu>. The following partners will participate in this dissemination event in Jakarta:

- Deepblue, Italy: <https://dbblue.it>
- University of Strathclyde, Glasgow, UK: <https://www.strath.ac.uk>
- World Maritime University, Malmö, Sweden: <https://www.wmu.se>, and
- ITS, Surabaya, Indonesia: <https://www.its.ac.id>

## **2. OBJECTIVES**

Two activities, namely a symposium and a training session will be organized.

Objectives of Symposium:

- To disseminate the results of the Safemode research and to promote safety learning culture.
- To establish a dialogue, to enhance awareness on the issues of human factors in safety, to the industry, government, academia

Objectives of Training:

- To teach Safemode methodology, learning culture

### 3. VENUE

Hotel Grand Mercure Kemayoran, Jakarta



This hotel is located 5 km from both Ancol Dreamland theme park and Sea World Indonesia, this colorful, upscale hotel on a busy road is 6 km from the National Monument.

Refined, stylish rooms have a modern vibe, and feature Wi-Fi and flat-screen TVs, as well as multimedia connections and minifridges. Upgraded rooms offer city views; suites provide posh living rooms and afternoon tea. Room service is available 24/7.

There's a cosmopolitan lounge, and a polished restaurant offering international dining on a terrace; breakfast is provided for a surcharge. Additional amenities include an outdoor pool and a fitness room. Parking is available.

Check-in time: 14:00

Check-out time: 12:00

Conference room



Training room



# Guided Tour to Port of Tanjung Priok, Jakarta

Start: Grand Mercure Hotel, Jakarta

Transport to Port: Minibuses

Tour: Vessel TBN



## Dinner

Natrabu Minang Restaurant

Date : 24 October 2022 at 07:00 pm

Participants: Safemode Team and organizing committee

Info: <https://natrabu-restaurant.business.site>



## 4. AGENDA

### DAY 1          Dissemination Event

**Monday – 24<sup>th</sup> October, 09:00–15:00**

N.	Schedule	Topic
0	09:00	<b>Welcome (NTSC Chairman)</b>
1	09:10	<b>Keynote Speech (ITS)</b>
2	09:20	Portrait of maritime safety in Indonesia (NTS Chairman)
3	09:40	Project Coordinator, Deepblue, Italy “Overview of the SAFEMODE project: Human Factors in maritime and aviation”
4	10:00	University of Strathclyde, UK “Benefits of using SAFEMODE methods and tools”
5	10:20	World Maritime University, Sweden “Towards a Safety Learning Culture”
6	10:40	<b>Coffee Break</b>
7	11:00	Prof. Eko Budi Djatmiko & Dr. Setyo Nugroho, ITS "Capsize Accident Analysis and Minimizing Human Errors in Ship Loading Operations”
8	11:20	Aleik Nurwahyudi, NTSC "Human Factors in Fire Accidents"
9	11:40	Alif Hastono, Independent Marine Surveyor "Human Factors in Marine Safety - Perspectives of Insurance"
10	12:00	Discussion
11	13:00	Closure
12	13:10	Lunch
13	14:10	Field trip to Tanjung Priok Port
14	17:00	Return to hotel

### **INSTRUCTIONS FOR ONLINE JOINING**

Meeting URL:

Meeting ID:

Password:

## Guided Tour to Port of Tanjung Priok, Jakarta

No.	Time	Aactivity
1	14:00	Heading to Tanjung Priok Port
2	14:30	Presentation & Discussion <ol style="list-style-type: none"><li>1. Overview of Tanjung Priok Port (Harbour Master of Tanjung Priok)</li><li>2. Port safety and pilotage service (PELINDO)</li><li>3. Marine traffic management and control facility (District of Navigation)</li></ol>
3	15:30	Port tour
4	17:30	Return to hotel
5	18:30-21:00	Courtesy dinner at Padang style restaurant

## DAY 2      Training Session

**Tuesday – 25<sup>th</sup> October, 09:00–12:45**

N.	Schedule	Topic
0	09:00	Welcome & roundtable
1	09:30	Introductory session to SAFEMODE training package (World Maritime University, Sweden: María Carrera)
2	09:45	Human Factors and human performance / Key concepts and principles (University of Strathclyde, UK)
3	10:30	Human abilities and limitations (DeepBlue, Italy)
4	11:15	<b>Coffee Break</b>
5	11:40	Human error in its context / Learning from accidents and incidents (World Maritime University, Sweden & University of Strathclyde, UK)
6	12:10	Human Factors policy gaps and recommendations (World Maritime University, Sweden: María Carrera)
7	13:00	<b>Lunch</b>

## DAY 2      Workshops

**Tuesday – 25<sup>th</sup> October, 14:30–17:00**

N.	Schedule	Topic
0	14:30	Workshop 1- Translating Incidents into Safety Lessons - SHIELD (University of Strathclyde, UK)
1	15:50	<b>Coffee Break</b>
2	16:10	Workshop 2- eGuidance for the Application of Human Factors tools – the HF Pathfinder (DeepBlue, Italy)
3	17:00	<b>Wrap Up</b>

# **PARTICIPANTS**

## **Symposium**

Venue: Grand Mercure Hotel, Jakarta

Mode: hybrid

- Offline event, and
- Online (zoom)

Attendance: 70 pax

- Ministry of Transportation, Coord. Ministry of Maritime Affairs & Investment
- NTSC
- Merchant Shipping & Ferry Shipping Association
- Marine insurance companies
- Classification societies
- Universities & research institutes
- Maritime Court
- Navy

## **Training**

Tuesday, 25 Oct 2022

Venue: Grand Mercure Hotel, Jakarta

Mode: offline

Participants: max 20 persons

- Ministry of Transportation, Coord. Ministry of Maritime Affairs & Investment
- NTSC
- Merchant Shipping & Ferry Shipping Association
- Marine insurance companies
- Classification societies
- Universities & research institutes
- Navy

## 5. ORGANIZING COMMITTEE

The Safemode Symposium is jointly organized by Institut Teknologi Sepuluh Nopember (ITS) and Komite Nasional Keselamatan Transportasi (KNKT)/ NTSC

### **Institut Teknologi Sepuluh Nopember (ITS)**

Kampus ITS

Sukolilo, Surabaya

website: [www.its.ac.id](http://www.its.ac.id)

Contacts:

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- Eka Wahyu Ardhi ([ekawahyu@seatrans.its.ac.id](mailto:ekawahyu@seatrans.its.ac.id)), +62-81357 423279

### **Komite Nasional Keselamatan Transportasi (KNKT) / National Transportation Safety Committte (NTSC)**

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