

2nd Workshop on Marine casualty Investigation

European Marine Casualty Information Platform – EMCIP

Database project

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2005-11-15



EMCIP

Database

Support investigation

Publications

News

Forum

Links

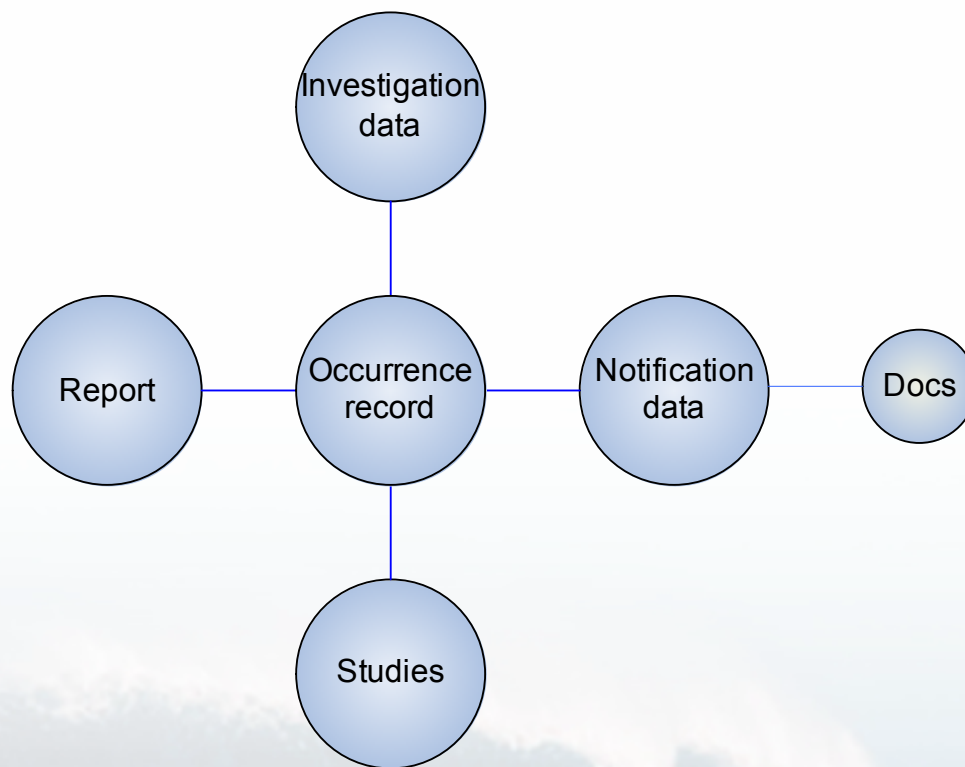
EMCIP - Database

Nature of the casualty

Severity level

Type of ship

Database information



EMCIP – Support to investigation

Tutorial

Examples

Forms

Contact list

EMCIP - Publications

European legislation

International legislation

Member States reports

Non-EU reports

Other publications

EMCIP - News

EMSA/Commission

Member States

International

Safety issues

EMCIP – Forum/links

Forum for discussion

Links

Database pillars

Taxonomy

Definitions

Data collection method

Taxonomy

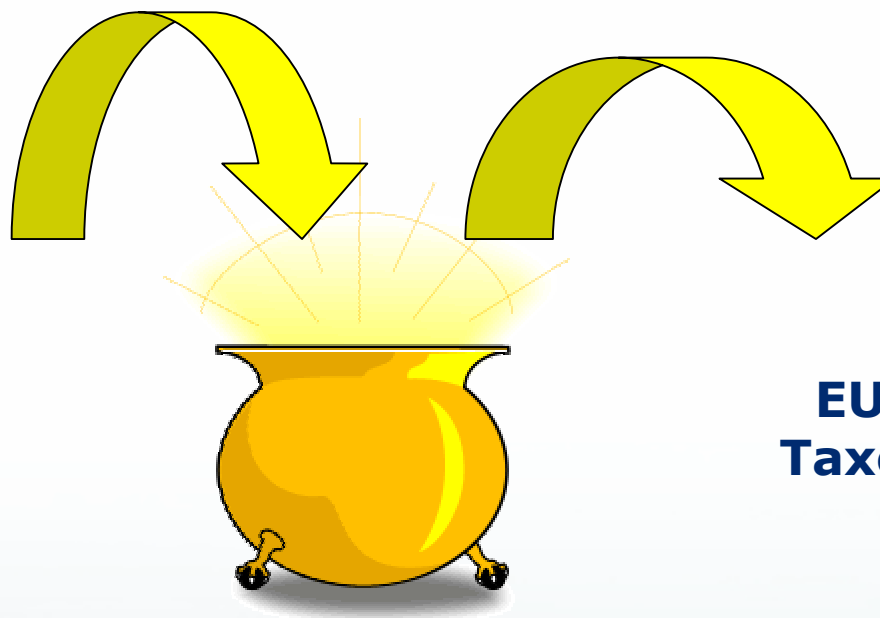
European projects

Other taxonomies

Studies

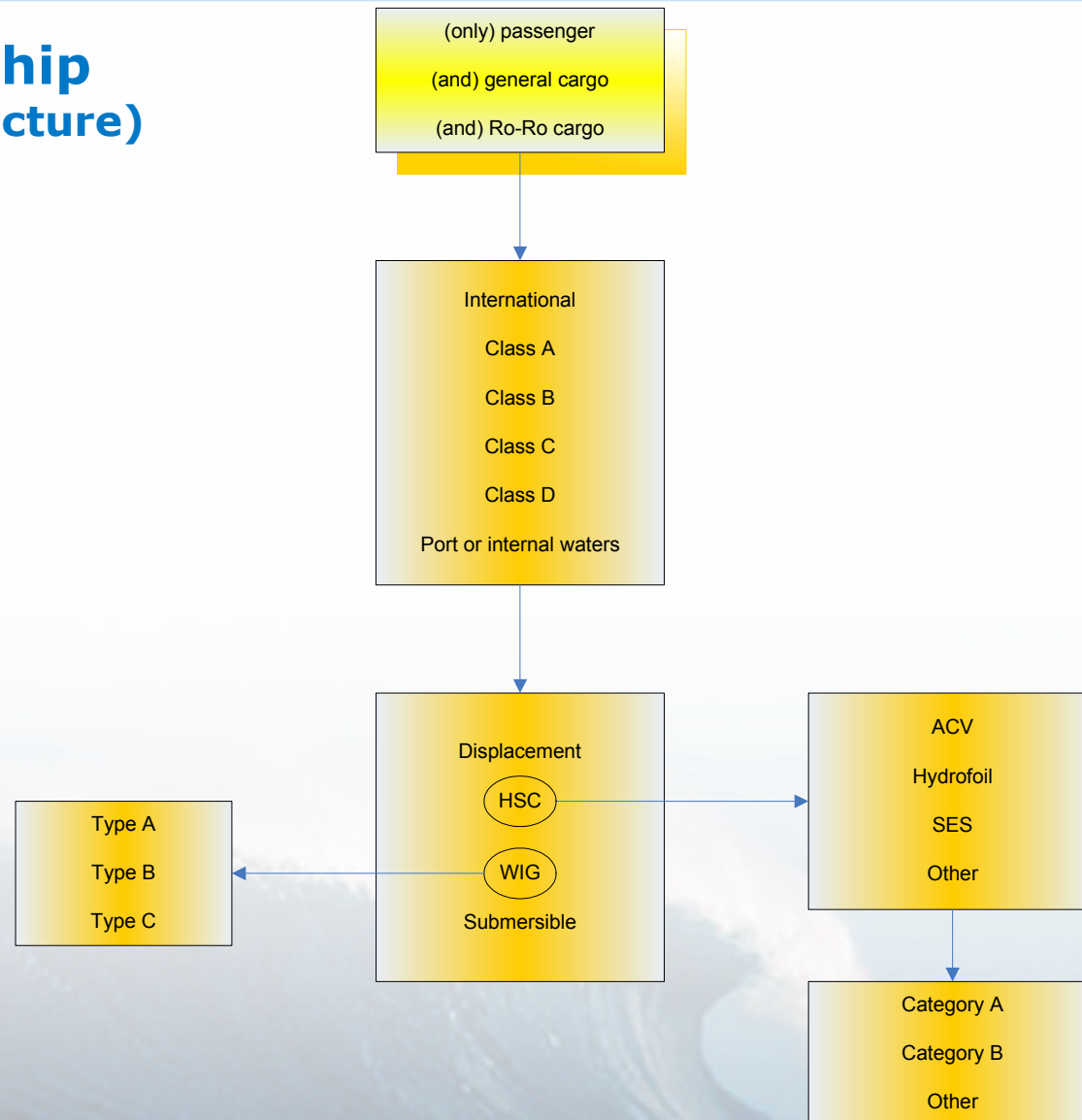
MS views

EMSA views



**EU MAR
Taxonomy**

Passenger ship (hierarchical structure)



Database - Definitions



EU MAR
Taxonomy

***II – Occupational accident** – accident or event to people on board other than a marine casualty*

***Very serious occupational accident** means an occupational accident that has resulted in the death of person within 30 days and as a consequence of the accident.*

***Serious occupational accident** means an occupational accident that has resulted in an injury to a person causing incapacitation for more than 72 hours commencing within seven days from the date of injury or who has been hospitalized for a period of more than 24 hours.*

***Less serious occupational accident** means an occupational accident that has resulted in an injury to a person resulting in incapacitation for up to 72 hours commencing within seven days from the date of injury.*

***Occupational incident** means an occupational accident by which a person was imperilled.*

Fields attributes

N.º	Fields	Input	Tab. Nr.	Type	Format	Size	Units	Range	Mand.	Confid.	Check	Comments

Notes:

Input – manually (M) or predefined table/list (L).(Lm) if it is a multichoice.

Tab. nr. – list identification, nr. or name.

Type – integer (I), real (R), Boolean (B), text (Tx), date (D), time (t), degree (G).

Format – latitude (DD MM.0), longitude (DDD MM.0), time (UTC) and date (YYYY) or (YY-MM-DD) formats, etc.

Size – number of characters; real type in the format X.Y (X, total nr. of characters and Y, nr. of decimals).

Unit – unit IS, unless those common in maritime sector (ex.: degree, ton, knot instead of rad, N, m/s).

Range – if there's a maximum and/or minimum.

Mand. – if it is mandatory - (y)

Confid. – if it is confidential - (y), which means that only the "4 - substantially interested" MS could have access to consult.

Check – if it should be checked with other field(s). Between (Nº)

Comments – explanations, notes, special requirement

Database – data collection method

Basic data

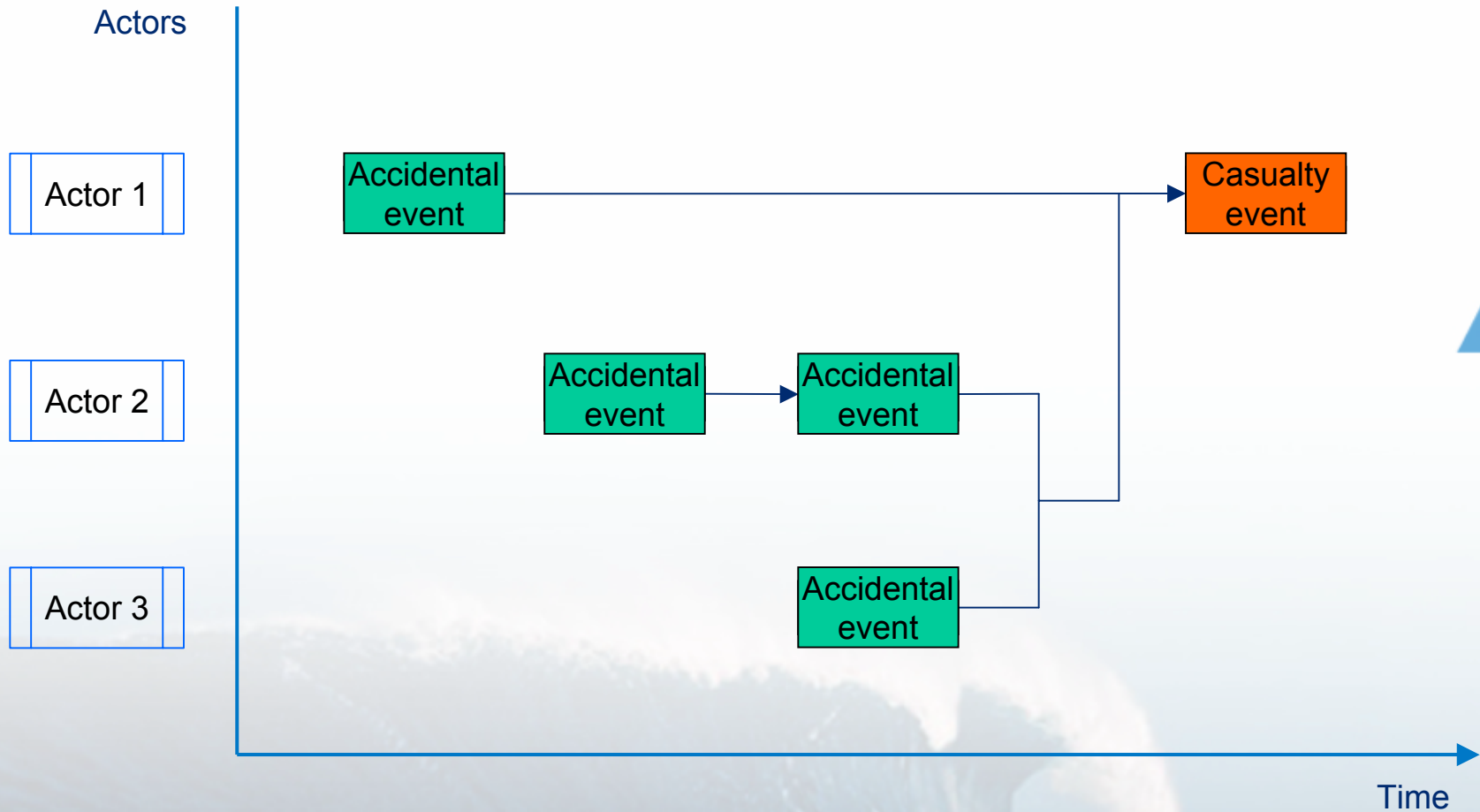
Actors involvement

Sequence of events

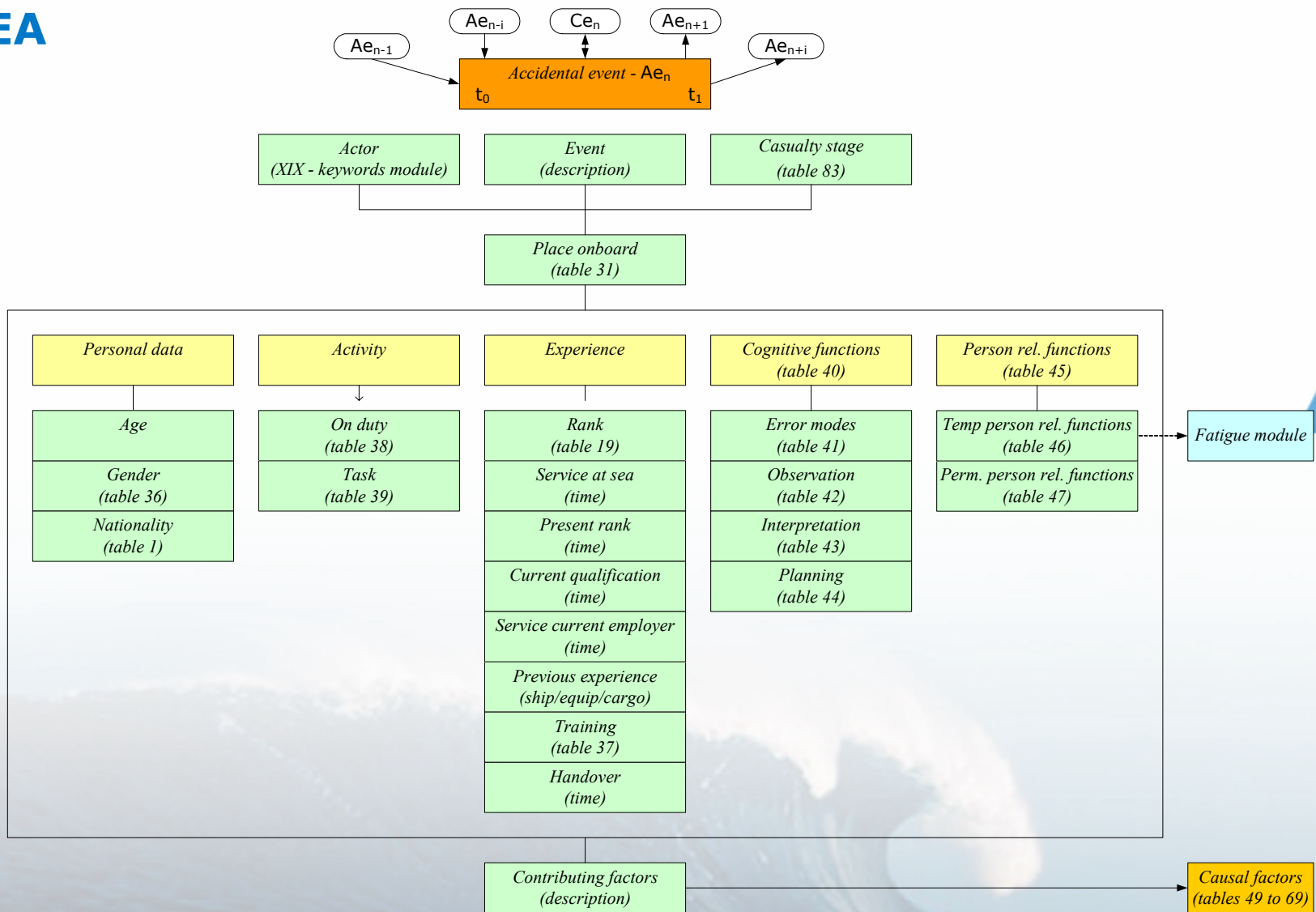
Accidental event context

Safety recommendations

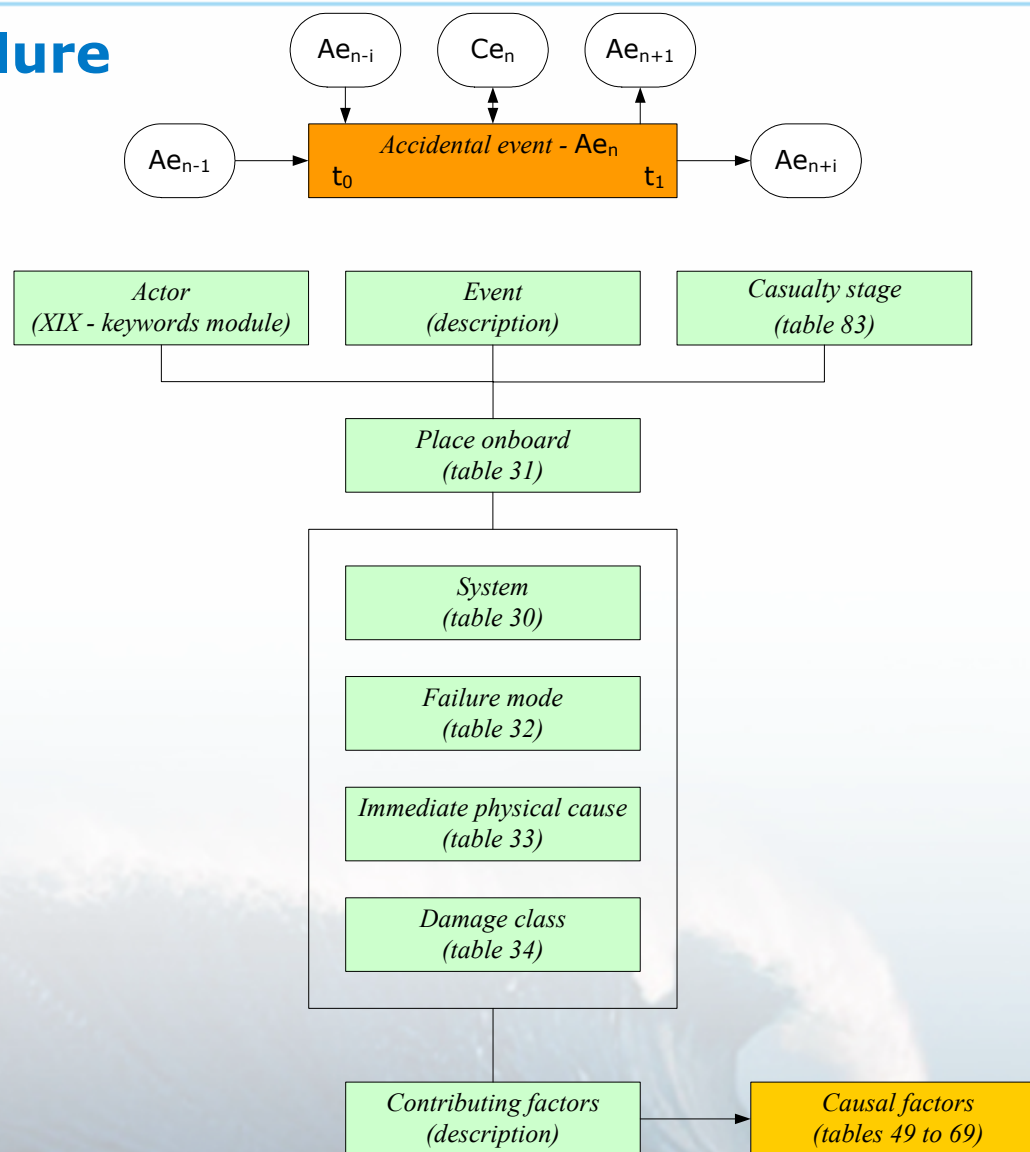
Event sequence



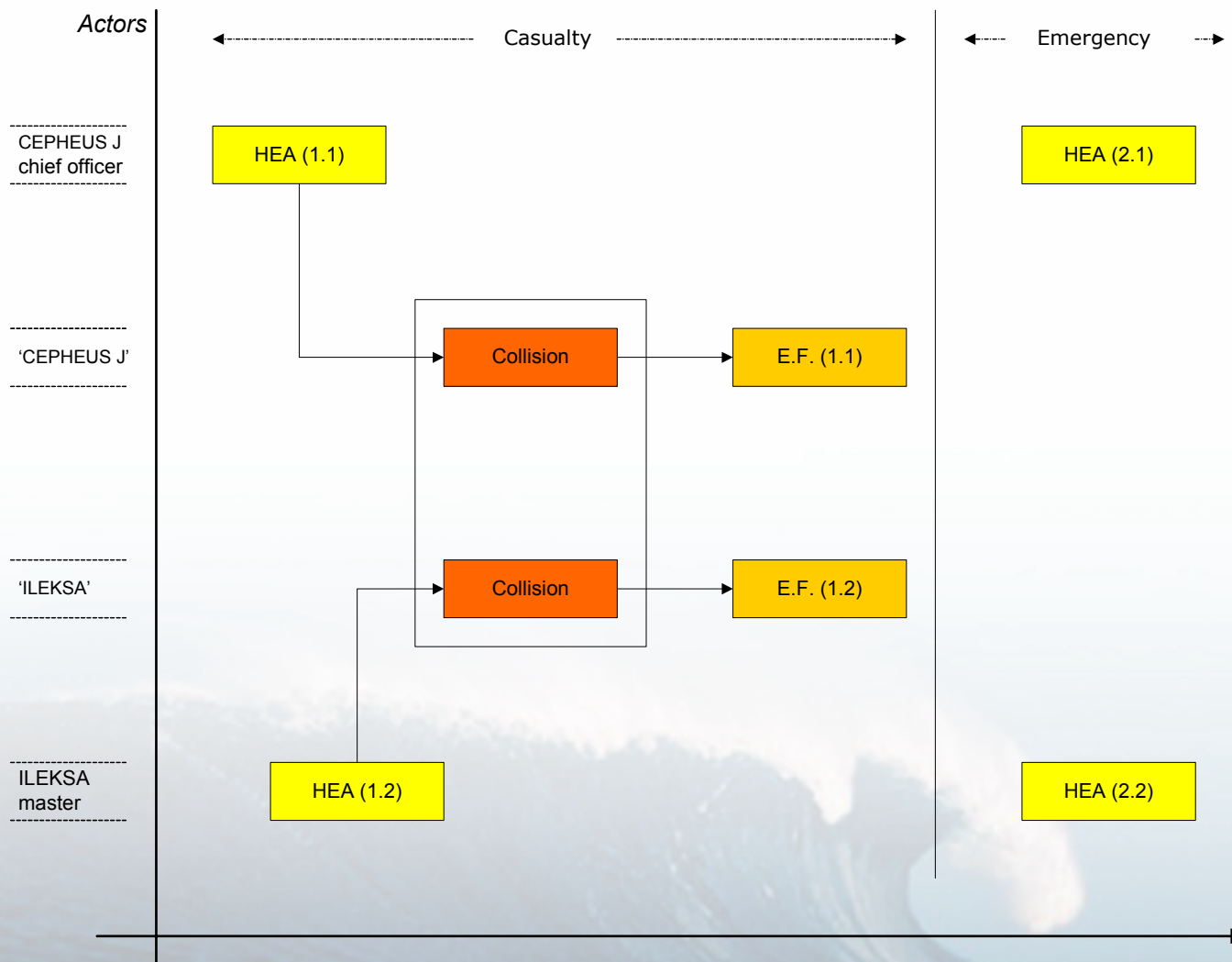
HEA



Equipment failure



Collision – simplified sequence of events



Database Outcome

Statistics

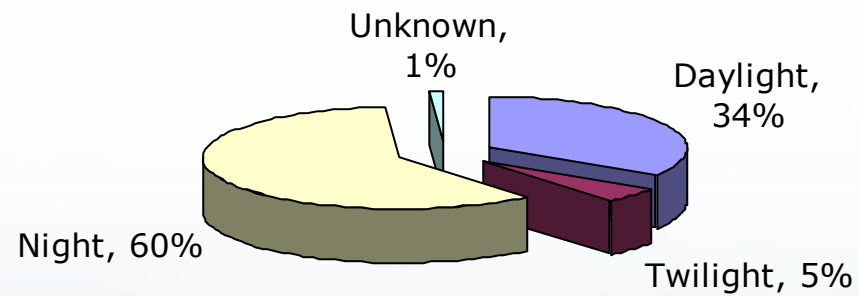
Risk analysis

Lessons learned

Published reports

Collision – natural light

Natural light
(One person on the bridge or nobody)



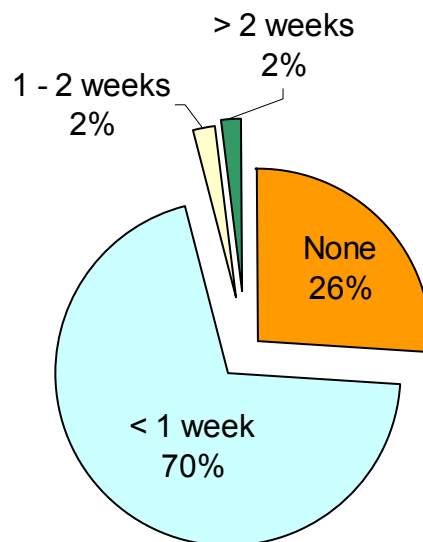
Ship damage or loss frequency

Casualties frequency involving passengers ships (per vessel year) Inadequate manning				
Casualty event		Severity		
		Serious	Very serious	All
Collision		3.86E-0.3	3.02E-0.4	4.16E-0.3
Grounding		9.18E-0.3	0	9.18E-0.3
Contact		3.17E-0.3	0	3.17E-0.3
Total		1.62E-0.2	3.02E-0.4	1.65E-0.2

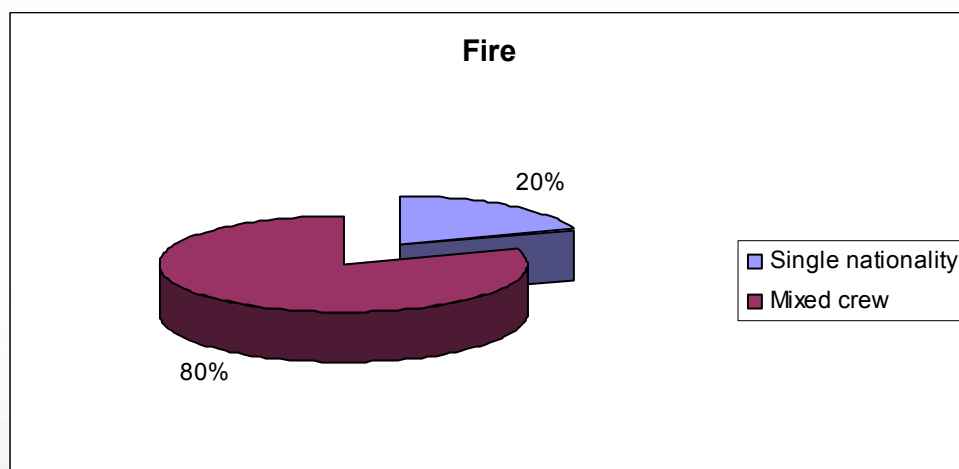
Note: example.

Handover periods

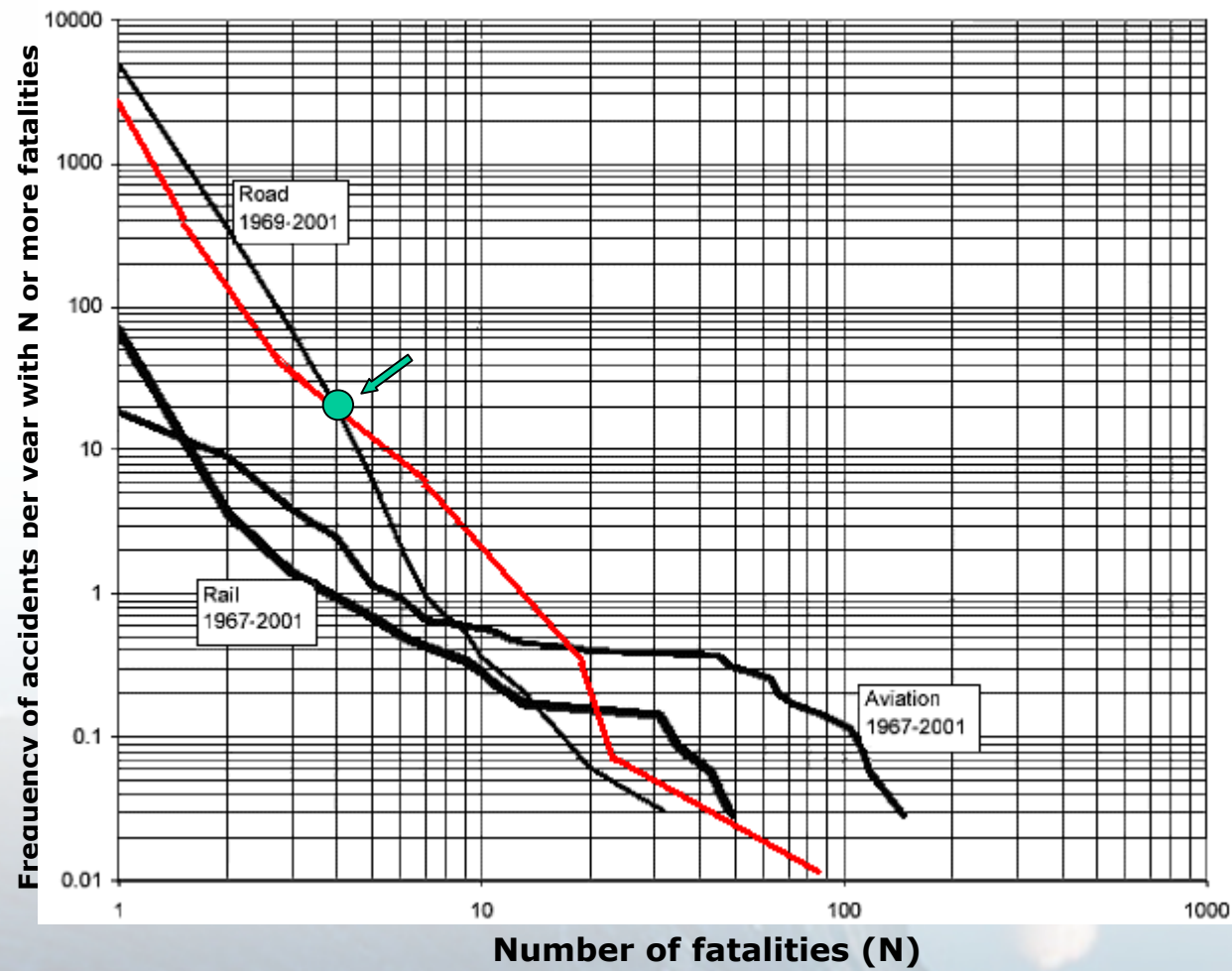
Capsizing - Officers involvement



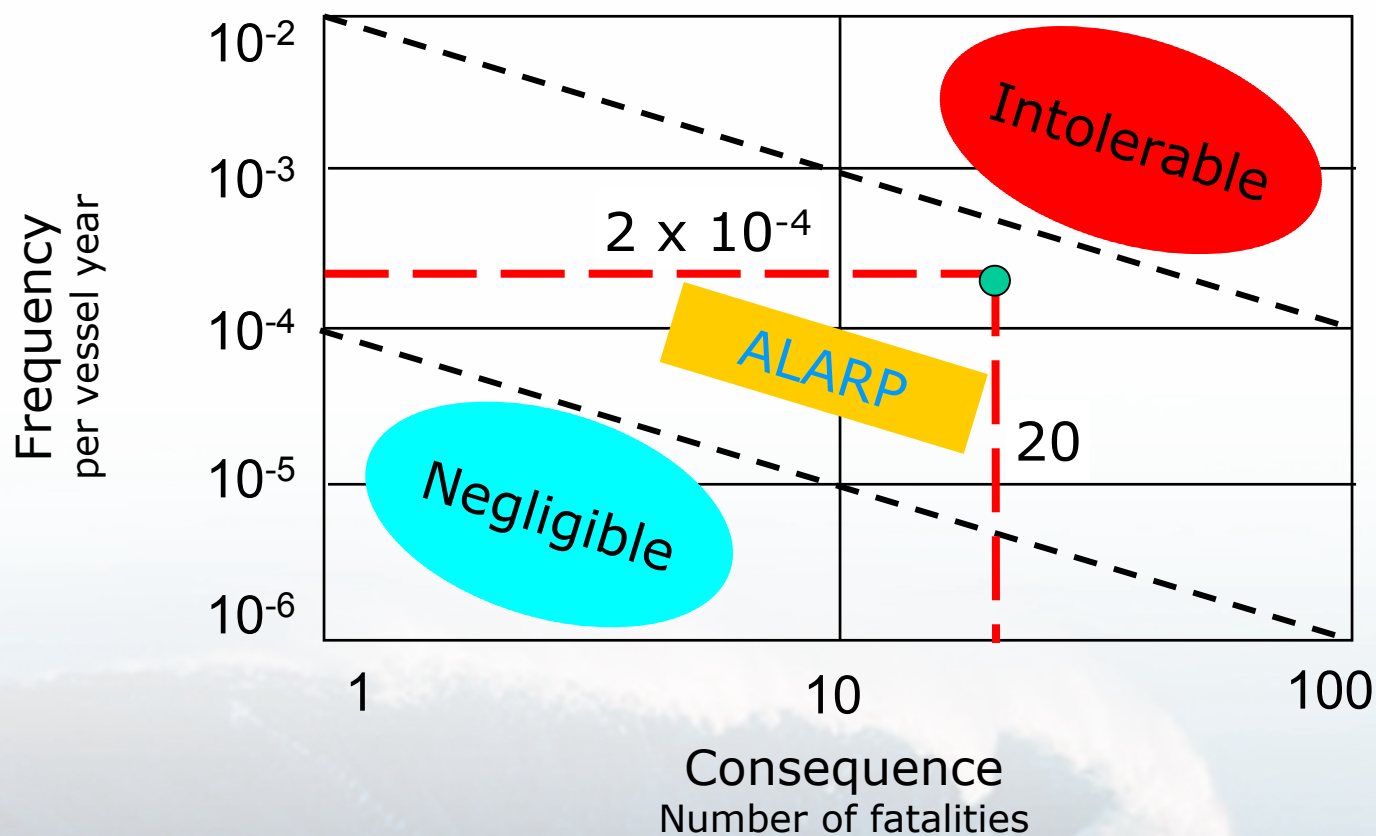
Nationality of full crew



FN curves

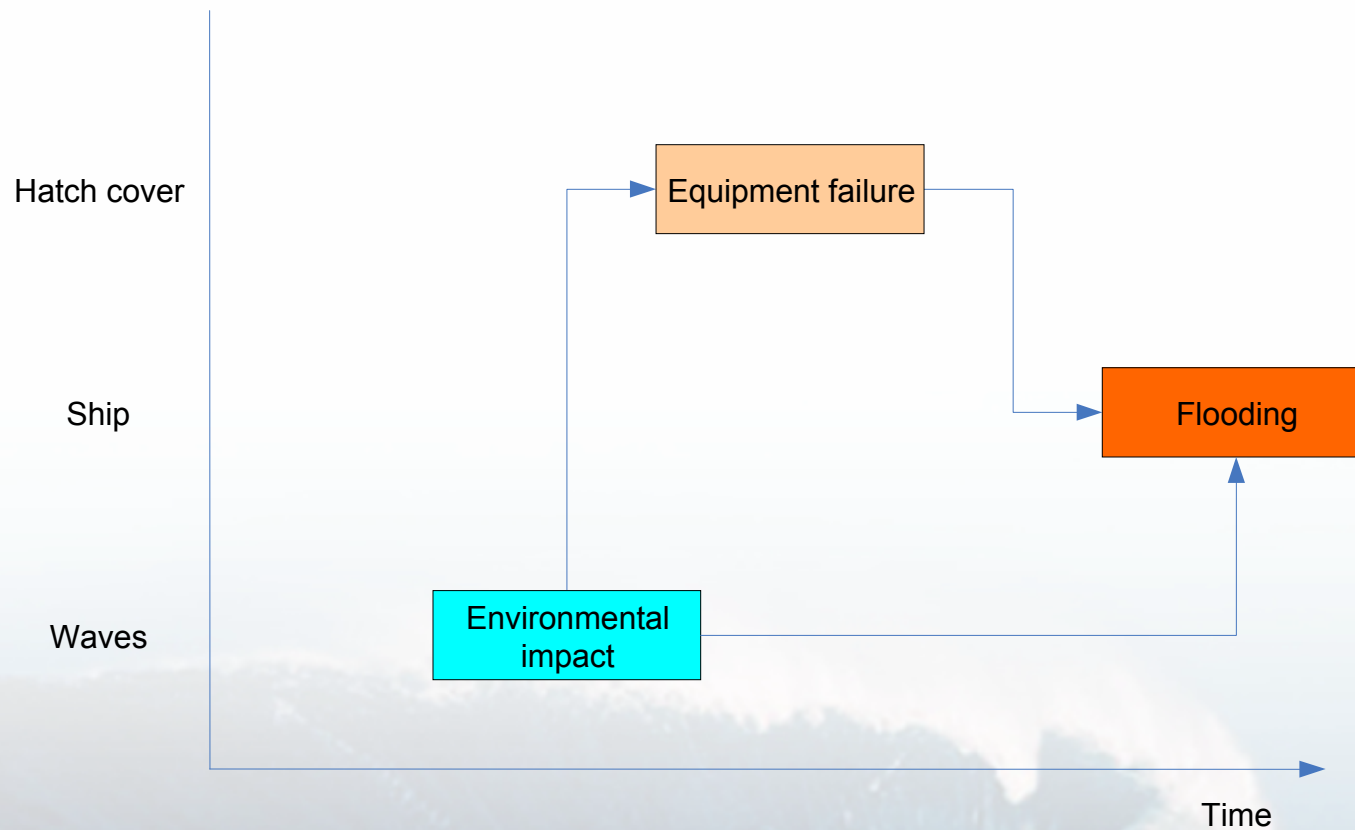


ALARP

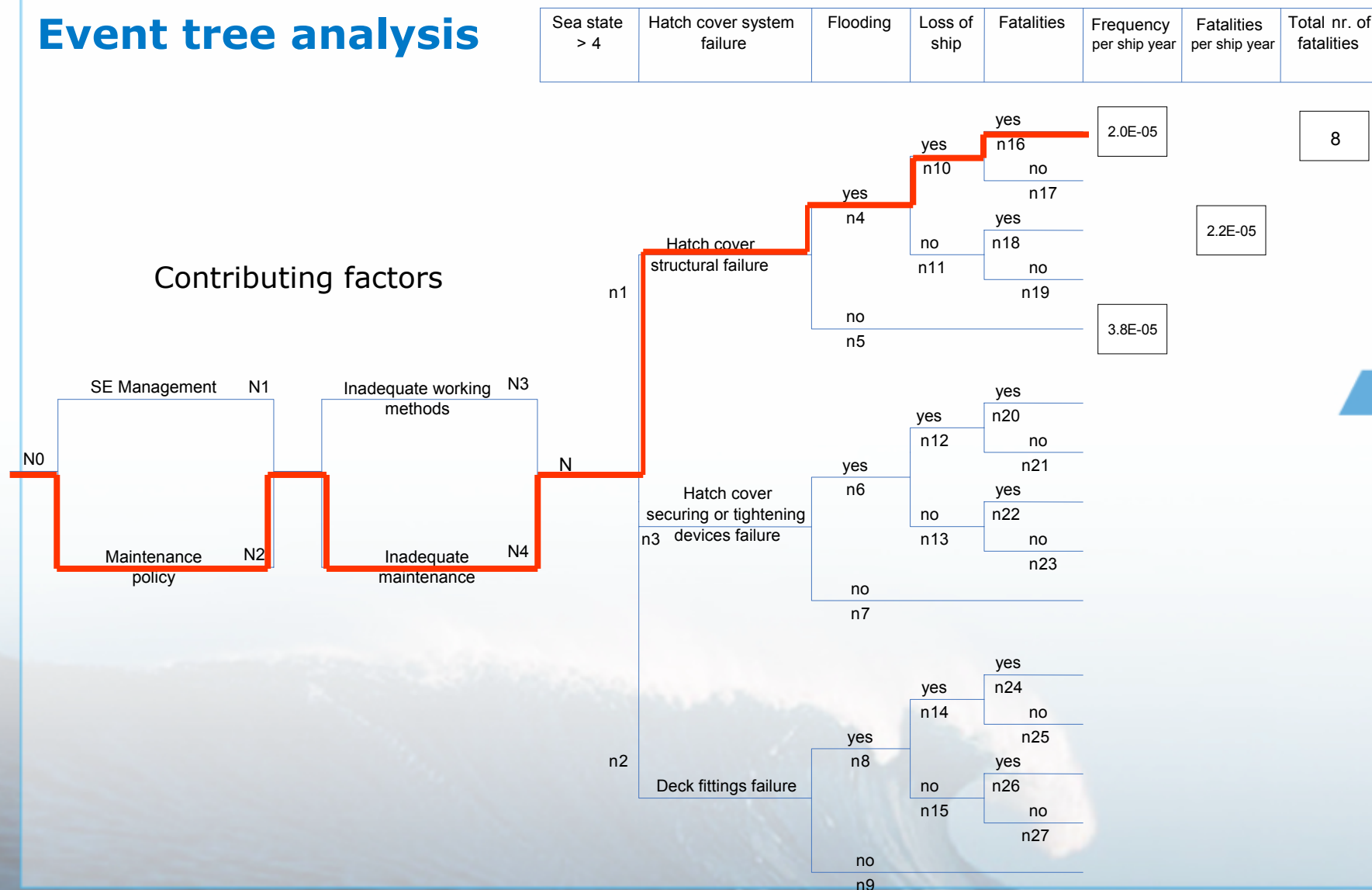


● Risk = 0.004 fatalities per vessel year

Sequence of events



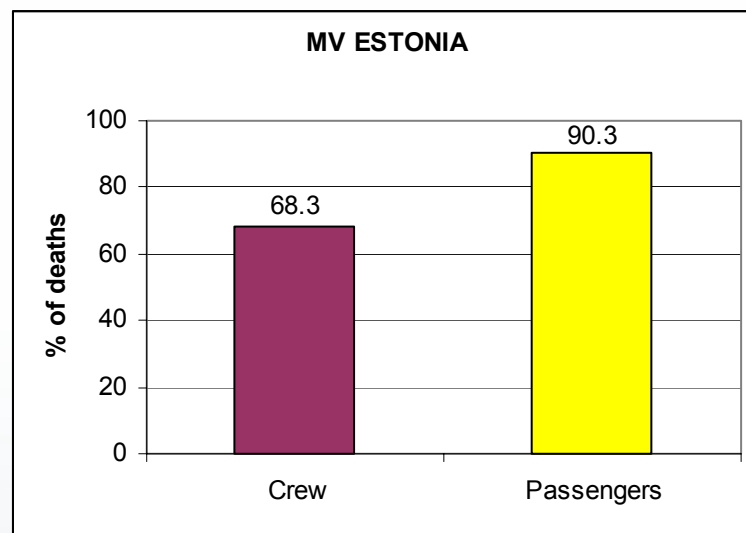
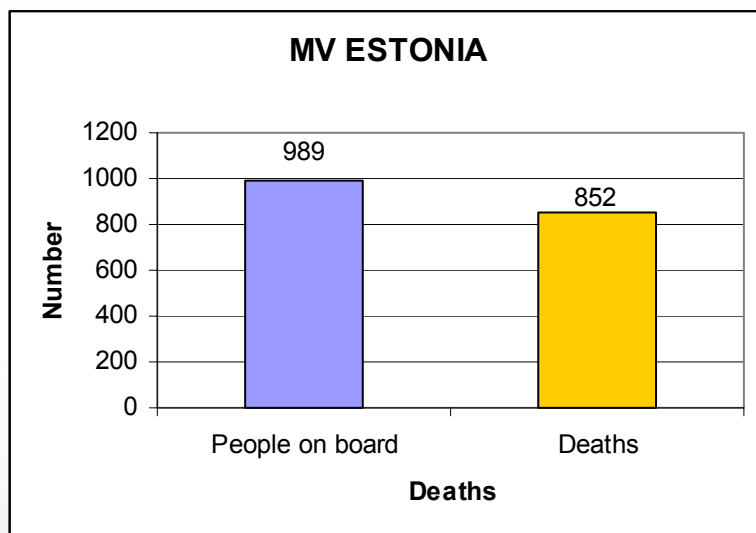
Event tree analysis



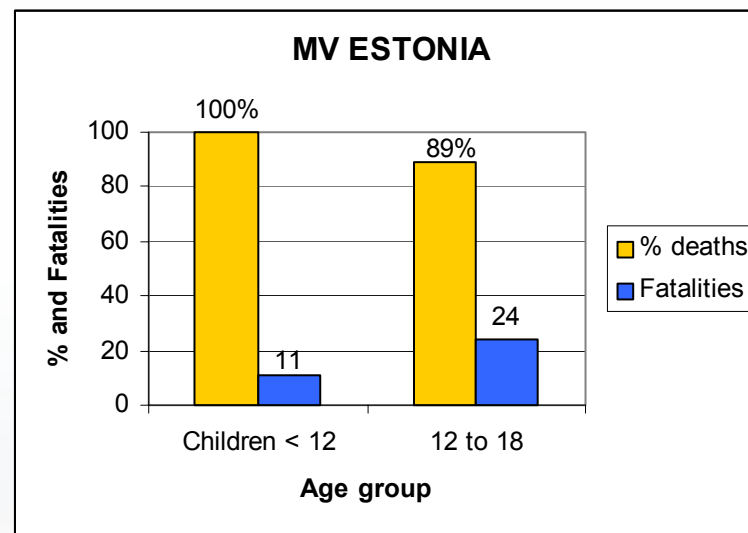
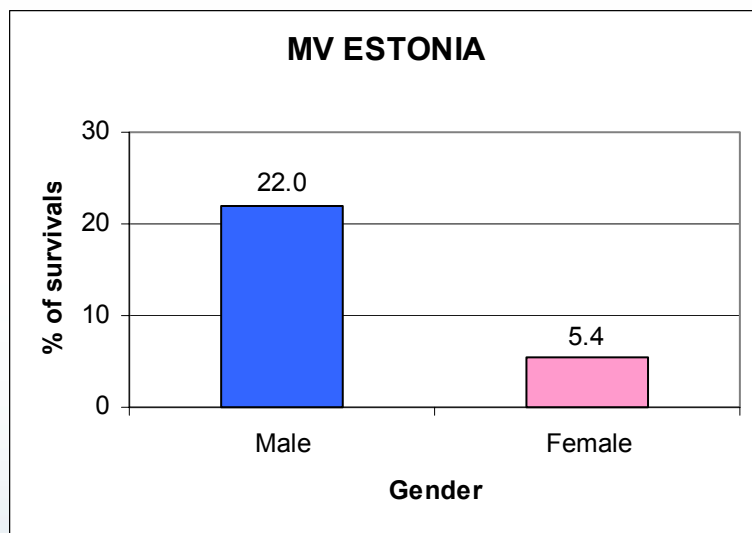
Consequences - loss matrix

Ship Casualty Loss (euro per ship year)					
Casualty	Ship casualty cost	Environmental damage	Risk to life	Risk of injuries	Total cost
Collision Contact Capsizing Hull failure etc.					
Total					

Consequences - Casualty profile



Casualty profile

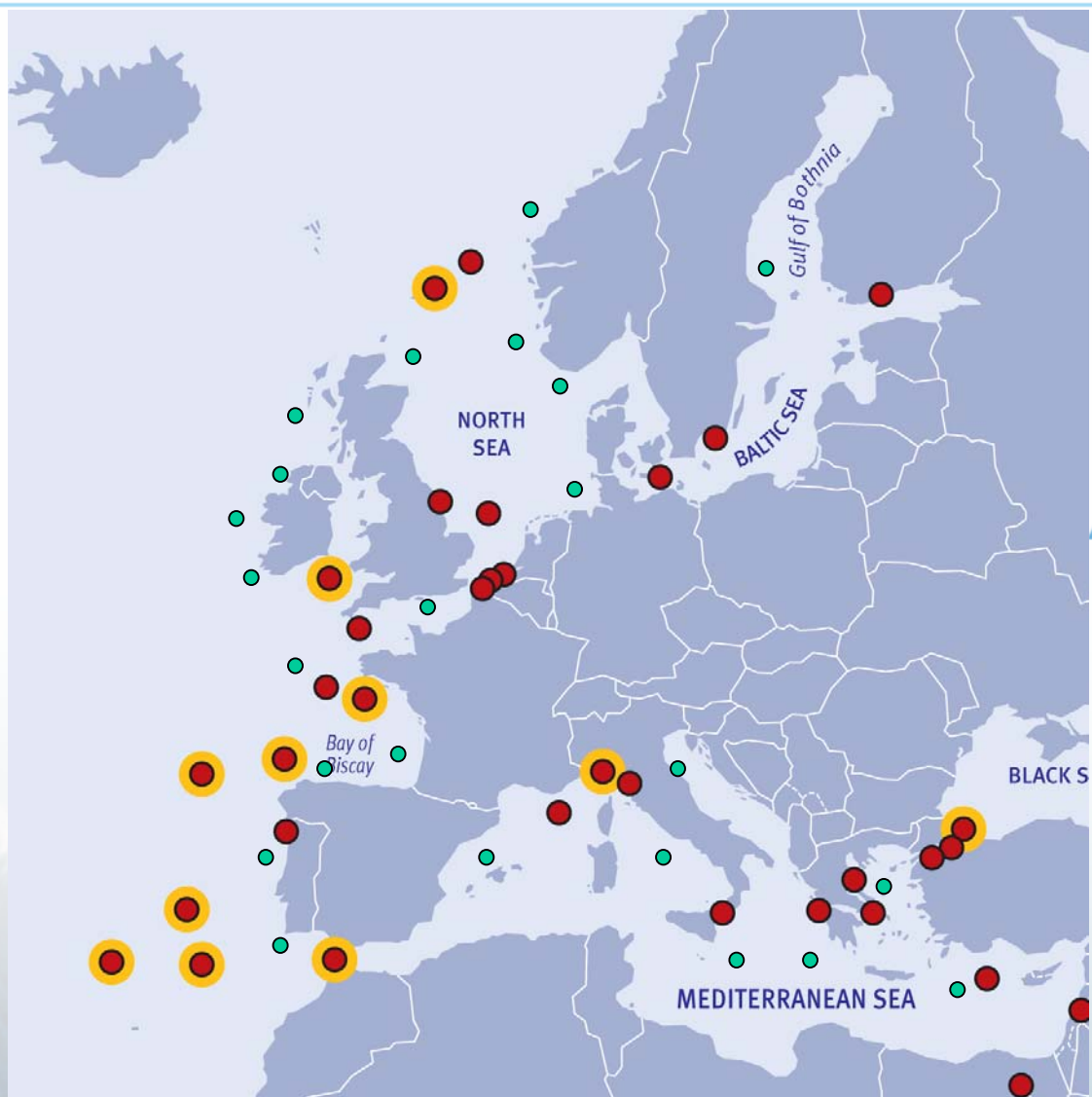


Spill size

$700\text{t} \leq \bullet < 10\,000\text{t}$

$\bullet \geq 10\,000\text{t}$

$50\text{t} \leq \bullet < 700\text{t}$



Hypothetical example.

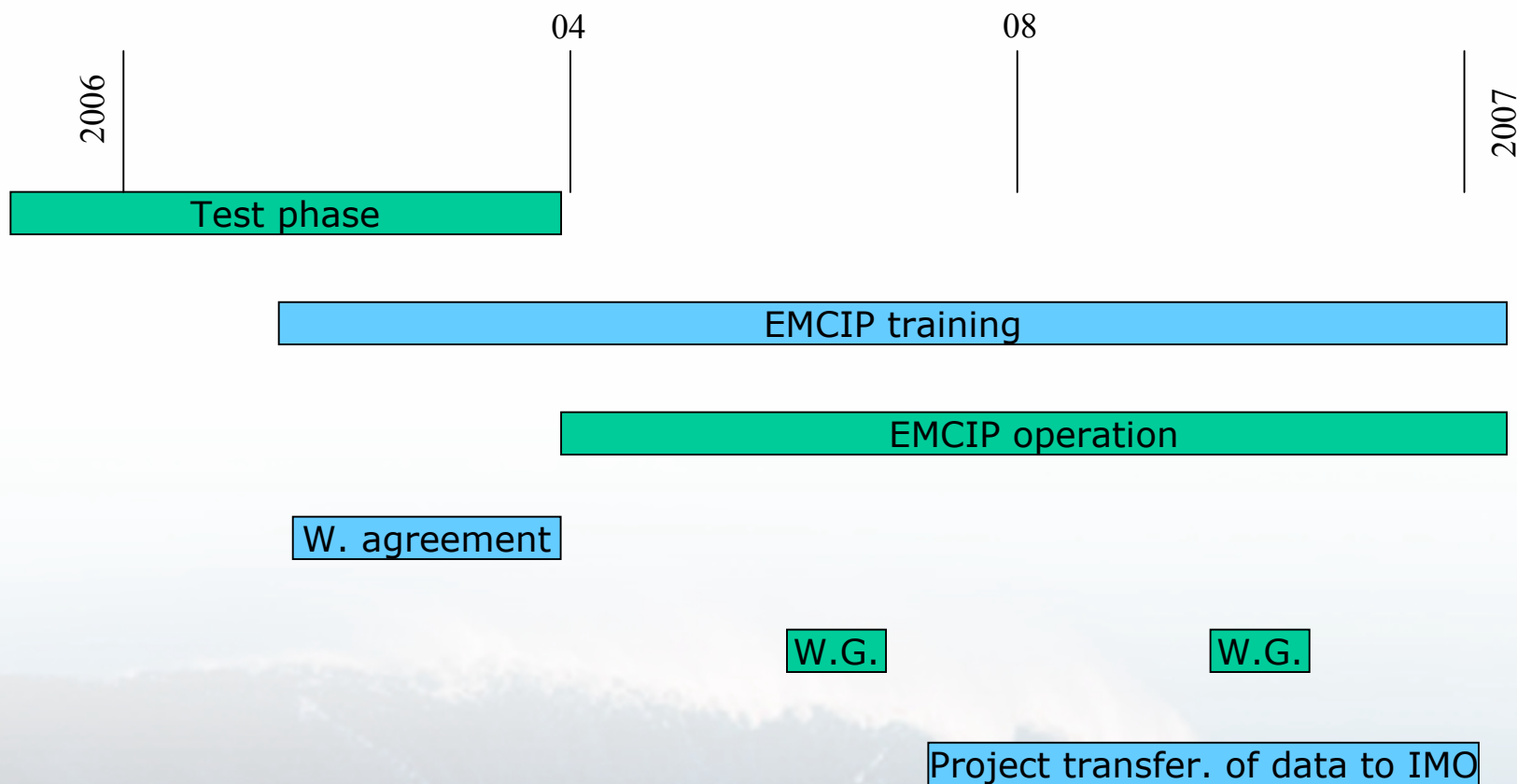
EMCIP Working Group

DB improvement

Common approach

Data analysis

EMCIP Activity plan



Thank you