



Maritime and Coastguard Agency

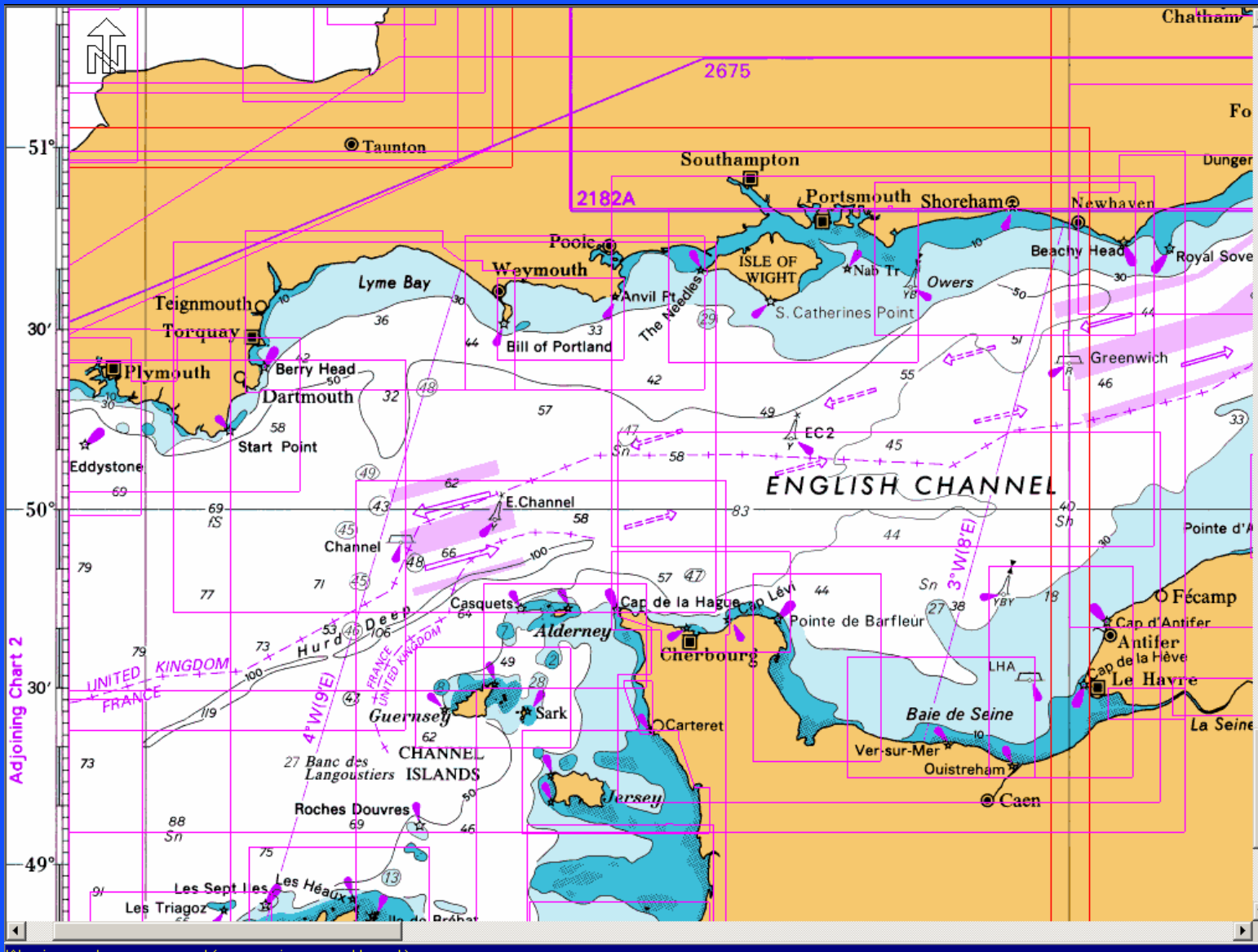
**Expert Meeting on Preparedness and Response
to Pollution Incidents
by Hazardous and Noxious Substances**

January 25th to 26th January 2006

**Toby Stone
Head Of Counter Pollution & Response
Maritime & Coastguard Agency**

- 1. Introduction**
- 2. Examples of HNS incident & response including the levoli Sun and the Ever Decent**
- 3. Practical response measures including the proposed UK model for HNS response**
- 4. Development of human resources for HNS including the 15 regional fire-fighting teams and the National HNS response team**
- 5. Summary**

levoli Sun



Warning: warnings unapproved / person else may not be safe

levoli Sun

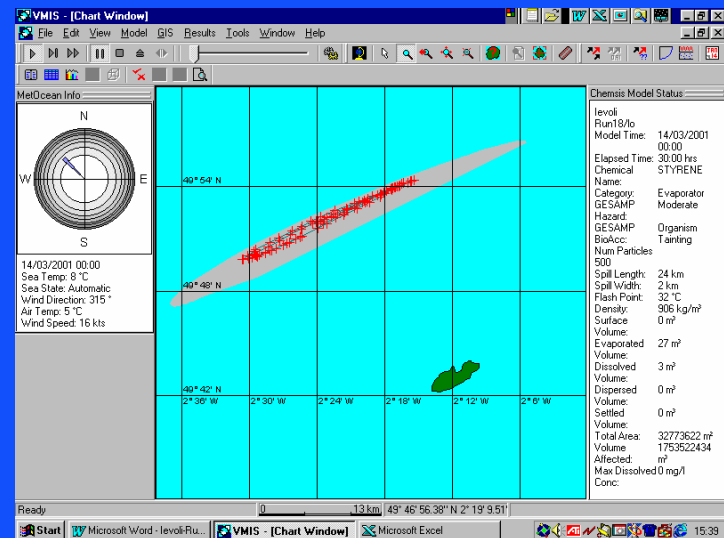
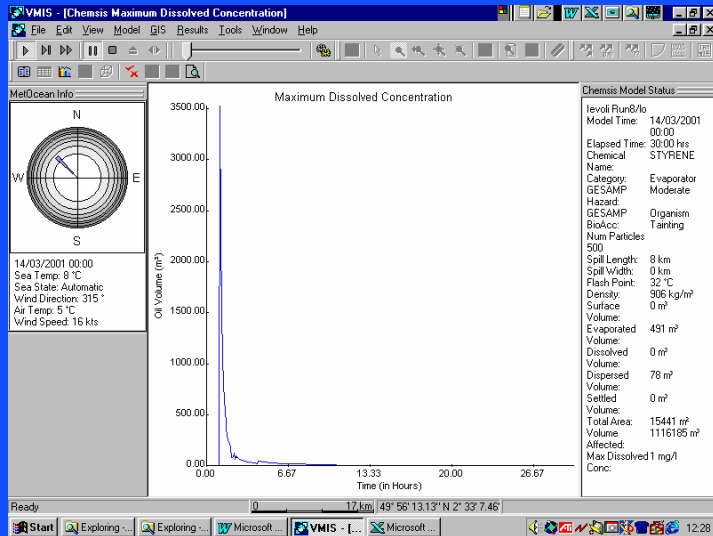
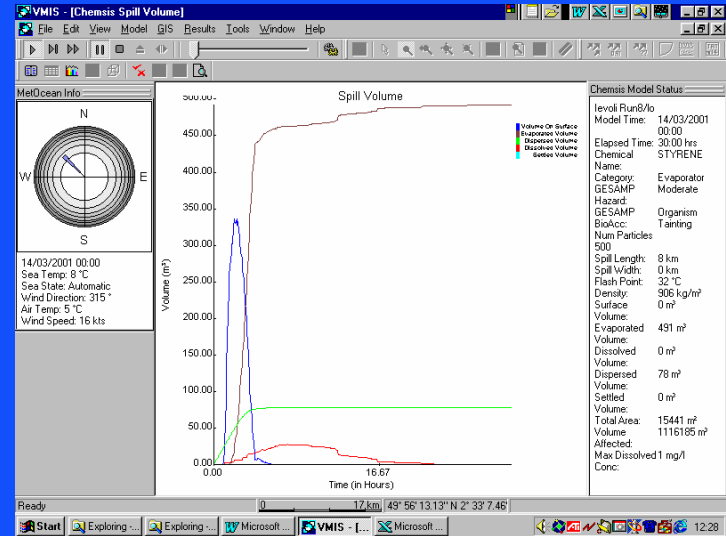
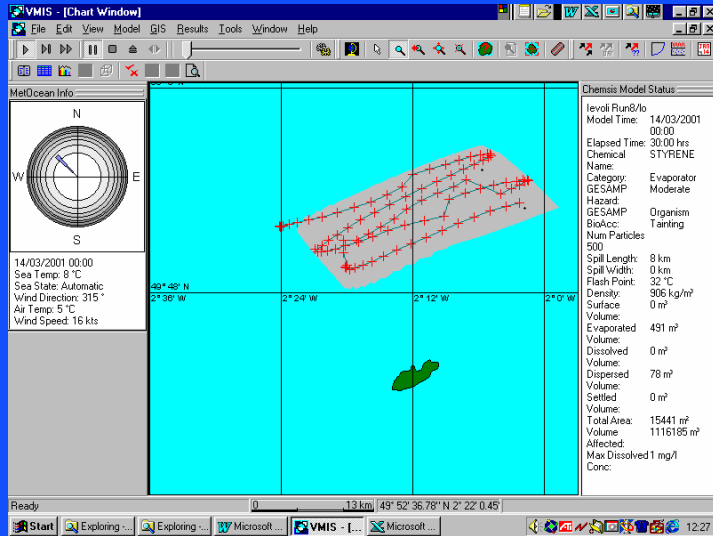


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levoli Sun

- **Cargo**
 - Styrene, 4000 tonnes , marine pollutant
 - Isopropyl Alcohol, 1000 tonnes
 - Methyl Ethyl Ketone, 1000 tonnes
 - IFO 180, 180 tonnes
 - Diesel, 60 tonnes
- **Environmental fate of cargo**
 - Water column modelling
 - Surface trajectory
 - Vapour cloud trajectory

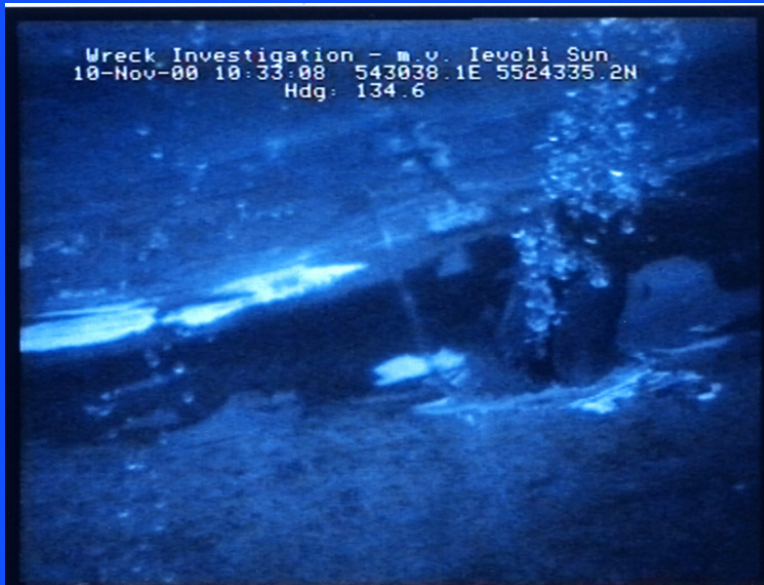
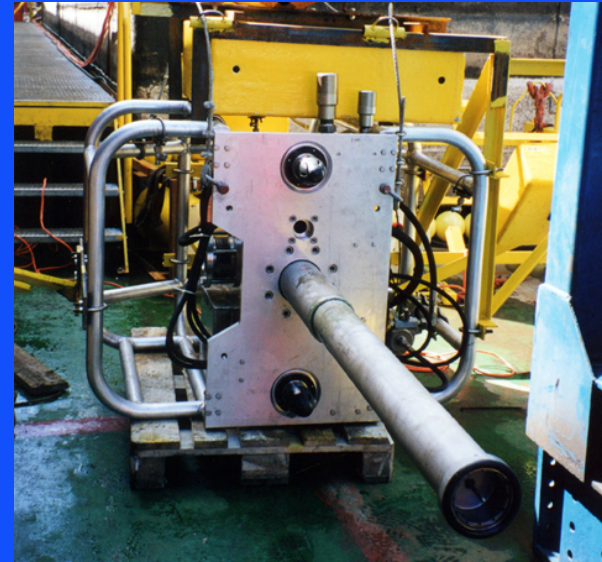
levoli Sun



levoli Sun



levoli Sun salvage of pollutants



NORWEGIAN DREAM

- 1,750 Passengers / 638 Crew
- NCL Holdings of Bermuda,
- Norwegian Cruise Lines
- 1992, BV Class, 51000GT
- On route to Dover

EVER DECENT

- 25 Crew
- Evergreen Marine Corporation
- 1997, American Bureau of Shipping
- 52100GT, LOA 294m
- On route to Zeebrugge
- Crossing the TSS at 67 degrees

Norwegian Dream





**TERRIFIED PASSENGERS
FEARED A
SECOND TITANIC.....**



EverDecent



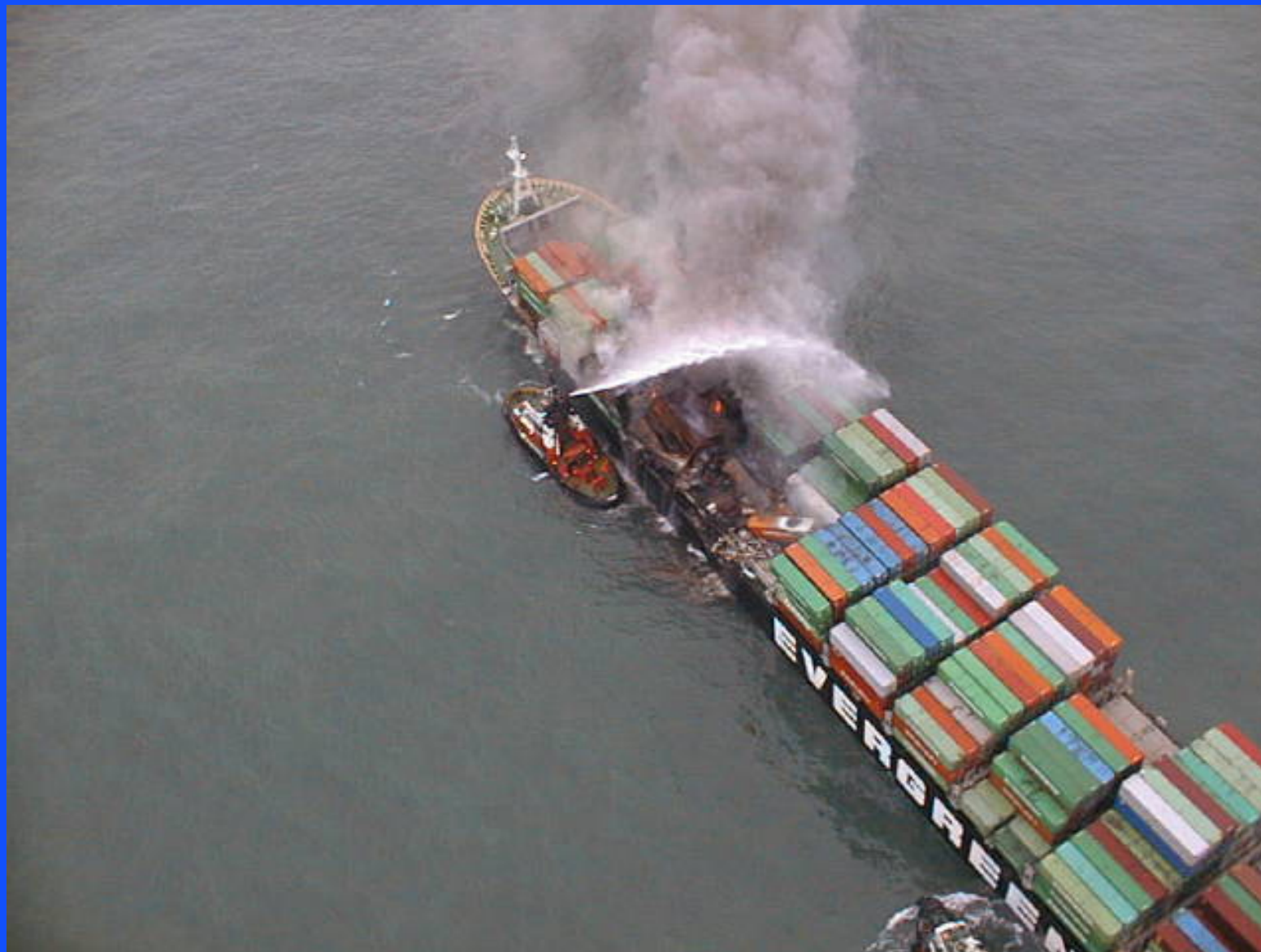
EverDecent



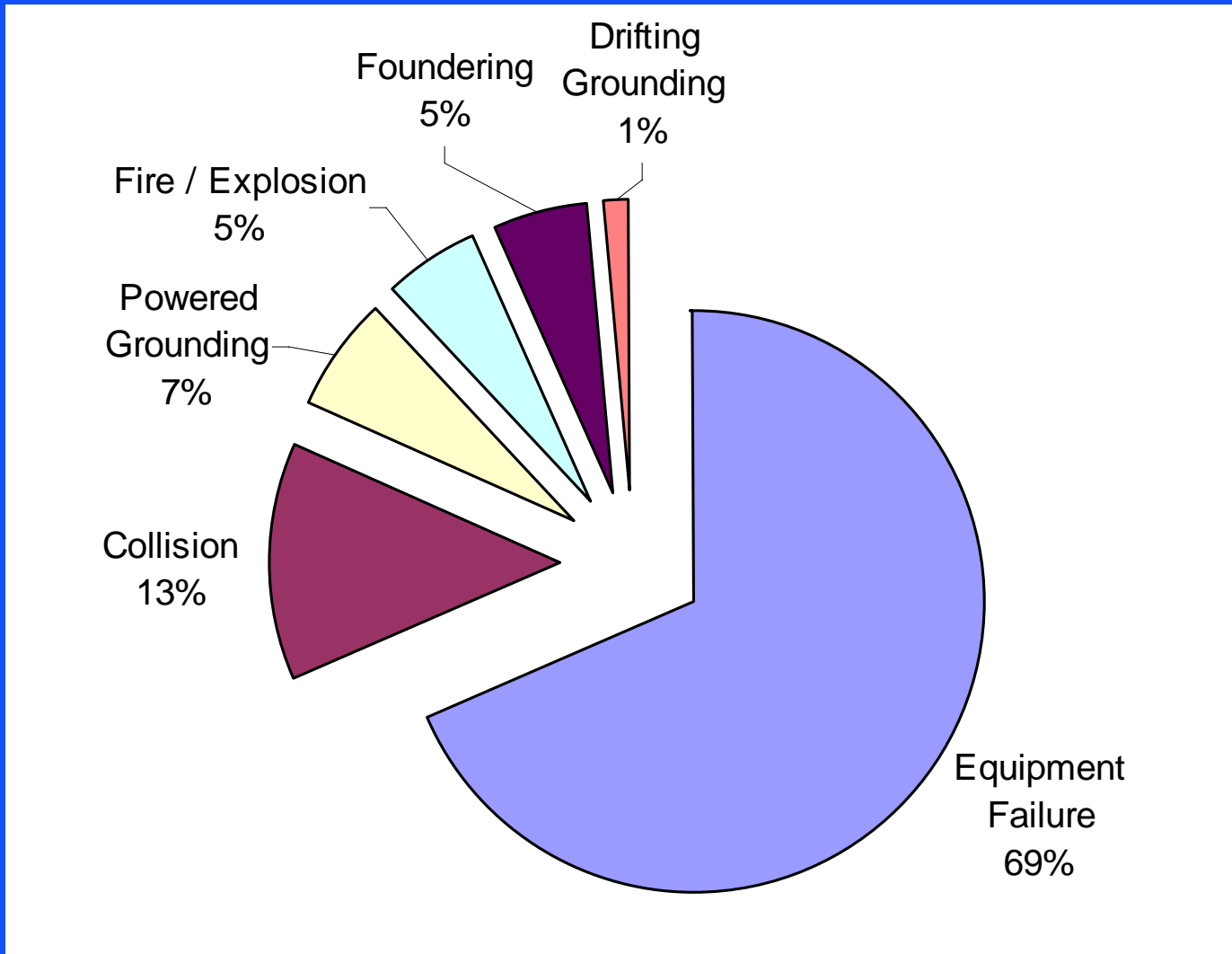
EverDecent



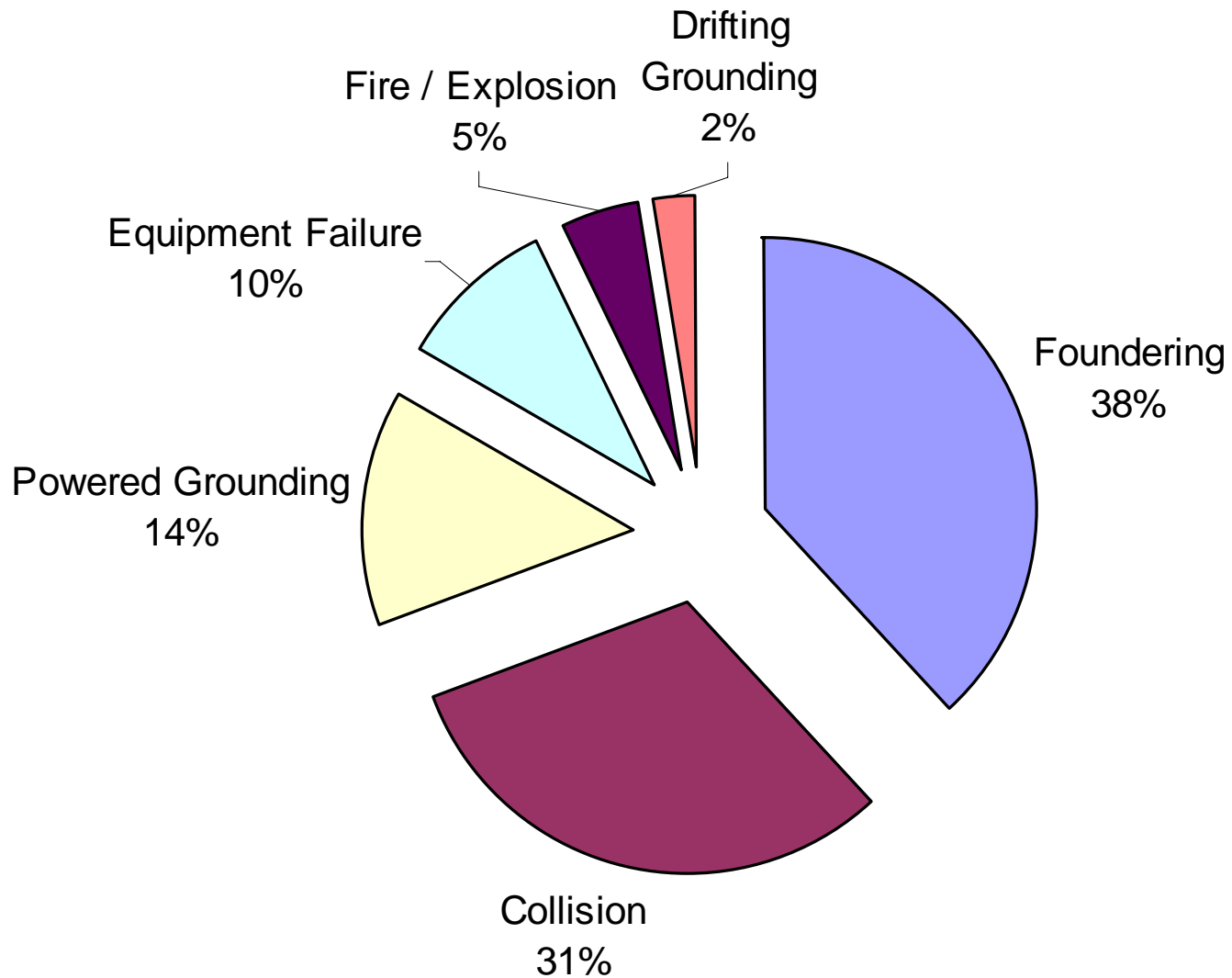
EverDecent



Chemical Tanker Accident Frequency by Cause

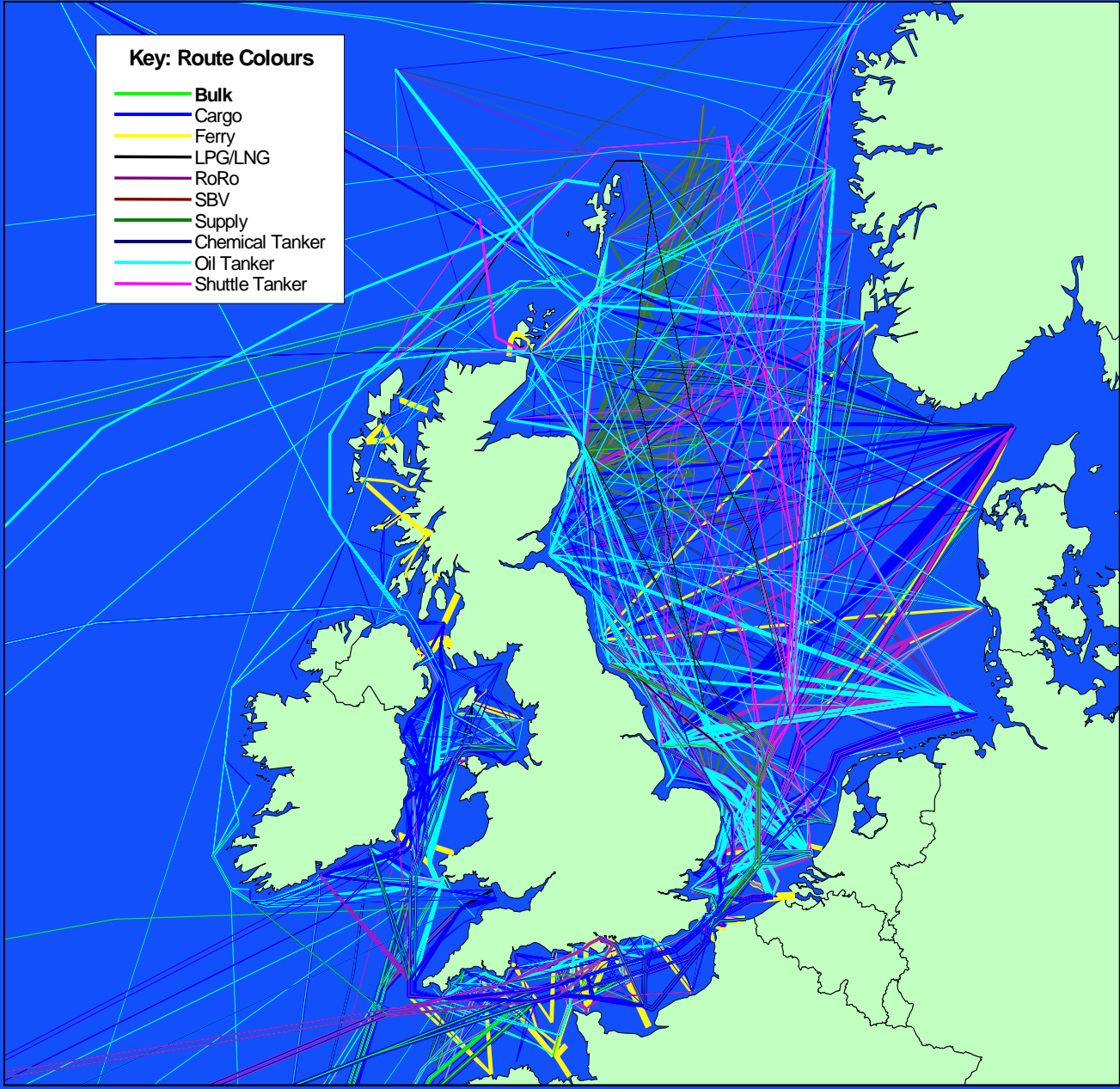


Chemical Tanker Spill Frequency by Cause



Key: Route Colours

- Bulk
- Cargo
- Ferry
- LPG/LNG
- RoRo
- SBV
- Supply
- Chemical Tanker
- Oil Tanker
- Shuttle Tanker



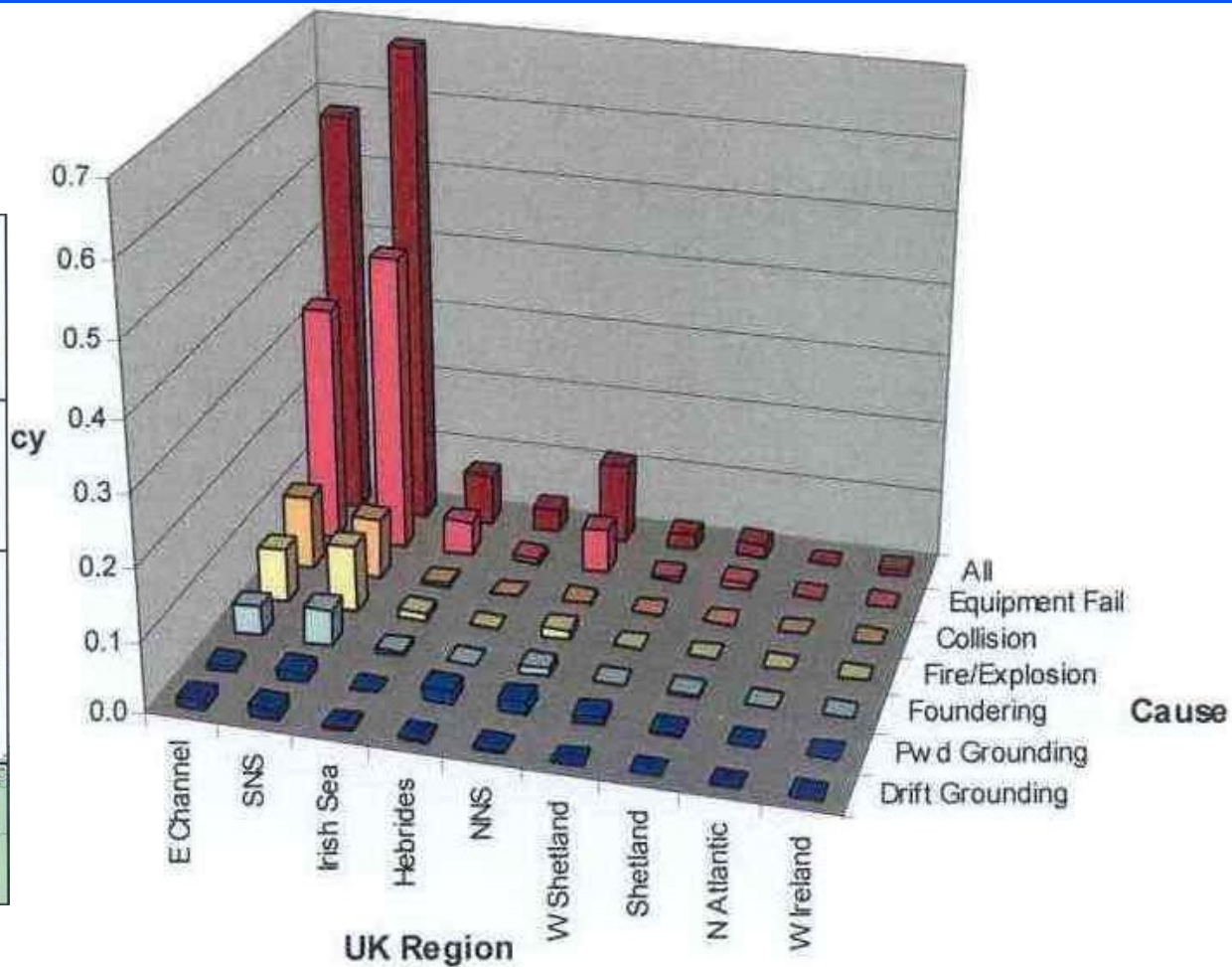
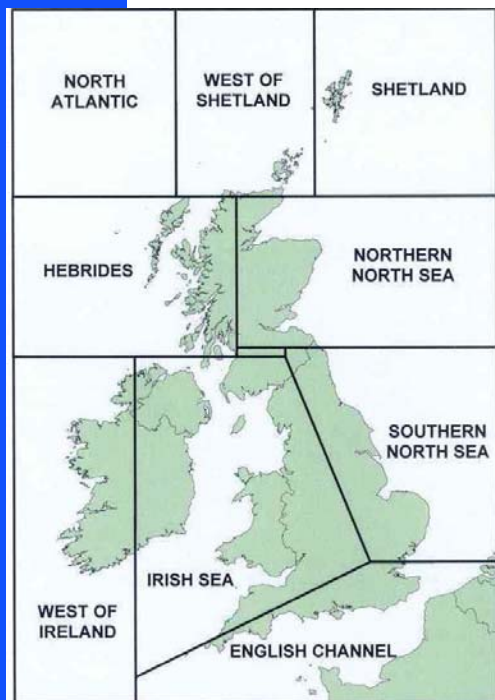


Figure 8.2 Gas Carrier Accident Frequencies by Region and Cause

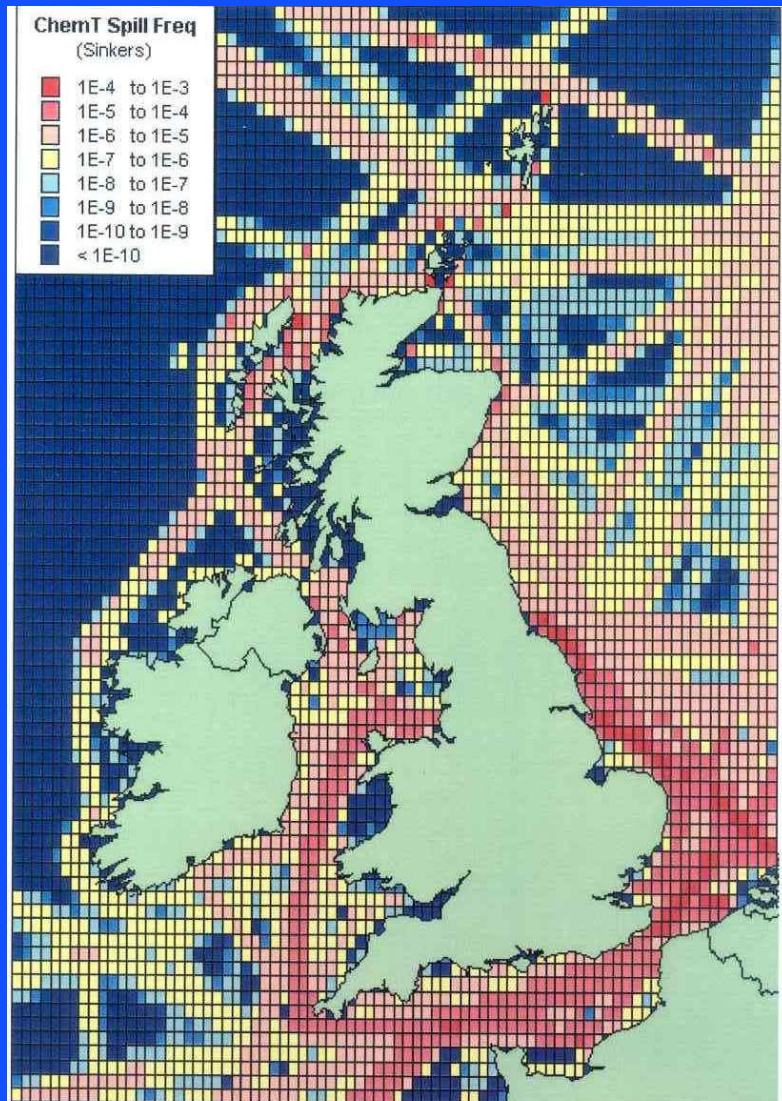


Figure 7.19 Predicted Chemical Tanker Spill Frequency - Sinkers

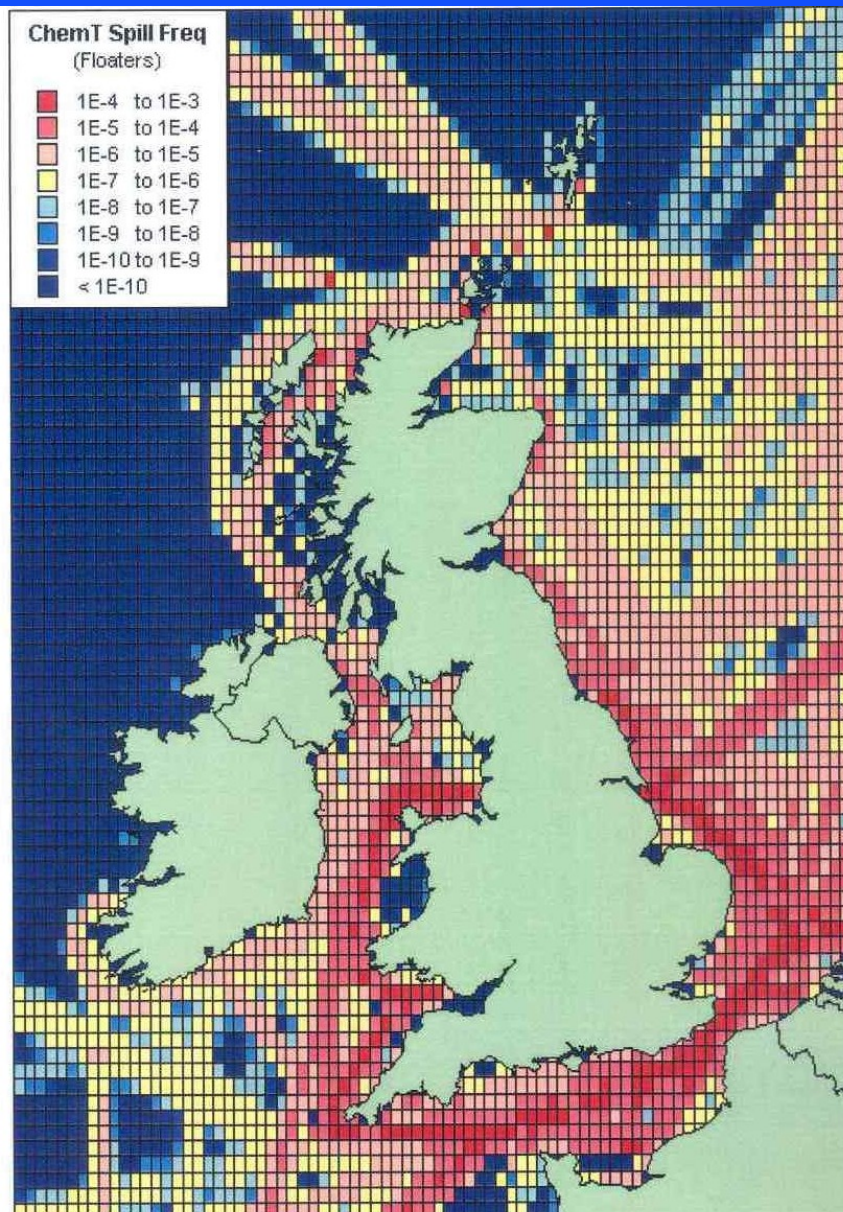


Figure 7.18 Predicted Chemical Tanker Spill Frequency - Floaters

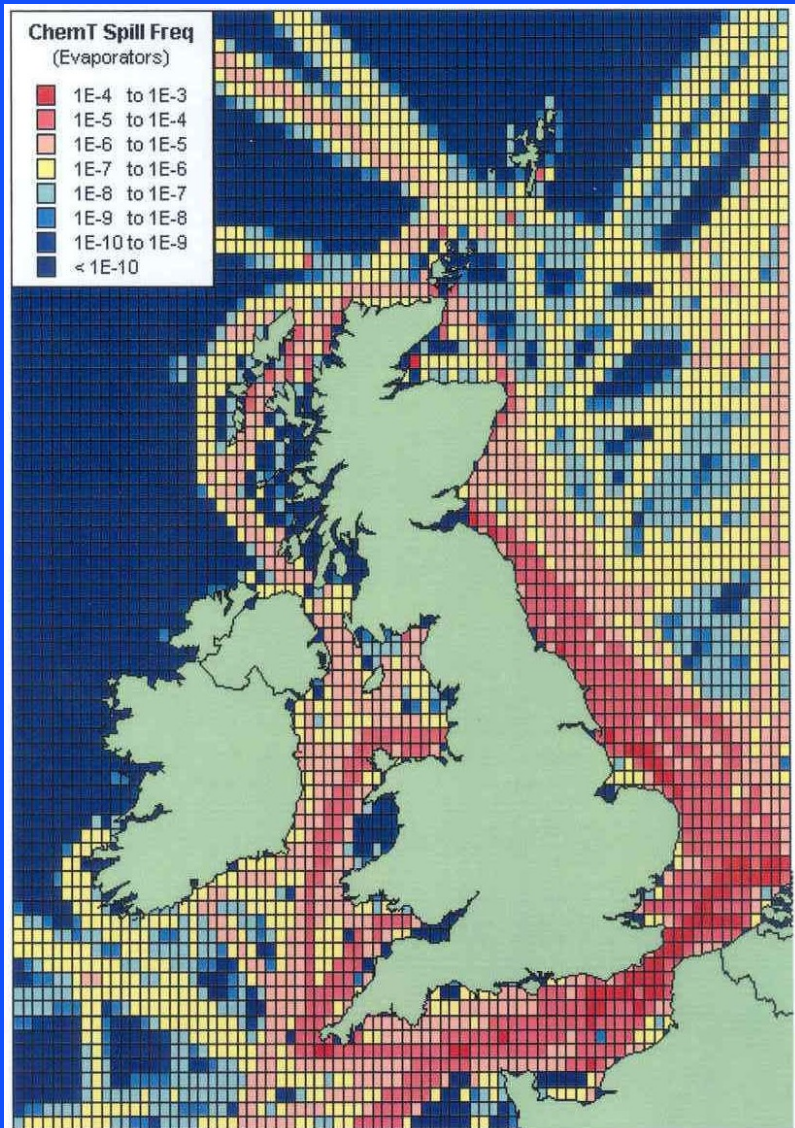


Figure 7.17 Predicted Chemical Tanker Spill Frequency - Evaporators

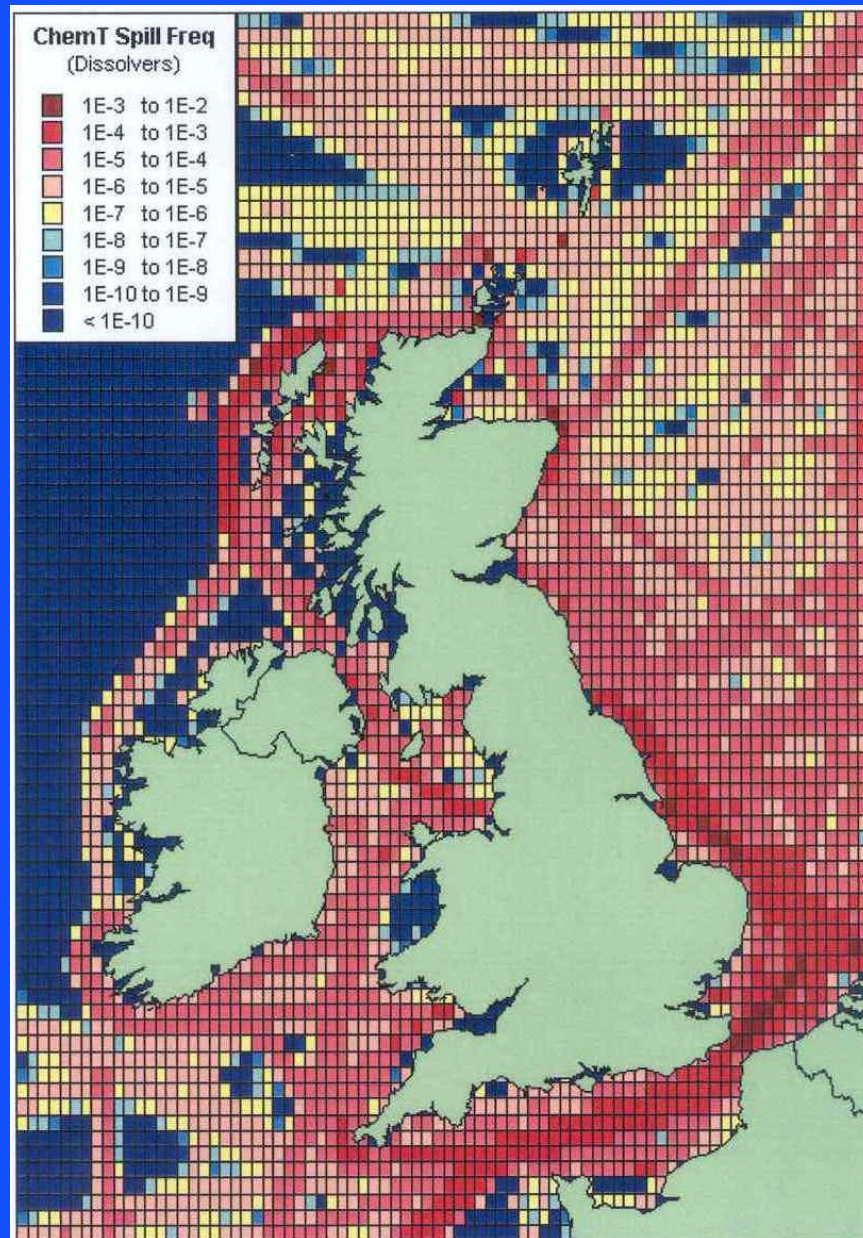


Figure 7.16 Predicted Chemical Tanker Spill Frequency - Dissolvers



**International Convention on Oil Pollution
Preparedness, Response and Co-operation**

1990

Crude Oil and Refined Petroleum Products

Statutory Instrument 1998 No. 1056 - Microsoft Internet Explorer

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Address <http://www.hmso.gov.uk/si/si1998/19981056.htm> Links

STATUTORY INSTRUMENTS

1998 No. 1056

MARINE POLLUTION

The Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention) Regulations 1998

<i>Made</i>	<i>16th April 1998</i>
<i>Laid before Parliament</i>	<i>23rd April 1998</i>
<i>Coming into force</i>	<i>15th May 1998</i>

The Secretary of State for the Environment, Transport and the Regions, in exercise of the powers conferred by article 2 of the Merchant Shipping (Oil Pollution Preparedness, Response and Cooperation) Order 1997^[1] and of all other powers enabling him in that behalf, hereby makes the following Regulations:

Citation and commencement

Responsibilities

POLLUTION AT SEA OR ON THE COAST

- **GOVERNMENT** - Takes the lead in pollution at sea from ships
- **PORTS, HARBOURS, OIL FACILITIES & OFFSHORE INSTALLATIONS** - Have a statutory responsibility for clean-up of their areas- Oil pollution
- **LOCAL AUTHORITIES / EHS** - Have accepted the non-statutory responsibility
- **LINKED WITH THE NATIONAL CONTINGENCY PLAN**

The Tiered Response for Crude Oil & Refined Petroleum Products

TIER ONE

Small operational spill - local resources

TIER TWO

Medium sized spill - regional assistance

TIER THREE

Large spill - National assistance, NCP

HNS Marine Response Levels

HNS Marine Response Level 1	Remote advice	Chemsafe Level 1
HNS Marine Response Level 2	On scene advice	Chemsafe Level 2
HNS Marine Response Level 3	On scene regional assistance	Chemsafe Level 3
HNS Marine Response Level 4	On scene national assistance	

Possible Types of Plans

There are already 200 approved OPRC Oil Spill Contingency Plans for the medium and major ports of the United Kingdom.

This will form the basis for OPRC HNS compliance.

- Adaptation of existing plan
- OPRC-HNS Pollution Emergency plan
- Or stand alone plan
- HNS Pollution Emergency Plan

- submission based on risk, linked to turnover, size of ships using port, cargo type & environmental sensitivities.

Training Requirements



Accreditation Maritime Oil Spill Response

Existing OPRC levels :

UK course types	3/3p	-----	IMO Level 1
UK course types	4/4p	-----	IMO Level 2
UK course types	5/5p	-----	IMO Level 2

There will be a requirement for an endorsement of any Harbour Authorities existing accredited training levels. This may be in the form of a one or 2 day HNS module

The 15 MIRG Firefighting/HNS response teams



Maritime and Coastguard Agency National HNS



National HNS Response Team

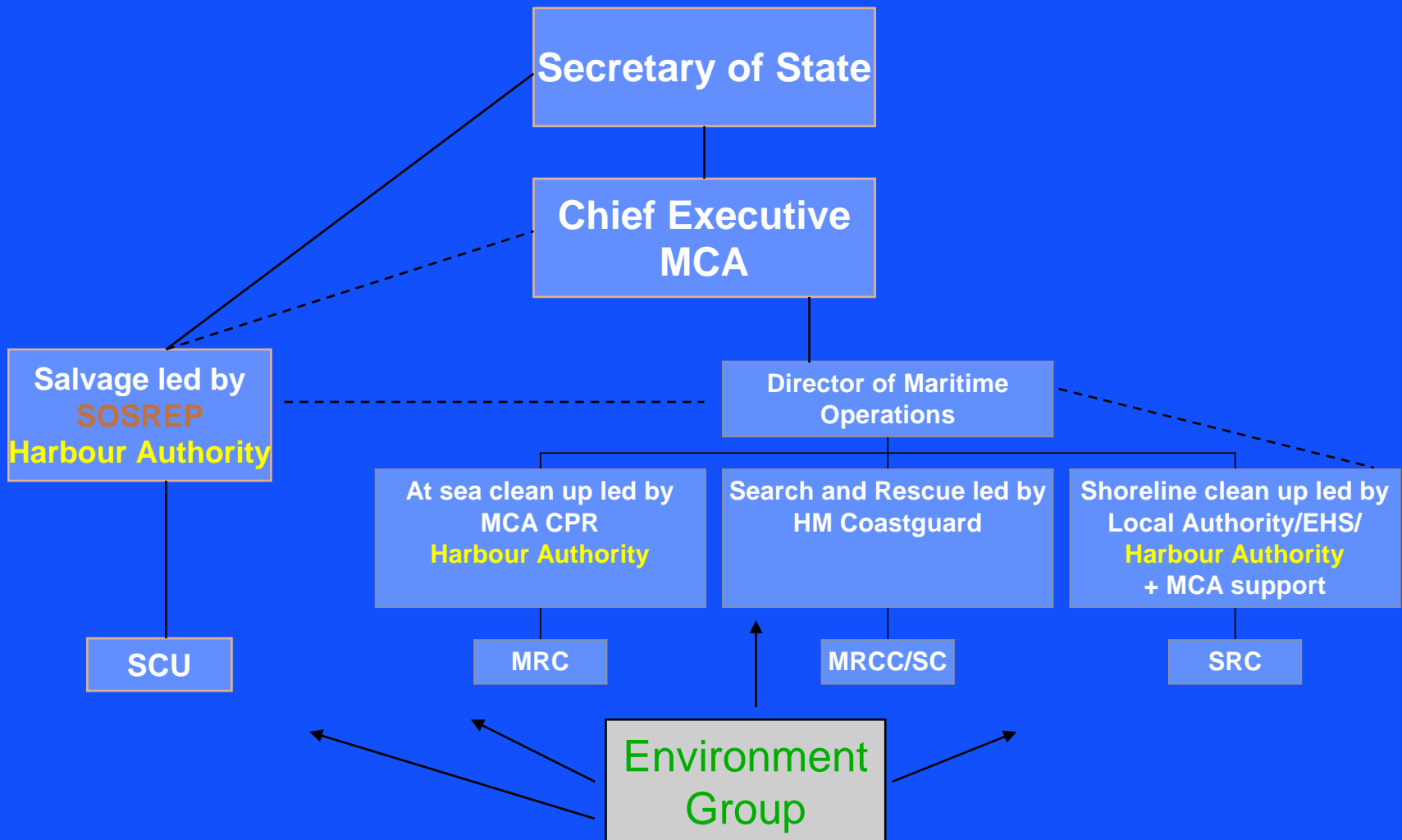
Cargo pumps
Power packs
IG Generators
Gas protection suits
Gas tight suits
Disposable suits
Splash suits
Breathing apparatus
Kool Vests
Resuscitators

24 hour advice
Contracts manager
Skills base
24 hour 365 days
Team of eight 24 hours
1 Team Leader
2 Team Experts
5 Responders

Phases Of Response

- **1. Search And Rescue**
- **2. Dealing with the casualty**
- **3. Counter pollution at sea**
- **4. Counter pollution on shore**

Command & Control







Multitank Ascania



Linda Kosan





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Safer Lives
Safer Ships
Cleaner Seas