

Lyme Bay Ship to Ship Transfers: Local Authority Concerns

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Introduction The Baltic/ Russian Oil Trade

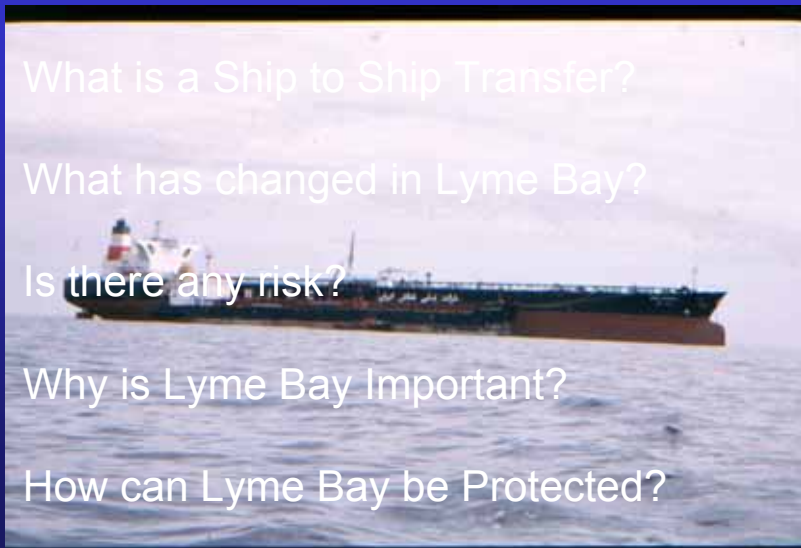
What is a Ship to Ship Transfer?

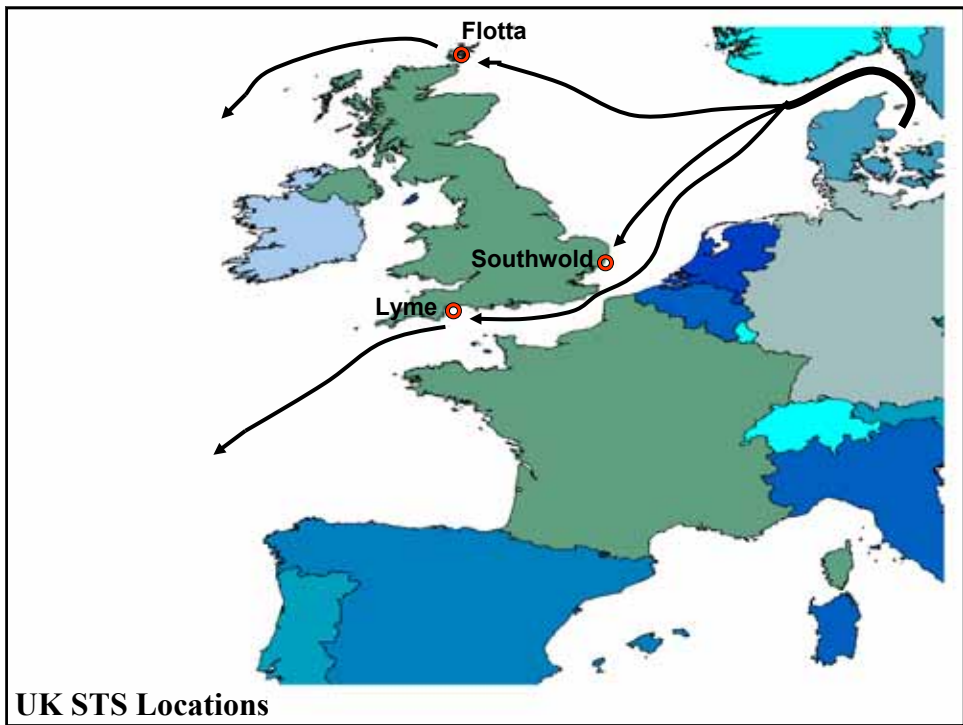
What has changed in Lyme Bay?

Is there any risk?

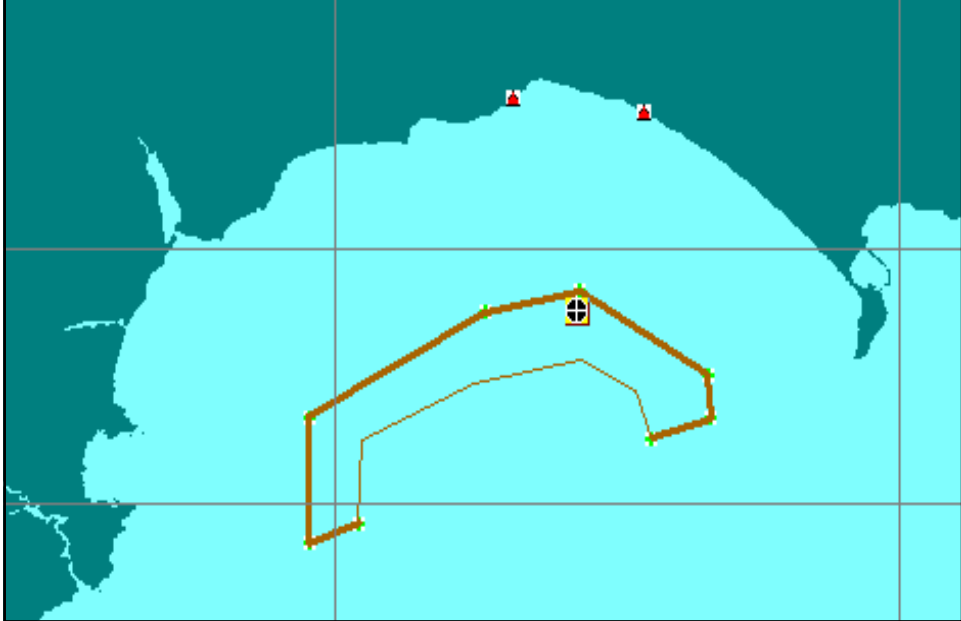
Why is Lyme Bay Important?

How can Lyme Bay be Protected?



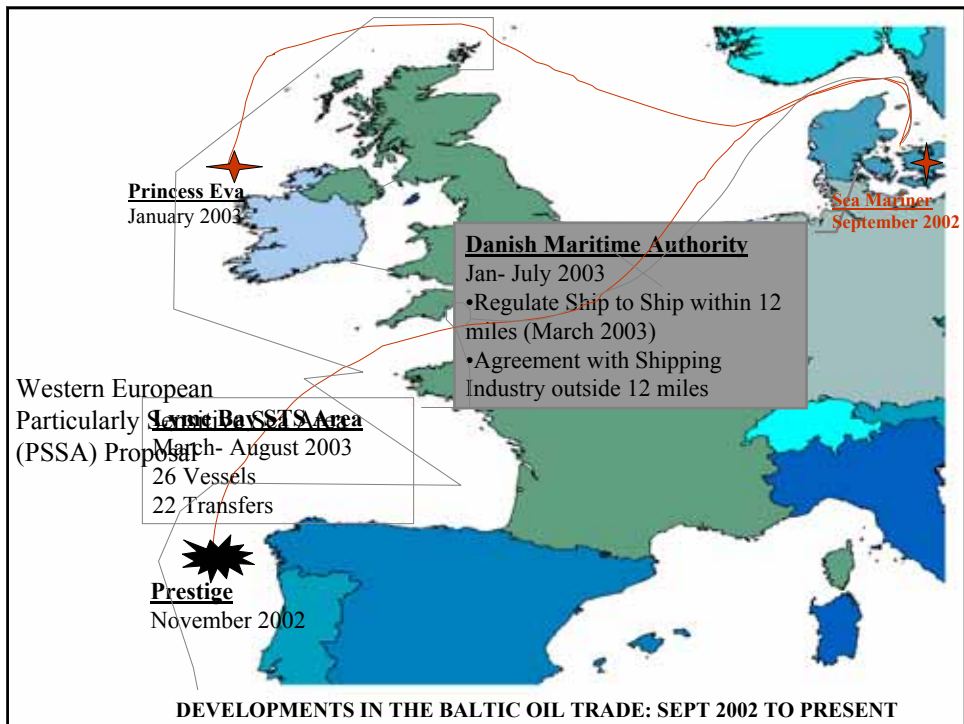


TRANSFER AREA



The Baltic Oil Trade: Without Risk?

- Of 251 Accidents (89-99) in Baltic, one fifth resulted in oil pollution (HELCOM) incidents ongoing.
- Finland & Denmark have called for ban on single hull tankers (Danes do not allow single hull STS) (Lloyds List, 2003).
- Russian Shipping Industry wants to “keep open low cost single-hull tanker option” until 2015 (Lloyds List, 2003).
- “Massive surge in tanker traffic forecast” (Lloyds List, 2003).
 - Oil exports from 40 mta to 80 mta by 2005.



Lyme Bay STS: Without Risk?

- Prior to 2003 1-2 transfers per yr. & non-persistent cargoes (over last 12 yrs)
- 2003: 22 Transfers, all persistent Russian Heavy Oil
- 1 VLCC (300,000 t) loaded by 4-6 Tankers (18-50,000 t).

2003 STS Ships

Very Large Crude Carriers

- Iran Delvar
- Arosa
- Iran Hormoz
- Iran Nabi

Shuttle Tankers

- Baltic Commander 1
- Fili
- Kapitan Putilin
- Kogalym
- Maremar
- Nounou
- Alia
- Robin
- Kapitan Zhuravlyov
- Odin
- Kazym River
- Vanessa
- Seine
- White Point
- Sibonancy
- Montreux
- Zoja 11
- Natura
- Saint Petersberg
- Melide
- Sea Mariner
- Seaempress

Lyme Bay: Problems

- No single source of advice
- No single control over tankers
- No authority to whom masters report
- No means of separating various uses (fishing, recreation, etc.)
- No means of keeping tankers well away from shore [shallow water]

Donaldson, 1994

- No criminal liability for STS incidents, unlike Denmark (March 2003)

Justification 1994

Transshipments have to take place somewhere, the only alternative is an increase in shipping costs, which is likely to affect prices of finished goods and thus UK trade

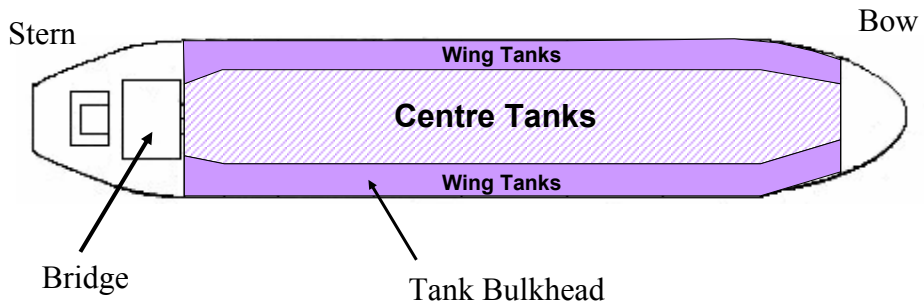
Situation Changed 2003

- Large scale Cargo loading not lightening for safe navigation
- Oil not for UK or Europe (Russia to Far East)- little benefit
- Alternative locations with oil spill response capability (Rotterdam/ Flotta)
- If incident Clean-up cost outweighs benefits
- Lyme Bay's Conservation and Economic Value Identified

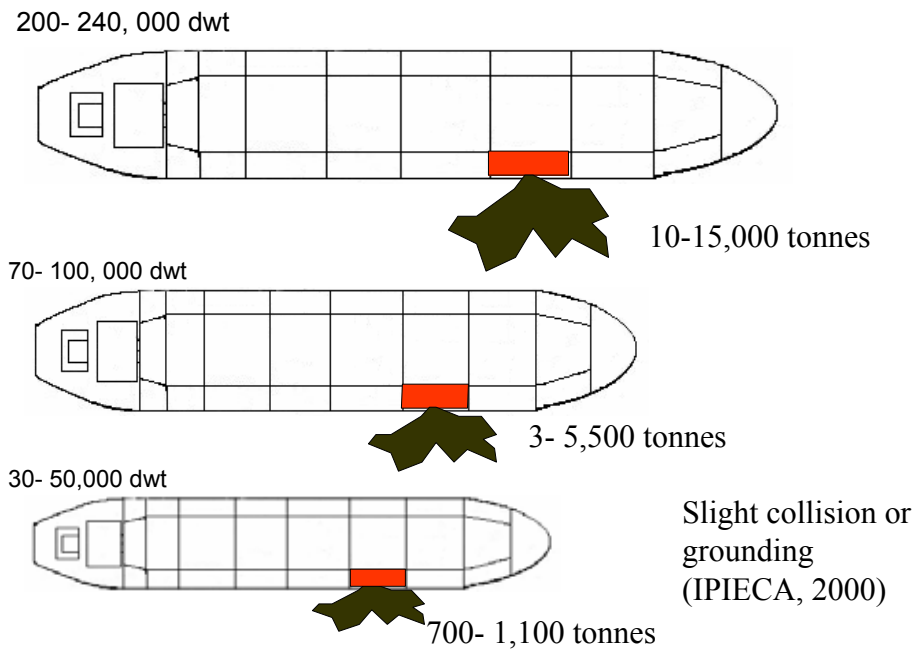
Safer Ships Cleaner Seas

- 1994 “We recommend that Draft Regulations..should be brought into force as quickly as possible” (Donaldson, 1994)
- 1997 MCA issue draft regulations
- 7 years later- still draft & designed for lightening not cargo transfer of Russian Oil
- 2004: Part of NCP “Refresher”- 2005?

Tanker Plan View



Credible Spill Potential (tonnes)



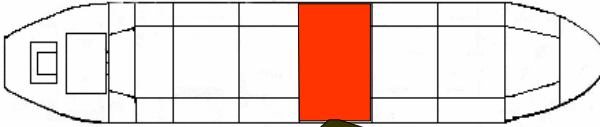
Credible Spill Potential (tonnes)

200- 240, 000 dwt



45- 60,000 tonnes

70- 100, 000 dwt



12-21,000 tonnes

30- 50,000 dwt

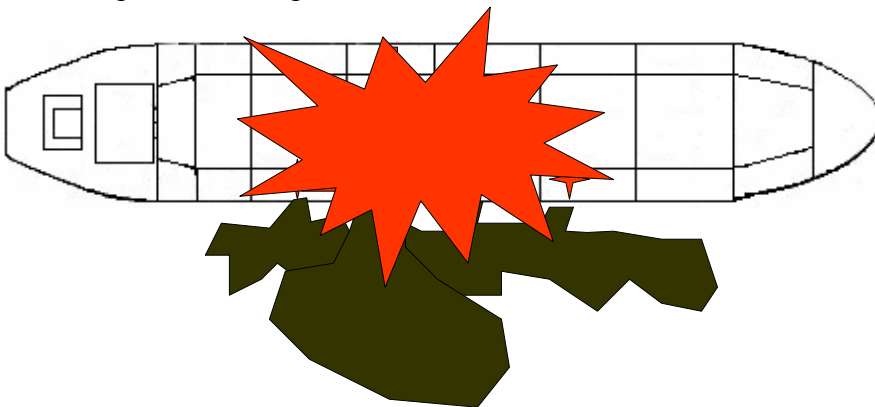


3-5000 tonnes

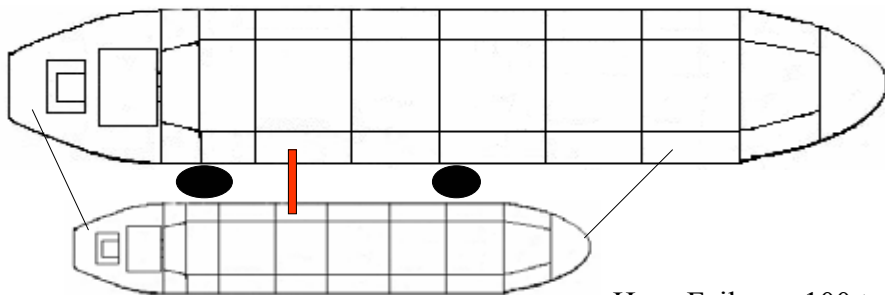
Rupture (2 Wing Tanks
and Centre Tank)
(IPIECA, 2000)

Factors leading to Catastrophic Spill

1. Multiple Grounding/ Collision Points
2. Structural Failure of Bulkheads
3. Subsequent Fire/ Explosion



Ship to Ship Risk Assessment



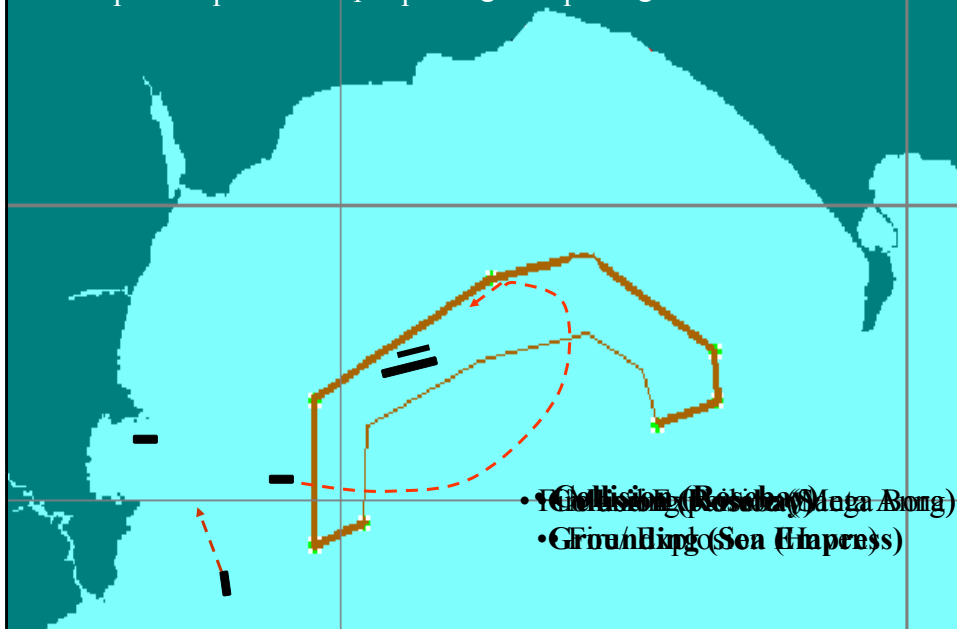
Hose Failure <100 tonnes

Are Contingency arrangements based on:

- A. Loss of 1 Wing Tank? ✗
- B. Rupture 2 Wing & 1 Centre Tanks? ✗
- C. Catastrophic Spill? ✗
- D. Operational Spill? ✓

Lyme Bay Potential Risks:

1. Should Ship be transferred to anchorage

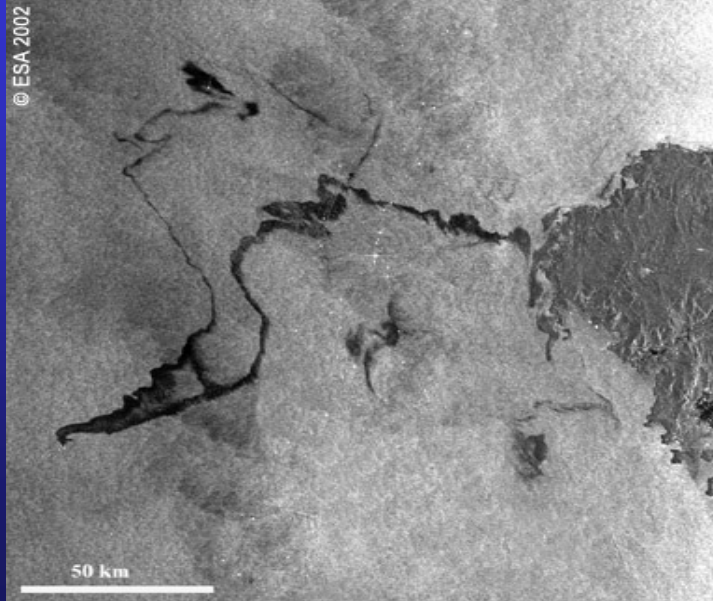




Impact on Lyme Bay

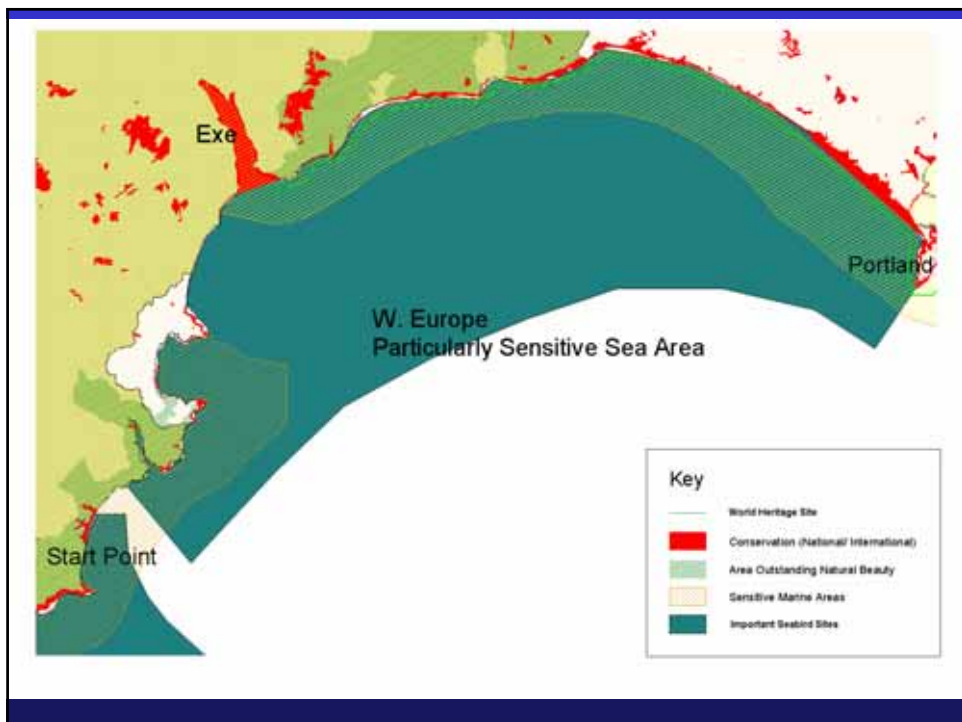
Is the use of Lyme Bay for the Baltic/
Russian Oil Trade appropriate and/ or
sustainable given the areas
environmental and socio-economic
value?

Russian Heavy Oil Persistence



Conservation

- Sites of Special Scientific Interest (22 in number, Devon);
- Sensitive Marine Areas (4 in number, Devon);
- Special Protection Areas and Ramsar Sites (1 in number, Devon);
- National Nature Reserve (4 in number, Devon);
- Special Areas of Conservation (4 in number, Devon);





Conservation

- Implications to Dorset and East Devon World Heritage Site status (UNESCO Review)
- Is STS compatible with UK Govt. international obligations to protect sites (Ramsar, SPA, SAC, WHS)
- Loss of habitats
- Loss of wildlife (25, 000 bird casult. Prestige)

Tourism & Leisure



Pollution

= loss of amenity areas

= loss of coastal zone: Public Safety

= loss of Tourist Confidence

= loss of visits to area

= loss of £1753 m (75%) per yr

• Tourism spend £2338 m (Lyme Bay Area)
= loss of employment/ economy

• Supports 17- 32% of Lyme Bay Employment

How long to regain confidence?

• Estimated loss £1753 m (75%). (SW Tourism)

- Tourism supports coastal towns
- Relies on quality of environment
- Natural environment is major 'Draw'

Figures: SW Tourism, 2003

Fisheries

- 10 Fishing Ports/ Harbours
 - Devon Fishing Industry = £43 m per yr
 - Lyme Bay = £20m per yr
 - Fishing gear vulnerable to pollution
 - REBCQ- subsurface? Smothering of nursery/ spawning areas
- Long Term Contamination?**

Figures: DSFC, 2003

Minimise Impact to Lyme Bay

Should a 'precautionary approach' be adopted over contingency arrangements to make STS environmentally and socio-economically sustainable?

Need for comprehensive regulation to:

- Prevent oil spill from commercial oil transfers
- Minimise impact by use of comprehensive contingency planning if spill occurs

International Guidance

“ Although STS transfers operations can be carried out safely, the risk of accident and the potential scale of the consequences require that organisers develop contingency plans for dealing with emergencies.

Such plans should cover all possible emergencies and should provide for comprehensive response.

In addition, contingency plans should have relevance to the location of the operation and should take into account the resources available both at the transfer area and with regard to nearby back-up support.

Where appropriate the contingency plan should be integrated with similar plans prepared by the local authority”

(ICS & OCIMF 1997)

Existing Contingency Arrangements: Fulfil International Guidance?

- Existing Arrangements: Equipment to deal with <50 tonne spill (hose parting), each transfer involves 18-40,000 tonnes
- Reliance on Local Authority Response under National Contingency Plan, **but**:
 - STS not considered in UK Guidance STOp 3/2001
 - Do not include 'Worst Case Scenario'
 - No consultation/ link to local authorities

The Way Forward: Proposed Strategy

Within 12 NM: Outside 12 NM:

- Revision and implementation of Draft Regulations
- Integrate STS regulations with Associated Protection Measures
- Determine if Lyme Bay is suitable/ appropriate 'UK strategy' based within W-Europe Particularly Sensitive Sea Area around Frotta? - Use of EIA
- International best practice: credible spill size and STS guidance
- MOU with UK Shipping Industry not to support STS outside
- Virtual Port Oil Terminal Extend OPRC Oil terminal best practice 12NM (interim measure) - already achieved by Danish Govt.
- Command & Control: who responsible for STS area and Oil Spill Response?
- link to Baltic arrangements
- Integrate Contingency Plan with local authority proposals
 - A regulatory framework using COMAH best practice
 - Ability for LAs to charge shipping industry for preparing contingency plans
 - LAs to be contracted (paid by operator) to clean-up STS spill, to protect services, etc.

Current Situation(2004)

- Consultation on draft regulations postponed(2005?)
- Operations moved to port areas (Orkneys?)
- Shipping industry requests to use Lyme Bay
- Preparedness:
Emergency Response to Coastal Oil, Chemical and Incert Pollution from Shipping (Interreg IIIb) & Maritime Safety Umbrella Operation (Interreg IIIb)

Richard Hill