

**PROTECTING  
HARBOURS & SHIPPING  
FROM MARITIME  
TERRORISM: ROLES OF  
NAVIES**

**BY J. N. MAK  
MALAYSIA**



# Three key analytical elements involved:

1. Potential source of threat.
2. Potential weapons.
3. Potential targets.

# Potential sources of threats.

- **Maritime terrorists? Dangerous to use term “maritime terrorists”. Why?**

**Because terrorists can strike at maritime targets by land, sea and air today.**

- **Term “maritime terrorism” can blind us to real source and extent of threat.**

# Potential Weapons

**Hard weapons, soft weapons.**



# Potential Targets

**Two main targets:-**

- 1. The “new choke points” of the world – the mega-hub ports.**
- 2. Congested, narrow straits where major hubs are to be found, where there is heavy local maritime traffic (Malacca Straits, Philips Channel in Southeast Asia).**

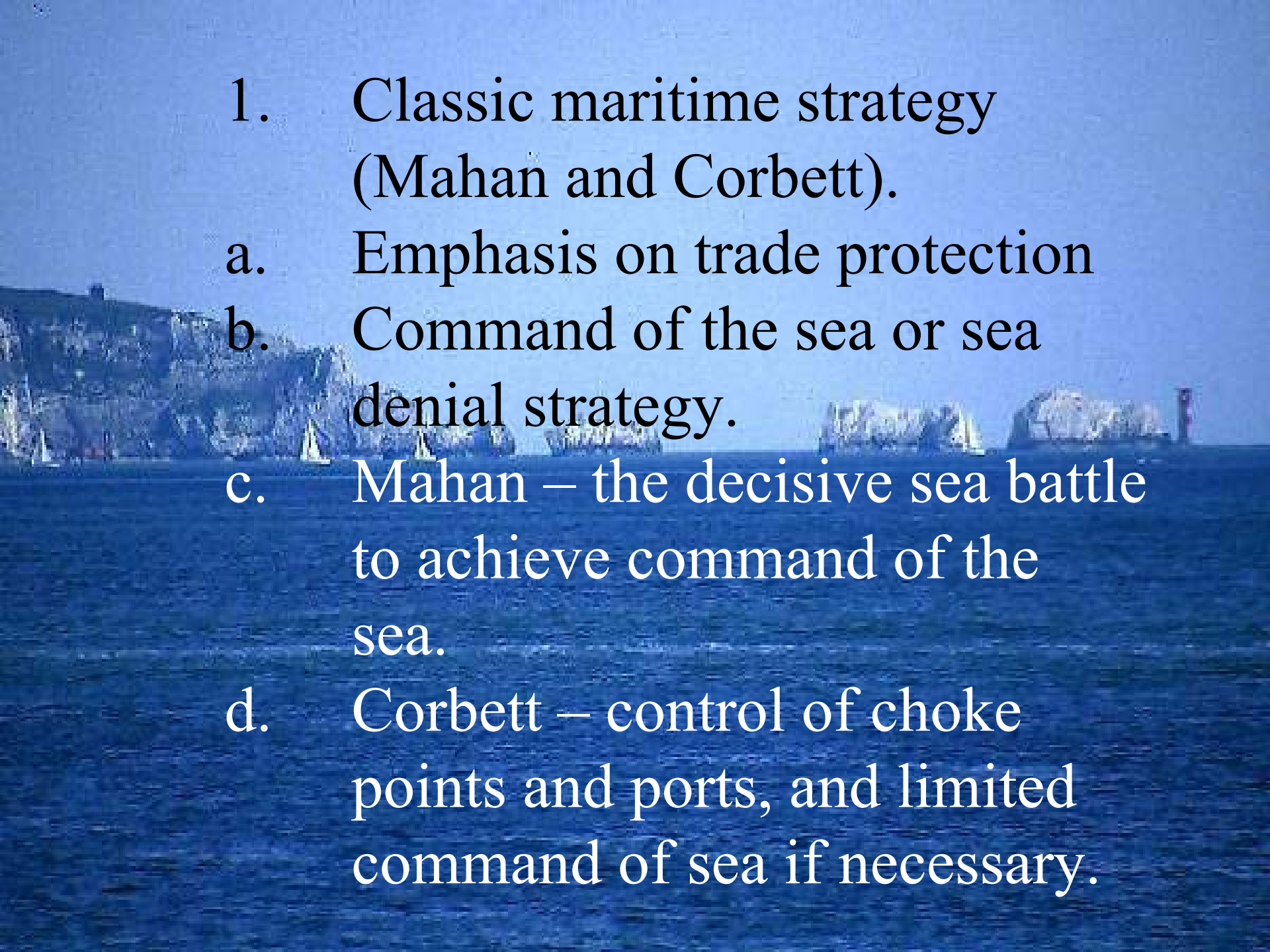


# Secondary Target?

**Offshore installations  
( Less vulnerable? )**



**IMPLICATIONS  
FOR  
MARITIME  
STRATEGY**

- 
1. Classic maritime strategy (Mahan and Corbett).
    - a. Emphasis on trade protection
    - b. Command of the sea or sea denial strategy.
    - c. Mahan – the decisive sea battle to achieve command of the sea.
    - d. Corbett – control of choke points and ports, and limited command of sea if necessary.

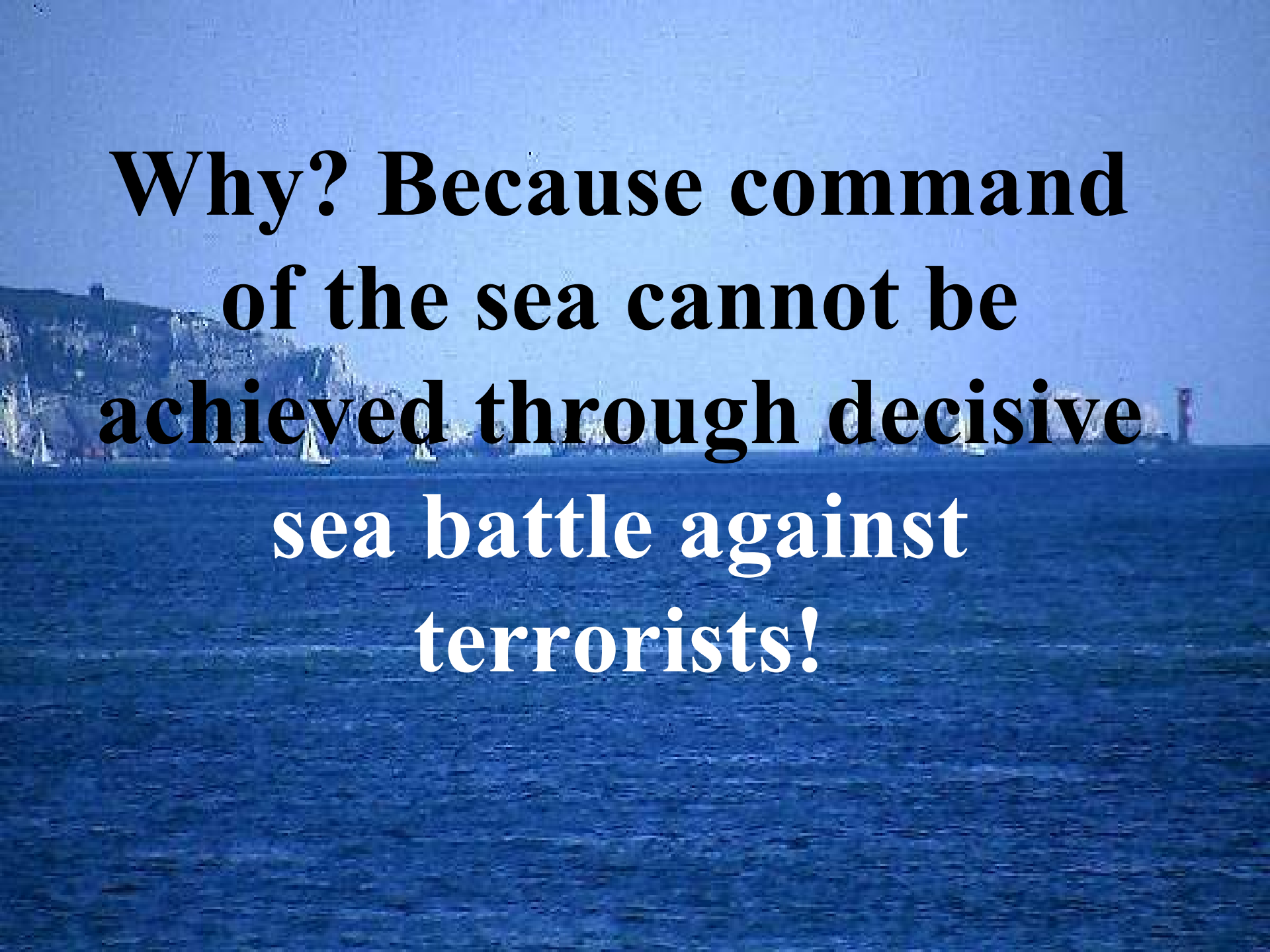




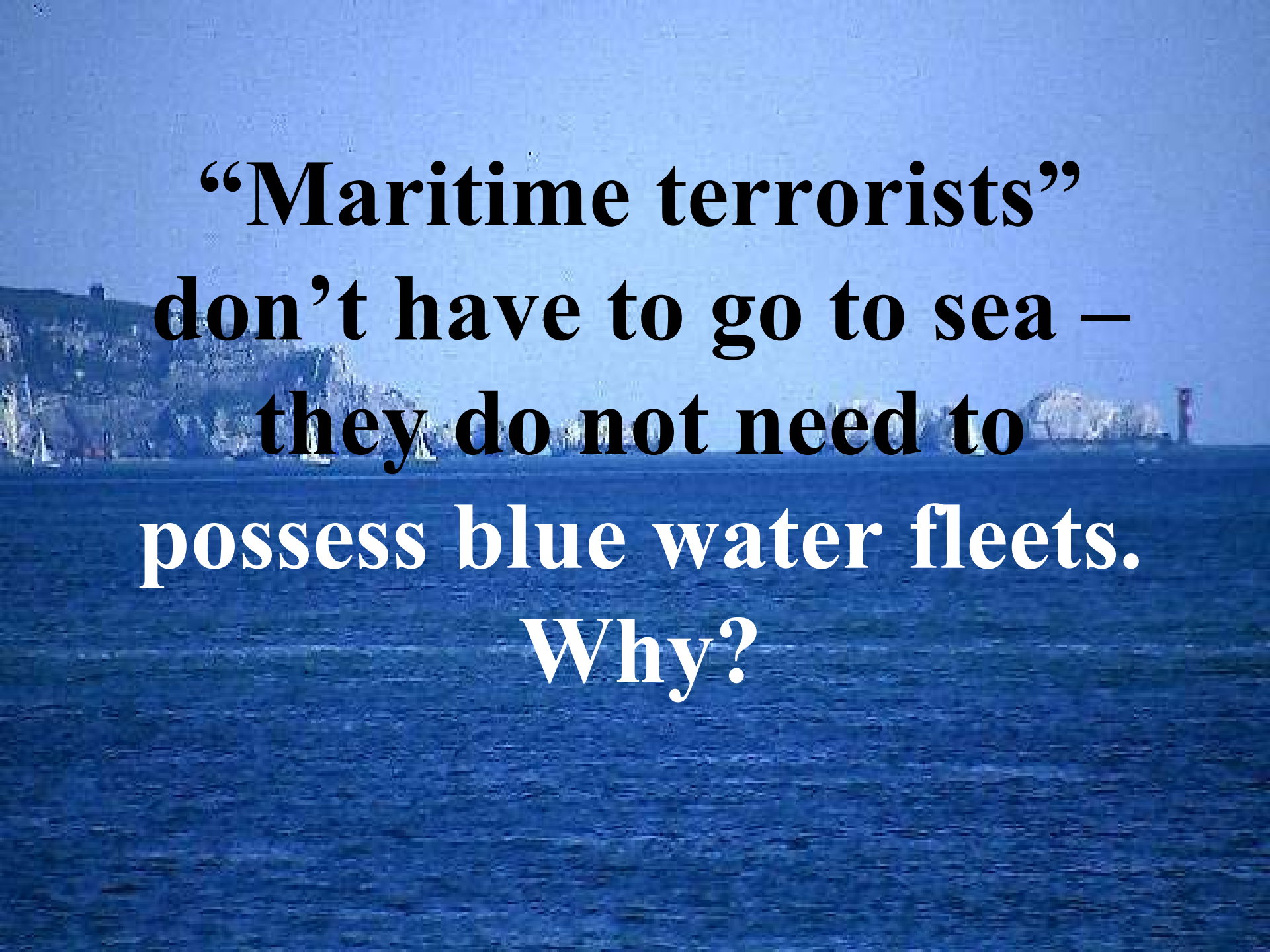
**Both these classic maritime strategies—involved maritime forces as **SOLE** providers of maritime security.**

A blue-tinted photograph of a harbor scene. In the background, a dark, rocky coastline is visible with a lighthouse on the right. Several large, white, multi-decked ships are docked or anchored in the water. The foreground is filled with the dark blue water of the harbor. The text is overlaid in the center of the image.

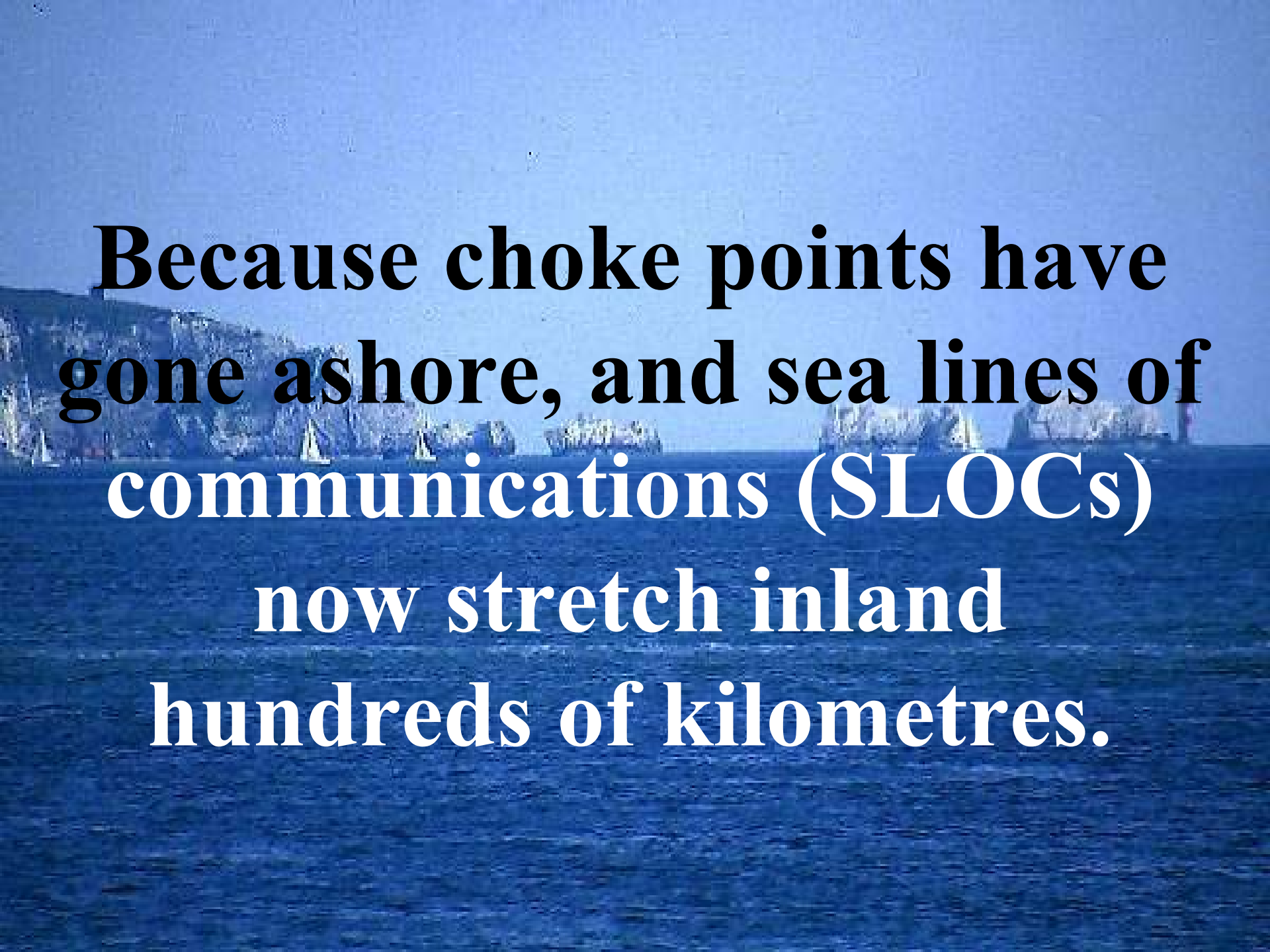
**However, after 911,  
navies/maritime forces  
no longer sole provider of  
maritime security.**



**Why? Because command  
of the sea cannot be  
achieved through decisive  
sea battle against  
terrorists!**



**“Maritime terrorists”  
don’t have to go to sea –  
they do not need to  
possess blue water fleets.  
Why?**



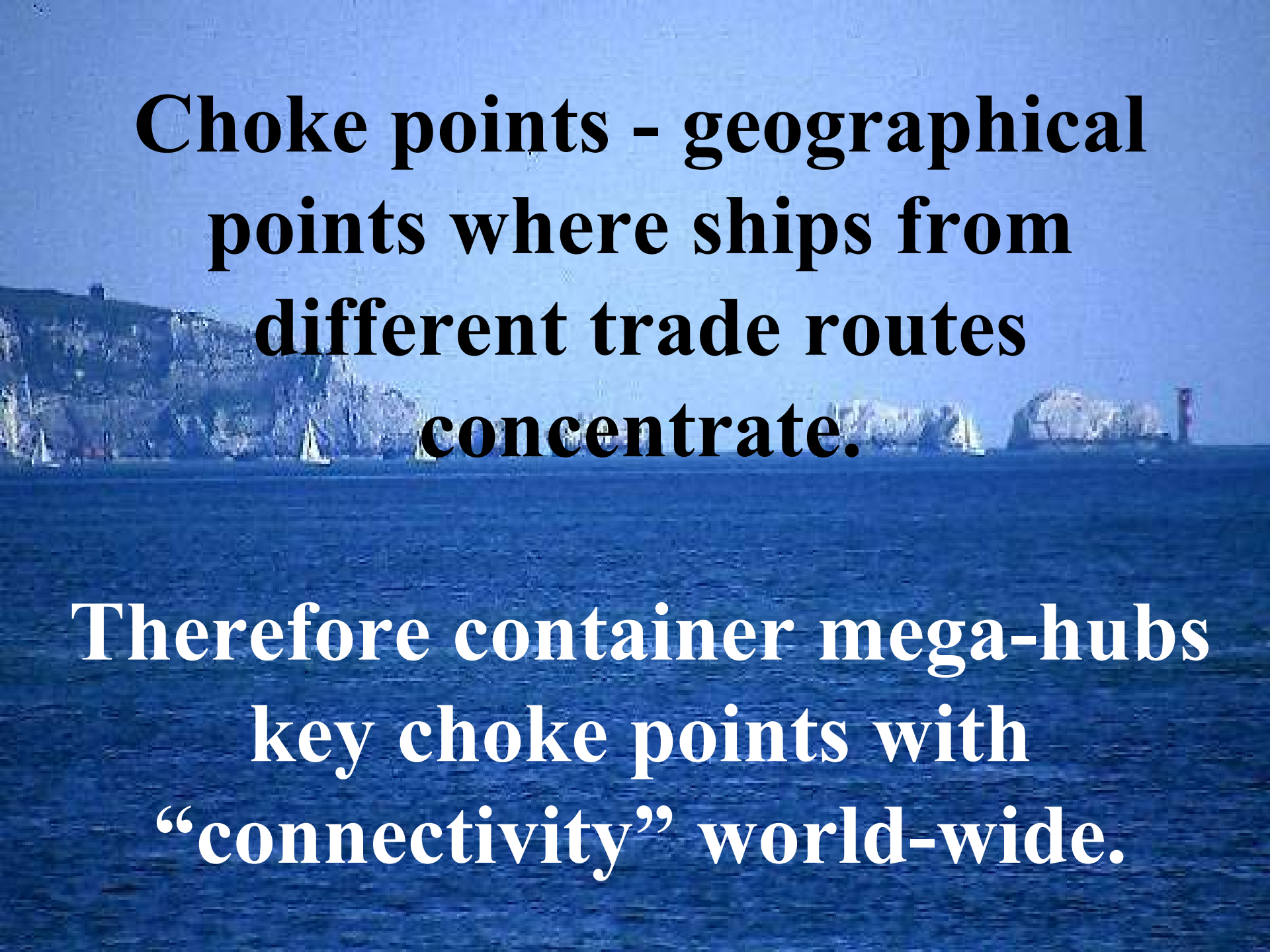
**Because choke points have  
gone ashore, and sea lines of  
communications (SLOCs)  
now stretch inland  
hundreds of kilometres.**



**DIRECT RESULT OF  
IMPACT OF  
CONTAINERISATION**



**World's primary choke  
points today found on  
land. Southeast Asia -  
Singapore is key choke  
point.**



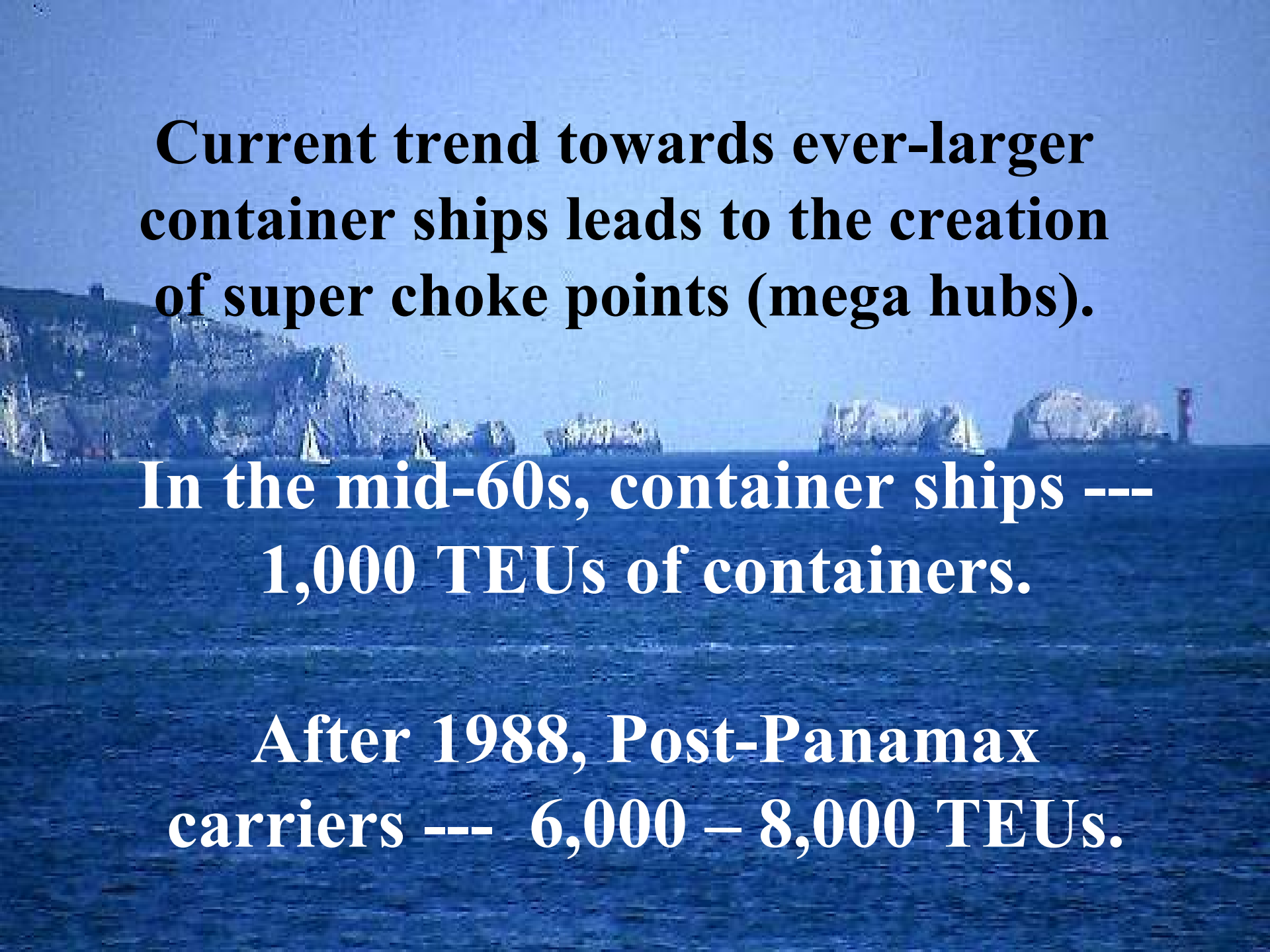
**Choke points - geographical points where ships from different trade routes concentrate.**

**Therefore container mega-hubs key choke points with “connectivity” world-wide.**





# IMPACT OF CONTAINERISATION



**Current trend towards ever-larger container ships leads to the creation of super choke points (mega hubs).**

**In the mid-60s, container ships ---  
1,000 TEUs of containers.**


**After 1988, Post-Panamax  
carriers --- 6,000 – 8,000 TEUs.**

# **Today, plans for Malacca-max carriers:–**

**18 metre drafts**

**•18,000 TEUs**

- Require wharfs 400 metres long,  
20 metres deep**
- Special cranes that can reach  
out to 50 metres.**

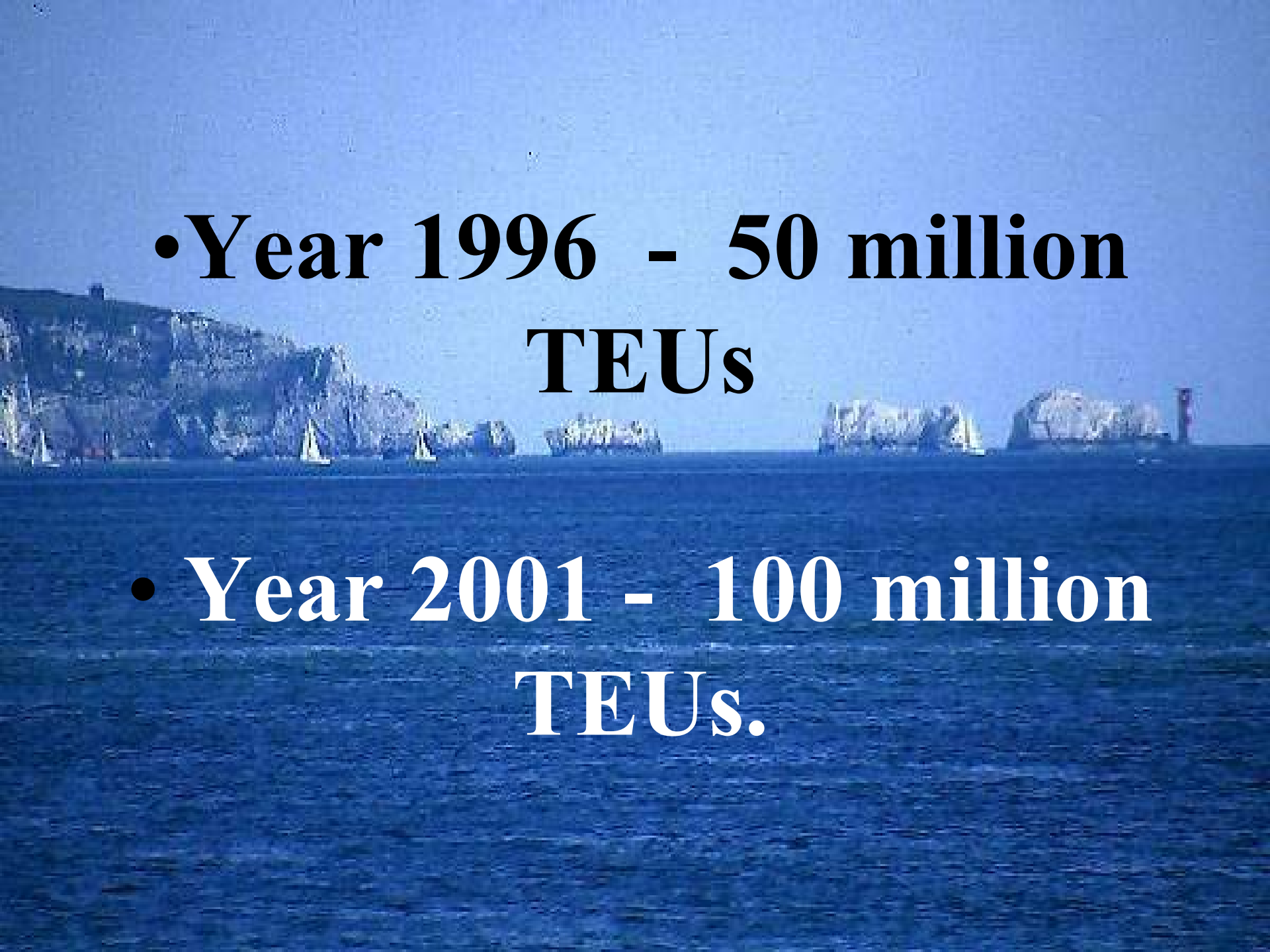


**If trend bigger is better  
continues, more and more  
trade will be concentrated in  
fewer and fewer mega-hubs.**

**Only few ports will be able to  
handle next generation super  
container ships.**

# **SOME STATISTICS**

**Top 20 mega ports handled  
45 - 50% of world container  
trade between 1996 and  
2001.**



- **Year 1996 - 50 million TEUs**

- **Year 2001 - 100 million TEUs.**



• **Year 1996 - Total world  
container volume - 150  
million TEUs**

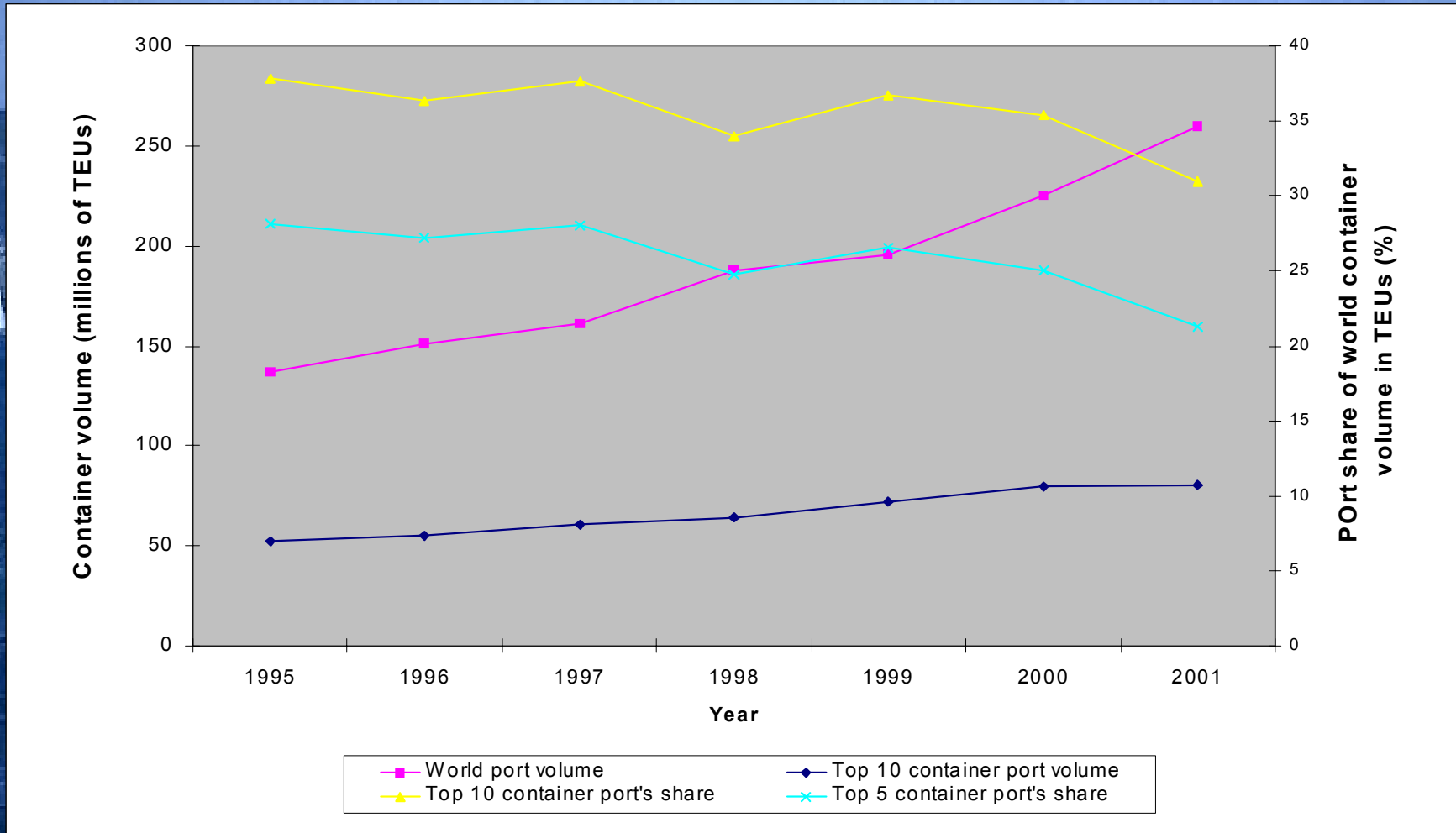
• **Year 2002 - 250 million  
TEUs**



**60% to 70% of  
TOTAL WORLD  
SEABORNE  
TRADE.**

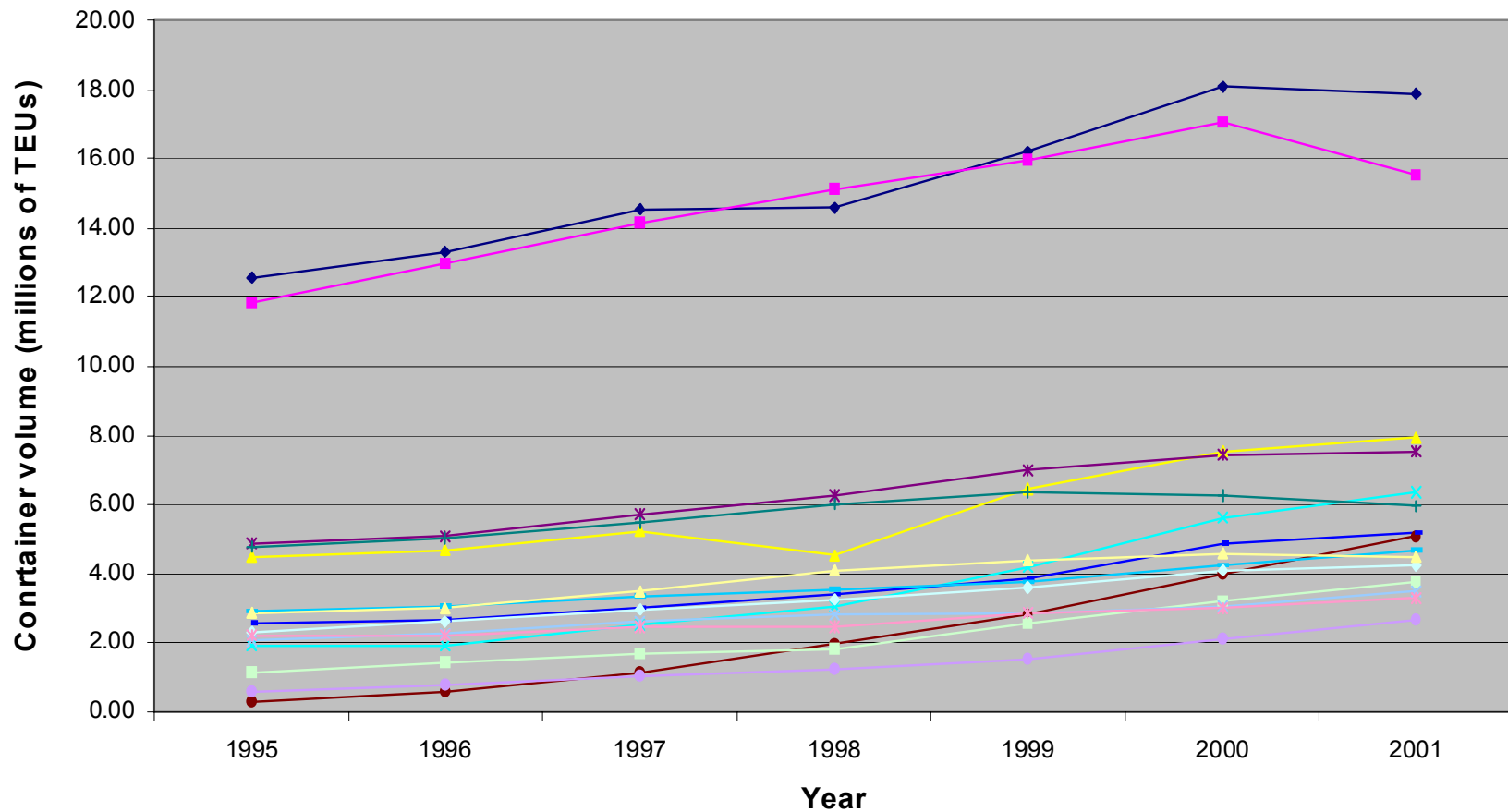


**Figure 1 Major port container volume and share of world container volume, 1995 to 2001**  
**(in millions of twenty-foot equivalent units and percentage)**



*Source: Containerisation International Yearbook, various years.*

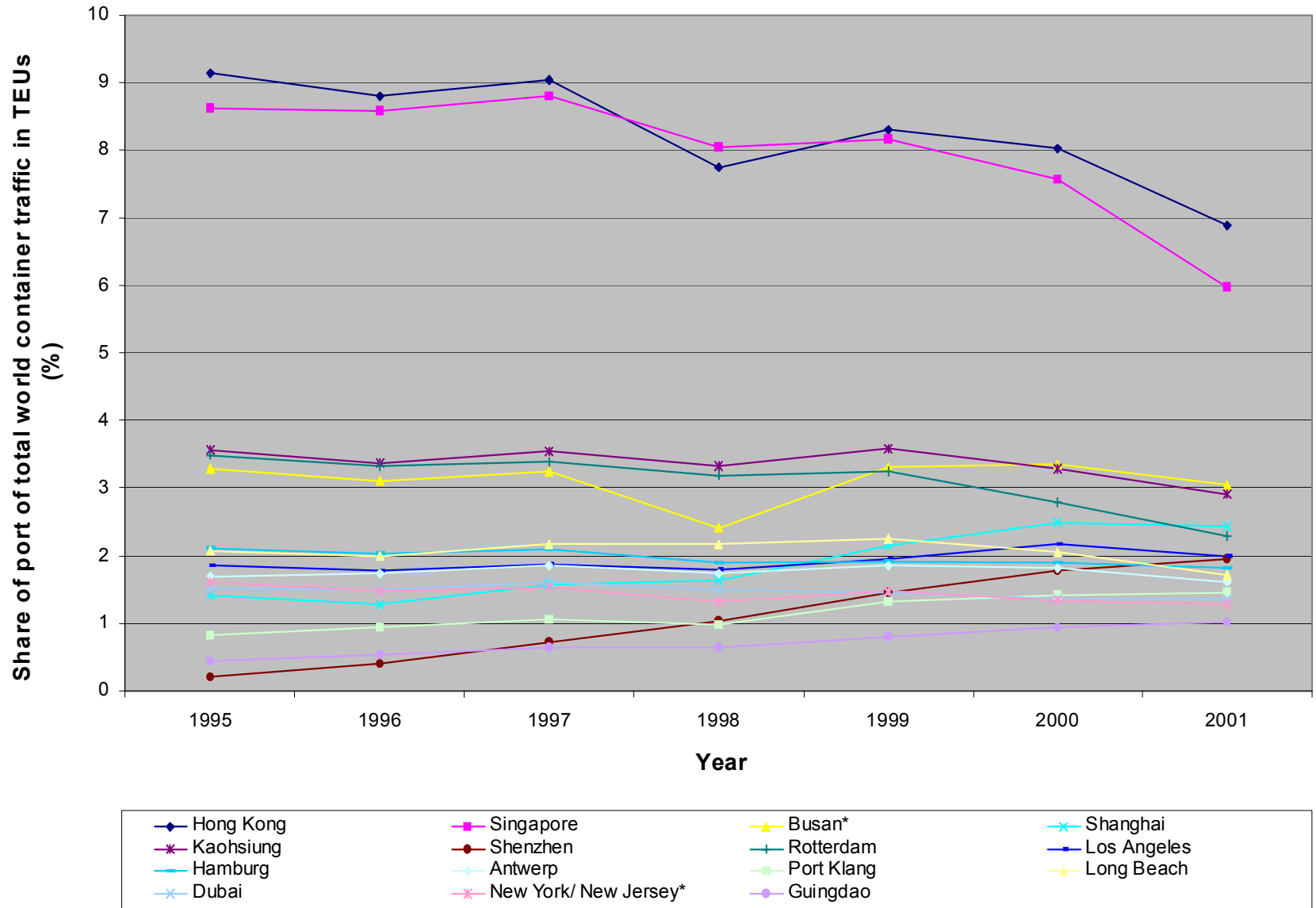
**Figure 2 Container volume of major container ports in the world, 1995 to 2001  
(in millions of twenty-foot equivalent units)**



- ◆ Hong Kong
- ◆ Singapore
- ▲ Busan\*
- ✕ Shanghai
- ✕ Kaohsiung
- Shenzhen
- ✕ Rotterdam
- Los Angeles
- Hamburg
- Antwerp
- Port Klang
- New York/ New Jersey\*
- Dubai
- Guingdao
- Long Beach

**Figure 3**

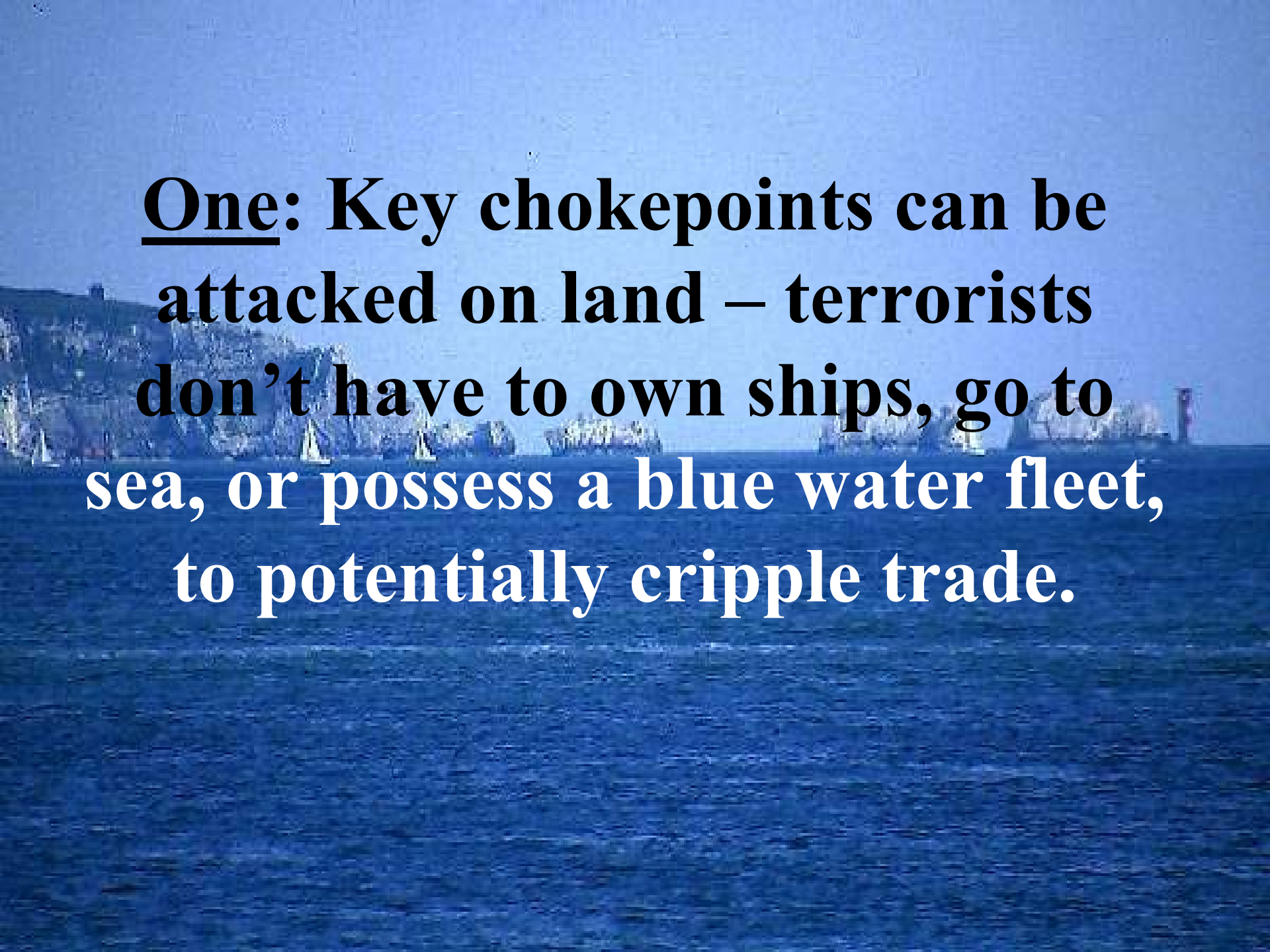
**Share of major container ports of world container volume based on twenty-foot equivalent units (TEUs), 1995 to 2001  
(in percentage, %)**



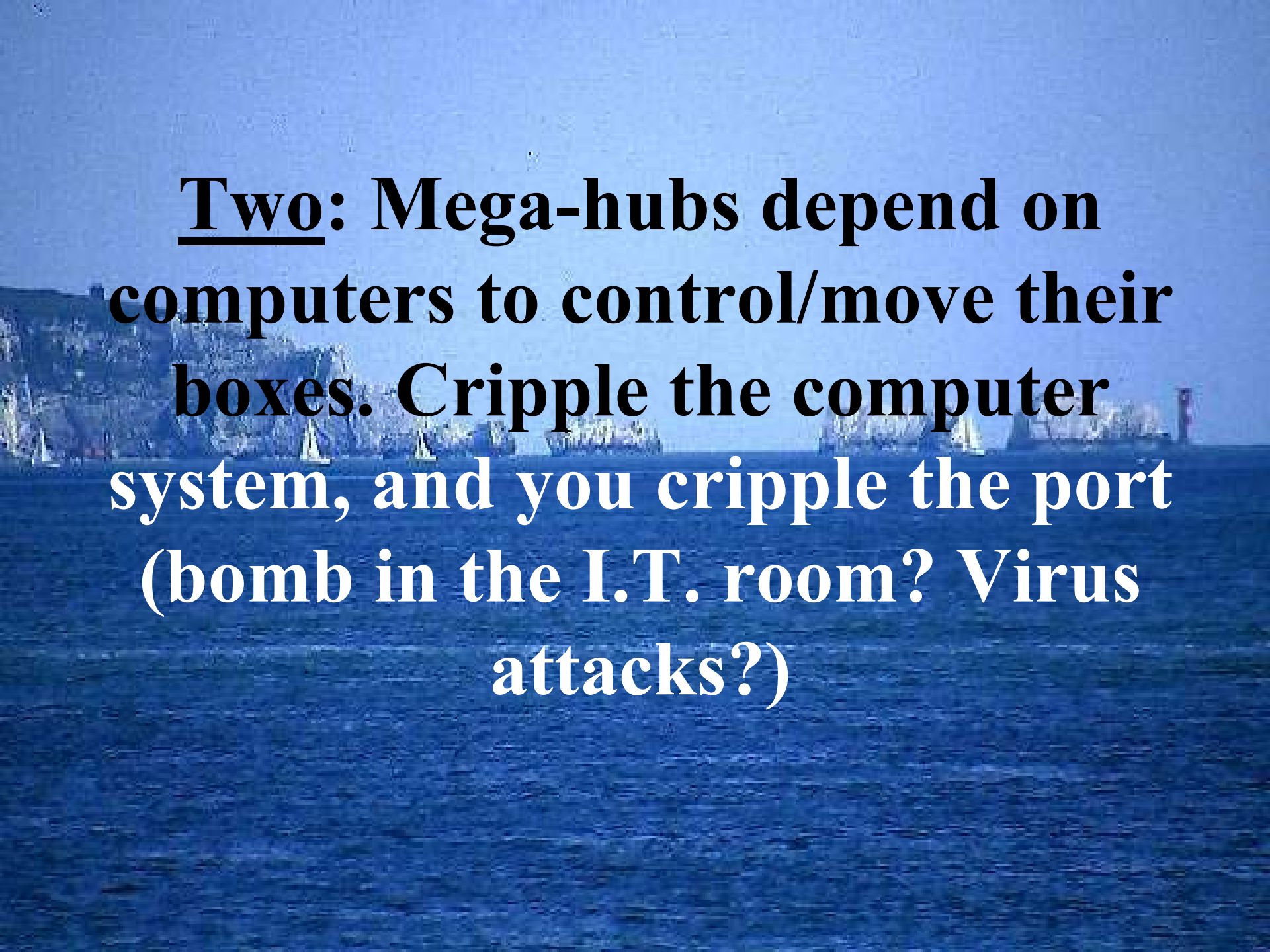
Source: Containerisation International Yearbook, various years.



**SIGNIFICANCE /  
IMPLICATIONS**



**One: Key chokepoints can be attacked on land – terrorists don't have to own ships, go to sea, or possess a blue water fleet, to potentially cripple trade.**

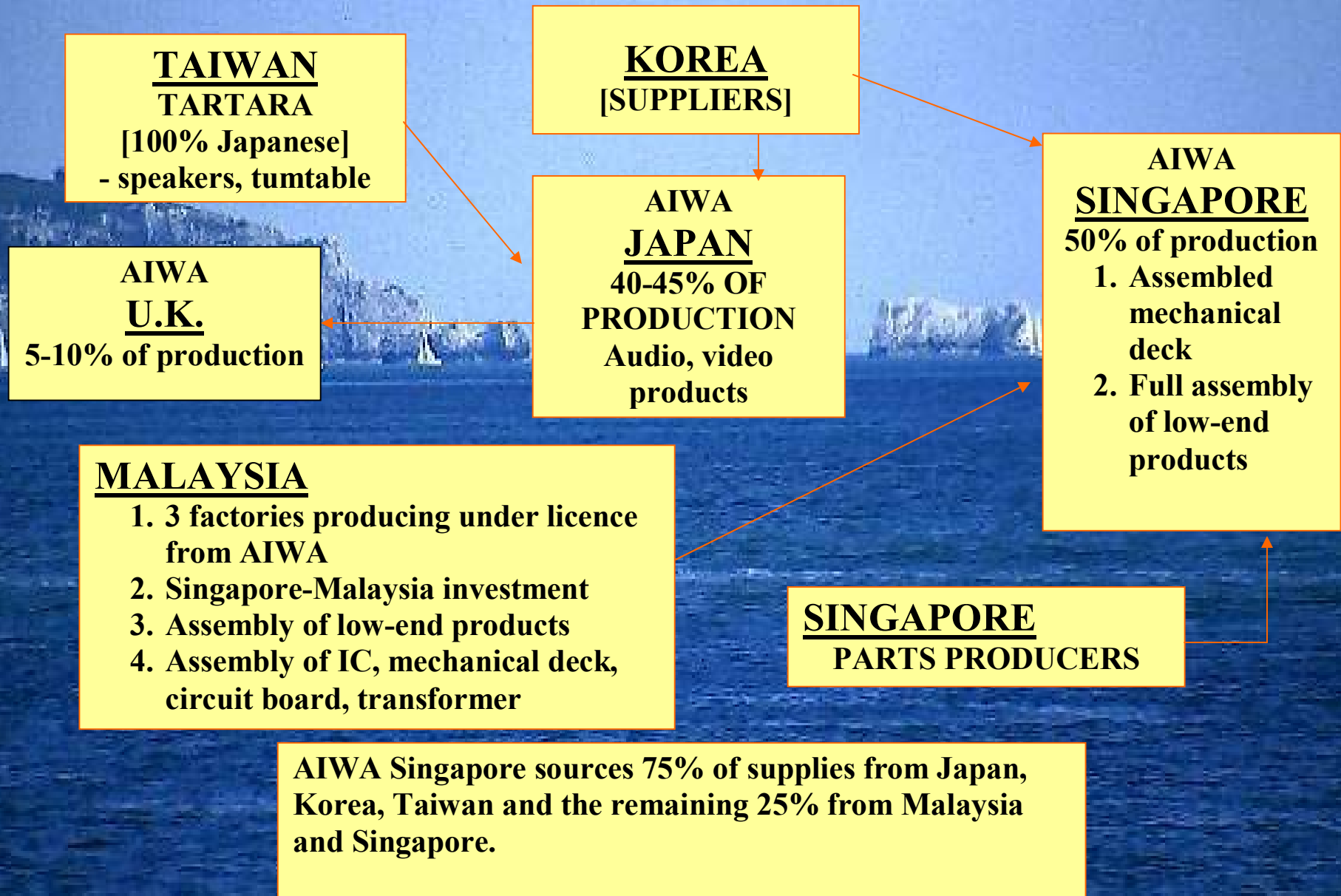


**Two: Mega-hubs depend on computers to control/move their boxes. Cripple the computer system, and you cripple the port (bomb in the I.T. room? Virus attacks?)**

# **Three: Crippled mega-port will disrupt world trade, because of**

- **Globalised production**
- **Mega-ports cannot be substituted one for the other in the short term.**
- **Reason-**
- **Just-in-time production, and J.I.T. shipping schedules.**

# AIWA PRODUCTION NETWORK DISTRIBUTED AND JUST-IN TIME PRODUCTION





**Four: Mega-hubs are potential sources of threats because of the thousands of boxes flowing through each day.**

**Year 2002**

- Singapore 17 million TEUs
- Hong Kong 19 million TEUs).

**Mega-hubs can “export” weapons of mass destruction, terrorists etc in their outgoing containers.**

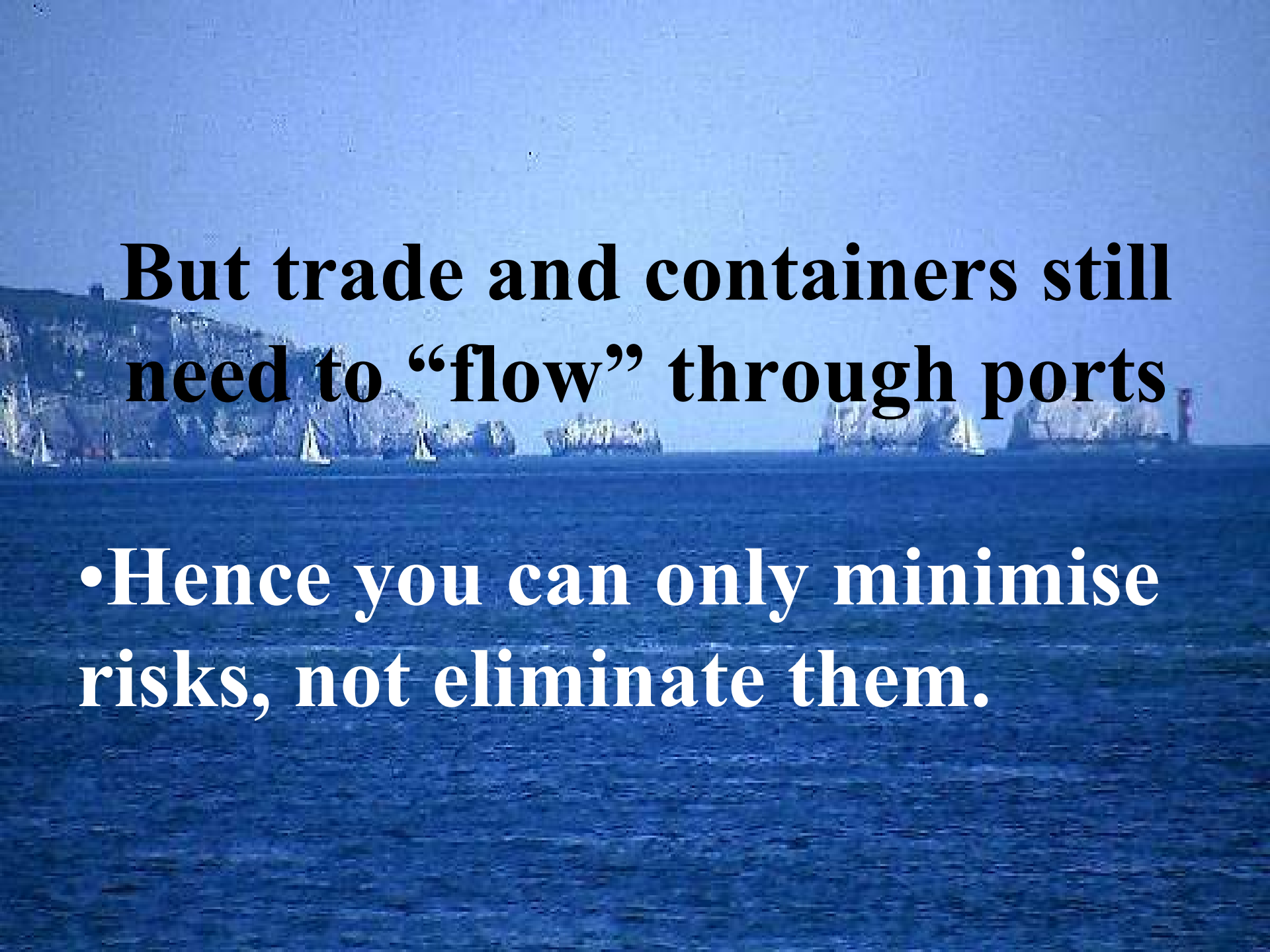
## Five: Mega-hubs vulnerable targets

- They were designed for efficiency
- To serve open trading systems.
- Hence, U.S. container security initiative (CSI).
- But CSI will not be able to totally eliminate threat.
- Thus, “risk-based” methodology to prevent “transportation security incidents”.
- Terrorists can use wide range of weapons against mega-hubs.

**Container Security initiative - to establish additional lines of security in the supply chain of international commerce.**


**At port level – emphasis on:-**

- **Smart containers**
- **Container screening**
- **Smart tags**
- **Port threat and vulnerability assessments**
- **Vessel and facility vulnerability assessments etc.**




**But trade and containers still need to “flow” through ports**

- **Hence you can only minimise risks, not eliminate them.**

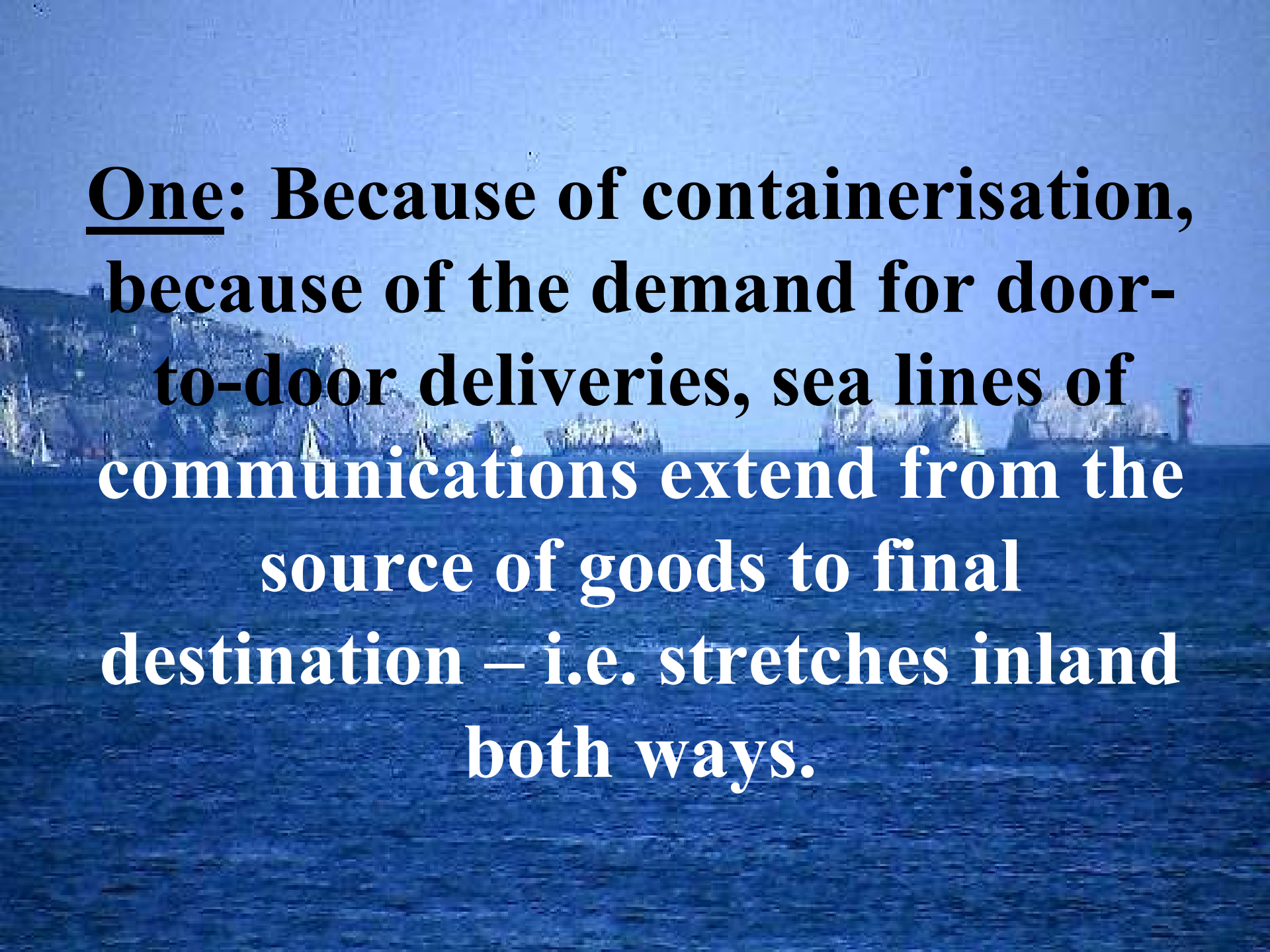
A photograph of several offshore oil platforms in the ocean. The platforms are large, complex structures with multiple levels and towers. They are situated in a deep blue sea under a clear sky. The platforms are arranged in a line from left to right, with some appearing closer and larger than others. The overall scene is a wide expanse of water with a few small whitecaps visible.

# **Offshore platforms arguably less vulnerable.**

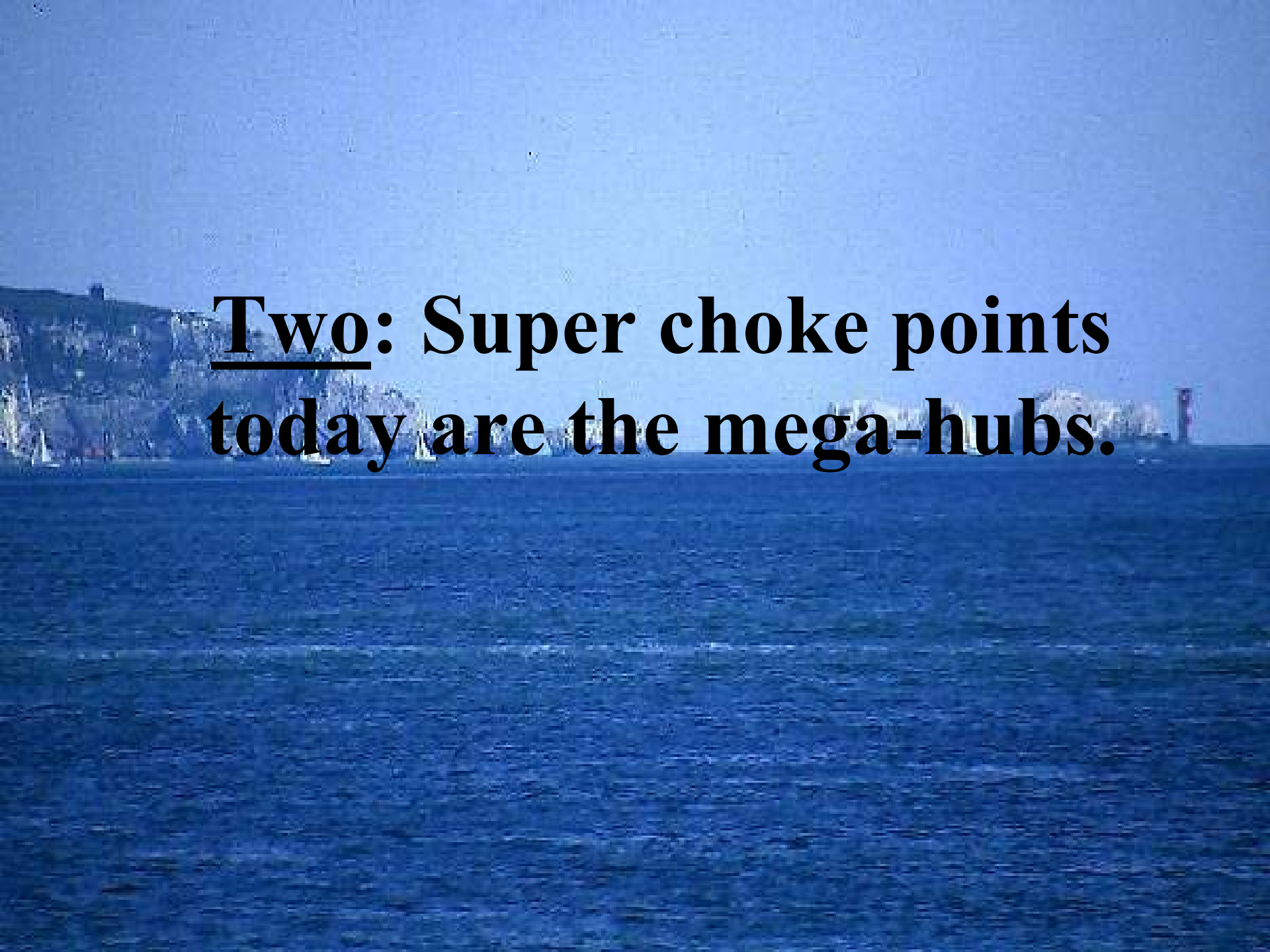
- Larger safety zones round them**
- Traffic can be limited / better controlled**



**IMPLICATIONS  
OF  
CONTAINERISATION**



**One: Because of containerisation,  
because of the demand for door-  
to-door deliveries, sea lines of  
communications extend from the  
source of goods to final  
destination – i.e. stretches inland  
both ways.**



**Two: Super choke points  
today are the mega-hubs.**





**Three: Maritime security and strategy no longer confined to maritime forces.**

- **Example, container security initiative is under purview of U.S. Customs, not the U.S. Coast Guard or the U.S. Navy.**

## Four: Questions

• **Necessary to reverse trend towards mega-ships and mega-ports?**

• **Need to build more hubs so that all our eggs won't be contained in one basket?**

• **Has / will diseconomies of scale set in because of terrorist threat?**

**U.S. move to secure itself against  
“containerised” attacks – the  
container security initiative and C-  
TPAT (Customs – Trade Partnership  
Against Terrorism) is seen by many  
countries as:-**

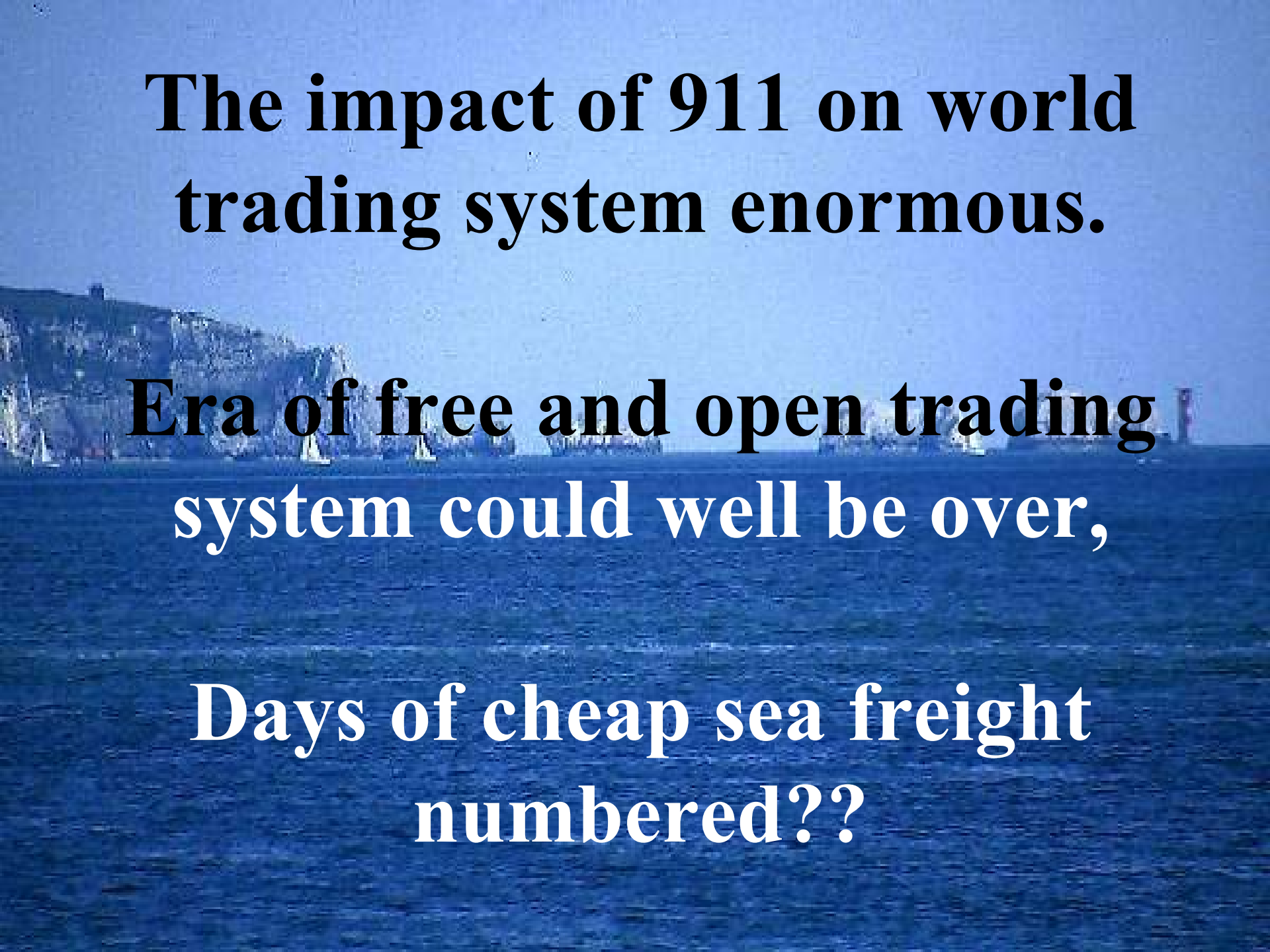
- **Intrusive**
- **Violation of their sovereignty**
- **Deeply resented.**



**Ports today must not be considered  
as standalone units.**

- **Protection must be considered as  
part and parcel of choke point  
defence.**

- **Sea lines of communication  
defence that today extend  
hundreds of miles inland.**

A blue-tinted photograph of a coastal city with a harbor and a lighthouse. The text is overlaid on the image.

**The impact of 911 on world trading system enormous.**

**Era of free and open trading system could well be over,**

**Days of cheap sea freight numbered??**

# Shipping in Narrow Straits

**Second vulnerable target – e.g. Malacca Straits.**

**Terrorist groups can flourish in parts of Southeast Asia because of loss of governance in parts of the Philippines and Indonesia.**



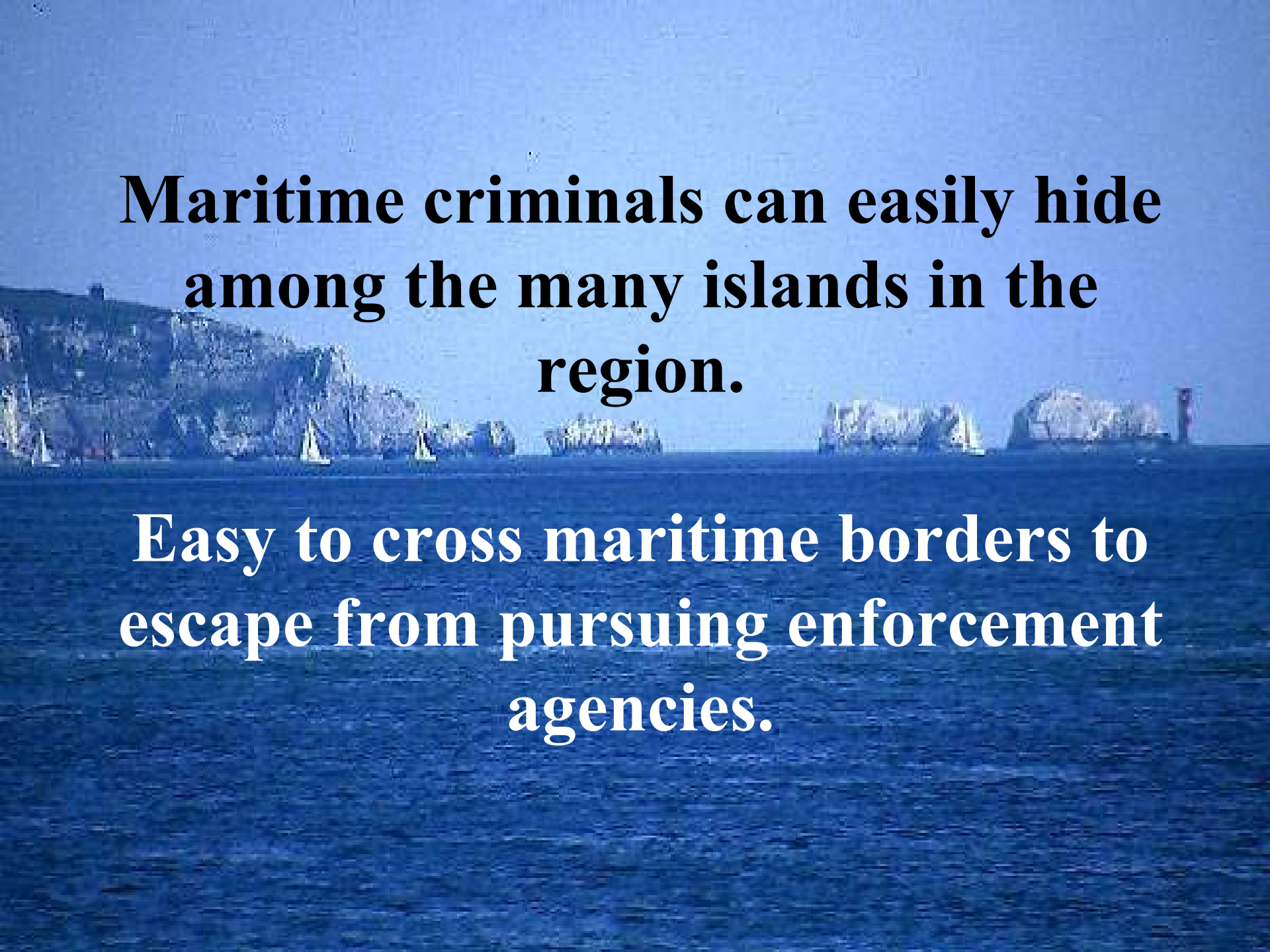
**Terrorists can hide and move easily among mobile populations.**

**Favourable geographic and geo-strategic situation for terrorists.**

# **Existence of various groups of**

- Transnational criminals**
- Separatists**
- Pirates**
- People smugglers**
- Illegal migrants**
- Multiple maritime borders.**



A scenic view of a coastline with several islands and a lighthouse in the distance. The sky is a clear, pale blue, and the water is a deep, dark blue. The islands are rugged and rocky, with some greenery visible on the larger ones. A lighthouse is visible on the right side of the image. The text is overlaid on the image in a bold, black, serif font.

**Maritime criminals can easily hide  
among the many islands in the  
region.**

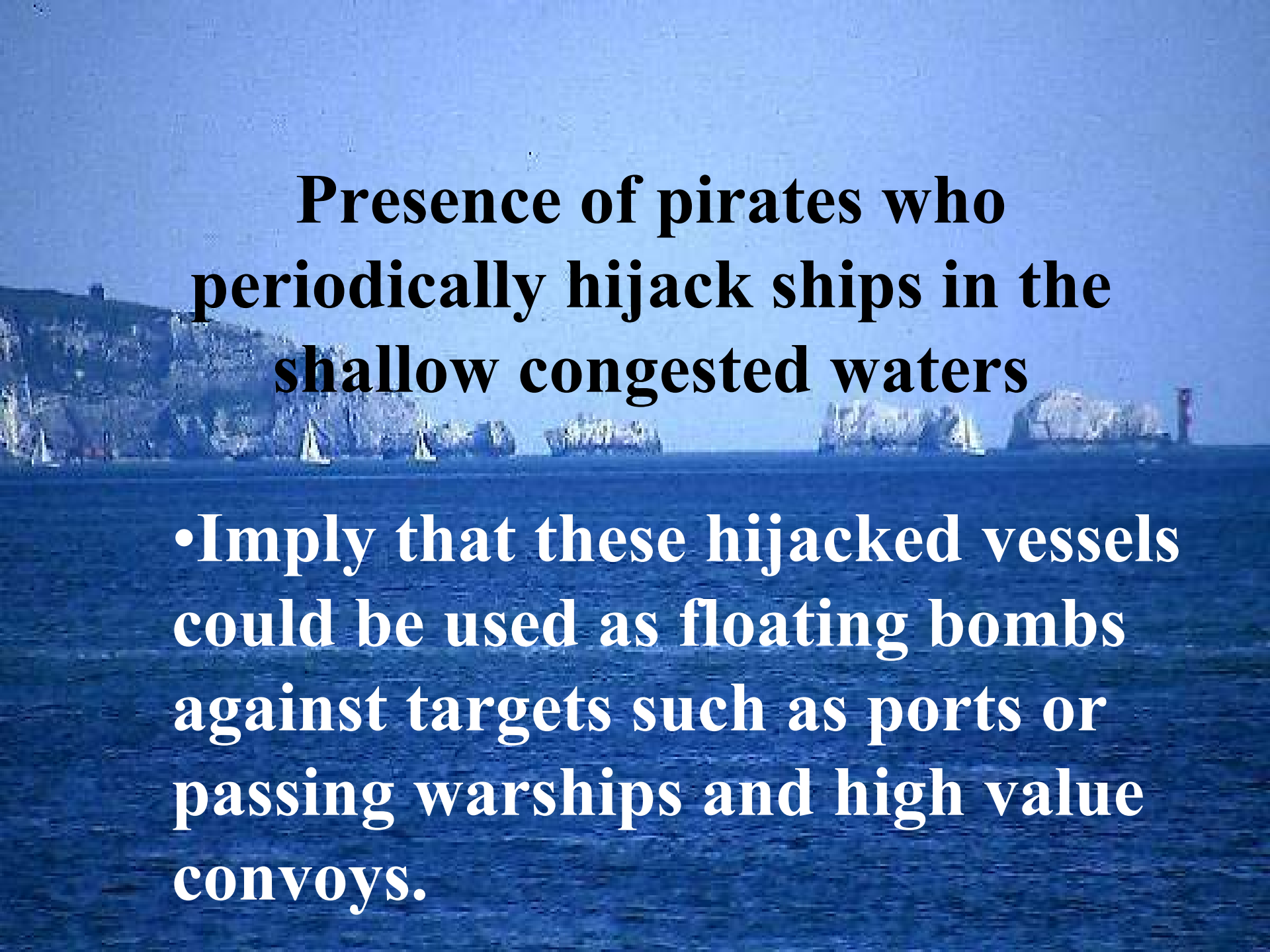
**Easy to cross maritime borders to  
escape from pursuing enforcement  
agencies.**

# **Southeast Asian waters**

- **Relatively narrow**
- **Thousands of local craft ply coastal waters in addition to hundreds of tankers and liners that transit critical straits used for international navigation.**
- **Difficult to screen all local craft**
- **Easy for terrorists to hide among them.**

# PIRACY

A scenic view of a coastline with a blue sky, a blue sea, and a rocky shore. The word 'PIRACY' is written in large, bold, red letters across the center of the image. The background shows a clear blue sky, a calm blue sea, and a rocky coastline with some buildings and a lighthouse visible in the distance.



**Presence of pirates who periodically hijack ships in the shallow congested waters**


- Imply that these hijacked vessels could be used as floating bombs against targets such as ports or passing warships and high value convoys.**



**Popular press has played up the issue of “piracy cases” in Southeast Asian waters, particularly in the Straits of Malacca.**



**International Maritime  
Organisation (IMB) has  
described the Malacca  
Straits as a pirate-  
infested area.**



**However, threat posed by pirates to shipping in the Malacca Straits over exaggerated tables below show:-**

**More than 600 international ships use the Malacca Straits daily, thus total number of piracy incidents over the years statistically insignificant.**

# NO. OF PIRACY INCIDENTS BY IMB CATEGORIES

Year	Categories	Location					Total
		Indonesia	Malacca Straits	Malaysia	Singapore Straits	South China Sea	
1995	Roberry	6		2	1	1	10
	Attempted Roberry	1					1
	Theft	12		3			15
	Attempted Theft	9	1	2		1	13
	Hijacked*			2	1		3
	Boarded (No further info)	1	1			1	3
1996	Roberry	15		1			16
	Attempted Roberry	2					2
	Theft	19		1			20
	Attempted Theft	14	3	3		1	21
	Hijacked*	2					2
	Boarded (No further info)	2				1	3
1997	Roberry	17				3	20
	Attempted Roberry	4			1		5
	Theft	14			2	1	17
	Attempted Theft	11		3	1	1	16
	Hijacked*	2		1	1	1	5
	Boarded (No further info)						0
1998	Roberry	20		6		1	27
	Attempted Roberry	3					3
	Theft	16		4			20
	Attempted Theft	4					4
	Hijacked*	3	1			3	7
	Boarded (No further info)						0
	Attempted to Board	13				1	14



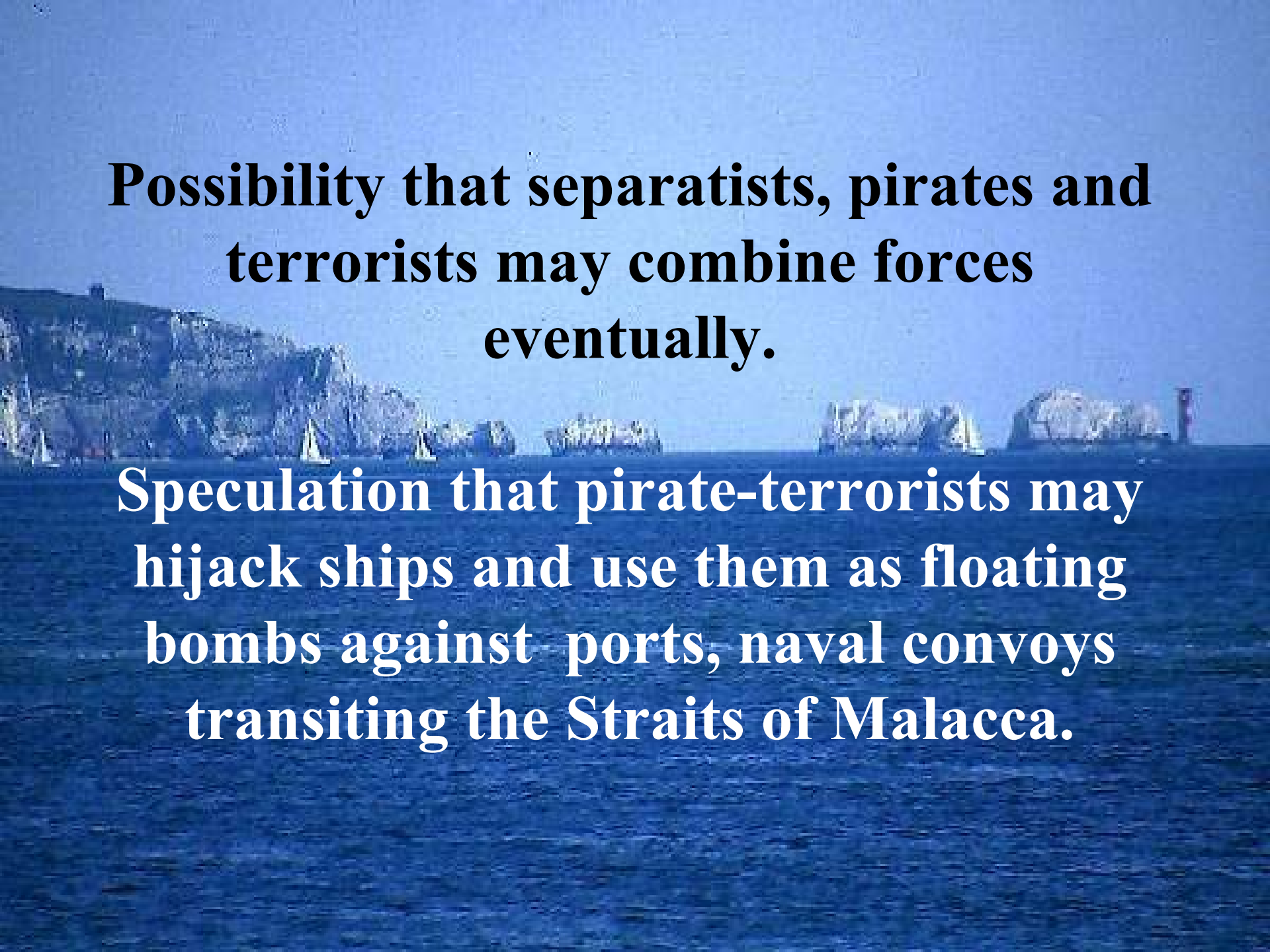
1999	Roberry	32		1	3		36
	Attempted Roberry	14			4		18
	Theft	25		10	2		37
	Attempted Theft	17		4	1		22
	Hijacked*	1		2			3
	Boarded (No further info)	2					2
	Attempted to Board	24	1	1	4	3	33
2000	Roberry	19	22	3	2		46
	Attempted Roberry	17	2	1			20
	Theft	25	9	3		1	38
	Attempted Theft	26	3	10		1	40
	Hijacked*		1		1	1	3
	Boarded (No further info)	1					1
	Attempted to Board	31	38	4	2	7	82
2001	Roberry	6	5		1		12
	Attempted Roberry	2		1			3
	Theft	38	2	8			48
	Attempted Theft	12		1			13
	Hijacked*	4	2	6			12
	Boarded (No further info)	10		1	3		14
	Attempted to Board	21	9	2	1	3	36
2002	Roberry	1	1				2
	Attempted Roberry	1	1				2
	Theft	61		6	1		68
	Attempted Theft						0
	Hijacked*	8	10	3	1		22
	Boarded (No further info)	12	2	3			17
	Attempted to Board	21	3	1	3		28
Total		621	117	99	36	32	905

Source: ICC International Maritime Bureau, *Piracy & Armed Robbery Against Ships, Annual Report* (various years)

\*Ship completely taken over



**However, danger is that porous maritime borders, combined with mass illegal migration of economic refugees and separatists, enable terrorists to hide their movements.**



**Possibility that separatists, pirates and terrorists may combine forces eventually.**

**Speculation that pirate-terrorists may hijack ships and use them as floating bombs against ports, naval convoys transiting the Straits of Malacca.**



**LIMITED ROLE  
FOR NAVIES?**

# War Against Terrorism

**What should core role of navies be?**

**War fighting or constabulary role (resource protection)?**

**A two-tiered navy?**

**War fighting navy PLUS coast guard?**

**No easy answers.**

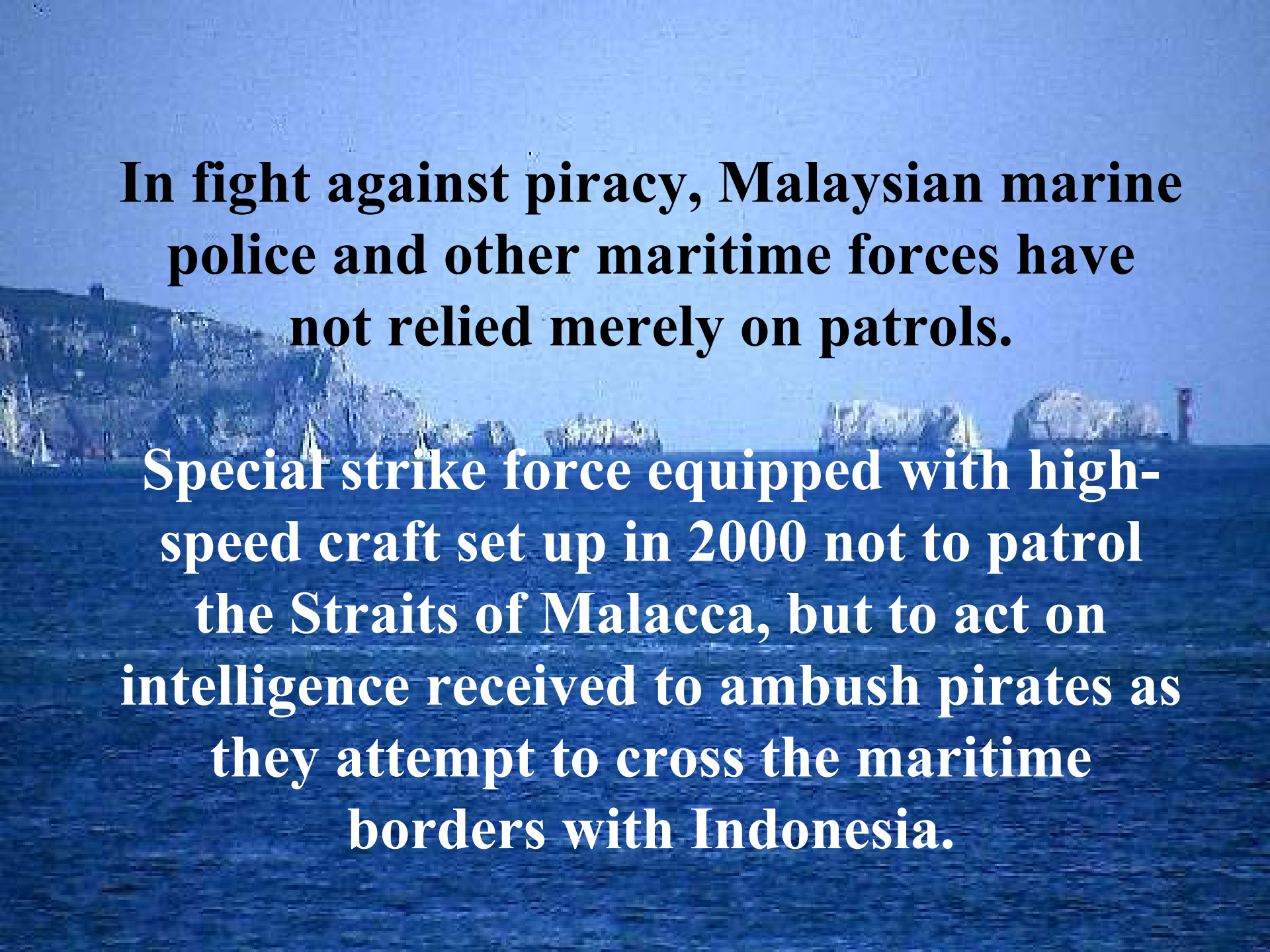
A scenic view of a coastline with a blue sky and sea. In the background, there is a large rock formation and a lighthouse. The text "THE MALAYSIAN EXPERIENCE" is overlaid in red, bold, serif font.

# THE MALAYSIAN EXPERIENCE



## **Three critical elements needed in the flight against transnational criminals.**

- 1. Accurate intelligence.**
- 2. Numbers, platforms, to establish a maritime 'fence'.**
- 3. Operations on land to deny place of refuge for criminals/terrorists, and to separate criminals from sympathisers.**




**In fight against piracy, Malaysian marine police and other maritime forces have not relied merely on patrols.**

**Special strike force equipped with high-speed craft set up in 2000 not to patrol the Straits of Malacca, but to act on intelligence received to ambush pirates as they attempt to cross the maritime borders with Indonesia.**




A blue-tinted photograph of a coastal town and a large ship at sea. The town is built on a hillside on the left, and a large ship is visible in the water on the right. The text is overlaid in the center.

**Nearly all cases of  
successful attacks against  
pirates by the Malaysian  
security agencies – result  
of solid intelligence.**



**In April 2000, the *Abu Sayaf Group* (ASG) kidnapped 21 foreign tourists and Malaysians from the resort island of Sipadan, off Sabah.**

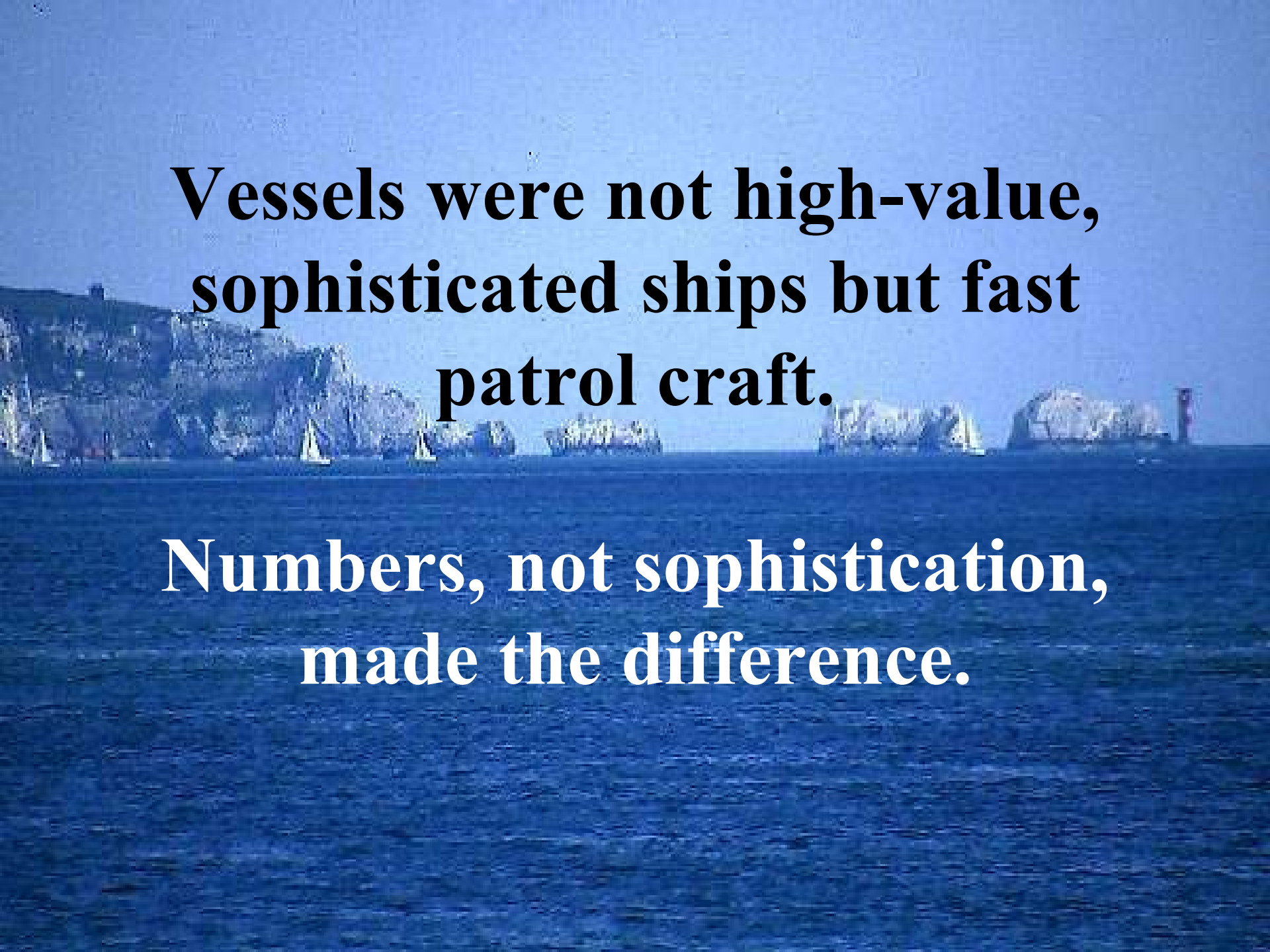
**In September 2000, the ASG struck again and took three more Malaysians from the island of Pulau Pandanan.**



**After these incidents, Malaysia initiated special operation designed to prevent illegal migrants, and the pirates / terrorists posing as illegal immigrants, from infiltrating Malaysian waters.**

A blue-tinted photograph of a coastal scene. In the foreground, the dark blue water of the sea is visible. In the middle ground, a chain of several islands or rocky outcrops stretches across the horizon. To the left, a larger landmass with some buildings is visible. In the distance, a line of small, white, rectangular objects, likely navy patrol boats, is visible on the water. The sky is a clear, light blue.

**This involved soldiers  
garrisoning a chain of  
islands, as well as a picket  
line of navy patrol boats.**



**Vessels were not high-value,  
sophisticated ships but fast  
patrol craft.**

**Numbers, not sophistication,  
made the difference.**



**Malaysia acquired  
more than 20 CB-90  
fast basic combat  
boats from Sweden.**

# Ops Nyah

**More significantly, Malaysian authorities launched a series of special operations - *Ops Nyah*, to round up illegal migrants and deport them from Sabah.**



**Supplemented by special operation  
- *Ops Pasir* - involving all three  
services of the Armed Forces and  
the Police, in 2000 to secure the  
coastline and the 523 islands along  
the east coast of Sabah.**




# **Ops Pasir**

**Maritime patrols, line of 55 manned outposts to secure the area against illegal incursions**

**Aim - to ensure that terrorists would not be able to lose themselves among the very large group of transient, illegal and very large foreign community living in Sabah.**



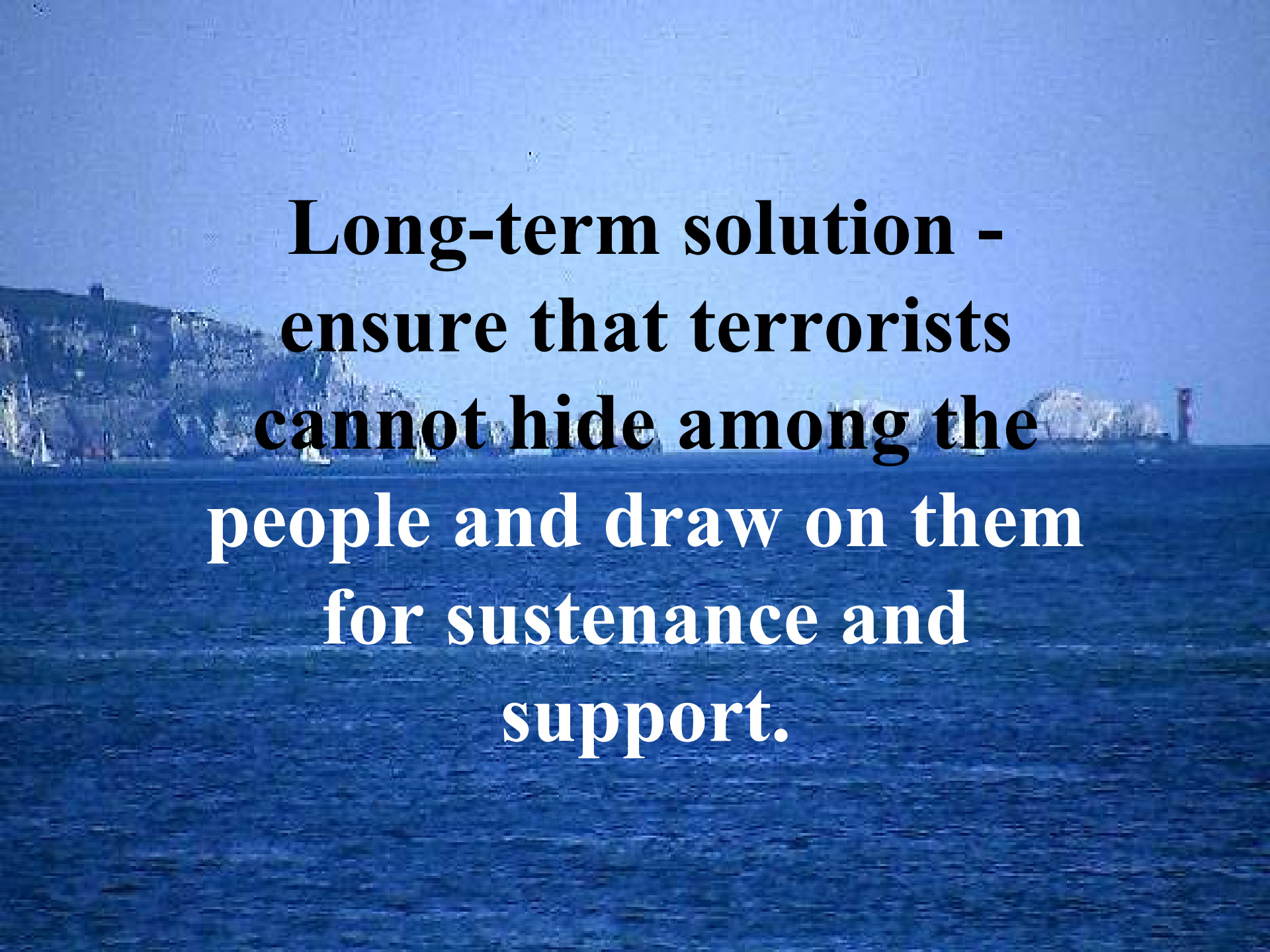
**These operations critical  
in managing the piracy  
and potential terrorism  
problem in East  
Malaysia.**



**Lesson of the long Malaysian  
experience against piracy and  
terrorism - fight cannot be won  
at sea alone.**

**Sea borne operations can only  
manage the problem.**

- Pirates, terrorists have their  
headquarters base on land, not at  
sea!**

The background is a blue-tinted photograph of a coastal city. In the foreground, there is a body of water. In the middle ground, a large stadium with a distinctive roof is visible. To the right, a tall lighthouse stands on a small island. The sky is clear and blue.

**Long-term solution -  
ensure that terrorists  
cannot hide among the  
people and draw on them  
for sustenance and  
support.**


# **Critical -**

**Series of social, economic  
and political programmes  
to empower the populace  
and give them a stake in  
the current political  
system.**



**But navies can still play a  
valuable role in**

- Processing intelligence,**
- Responding to specific requests to intercept suspected terrorist targets and their vessels, and**
- Provide wide area surveillance.**



**However, navies can only play complementary role in combating terrorism.**

**Other government and intelligence agencies such as customs, police, coast guards etc, equally important.**



# CONCLUSION

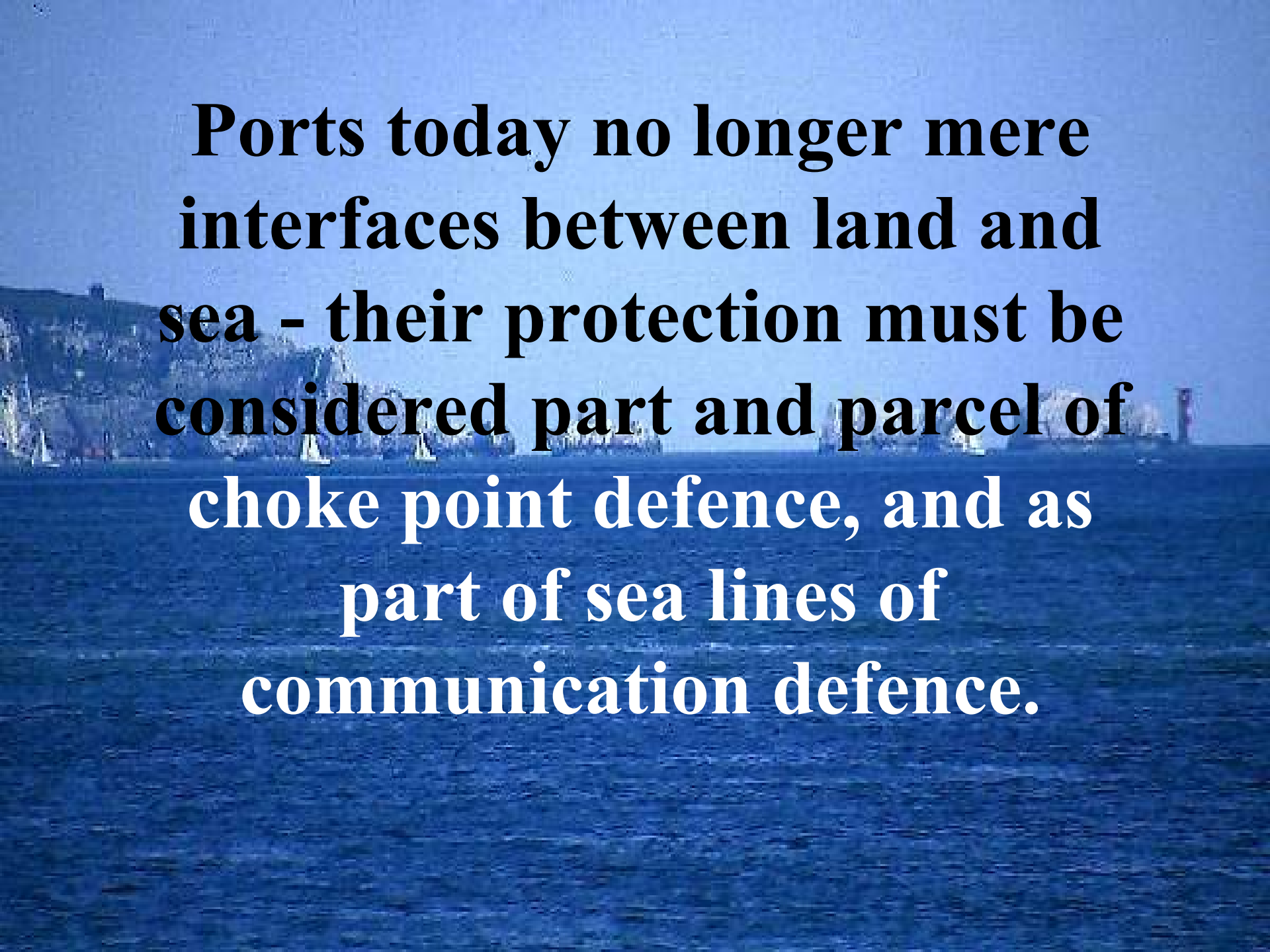


**Most important consequences of 911  
- navies are no longer the sole  
providers of maritime security.**

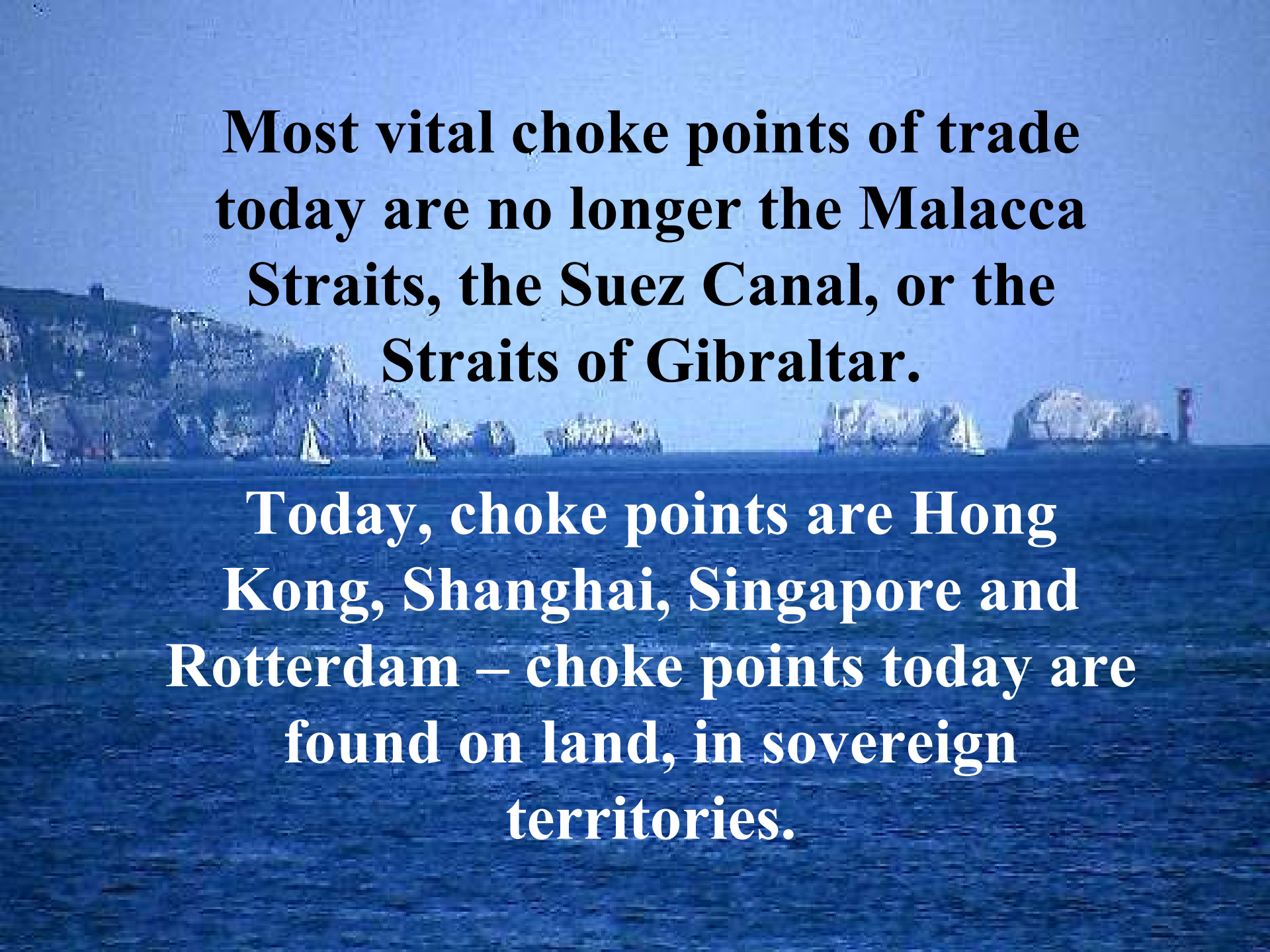
**• Impact of 911 on the world  
trading system enormous. Era of  
the free and open trading system  
could well be over, and the days of  
cheap sea freight numbered.**



**Need for navies to  
integrate themselves  
with other agencies  
involved in the battle  
against terrorism.**



**Ports today no longer mere  
interfaces between land and  
sea - their protection must be  
considered part and parcel of  
choke point defence, and as  
part of sea lines of  
communication defence.**

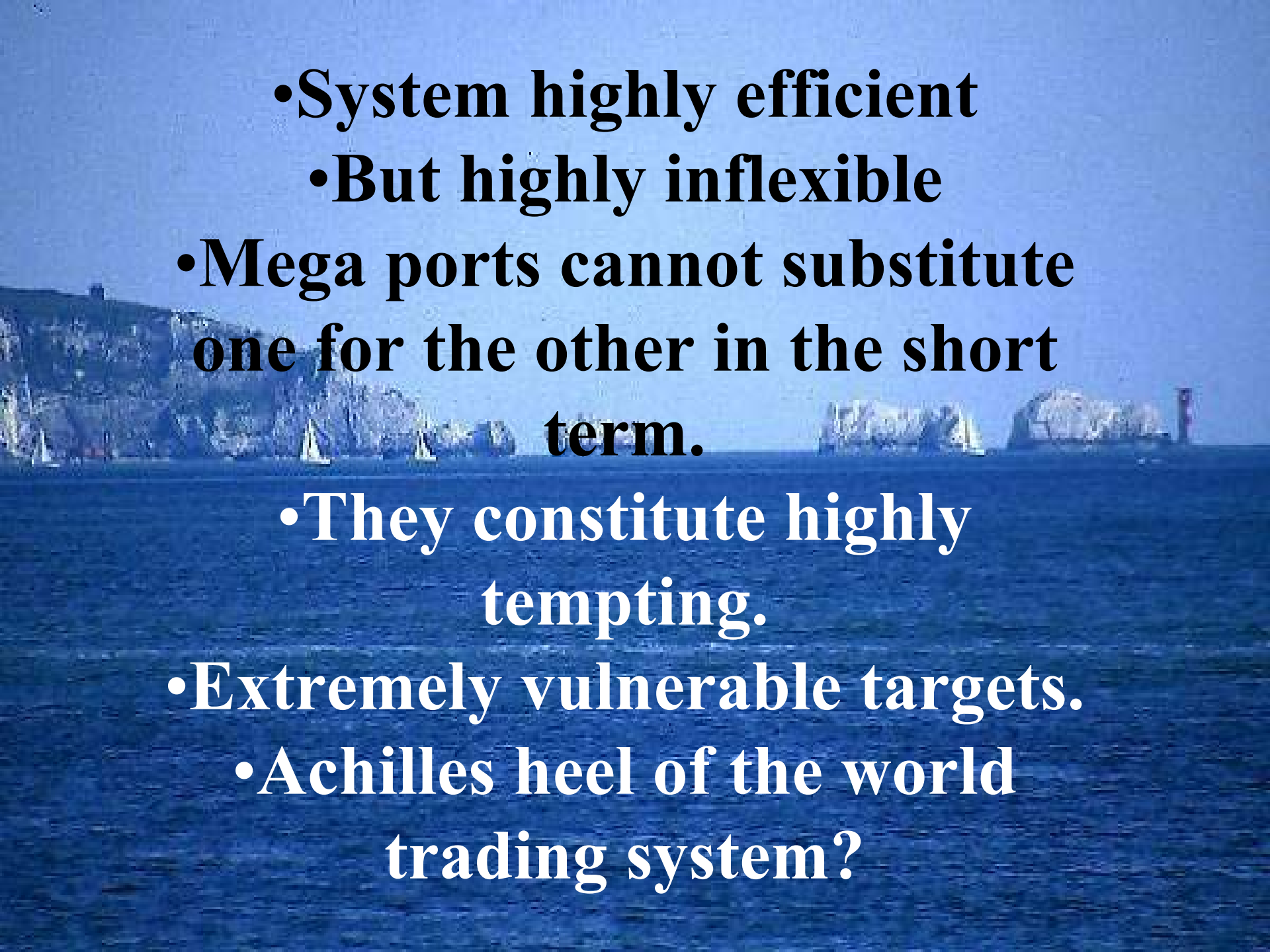


**Most vital choke points of trade today are no longer the Malacca Straits, the Suez Canal, or the Straits of Gibraltar.**

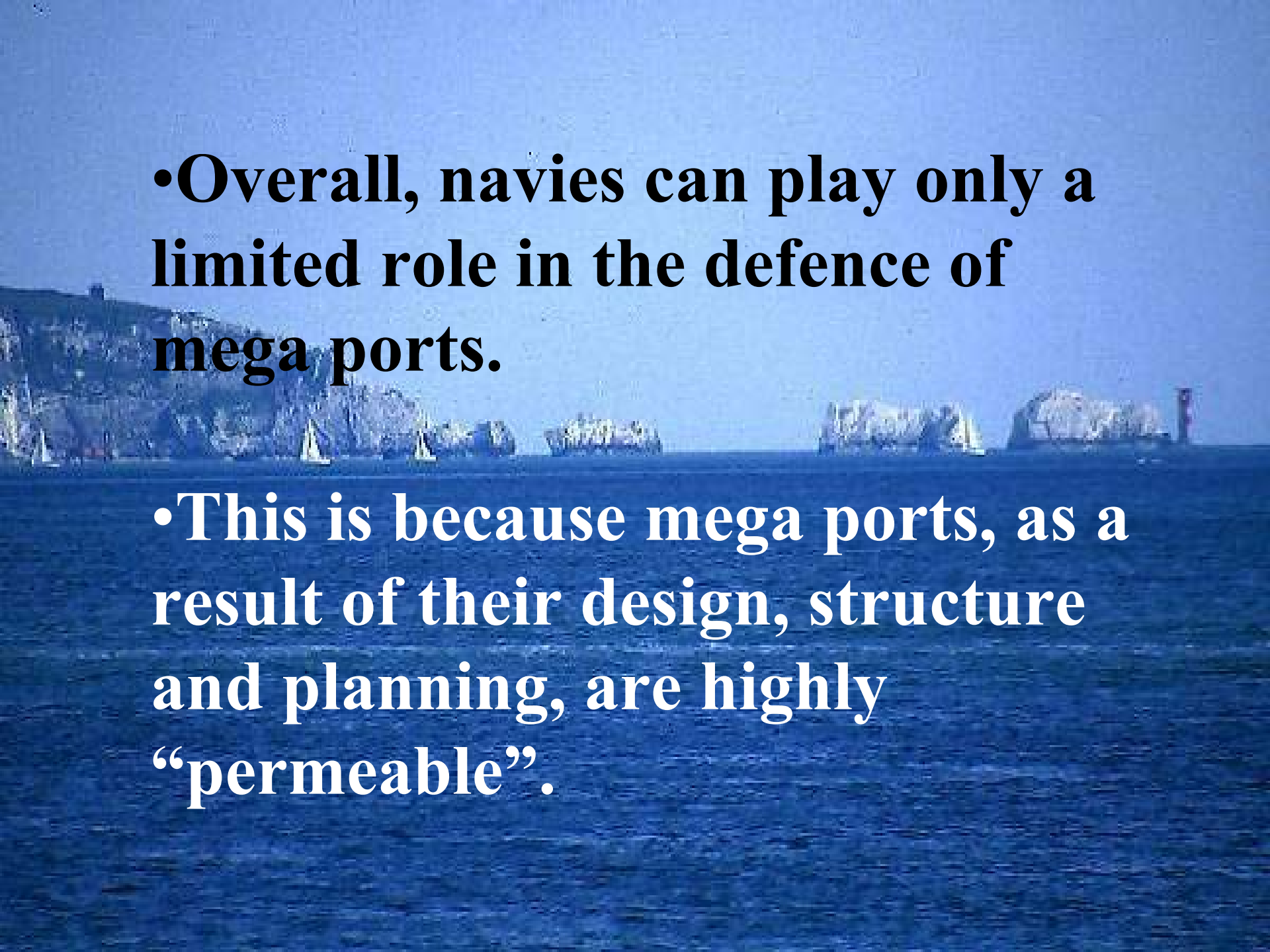
**Today, choke points are Hong Kong, Shanghai, Singapore and Rotterdam – choke points today are found on land, in sovereign territories.**

## **Today we have:-**

- Global transportation system**
- Global production system**
- Super efficient**
- Based on 20-30 mega ports**
- “fed” by hundreds and thousands of secondary ports.**

- 
- **System highly efficient**
    - **But highly inflexible**
  - **Mega ports cannot substitute one for the other in the short term.**

- **They constitute highly tempting.**
- **Extremely vulnerable targets.**
  - **Achilles heel of the world trading system?**



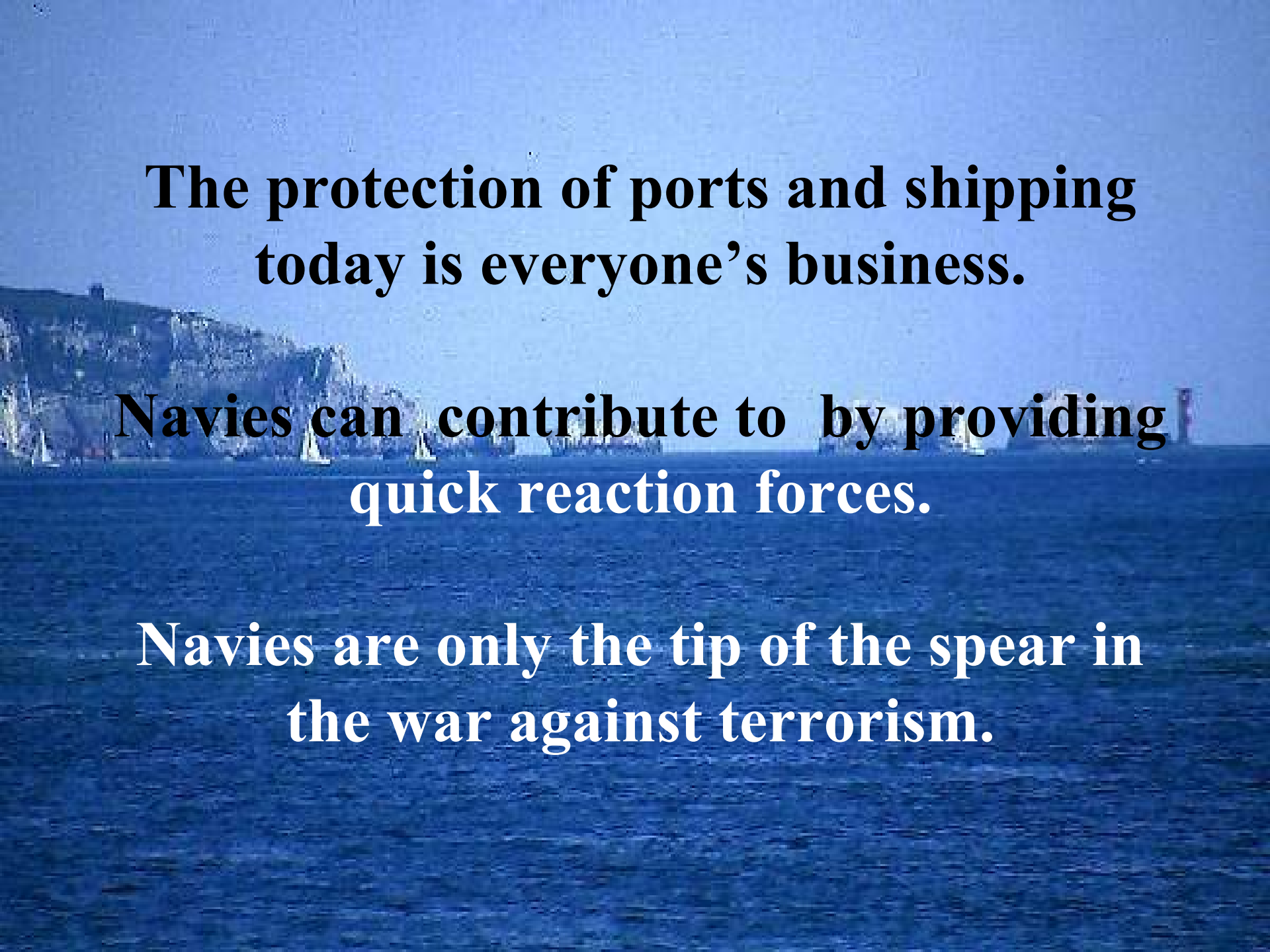
**•Overall, navies can play only a limited role in the defence of mega ports.**

**•This is because mega ports, as a result of their design, structure and planning, are highly “permeable”.**



**One fact that the U.S. has recognised. Thus the U.S. Customs is the lead agency in the Container Security Initiative, which is designed to filter out and identify high-risk containers from the mega ports.**

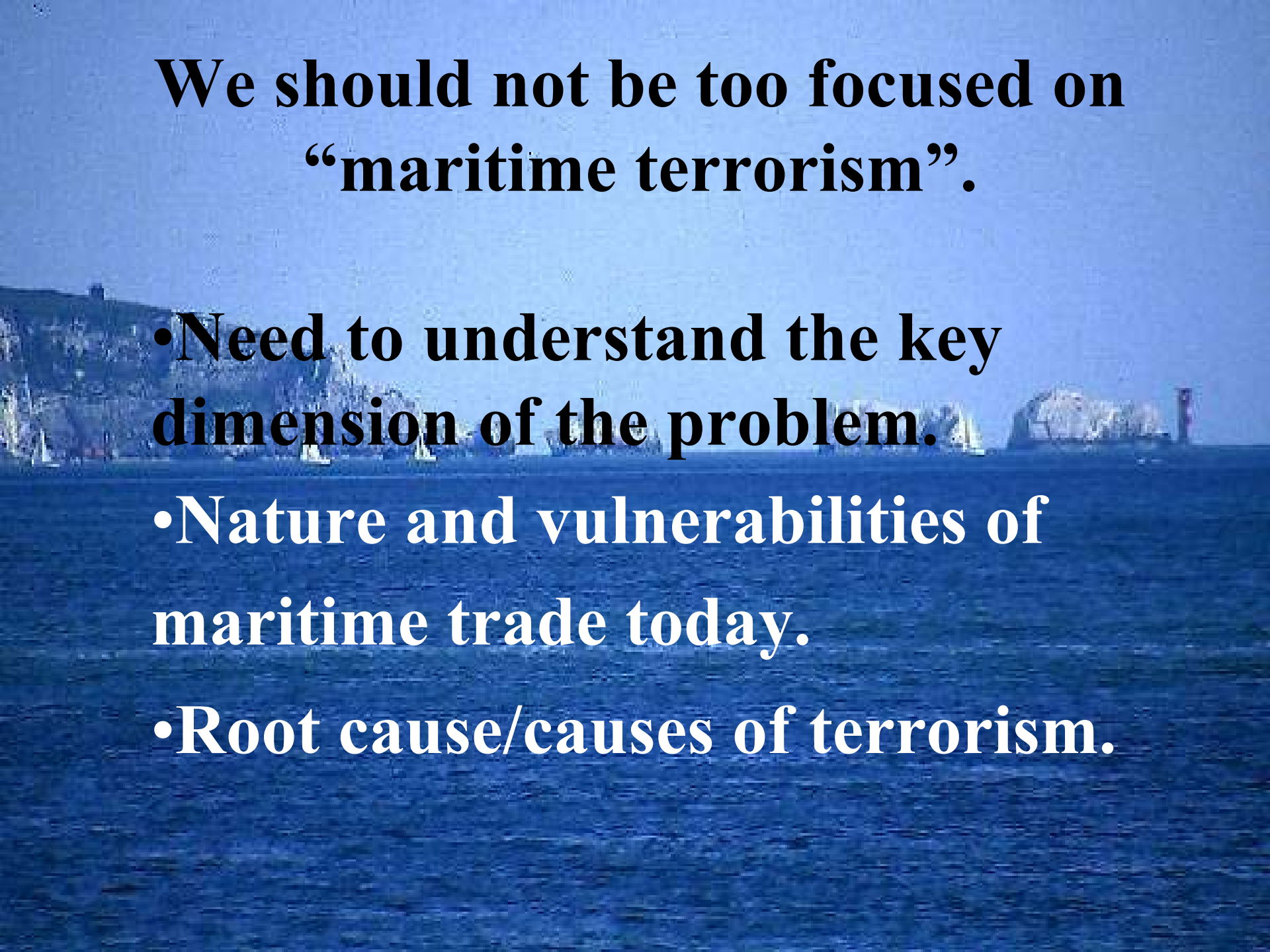




**The protection of ports and shipping  
today is everyone's business.**

**Navies can contribute to by providing  
quick reaction forces.**

**Navies are only the tip of the spear in  
the war against terrorism.**



**We should not be too focused on  
“maritime terrorism”.**

- Need to understand the key dimension of the problem.**
- Nature and vulnerabilities of maritime trade today.**
- Root cause/causes of terrorism.**



**Navies cannot go  
it alone!**

**You are part of an anti-  
terrorism system**

THANK  
YOU!

