

# THE MILITARY SPACE OF THE OCEAN

PRESENTATION S1.2

NANCY COULING laba, EPFL

26.04.13

epfl- ecole polytechnique fédérale de lausanne

## laba (laboratoire bâle)



Prof. Harry Gugger

# PART I

political geography and military practice

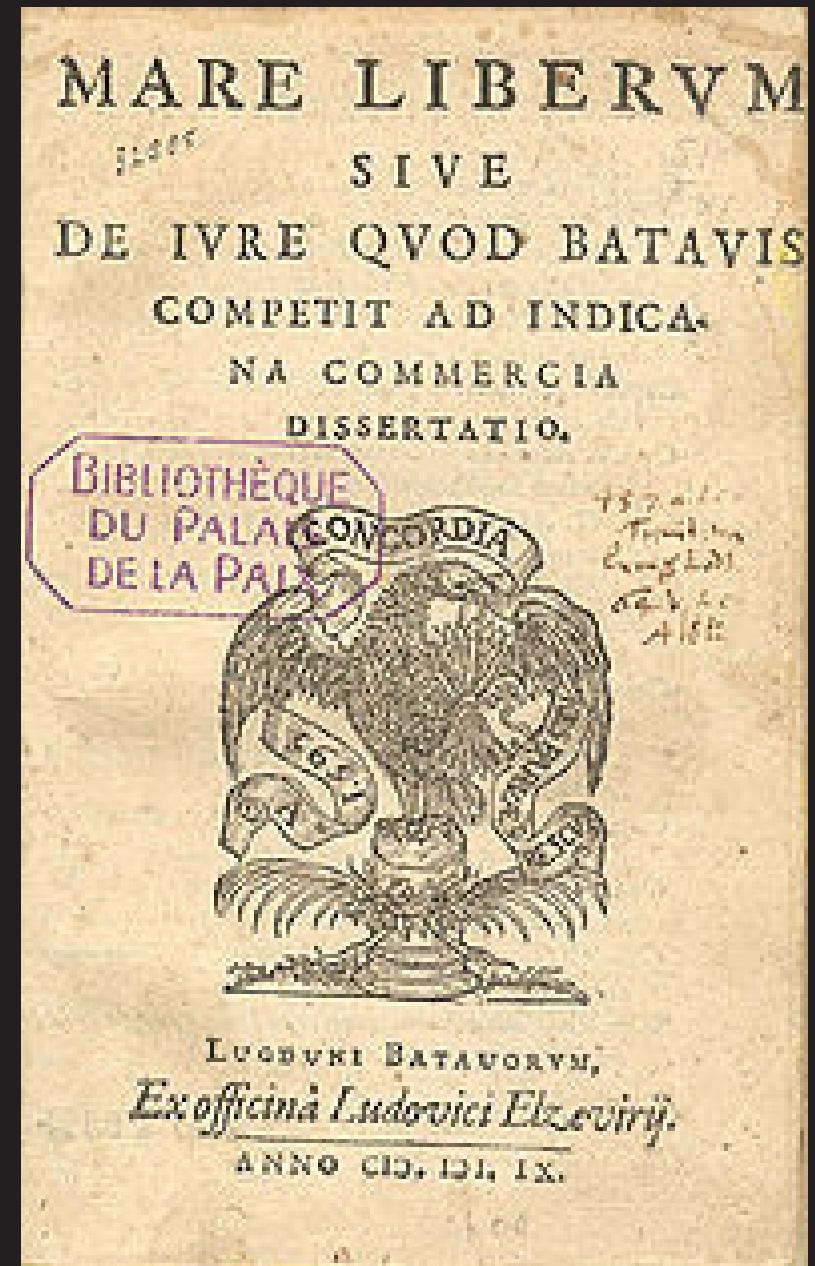
II

spatial implications of military practice

CONCLUSION

characteristics of ocean space which enable and are exploited by military activities

# MARE NOSTRUM or MARE LIBERUM

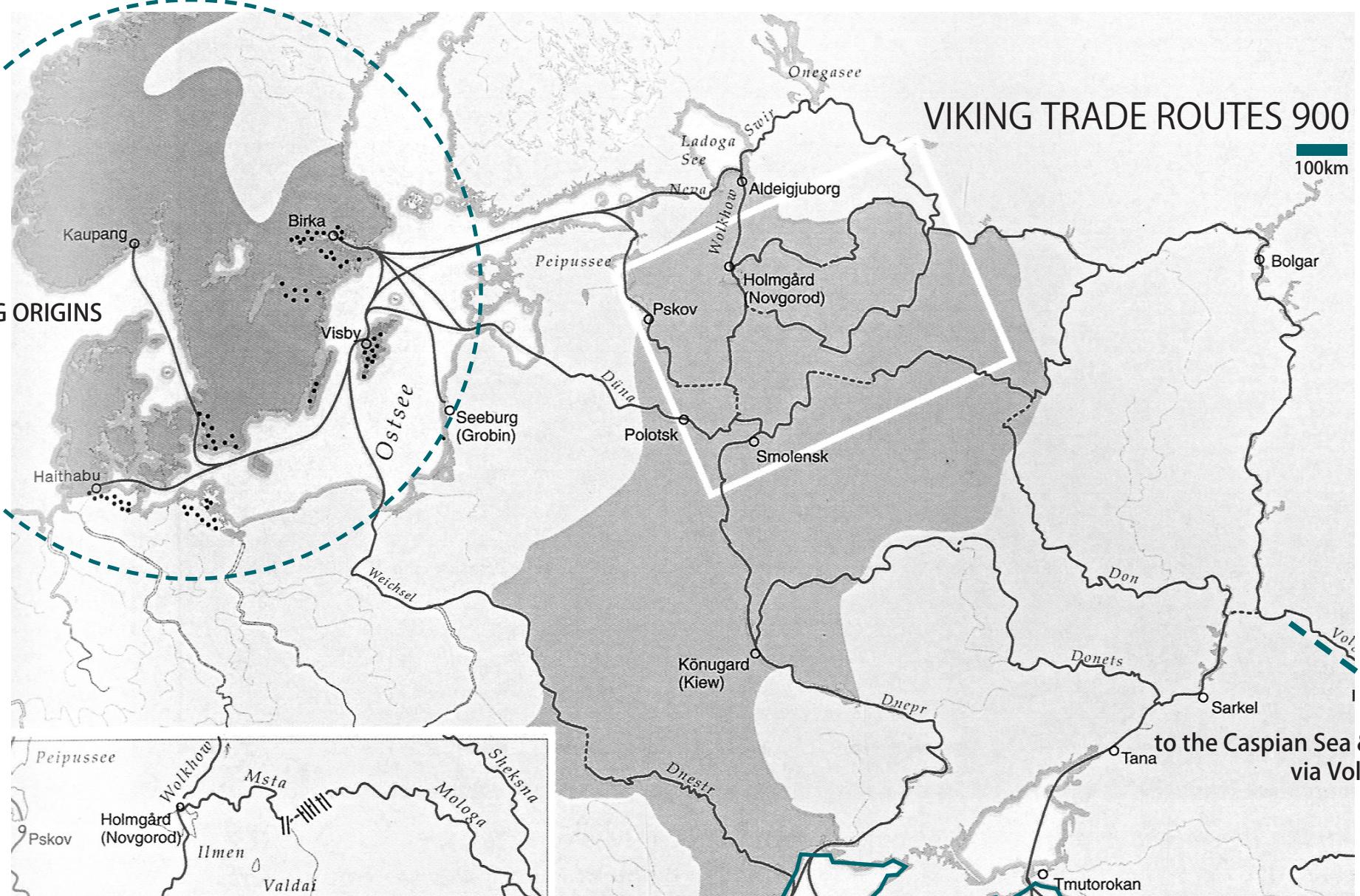


Title page „Mare Liberum“, Hugo Grotius 1609  
source: Wikimedia commons

# VIKING TRADE ROUTES 900

100km

## VIKING ORIGINS

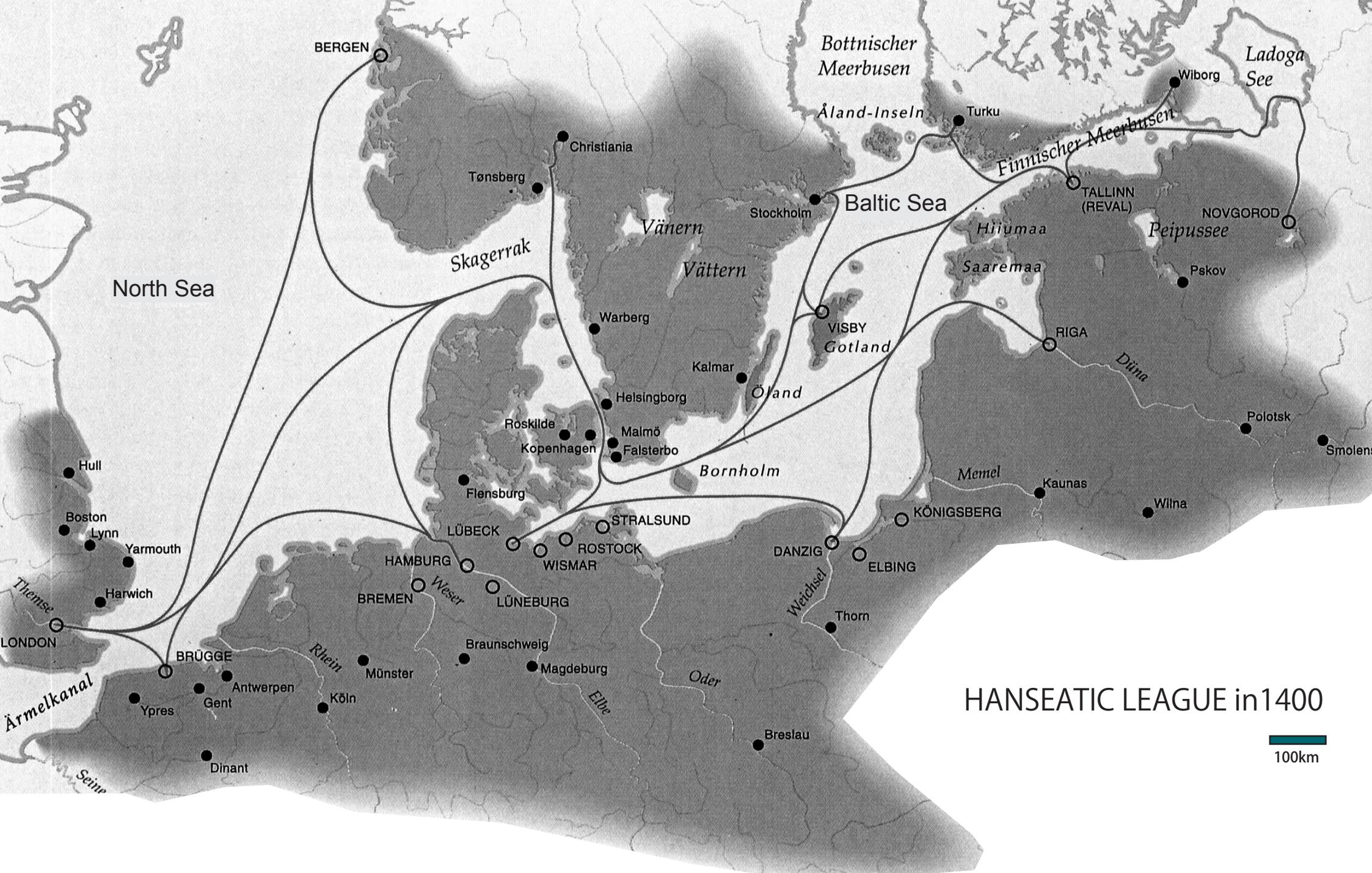


to Constantinople

to Bagdad

## PIRACY- an act for commercial gain on the high seas





## HANSEATIC LEAGUE in 1400

100km

Boundary definition ca. 1700

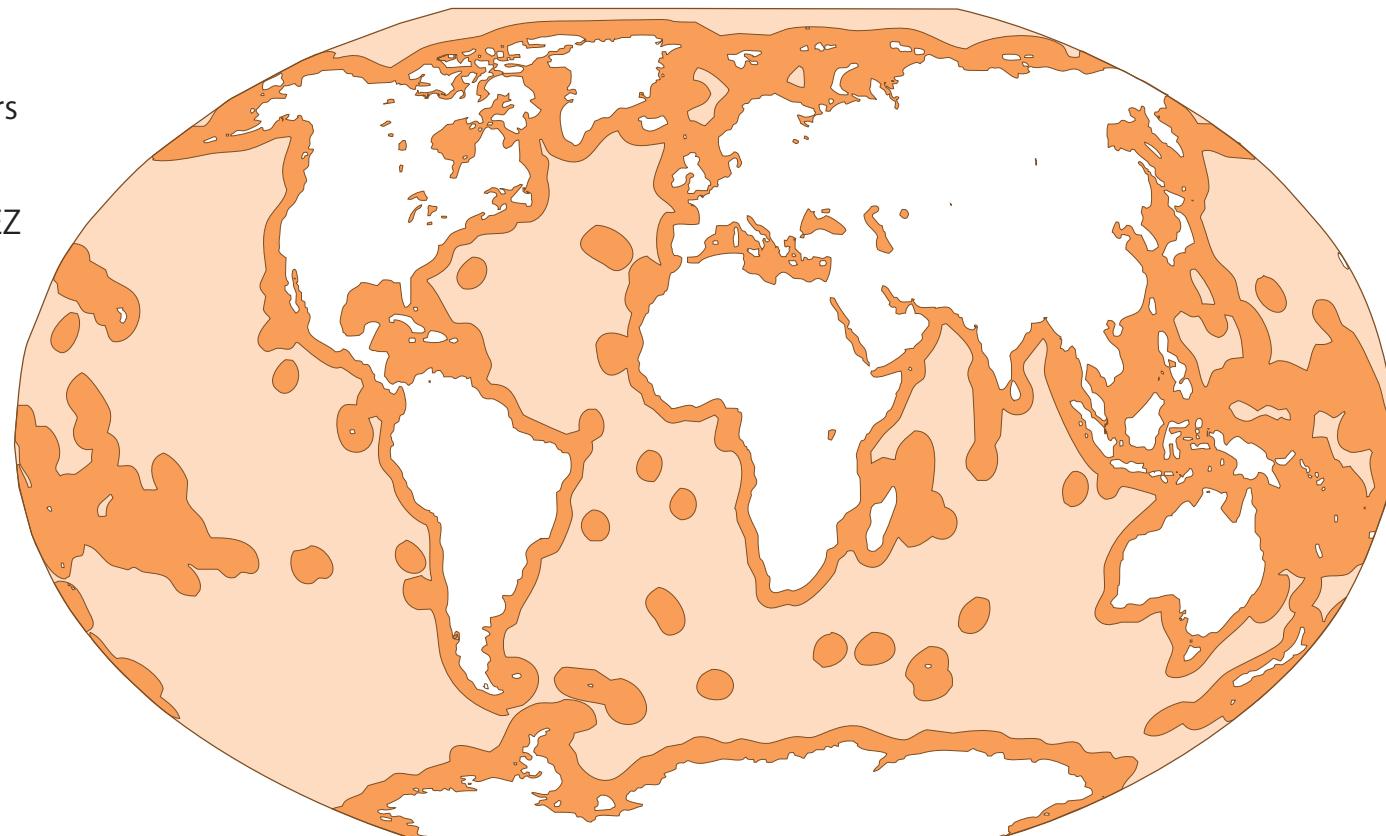


demi-cannon, 1700's  
source: Wikimedia commons

UNCLOS, 3rd convention 1982  
entered into force November 1994

International waters  
= ca. 64%

National waters, EEZ  
= c. 36%



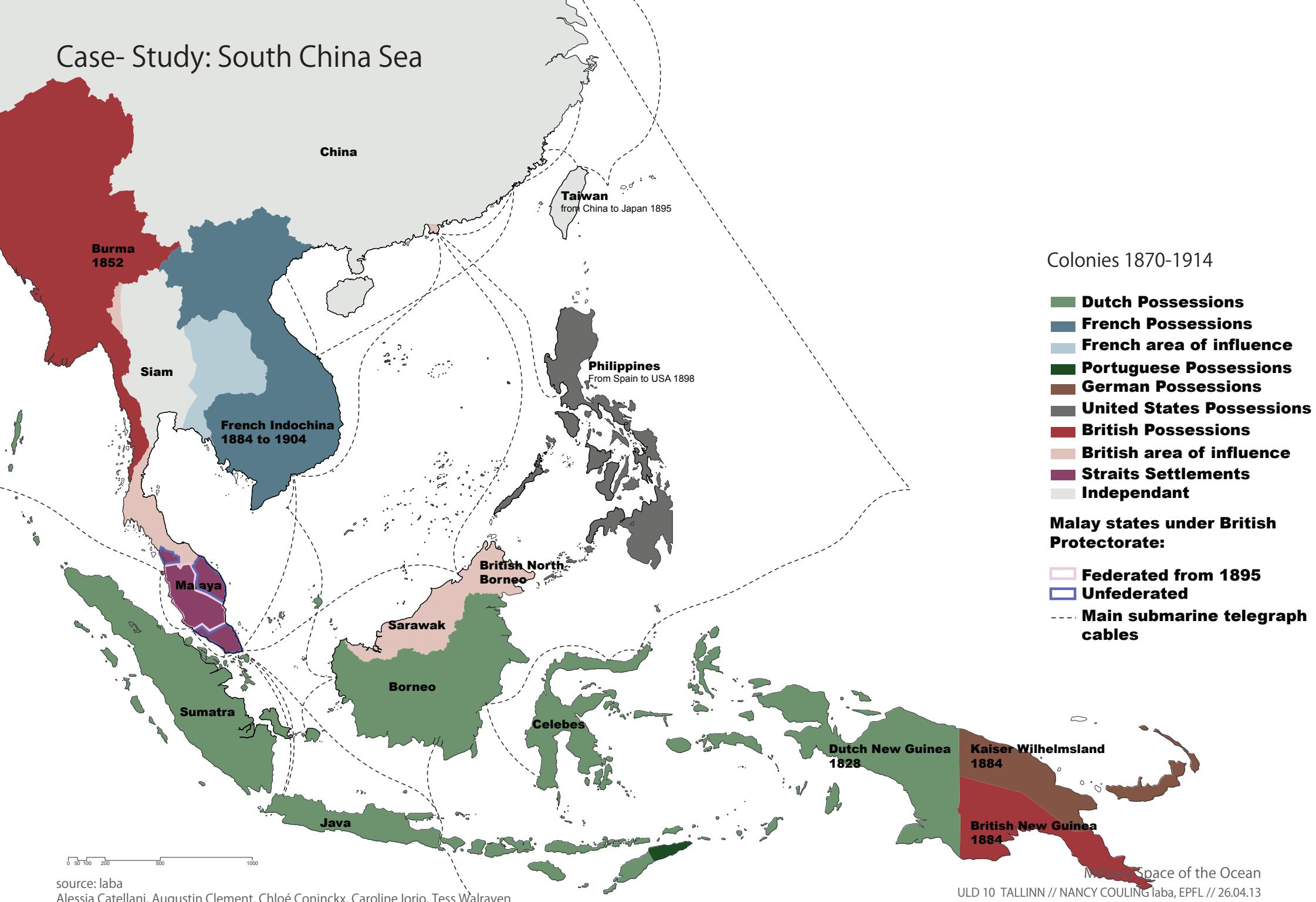
## Senkaku / Diaoyu Island dispute



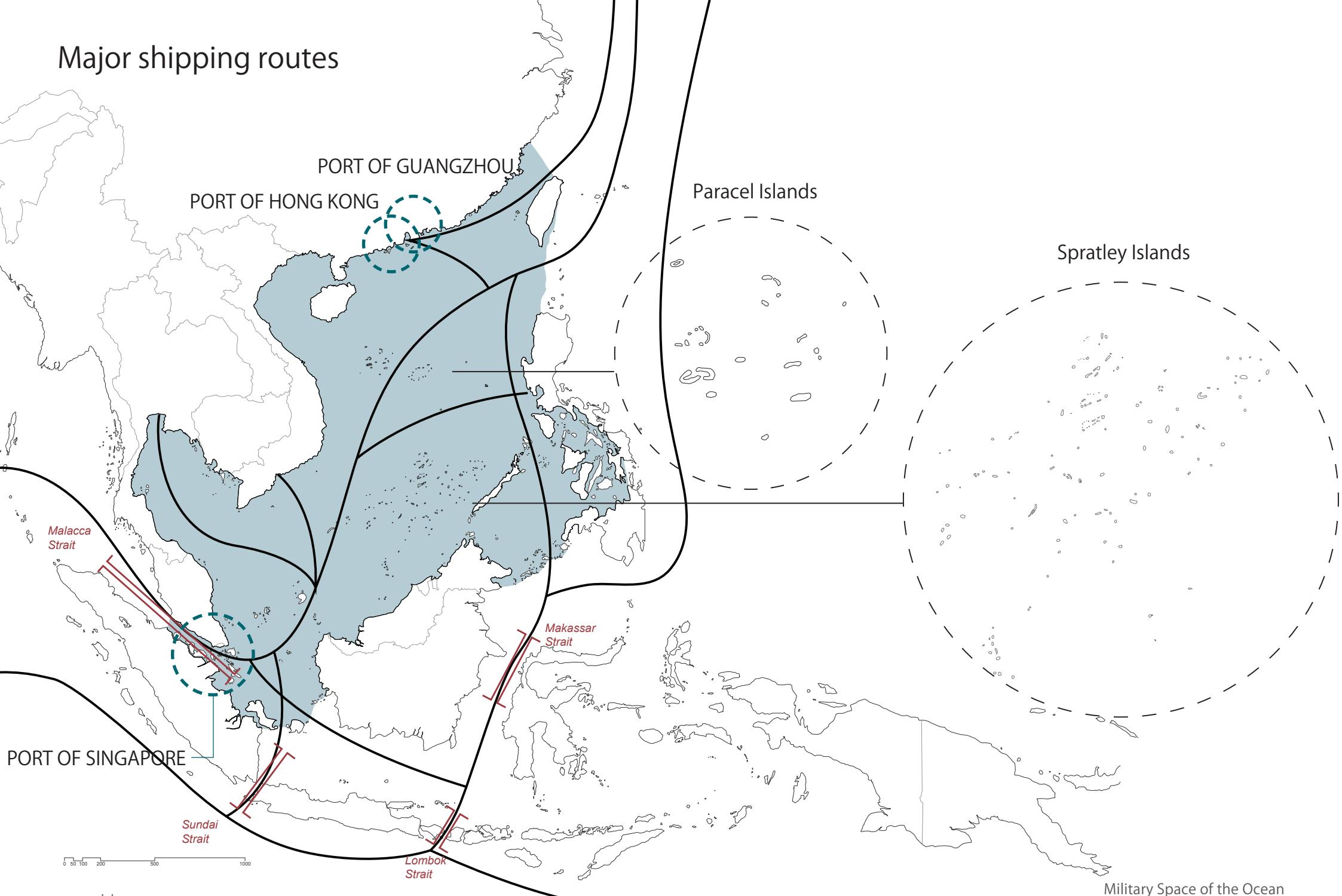
Image: Japanese coastguards warn off Taiwanese boats inside Japanese waters  
source: [www.theweek.co.uk](http://www.theweek.co.uk) 25.09.12

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# Case-Study: South China Sea



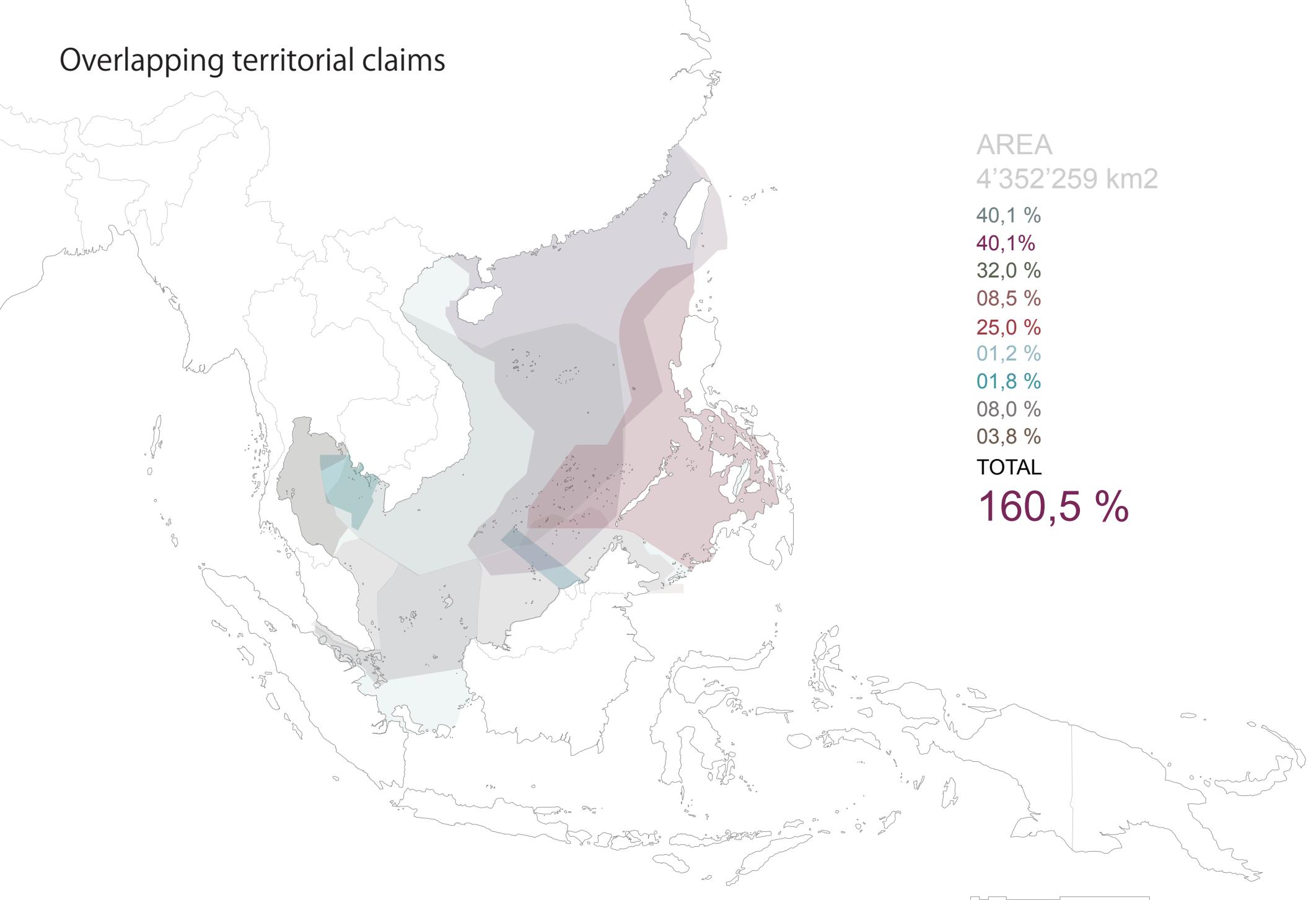
# Major shipping routes



source: laba  
Alessia Catellani, Augustin Clement, Chloé Coninckx, Caroline Iorio, Tess Walraven

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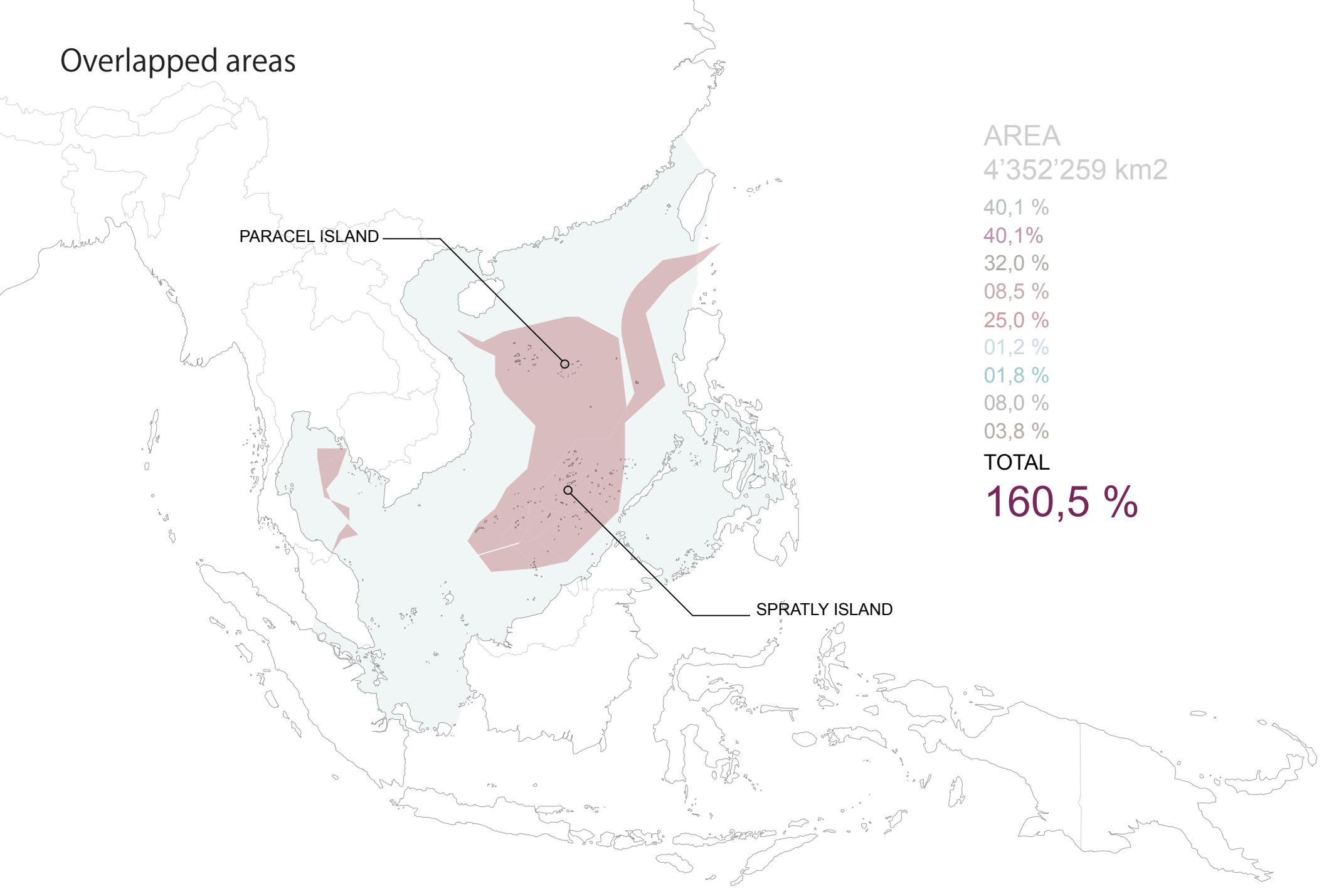
# Overlapping territorial claims



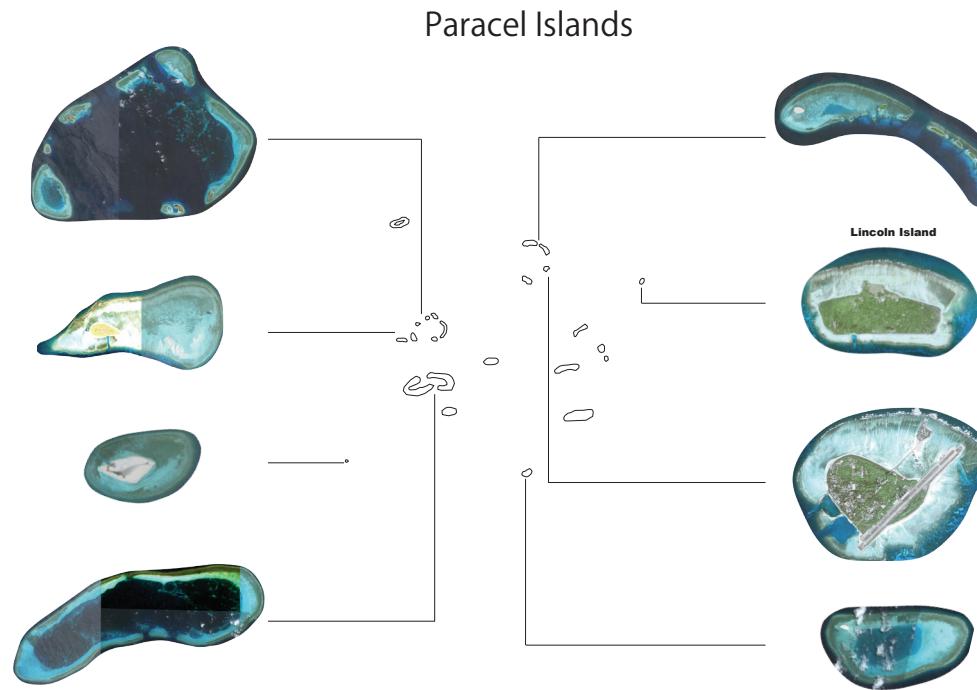
source: laba  
Alessia Catellani, Augustin Clement, Chloé Coninckx, Caroline Iorio, Tess Walraven

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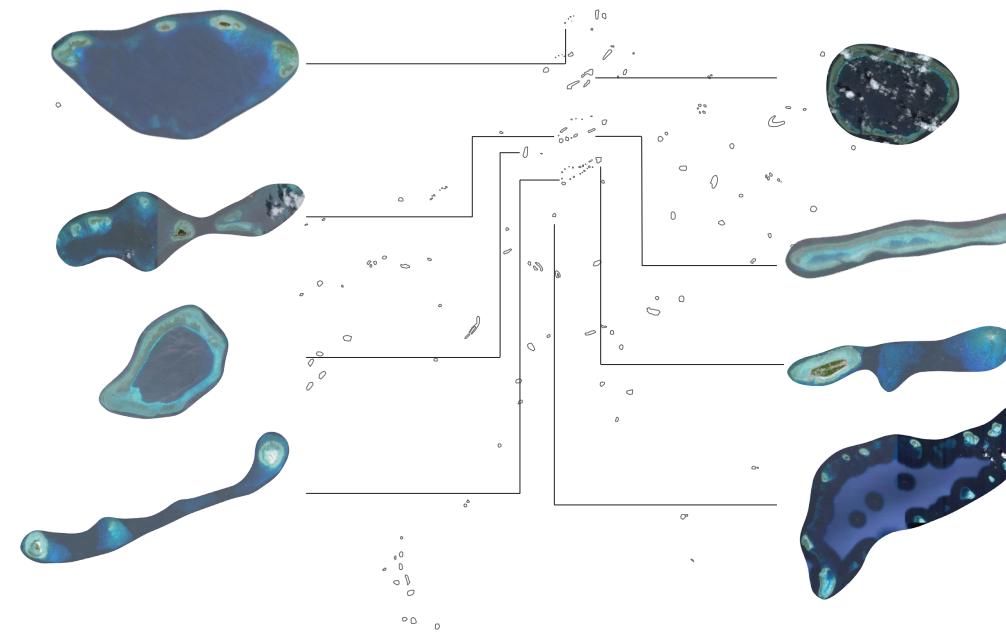
# Overlapped areas



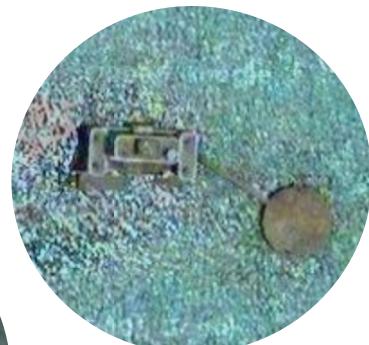
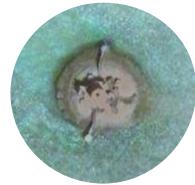
# Archipelagoes



# Spratley Islands



# Military Infrastructure as Phagocyte



source: laba  
Alessia Catellani, Augustin Clement, Chloé Coninckx, Caroline Iorio, Tess Walraven

## PARACEL ISLANDS

### POPULATION

- No indigenous population
- Presence of soldiers from the People's Liberation Army

### WATER

- Limited Supply of Fresh Water
- Solar Energy powered desalination plant planned by China

### ELECTRICITY

- Wind Power and Solar Power Facilities

### TRANSPORT

- Artificial Harbor
- 2350 metre Runay Airfield
- 3 Main roads
- 800 m cement bank connecting Woody to Rocky Island

### COMMUNICATION

- Army posts
- Post Office
- Hospital
- Shops
- Banks
- Hostels
- A rescue center
- Government Buildings
- FM Radio broadcasting
- Mobile Communication
- Satellite Television

## SPRATLEY ISLANDS

### TRANSPORT

- At least 3 fishing ports
- Several docks and harbors
- At least 3 heliports
- At least 4 rigging outposts
- 6 to 8 airstrips.
- Strategically located on primary shipping lanes

### COMMUNICATION

- Mobile phone station since 2005 (Philippines' Smart Communications)
- Covered by China Mobile since 2011

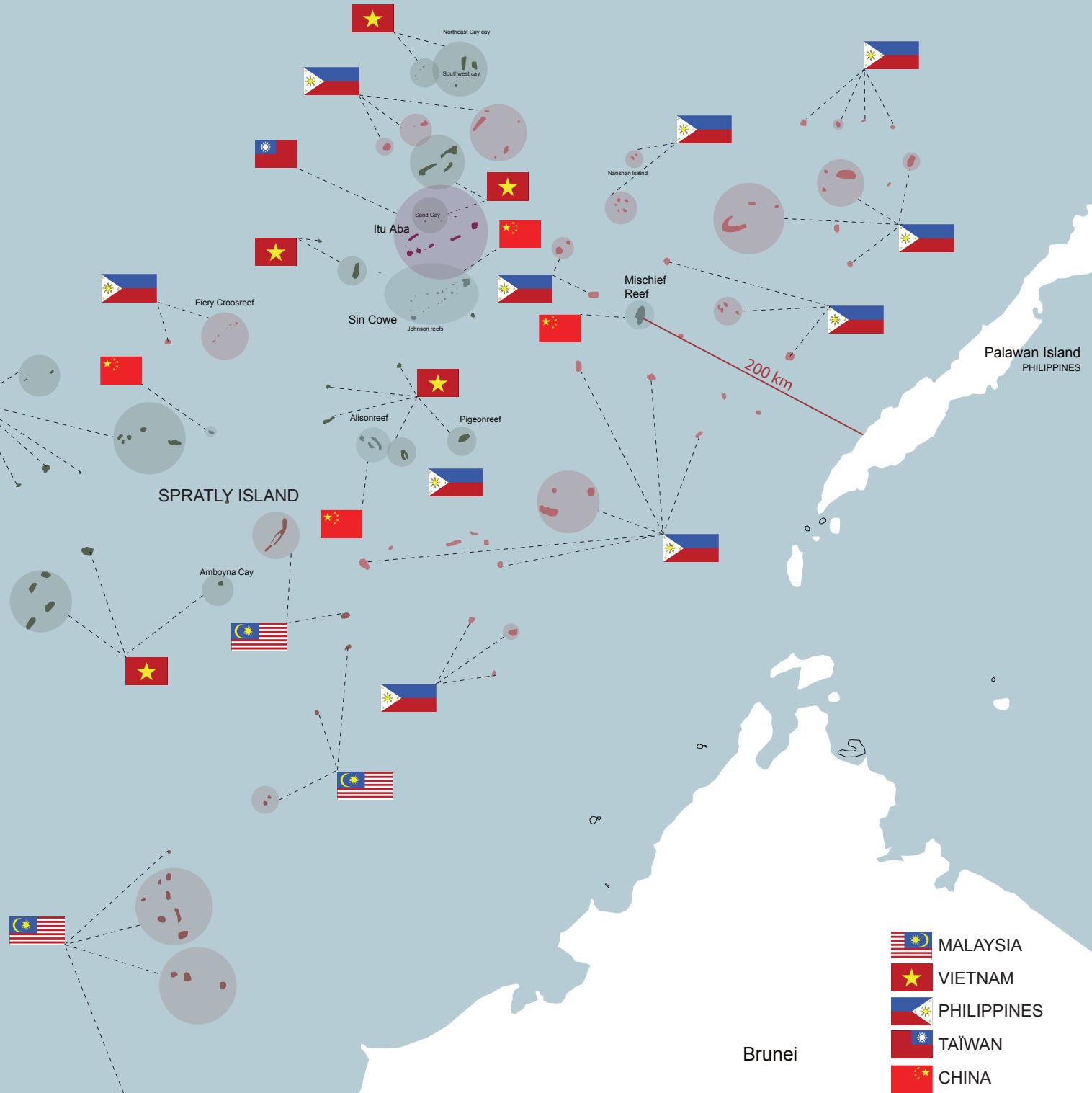
### POPULATION

- Military forces from China, Taiwan, Vietnam and Malaysia

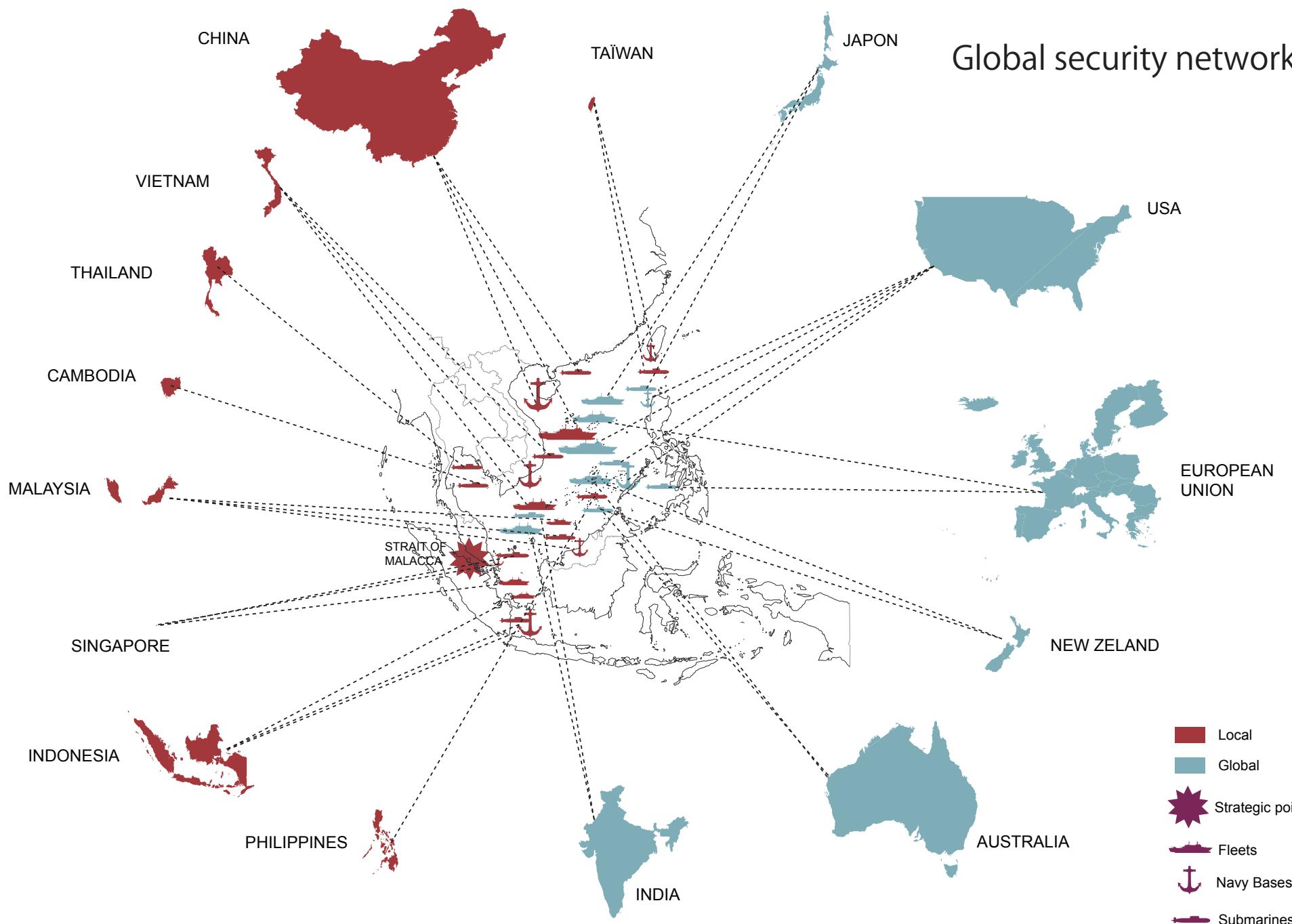
# Territorial Defense



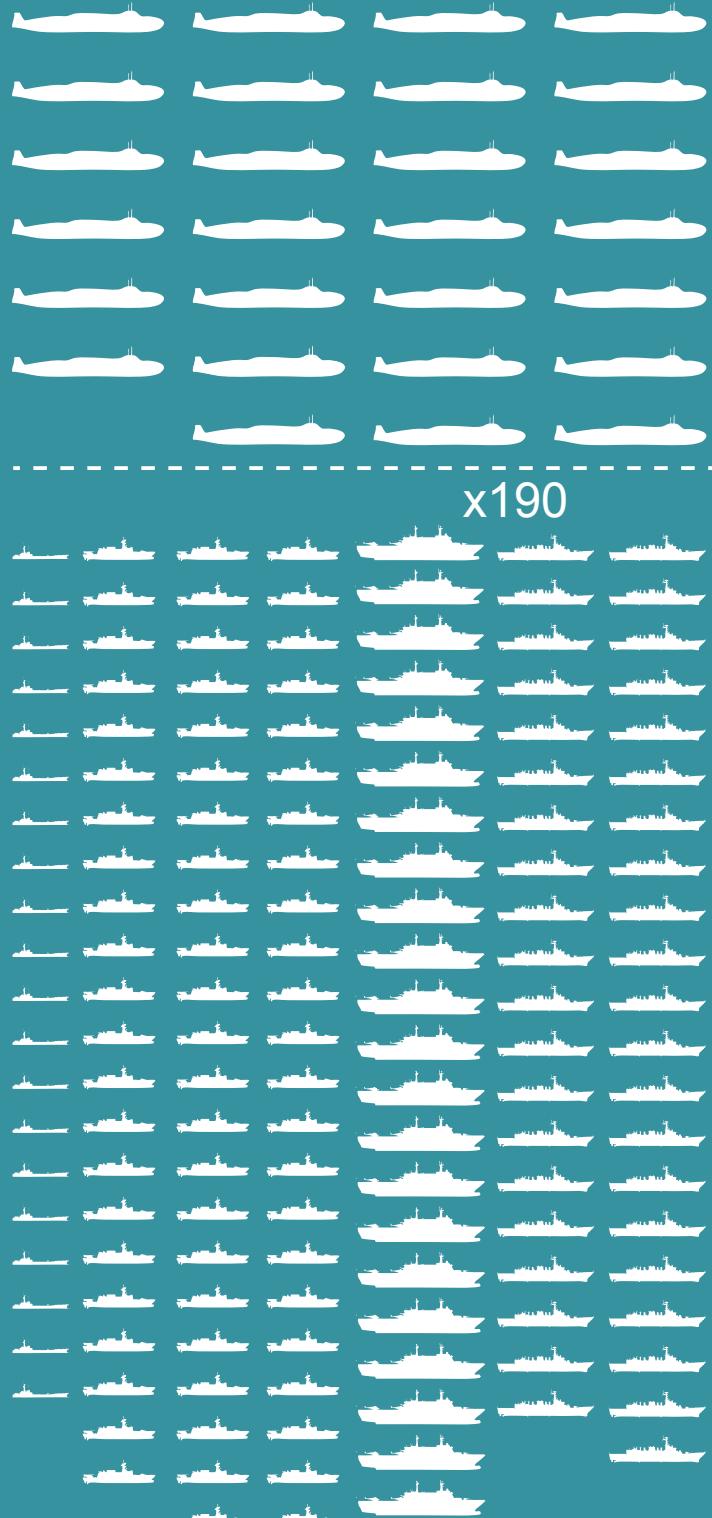
0 50 100 200



# Global security networks



x27



x6



x190

USA

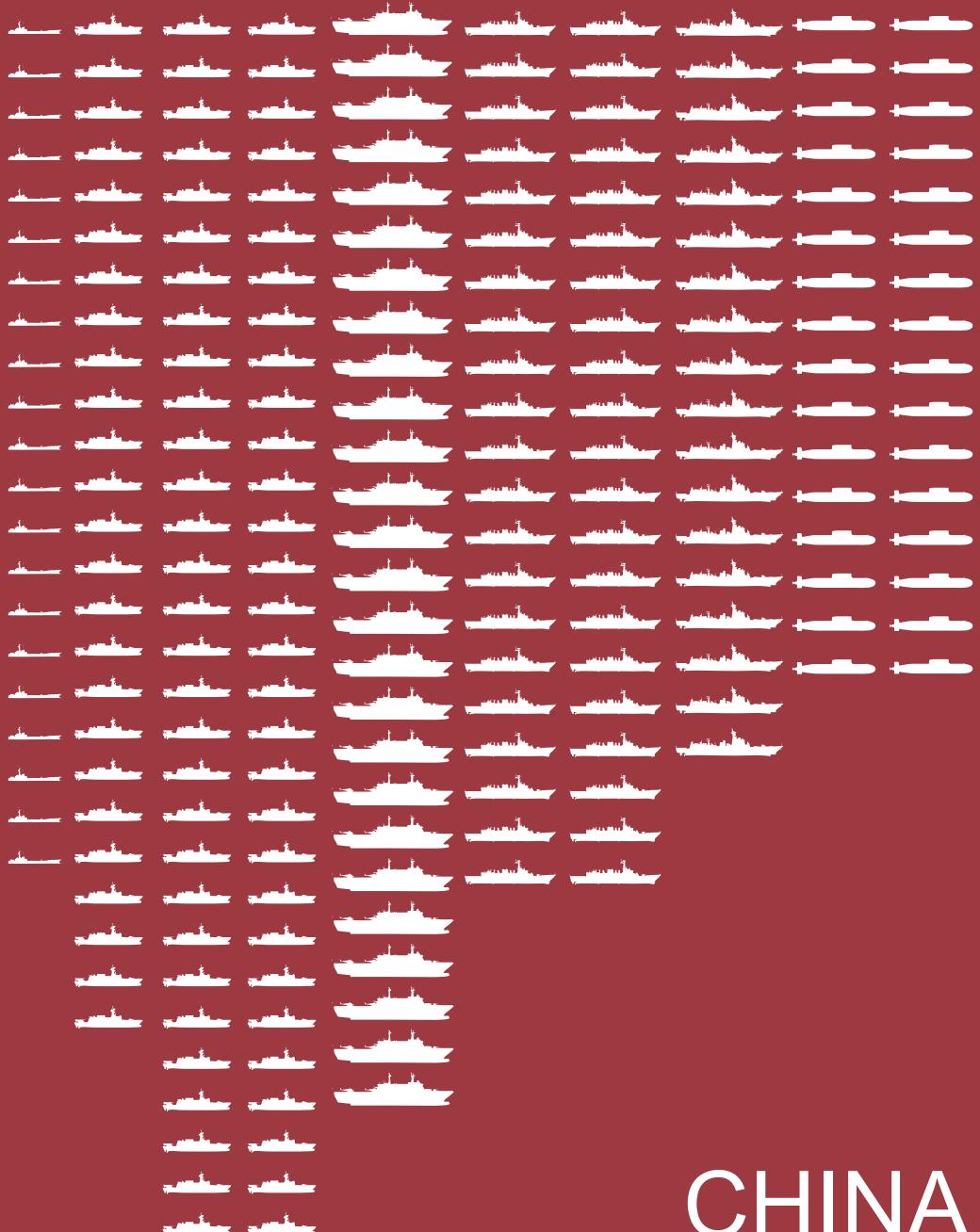
x1



x1



x222



CHINA



## II spatial implications of military practice in the ocean

naval bombardement of entrance fort, Dardanelles, 19.02.1915  
source: www.navygallipoli.com

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THE WORLD 1:60,000,000

# THE WORLD WITH COMMANDERS' AREAS OF RESPONSIBILITY

EDITION 9 NGA  
BASED ON  
UNIFIED COMMAND PLAN  
06 APRIL 2011

SERIES 1107



SERIES 1107  
EDITION 9 NGA



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MAP EFFECTIVE 06 APRIL 2011

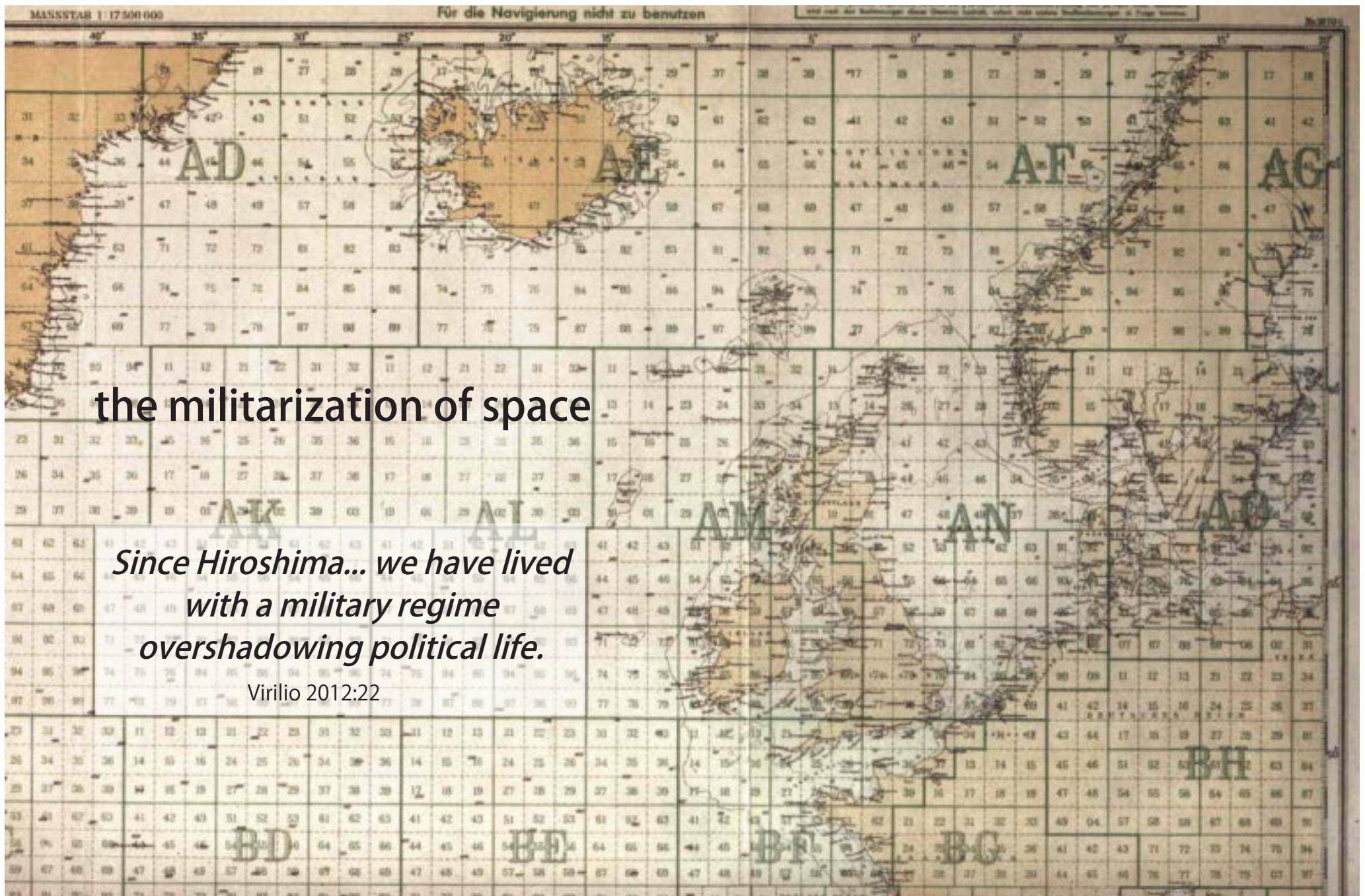
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INTELLIGENCE AGENT, ATTN: ESC, MAIL STOP 8-540, 4800 SANGERWOOD ROAD,  
BETHESDA MD 20814-3862

1:60,000,000  
MILLER CYLINDRICAL PROJECTION

+ West Bank and Gaza Strip - Israeli-occupied with current  
status subject to the Israeli - Palestinian Interim Agreement - permanent status to be determined through further negotiation.

THE REPRESENTATION OF BOUNDARIES  
IS NOT NECESSARILY AUTHORITATIVE.

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*In the 18th & 19th centuries,  
arsenals would again play a  
leading role in the standardiza-  
tion and routinization of the  
production process*

De Landa 1997:83

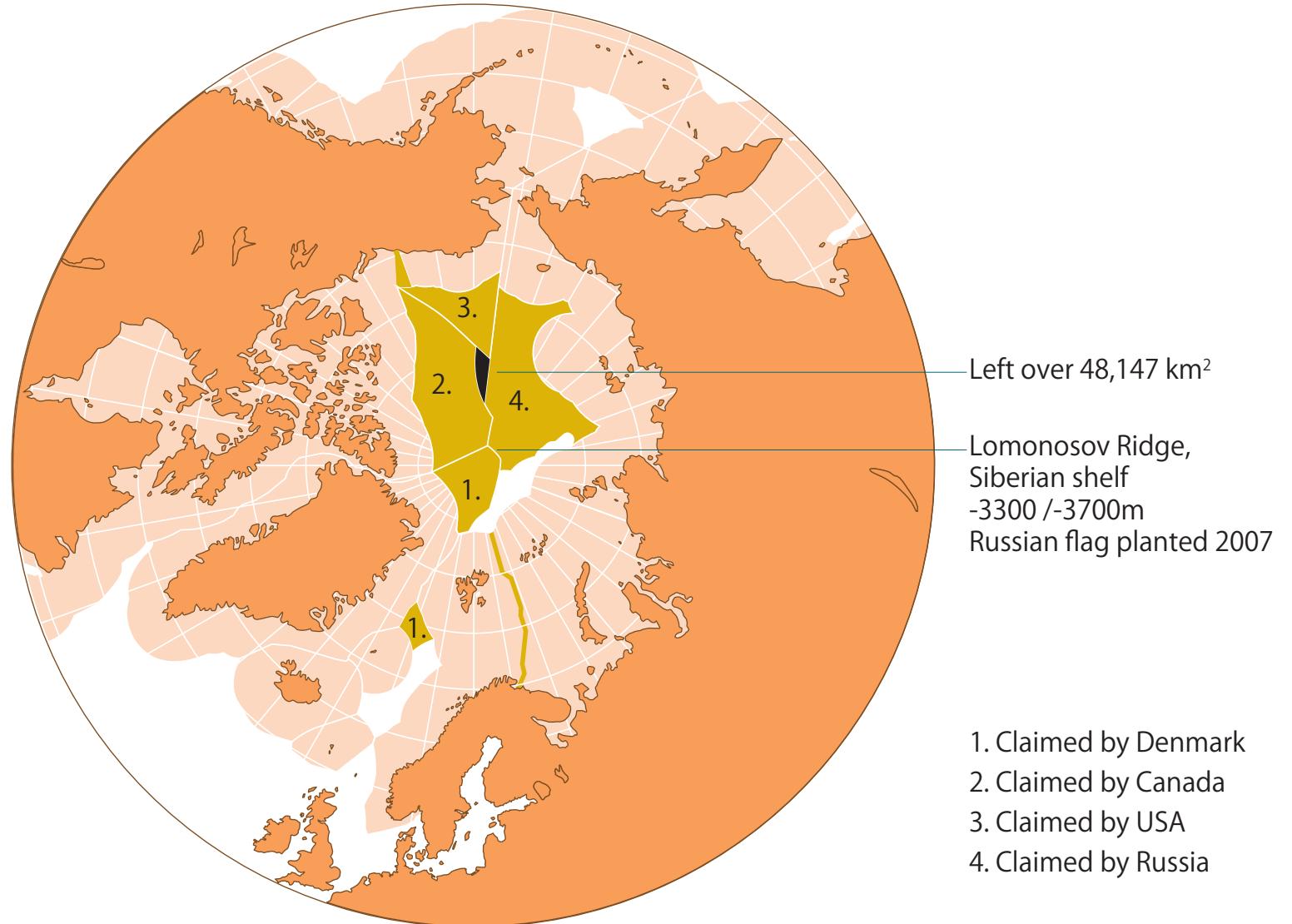


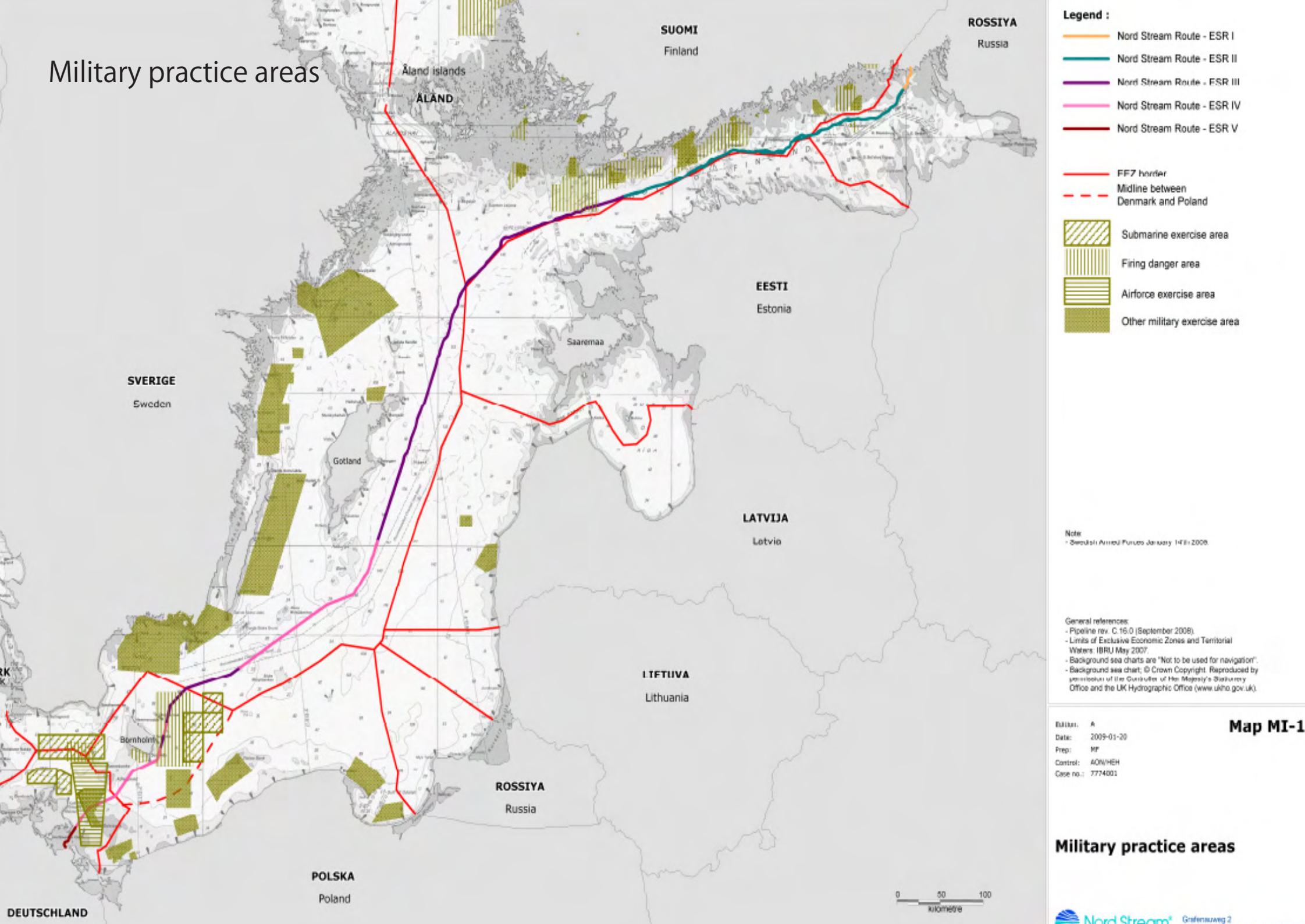
Arsenale, Venezia  
source:wikipedia commons

## EEZs in the Arctic

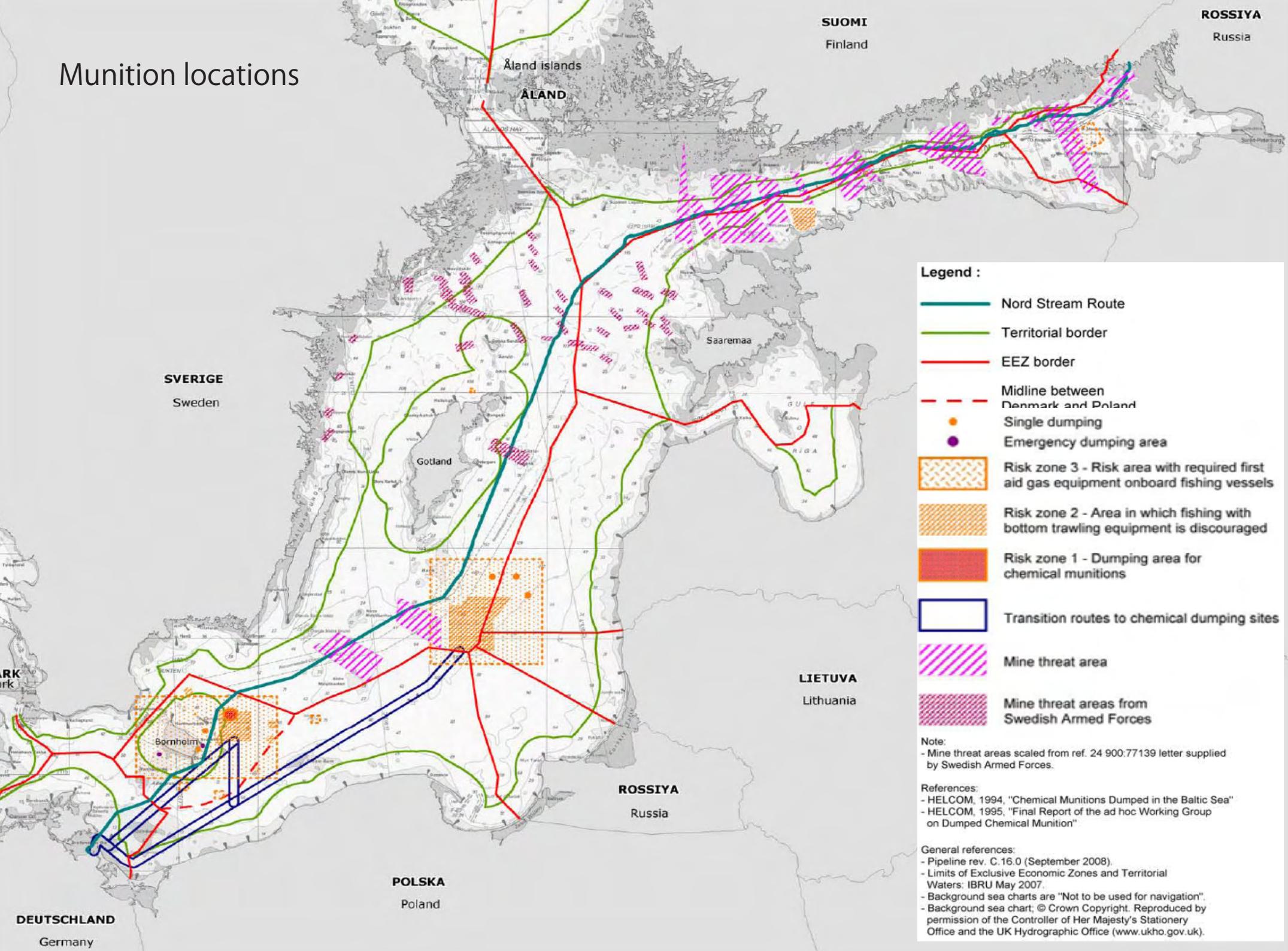


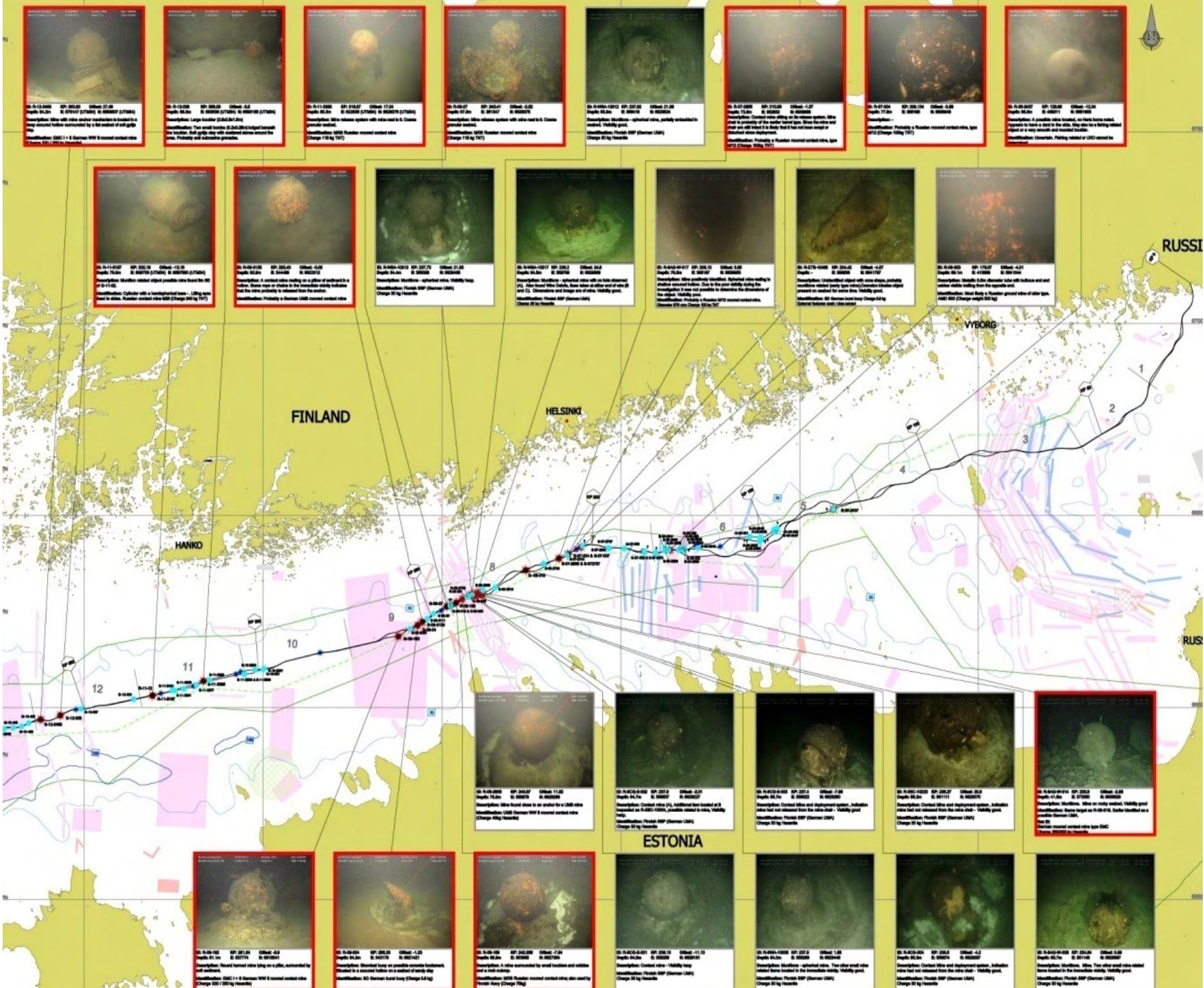
# Arctic Claims





# Munition locations

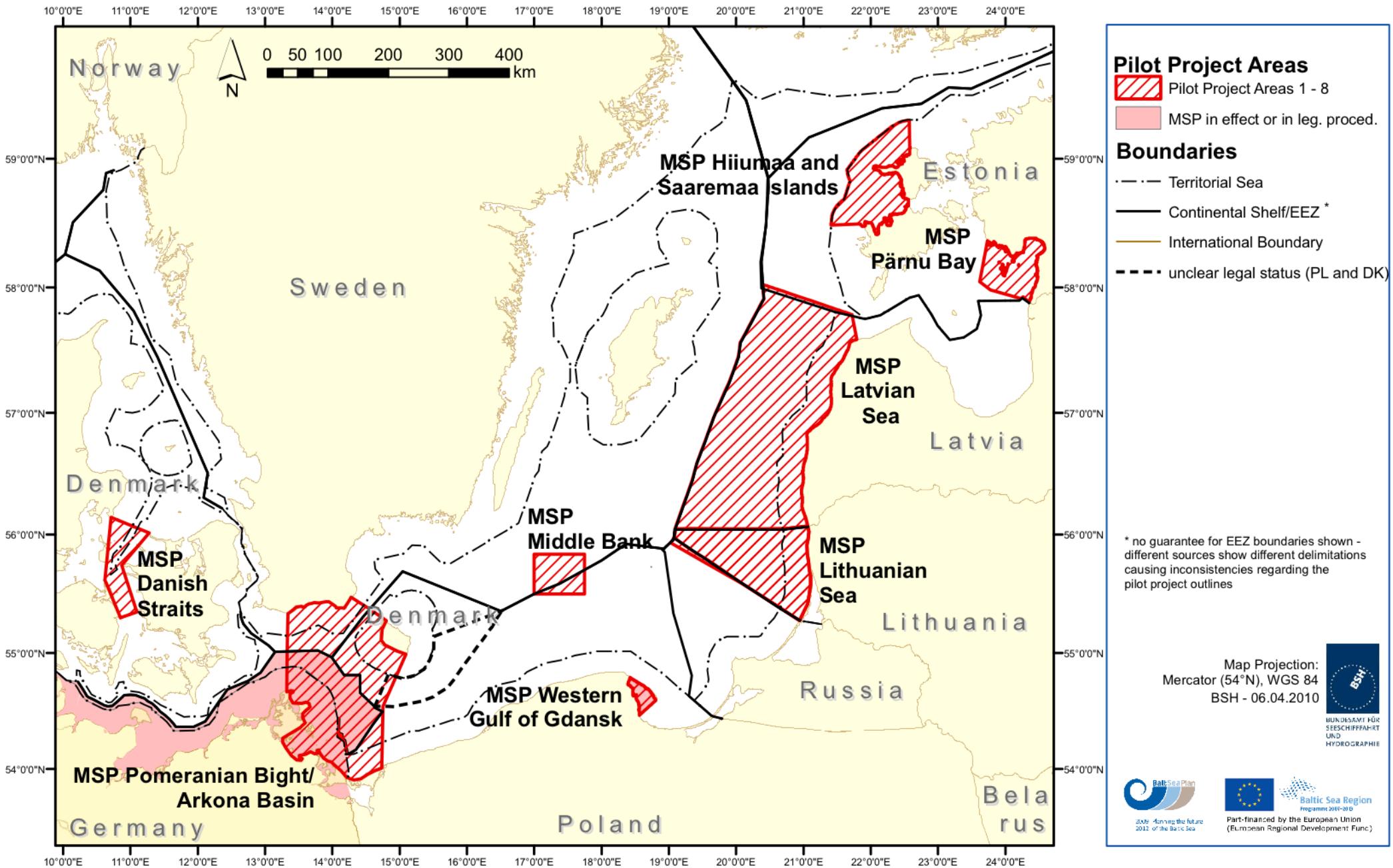




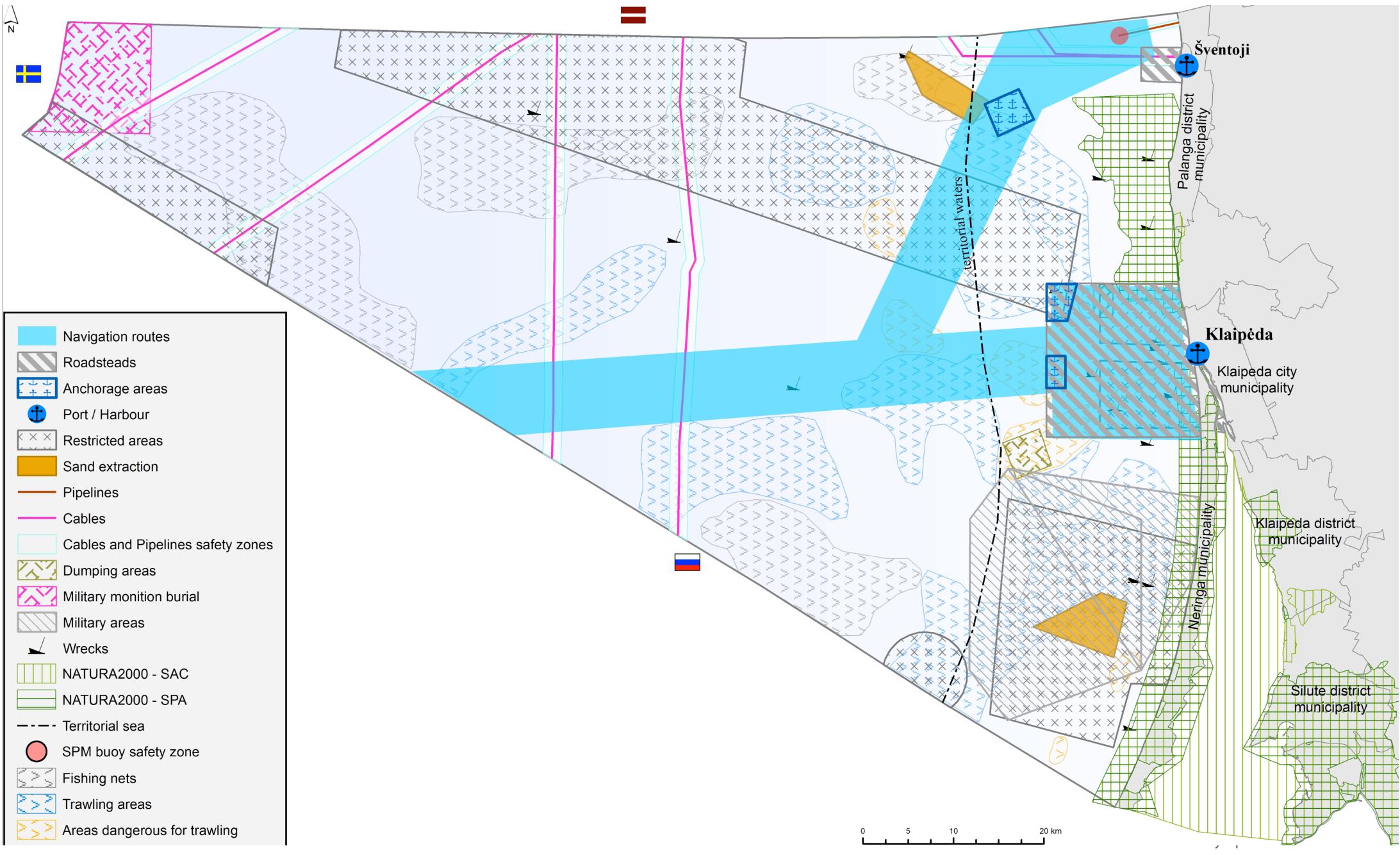
# NATO *Open Spirit* mine-clearing exercise



# MSP Pilot Projects in the Baltic



# Lithuanian EEZ



BALTOPS, Lithuania 2012



*to maintain safety and security in the Baltic Sea*

US EUCOM mission

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## Characteristics of ocean space - complexity



scale





Everything is  
latent.