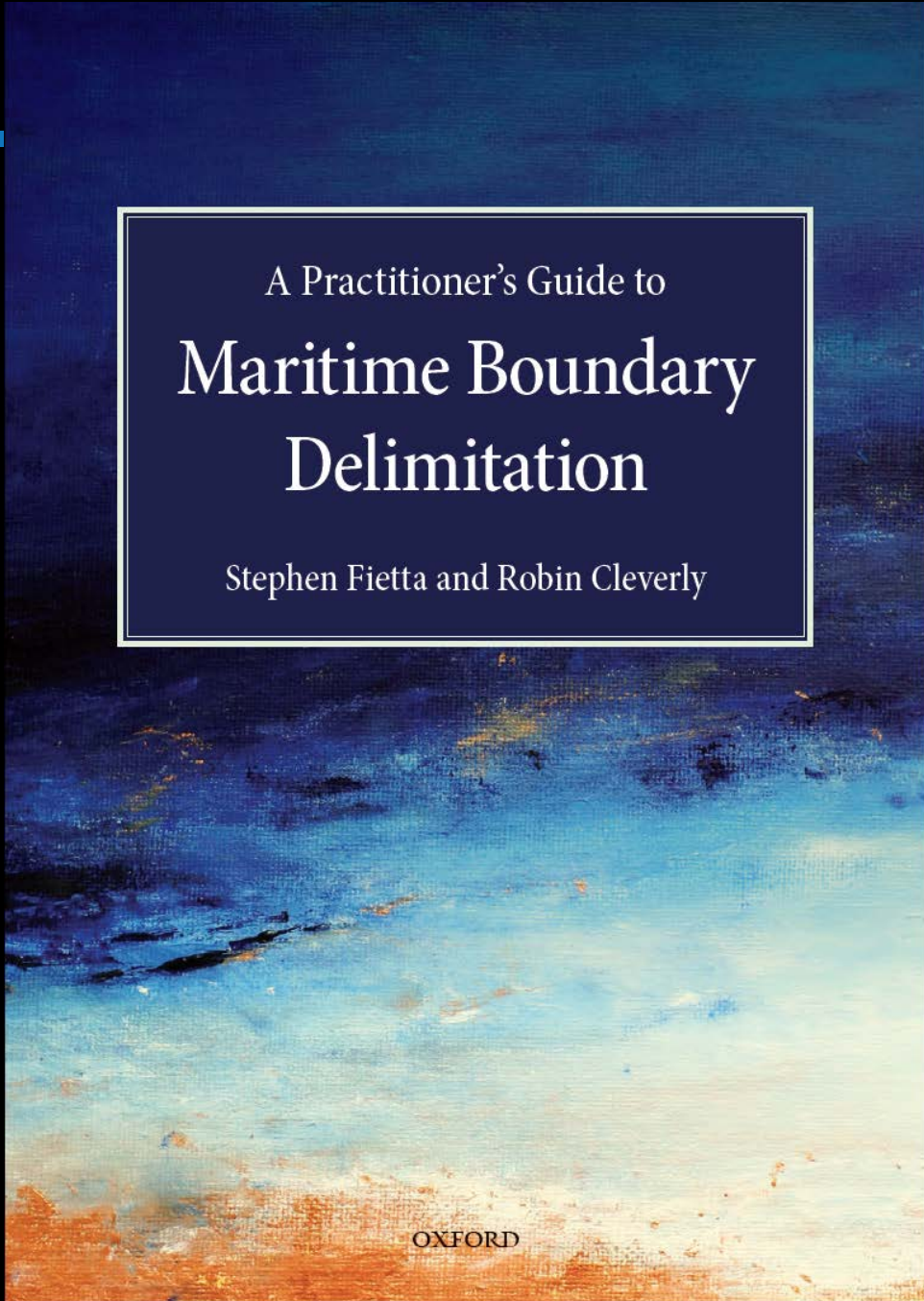


# The Disproportionality Test: Myth or Method?

Robin Cleverly  
Marbdy Consulting

# Acknowledgments



A Practitioner's Guide to  
**Maritime Boundary  
Delimitation**

Stephen Fietta and Robin Cleverly

To be published:  
Oxford University Press  
March 2016

OXFORD

## Delimitation: UNCLOS articles (Territorial Sea)

### *Article 15: Delimitation of the territorial sea between States with opposite or adjacent coasts*

- Where the coasts of two States are opposite or adjacent to each other, neither of the two States is entitled, failing agreement between them to the contrary, to extend its territorial sea beyond the *median line* . . . .
- The above provision does not apply, however, where it is necessary by reason of historic title or other *special circumstances* to delimit the territorial seas of the two States in a way which is at variance therewith.

## Delimitation: UNCLOS articles (EEZ & Continental Shelf)

### *Article 74 and 83: Delimitation of the EEZ/Continental Shelf between States with opposite or adjacent coasts*

1. . . . shall be effected by agreement on the basis of international law, . . . . . in order to achieve an *equitable solution*.
2. If no agreement can be reached within a reasonable period of time, the States shall resort to the procedures provided for in Part XV.

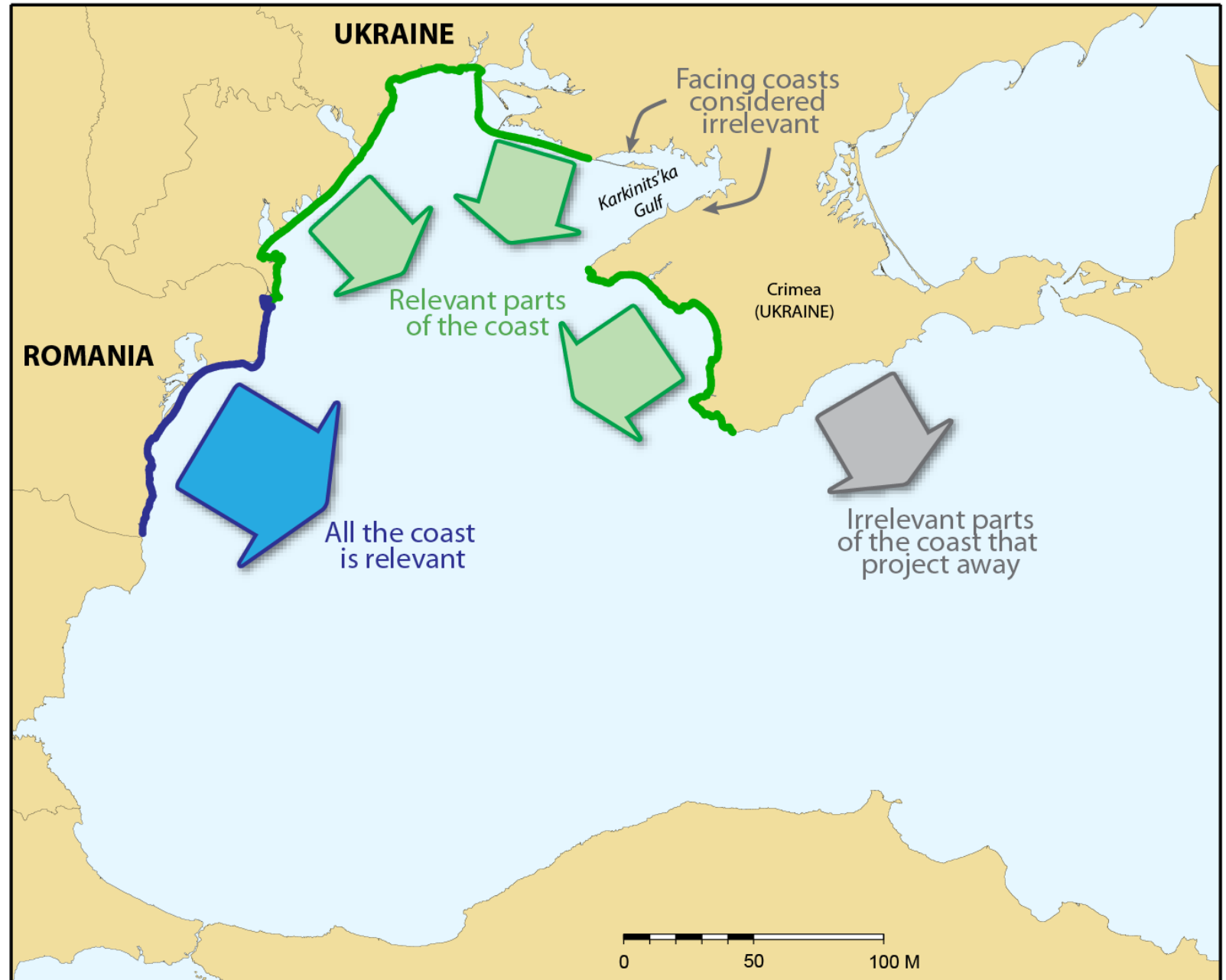
## Recipe for Delimitation: Three Stage Process

1. Draw **equidistance line** as a provisional boundary
2. Adjust provisional line as necessary for equitable solution in light of **relevant/special circumstances**
3. Check for proportionality (“Disproportionality Test”)  
Does the result show any marked disproportion between the ratio of the maritime areas allocated and the ratio of the coastal lengths?

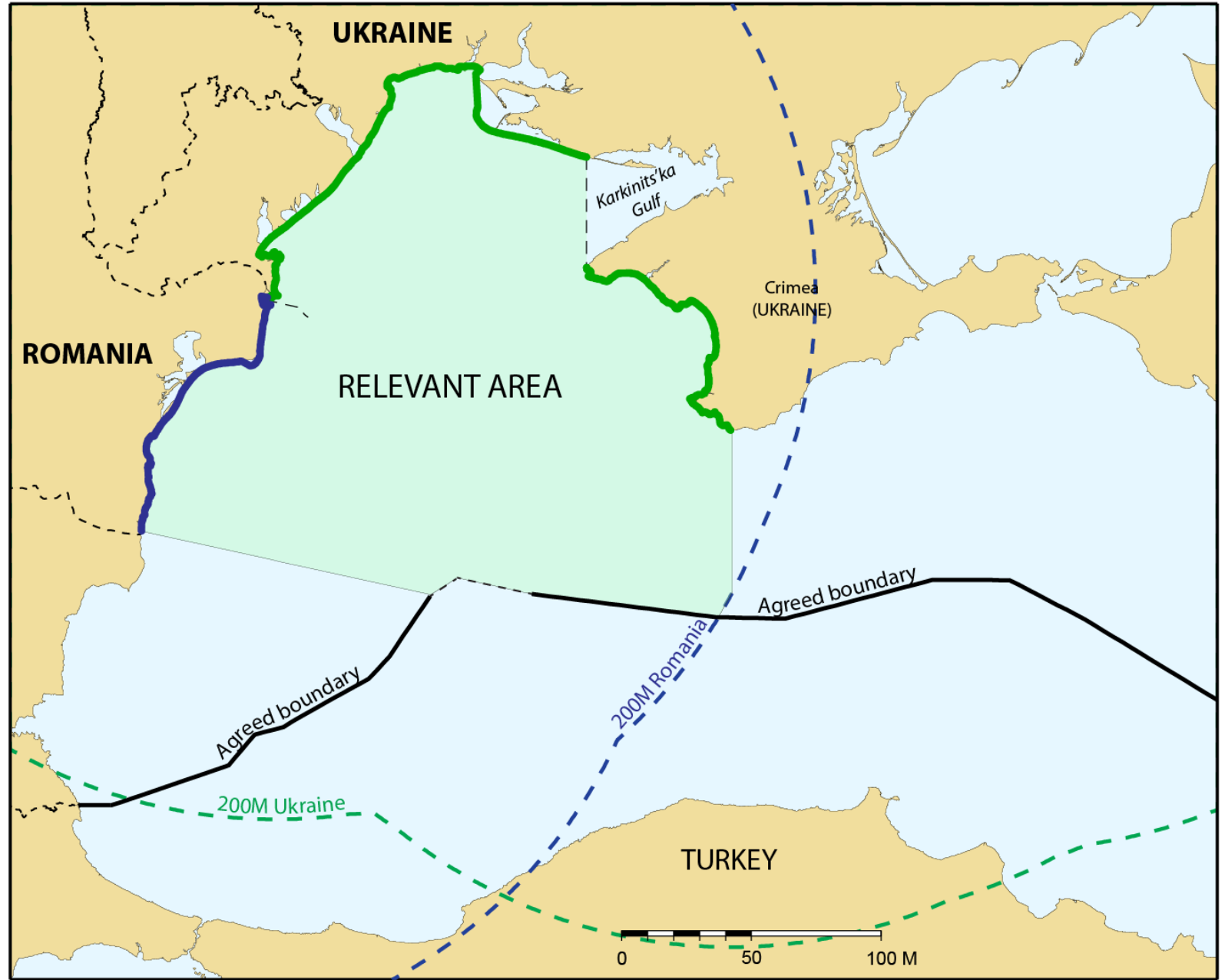
# Coastal concavity: Germany (North Sea)



# Relevant Coast (Black Sea case)

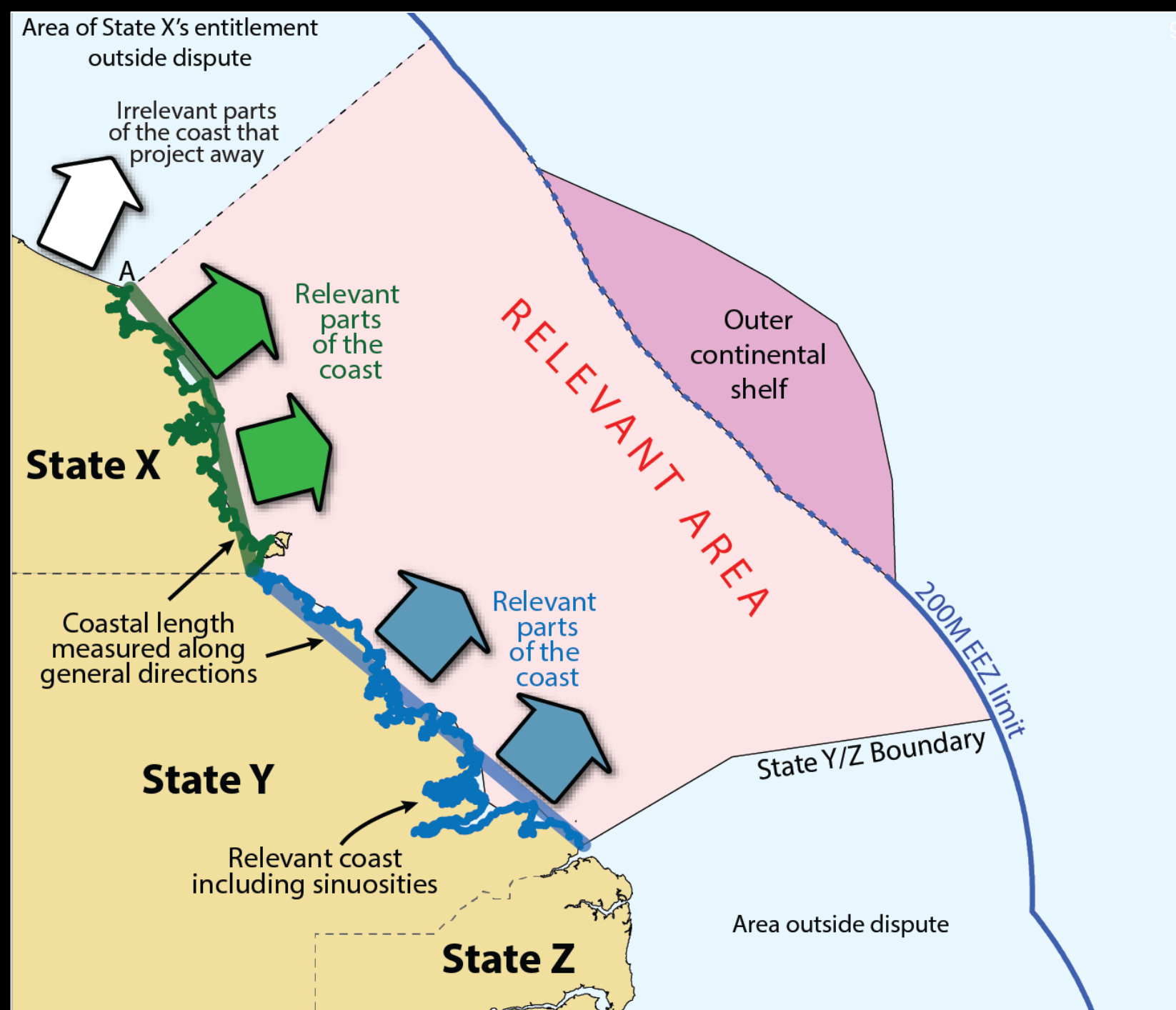


# Relevant Area: Black Sea





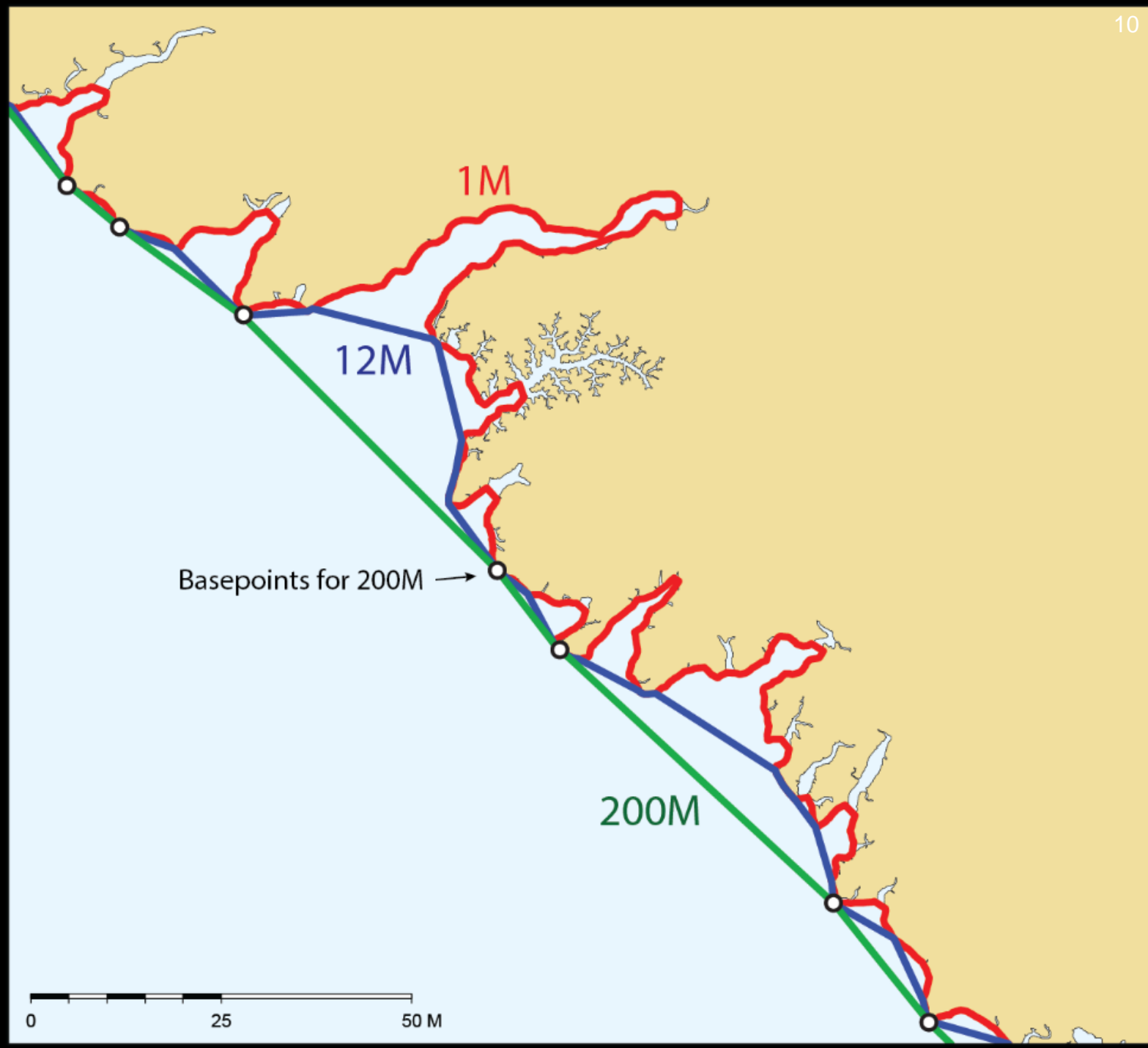
# Relevant Coasts



Graphic from:  
A Practitioner's Guide to Maritime Boundary  
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by S Fietta & R Cleverly. OUP March 2016

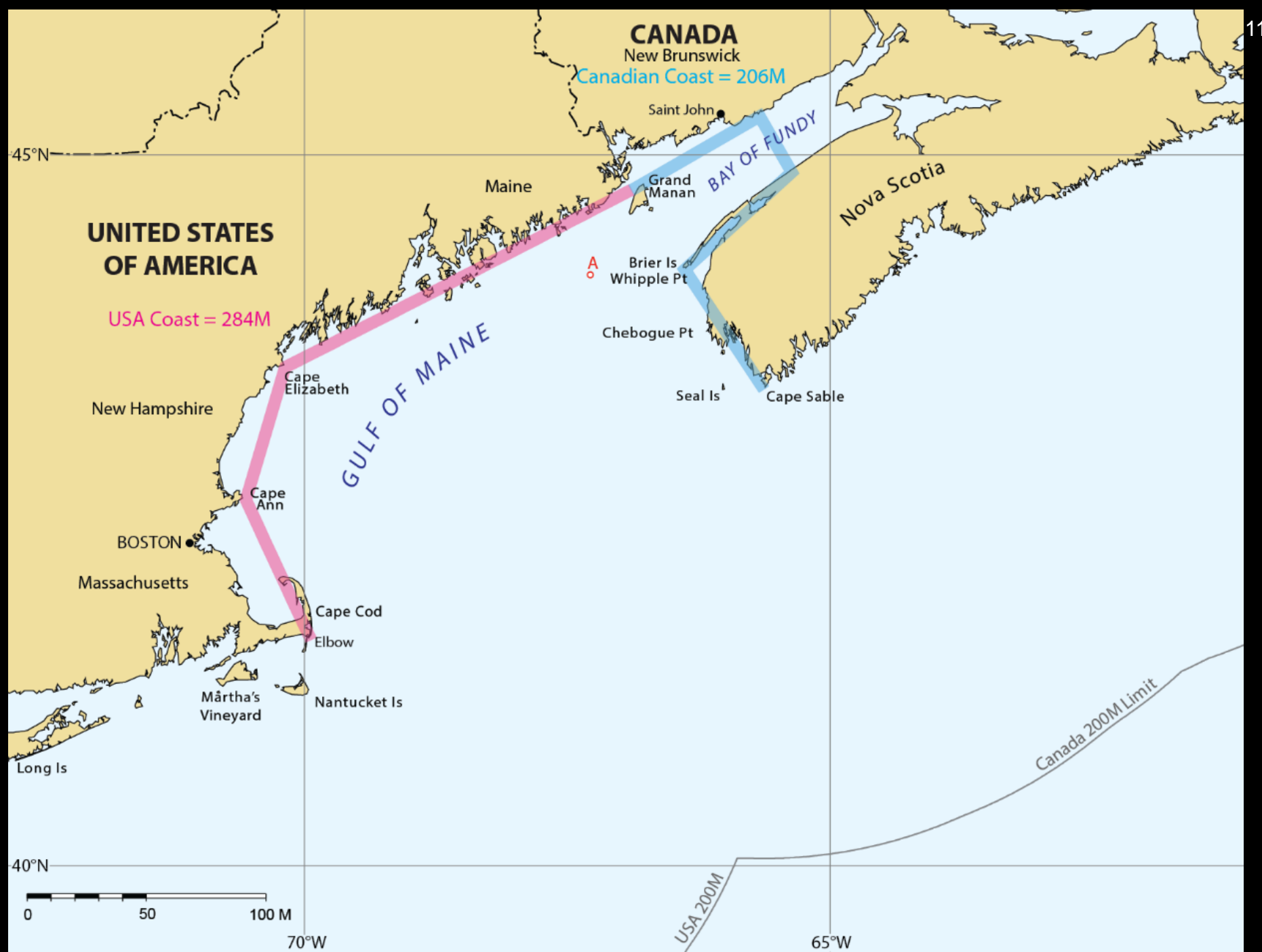
# The Coastal Length Paradox

Filter	Coastal length
	2200 km
1M	770 km
12M	346 km
200M	312 km



Graphic from:  
A Practitioner's Guide to Maritime Boundary  
Delimitation  
by S Fietta & R Cleverly. OUP March 2016

# Relevant Coasts: Gulf of Maine



Graphic from:  
A Practitioner's Guide to Maritime  
Boundary Delimitation  
by S Fietta & R Cleverly. OUP  
March 2016

Bay of Bengal:  
Bangladesh in a concavity

India

Bangladesh

Myanmar

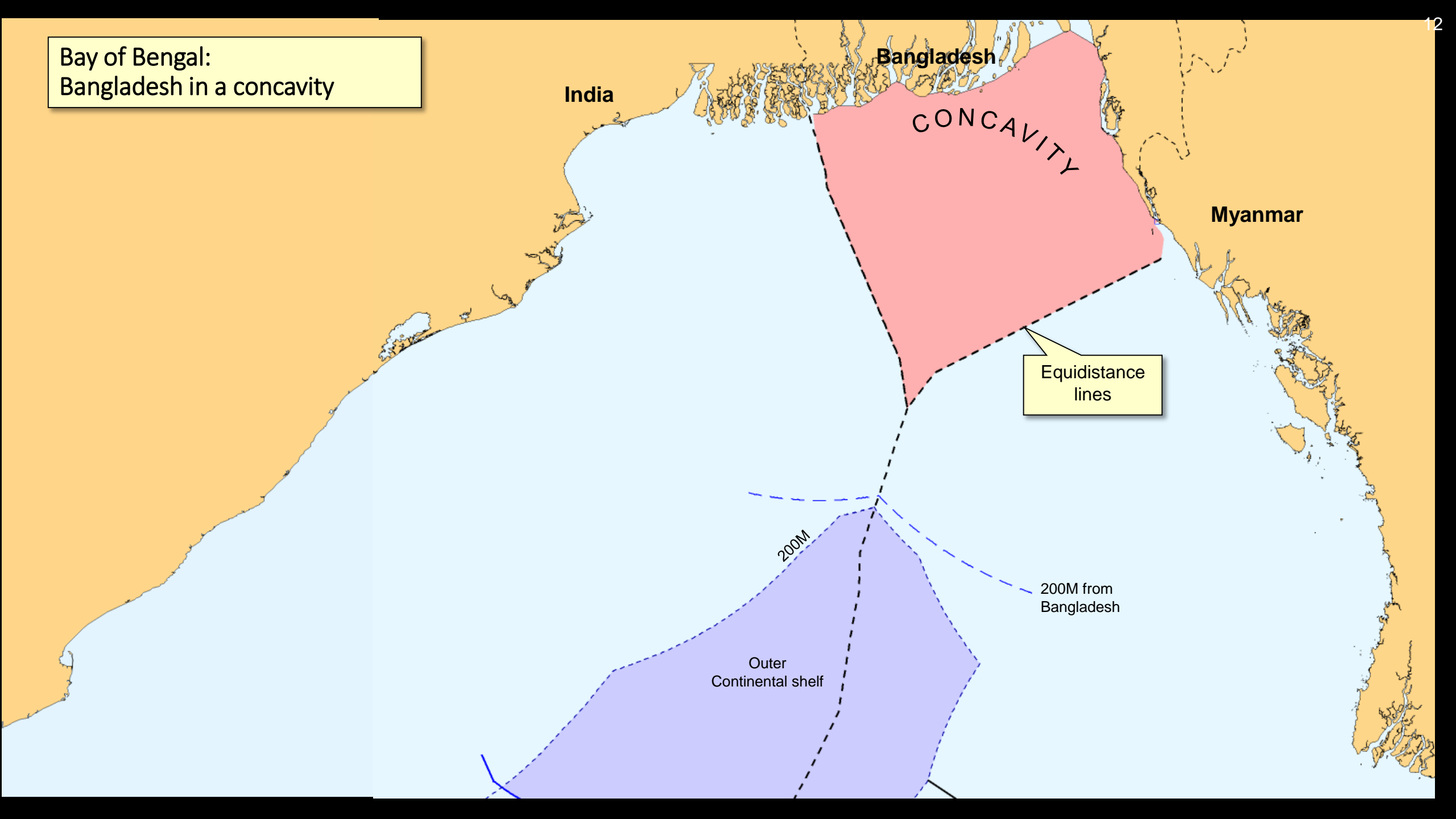
CONCAVITY

Equidistance lines

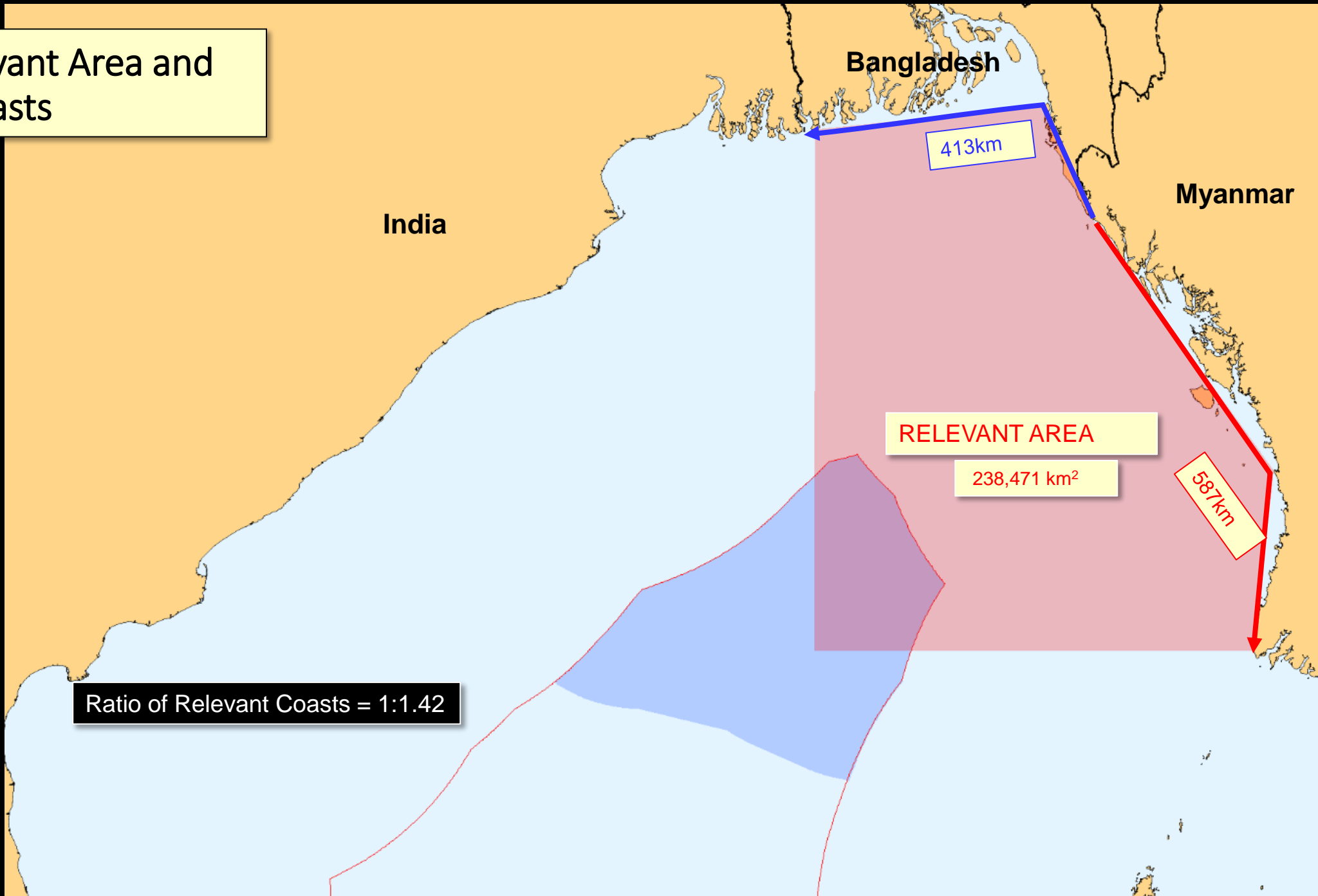
200M

200M from Bangladesh

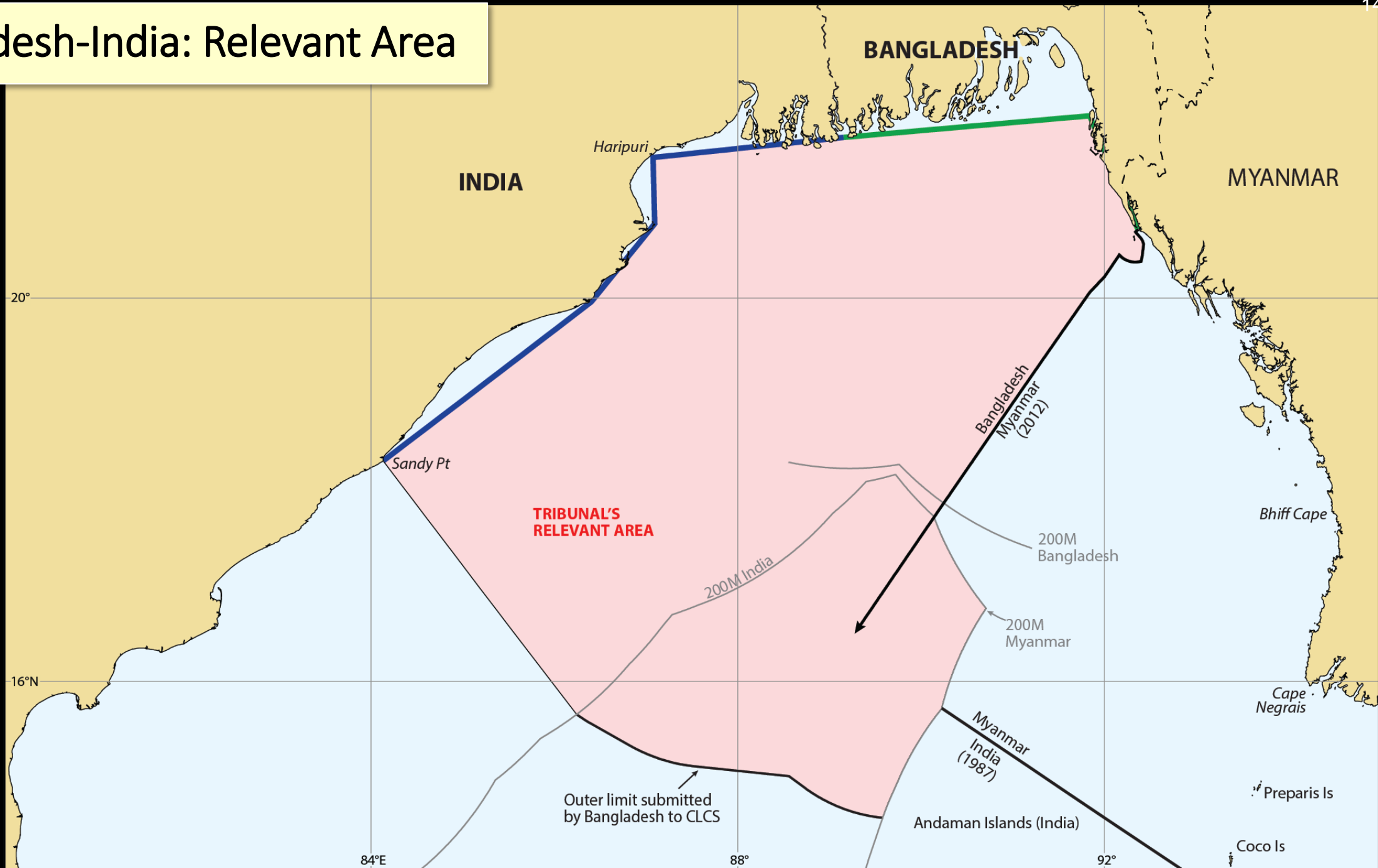
Outer Continental shelf



# ITLOS's Relevant Area and Relevant Coasts

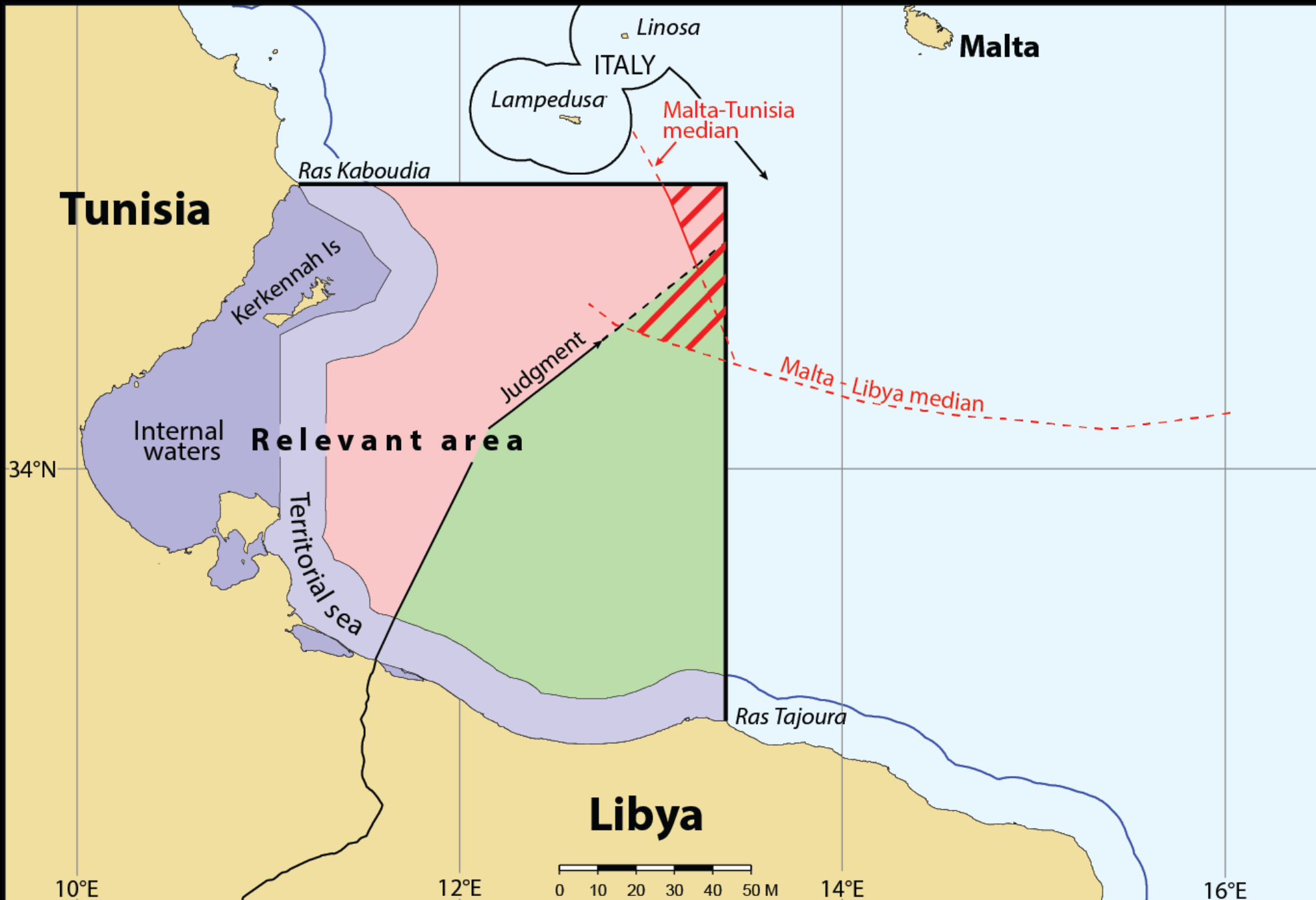


# Bangladesh-India: Relevant Area



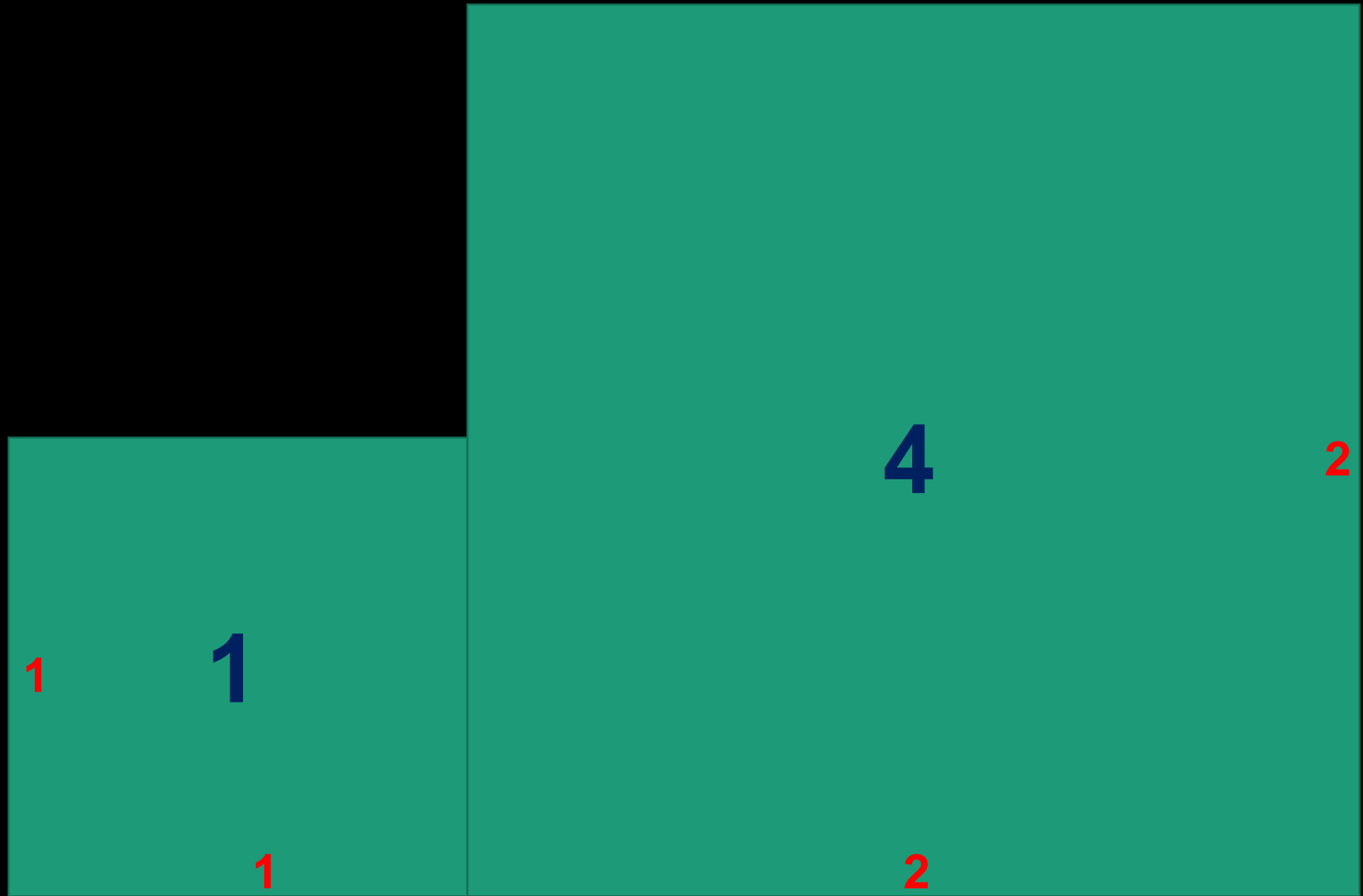
Graphic from:  
A Practitioner's  
Guide to Maritime  
Boundary  
Delimitation  
by S Fietta, R  
Cleverly. OUP  
March 2016

# Tunisia-Libya Relevant Area



Graphic from:  
A Practitioner's Guide to Maritime  
Boundary Delimitation  
by S Fietta, R Cleverly. OUP  
March 2016

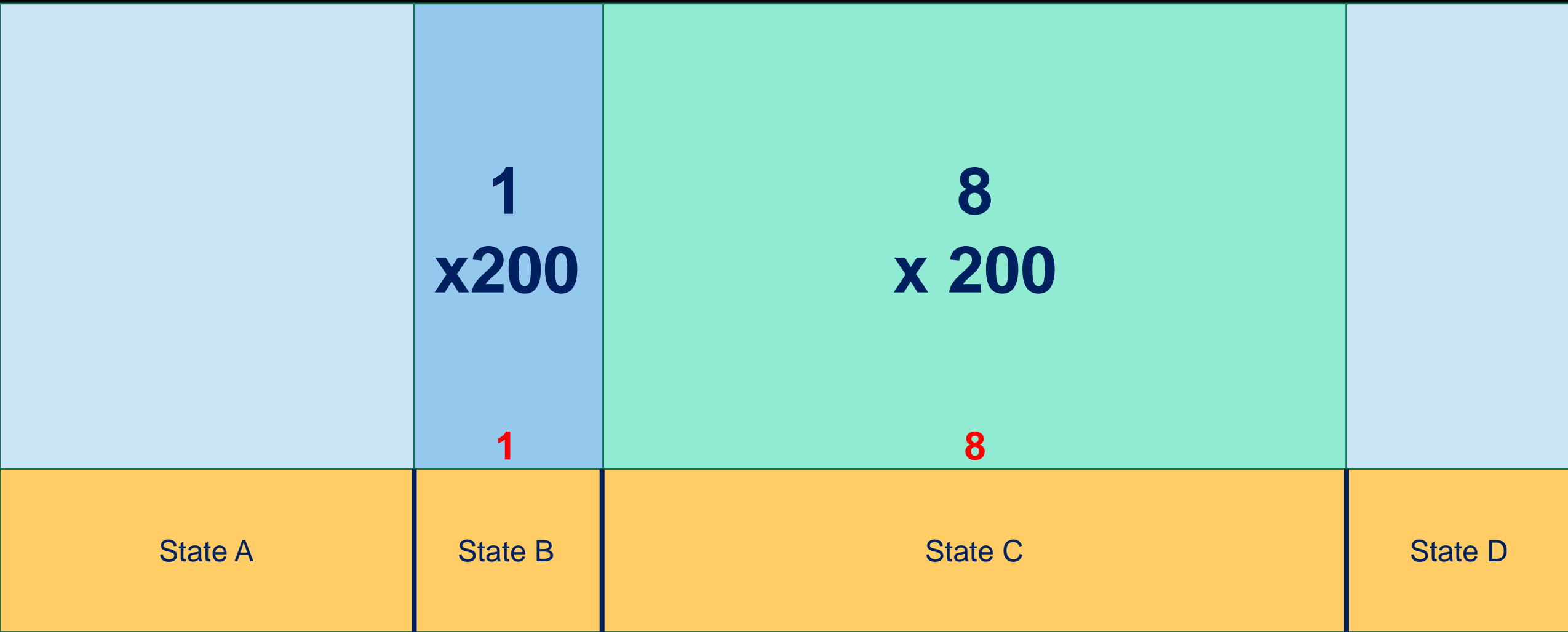
# Length-Area Relationship



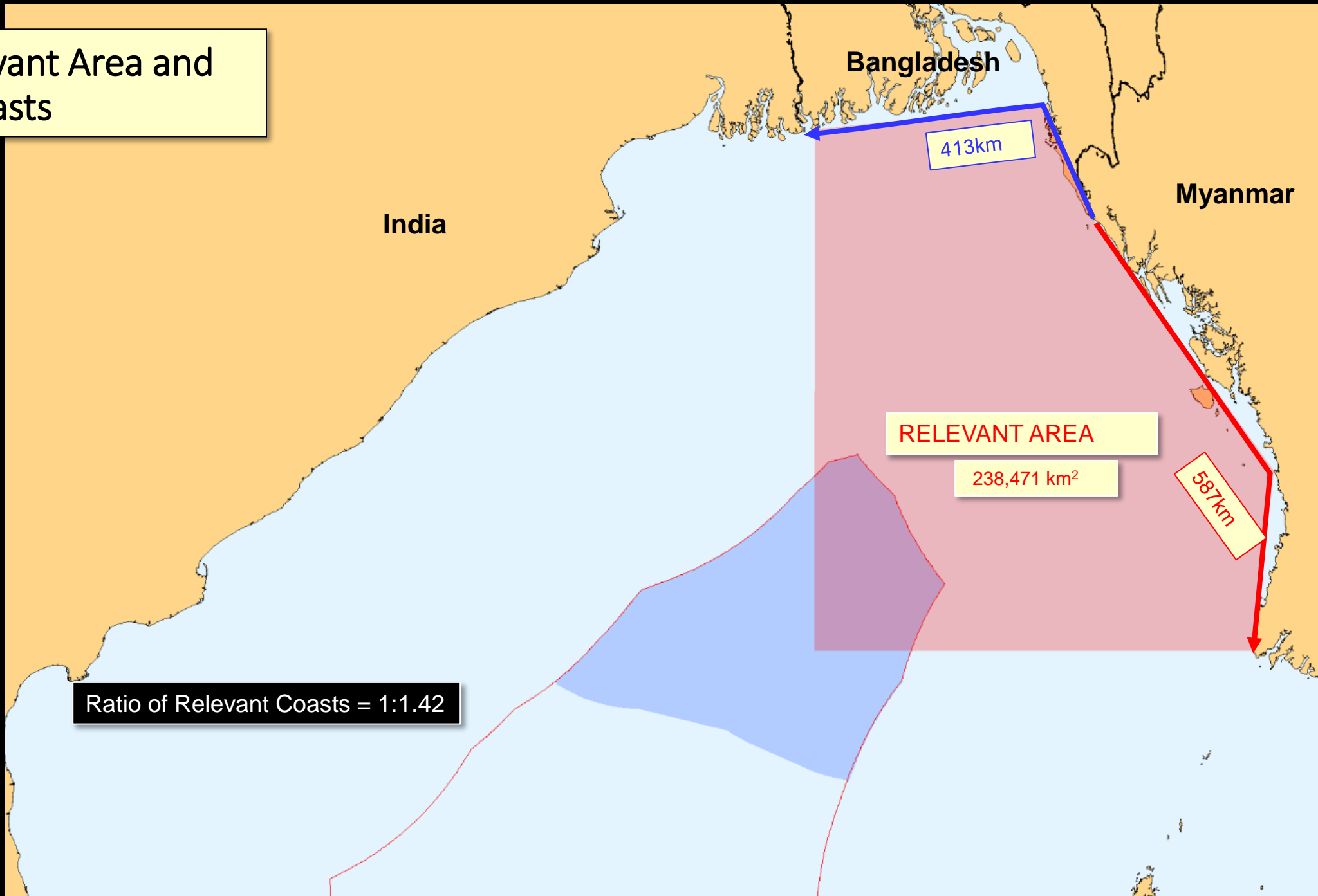


# Proportionality: Constant Extent

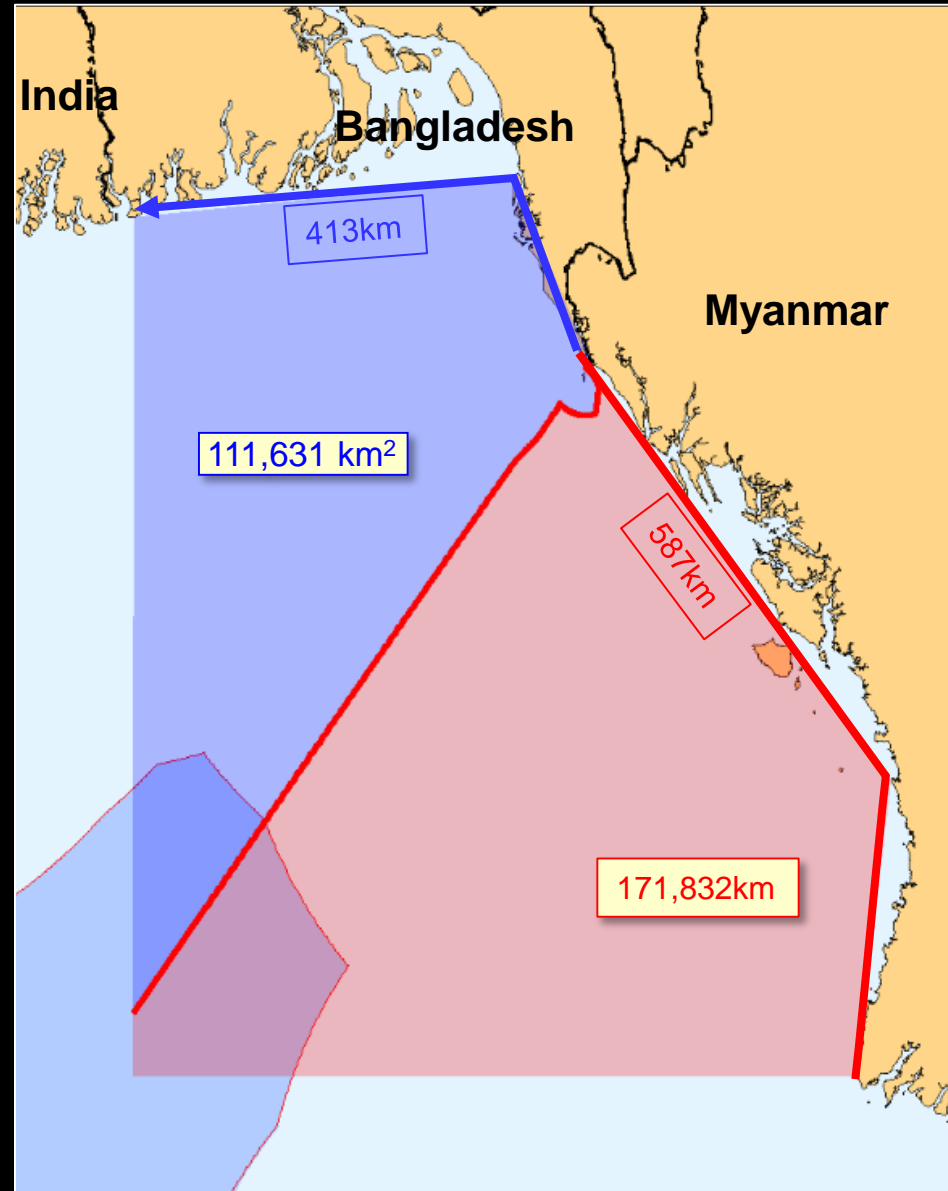
200M / median line



# ITLOS's Relevant Area and Relevant Coasts



## ITLOS's Disproportionality Test



Ratio of Relevant Coasts = 1:1.42 (for Myanmar)  
Ratio of Relevant Areas = 1:1.54 (for Myanmar)

# Bangladesh's Disproportionality Test

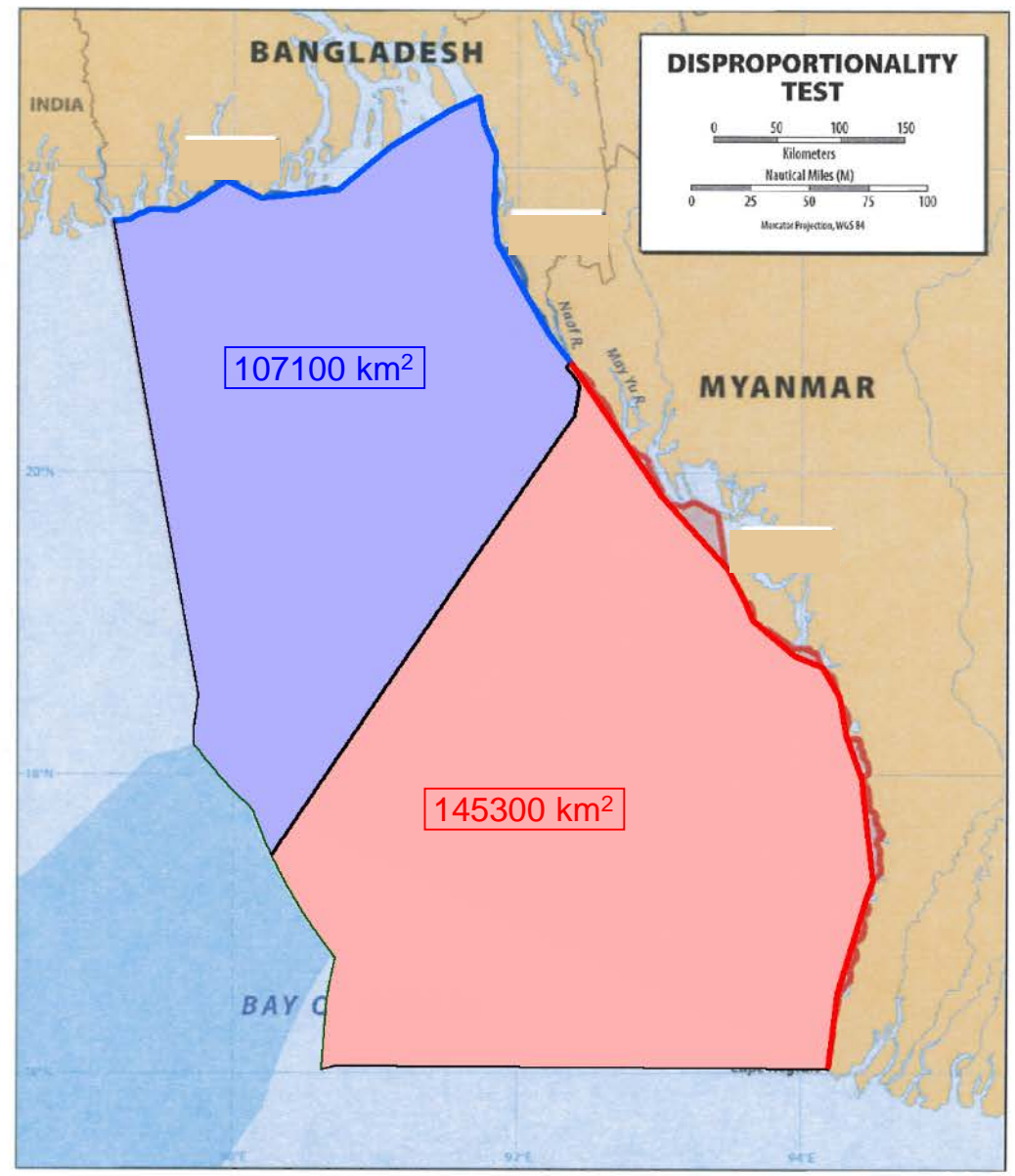
Bangladesh's Bisector (215°) Proposal

Bangladesh 510 km  
Myanmar 600 km

Coast ratio = 1:1.18

Bangladesh 107100 km<sup>2</sup>  
Myanmar 145300 km<sup>2</sup>

Area ratio = 1:1.36



Bangladesh's graphic from oral pleadings

# Myanmar's Disproportionality Test

## AREA RATIO

Bangladesh 80,400 km<sup>2</sup>

Myanmar 133,900 km<sup>2</sup>

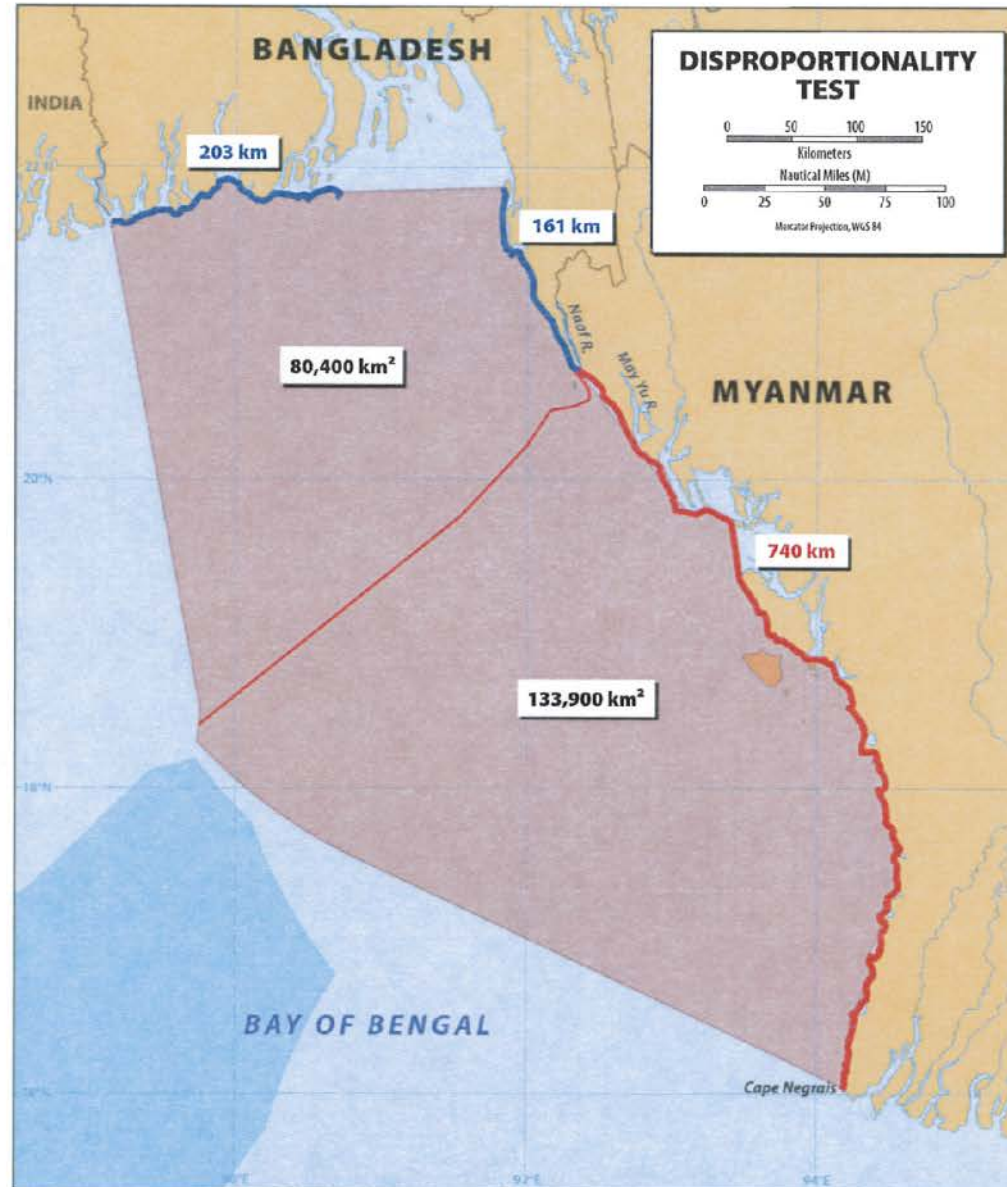
1 : 1.66

## COASTAL LENGTHS RATIO

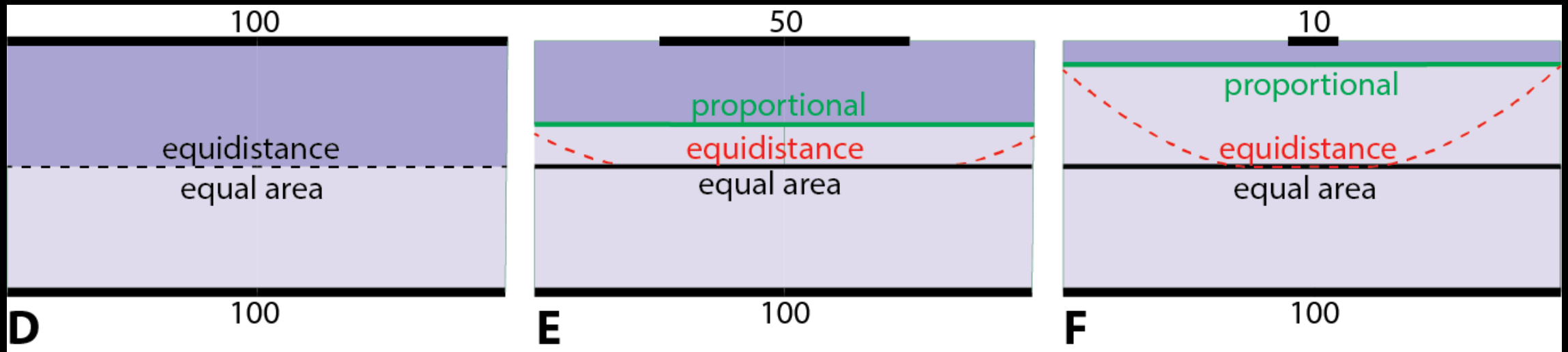
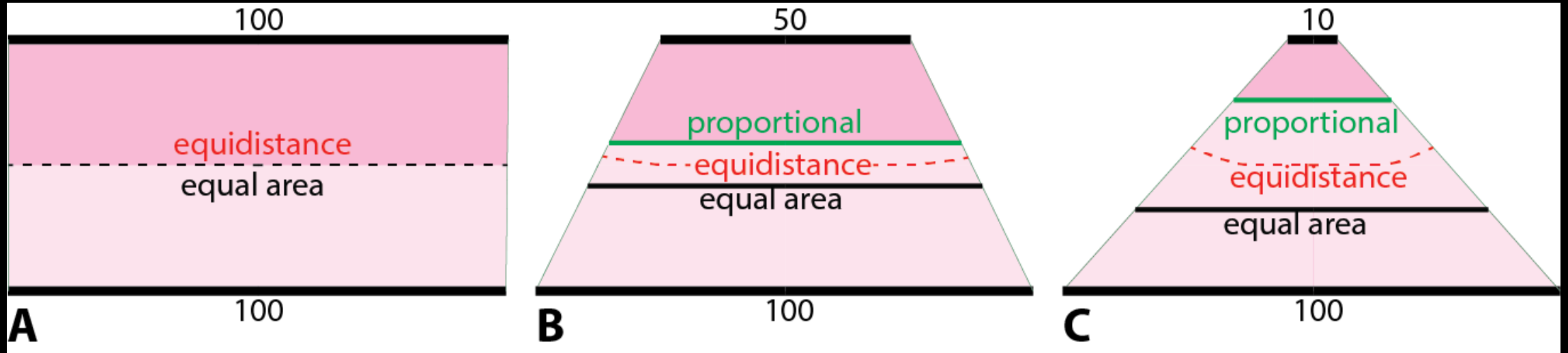
Bangladesh 364 km

Myanmar 740 km

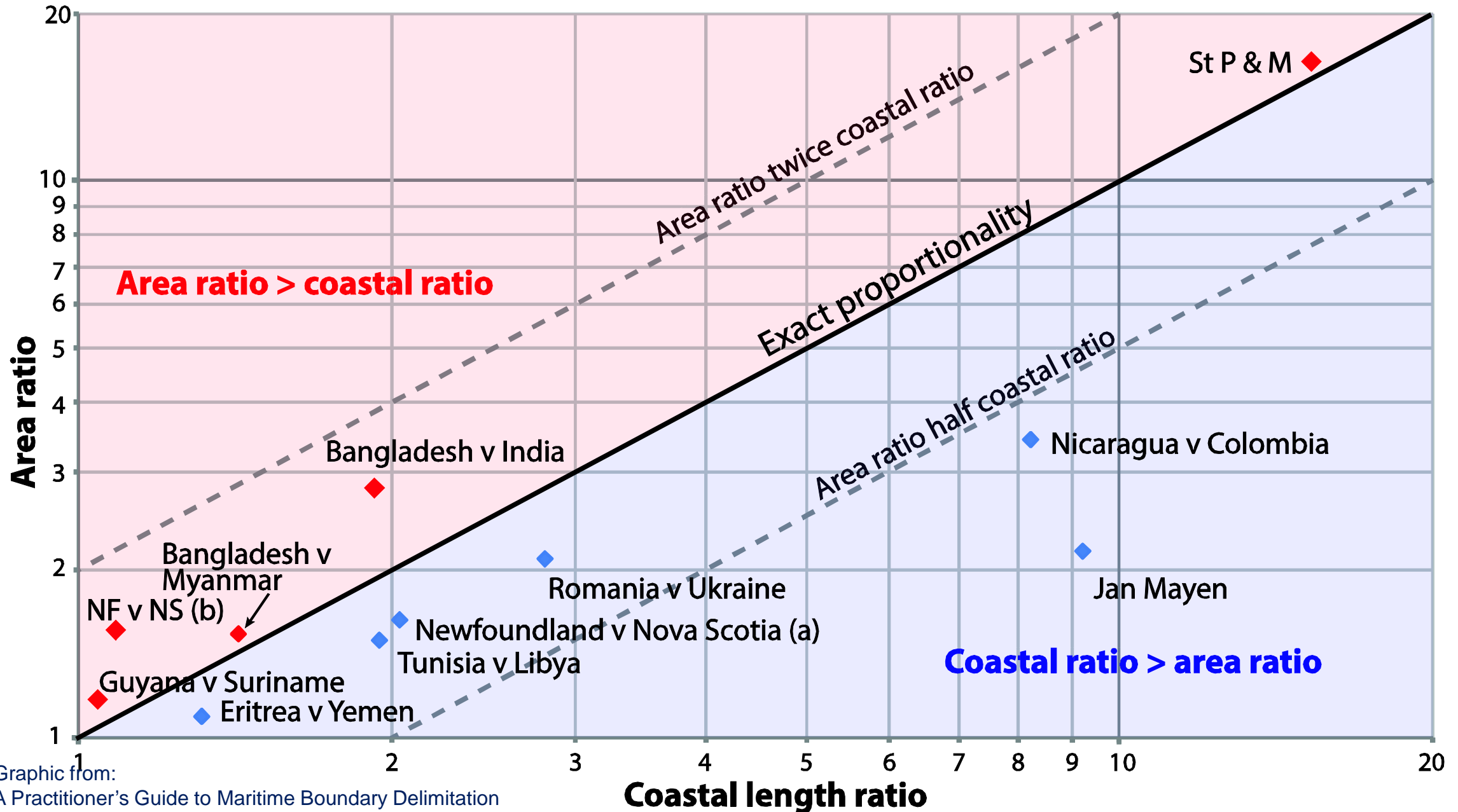
1 : 2.03



# Proportionality Calculations: Trapezium Models



# Proportionality Test



Graphic from:  
 A Practitioner's Guide to Maritime Boundary Delimitation  
 by S Fietta & R Cleverly. OUP March 2016

## Recipe for Delimitation: Three Stage Process

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## Recipe for Delimitation: Three Stage Process

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1. **Select basepoints**
2. Draw equidistance line as a provisional boundary
3. Adjust provisional line as necessary for equitable solution in light of relevant/special circumstances **and proportionality**

