• Selection of Issues Only
• Terminology
• Baseline Issues
• Delimitation Principles and Common Issues
Terminology

• **Delineation** of limits – eg. territorial sea, EEZ
• **Determination** of outer limits of continental shelf
• **Delimitation** – process of setting boundary or boundaries where overlap in claims between and among states
• **Opposite and Adjacent Coasts**
• **Entitlement vs Allocation**
Jurisdictional Zones

- Internal Waters
- Territorial Sea
- Contiguous Zone
- EEZ
- Continental Shelf
- High Seas
- Archipelagic Waters
Jurisdictional Zones

- **Territorial Sea**
- **Contiguous Zone**
- **Exclusive Economic Zone**
- **High Seas**
- **Continental Shelf**
- **Continental Rise**
- **Continental Slope**
- **Deep Sea Bed**

**Nautical Miles**

12, 24, 200
Coastal Baselines

- Purpose – measure other zones from here
  - Inside – internal waters
  - **NOT** necessarily applied in delimitation
- LOS 1982 made real progress
  - Technical rules in Arts. 5-14: bays, rivers, harbour works etc
  - Default position is low water line on coast
• **Common Problems**
  
  • Small rocks, islets used as basepoints
    • Tendency to ignore, discount *in delimitation* even if valid basepoint (eg Libya/Malta, Qatar/Bahrain)

• **Straight baselines**
  
  • LOS 1982 sets out some “rules”
  • Bays, harbours etc
  • Valid for Indented coastlines and fringing islands (Anglo/Norwegian Case)

• **Note archipelagic baselines special case**
Archipelagic Baselines Waters Bahamas
Land and Bank Areas Used In Calculations

Illustrative Map of
Land & Bank Areas Used To Calculate
The Area of the Water to the Area of the Land

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Area Description</th>
<th>Sq. Nautical Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Little Bahama Bank</td>
<td>4,109.1398</td>
</tr>
<tr>
<td>2</td>
<td>Andros</td>
<td>1,229.7842</td>
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<tr>
<td>3</td>
<td>Cat Sal Bank</td>
<td>3,179.6454</td>
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<tr>
<td>4</td>
<td>Acklins &amp; Crooked Island</td>
<td>2,632.3288</td>
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<tr>
<td>5</td>
<td>Great Inagua</td>
<td>1,469.3794</td>
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<tr>
<td>6</td>
<td>Arrecife</td>
<td>1,215.9887</td>
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<tr>
<td>7</td>
<td>Cat Island</td>
<td>1,030.0096</td>
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<tr>
<td>8</td>
<td>Bimini</td>
<td>984.6590</td>
</tr>
<tr>
<td>9</td>
<td>Berry Islands</td>
<td>794.7394</td>
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<tr>
<td>10</td>
<td>New Providence</td>
<td>464.0763</td>
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<tr>
<td>11</td>
<td>Mira Por Vos</td>
<td>42.5437</td>
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<td>12</td>
<td>Little Inagua</td>
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<td>13</td>
<td>Pina Cays</td>
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<td>14</td>
<td>Conception Island</td>
<td>31.6959</td>
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<tr>
<td>15</td>
<td>Bimini</td>
<td>25.2737</td>
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<td>16</td>
<td>Paria Bank</td>
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<td>17</td>
<td>Berry Island</td>
<td>14.5676</td>
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<tr>
<td>18</td>
<td>Hogada Reef</td>
<td>13.7913</td>
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<td>19</td>
<td>Russell Island Range</td>
<td>10.9069</td>
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<tr>
<td>20</td>
<td>Brothers</td>
<td>3.0687</td>
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<tr>
<td>21</td>
<td>Little San Salvador</td>
<td>2.1112</td>
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<tr>
<td>22</td>
<td>Hogady Reef</td>
<td>1.0152</td>
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<tr>
<td>23</td>
<td>Cat Lobos</td>
<td>0.0897</td>
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<tr>
<td>24</td>
<td>Cat Awa Dominique</td>
<td>0.0106</td>
</tr>
<tr>
<td></td>
<td><strong>Total land and Bank</strong></td>
<td><strong>9,096.6924</strong></td>
</tr>
</tbody>
</table>

*Some land is Base calculations
**Bank area only

Total Area of Baselines 72,795.40
Land & Water 9,096.6924
Water 63,701.10
Water: Land Ratio 63,701.10:72,795.40
Final Ratio 0.871:1
Baseline Problems 1
Baseline Problems 3
Pakistan Baseline
Particular Rules

• Bays – Article 10
  • “Well-marked” indentations in coast – not “mere curvature”

• Gulf of Sidra example
  • Non-Compliant *Unless* Accepted As “Historic” Bay
In any event: legal bay must have area equal to or greater than semi-circle drawn with mouth of bay as diameter (Art. 10(2))
Adequate Area
Bays cont’d

- Where mouth of bay is less than 24 M (minus any islands in mouth), draw closing line at first points where it meets this limit.
These restrictions do not apply to “so-called ‘historic’ bays” (Art. 10(6))

- Rely on long practice, acceptance by international community

- Eg – St. Peter the Great Bay, Hudson Bay

- Also – general rules on straight baselines may still permit bay closure
Maritime Boundary Delimitation: Treaty Law

1958 Geneva Convention on Continental Shelf: Article 6

• First: obligation to settle by agreement.
• If not:
  “In the absence of agreement, and unless another boundary line is justified by special circumstances, the boundary is the median line, every point of which is equidistant from the nearest points of the baselines…”
• Shelf boundaries only
• So-called “Equidistance-Special Circumstances” Rule

  • **Seemed** to give primacy to equidistance (i.e. equidistance “unless justified by special circumstances”)
  
  • **BUT** Subsequent cases tended to discount this as rule of custom – or even treaty
  
  • Beginning with *North Sea Cases (1969)* and *Anglo-French Arbitration (1977)*
Territorial Sea

• 1958 Geneva Convention on Territorial Sea and Contiguous Zone

“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 every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial seas of each of the two States is measured.”

• Does not apply where historic title or special circumstances requires otherwise
LOS 1982

EEZ Article 74

1. The delimitation of the exclusive economic zone between States with opposite or adjacent coasts shall be effected by agreement on the basis of international law, as referred to in Article 38 of the Statute of the International Court of Justice, in order to achieve an equitable solution.

Shelf – Article 83 – same wording
Territorial Sea – repeats 1958 – median line dominates

• Shelf & EEZ: Not much guidance – equity of result is key
• BUT: That is not all. To be effected on “basis of international law” – which includes customary law
Jurisprudence

• Widely litigated issue
  • Numerous tribunals: International Court of Justice and *ad hoc* tribunals
  • Note: important to remember that difficult cases tend to be litigated – otherwise negotiated: may skew the principles
<table>
<thead>
<tr>
<th>Litigated Boundaries</th>
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</thead>
<tbody>
<tr>
<td>North Sea Cases</td>
<td>Cont. Shelf</td>
<td>I.C.J. 1969</td>
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<tr>
<td>Anglo-French</td>
<td>Cont. Shelf</td>
<td>Arbitration 1977</td>
</tr>
<tr>
<td>Tunisia-Libya</td>
<td>Cont. Shelf</td>
<td>I.C.J. 1982</td>
</tr>
<tr>
<td>Canada-US (Gulf of Maine)</td>
<td>“Single” Maritime Boundary (SMB) to 200 M</td>
<td>I.C.J. Chamber 1984</td>
</tr>
<tr>
<td>Guinea – Guinea Bissau</td>
<td>Cont. Shelf and TS</td>
<td>Arbitration 1985</td>
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<tr>
<td>Libya-Malta</td>
<td>Cont. Shelf</td>
<td>I.C.J. 1986</td>
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<tr>
<td>Case</td>
<td>Issues</td>
<td>Court</td>
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<td>Denmark-Norway (Jan Mayen)</td>
<td>SMB</td>
<td>I.C.J. 1993</td>
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<tr>
<td>Qatar-Bahrain</td>
<td>SMB – in sectors Sovereignty</td>
<td>I.C.J. 2001</td>
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<tr>
<td>Cameroon-Nigeria</td>
<td>Land and SMB</td>
<td>I.C.J. 2002</td>
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<tr>
<td>Eritrea-Yemen</td>
<td>Islands and SMB</td>
<td>Arbitration 1998, 1999</td>
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<tr>
<td>Barbados-Trinidad &amp; Tobago</td>
<td>SMB</td>
<td>LOS Annex VII Arbitration 2006</td>
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<td>Guyana-Suriname</td>
<td>SMB</td>
<td>LOS Annex VII 2006</td>
</tr>
<tr>
<td>Nicaragua – Colombia</td>
<td>Territory &amp; SMB</td>
<td>I.C.J. 2007</td>
</tr>
<tr>
<td>Romania v Ukraine</td>
<td>SMB</td>
<td>I.C.J. 2009</td>
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<tr>
<td>Case</td>
<td>Type</td>
<td>Tribunal/Year</td>
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<tr>
<td>Bangladesh v Myanmar</td>
<td>SMB (outer shelf)</td>
<td>ITLOS 2012</td>
</tr>
<tr>
<td>Nicaragua v Honduras</td>
<td>SMB (outer shelf?)</td>
<td>I.C.J. 2012</td>
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<tr>
<td>Bay of Bengal (India/Bangladesh)</td>
<td>SMB</td>
<td>Annex VII 2014</td>
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<td>Croatia/Slovenia</td>
<td>SMB and land</td>
<td>Arbitration 2017, (Withdrawal &amp; protests of Croatia)</td>
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<td>Ghana/Cote D’Ivoire</td>
<td>SMB, Preliminary Measures</td>
<td>Annex VII to ITLOS Chamber, 2017</td>
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<tr>
<td>Costa Rica/Nicaragua</td>
<td>SMB plus land boundary</td>
<td>I.C.J. 2018</td>
</tr>
<tr>
<td>Delimitation in Indian Ocean, Kenya/Somalia</td>
<td>SMB</td>
<td>I.C.J. Pending (Failed settlement)</td>
</tr>
<tr>
<td>Nicaragua/Colombia</td>
<td>Cont. Shelf beyond 200 M</td>
<td>I.C.J. Pending</td>
</tr>
<tr>
<td>Guatemala/Belize</td>
<td>Territory, Islands and SMB</td>
<td>I.C.J. Pending</td>
</tr>
</tbody>
</table>
• North Seas Cases (1969)

• Fundamental approach: delimit in accordance with equitable principles and taking account of relevant circumstances to leave each party as much of natural prolongation as possible (was shelf boundary)

• 1958 Convention not applied
• Anglo-French Arbitration 1978
  • Merger of equidistance-special circes and equitable principles/relevant circes.
  • 1958 applicable
  • Equity of result dominates (formally)
Gulf of Maine: 1984

- First litigated “Single” boundary (seabed, water – but only to 200 M)
- Stressed process:
  - Define relevant area and coasts
  - Determine equitable principles (eg. no “cut-off, zone blocking, proportionality)
  - Set equitable criteria (eg. equal division of maritime area)
  - Choose practical method
  - Check equity of result
Relevance: Geographical Relationship
Outside Gulf – No real coastal relationship
Summary of Impact Up to 1990s

Definition of equitable principles (determined with “relevant circumstances”):

• Highly dependent upon geography (subjective)
  • Proportionality of coasts to maritime area (but – sometimes principle, sometimes “check”. Not necessarily mathematical exercise)
  • “Cut-Off”
  • Zone blocking – eg.
  • Relationship of coasts to each other is central circumstance – especially where other boundaries

• Mostly rejected factors such as land-mass, fisheries, population, economic impact etc.
Jan Mayen Case – Proportionality of Coastlines to maritime Area
North Sea – Classic Case of Zone Blocking
• List of relevant circumstances, equitable criteria not closed – cases are unique

• **Corollary** to this approach:
  • No one “practical method” of delimitation given any priority
  • Main contender for this status was equidistance or median line
  • **BUT** other methods commonly applied:
    • Perpendiculars to direction of coast
    • Azimuth or directional lines
• Problems with “pure” equitable approach
  • Highly subjective in treatment of geography and “relevant” coastlines and maritime areas
  • Can be extremely unpredictable
  • In state practice - forms of equidistance much more common than in litigation
    • Litigation has the “hard” cases where diplomacy failed?
Canada – France – 1992: High point of Unpredictability
More Recent Cases

Eg. *Jan Mayen, Qatar/Bahrain, Cameroon/Nigeria, Barbados/Trinidad and Tobago, Romania v Ukraine etc*

• Increasing relevance of equidistance as starting point
  • Always true of “opposite” boundaries
• i.e. *presumption for equidistance* – in absence of special or relevant circumstances that would justify adjustment
• **HIGHLY** relevant in negotiation preparations
“The most logical and widely practised approach is first to draw provisionally an equidistance line and then to consider whether that line must be adjusted in the light of the existence of special circumstances.”
Application to EEZ?

Qatar/Bahrain was territorial sea for large part – rules there favour equidistance anyway

• BUT – went on to say it was more broadly applicable approach

• Uses term “relevant circumstances” in relation to EEZ
“The determination of the line of delimitation thus normally follows a two-step approach. First, a provisional line of equidistance is posited as a hypothesis and a practical starting point. While a convenient starting point, equidistance alone will in many circumstances not ensure an equitable result in the light of the specific peculiarities of each specific case.”

Similar aproach in *Cameroon - Nigeria*
Summary

• Equitable principles not put aside
• BUT – in most cases – starting point will be equidistance or median line
• More predictable, as an initial consideration
• Burden of proof issues – Practically, need to find some way to justify moving away from equidistance
What is Unchanged

• Primary obligation of states is to **delimit by** agreement (arts. 74, 83, 15 of UNCLOS) on the basis of international law in order to achieve an **equitable solution**.

“No maritime delimitation between States with opposite or adjacent coasts may be effected unilaterally by one of those States.”

Current Delimitation Process

It is now accepted that the correct approach to maritime delimitation involves a 3 stage process (see, eg.: Cameroon v Nigeria [ICJ 2002]; Barbados v Trinidad & Tobago 2006; Romania v Ukraine (Black Sea Case) [ICJ 2009]; Bangladesh v Myanmar, [ITLOS 2012], Nicaragua v Colombia [ICJ 2012])

1. Drawing of provisional equidistance line
2. Identification of relevant (special) circumstances which may require shifting or adjustment of provisional line to produce equitable result
3. Assessment of line to ensure no inequitable result by disproportion between ratio of coastal lengths and relevant maritime areas.

This process provides guidance for delimitation negotiations
Relevant Circumstances: Disproportion

• Proportionality can only be considered as a “relevant circumstance” where the disproportion is extreme:

“Where disparities in the lengths of coasts are particularly marked, the Court may choose to treat that fact of geography as a relevant circumstance that would require some adjustments to the provisional equidistance line to be made.” Black Sea Case, para 164

• Applied only in cases of very significant coastal disparities:
  • Libya/Malta: 1 : 8
  • Jan Mayen: 1 : 9
  • Barbados/Trinidad: 1 : 8.2
Jan Mayen: 504 km

Libya/Malta: 356 km
Application of General Approach in *Bangladesh v Myanmar* ITLOS 2012

- Single Maritime Boundary
- Including outer shelf
- First ITLOS boundary decision
- Impact on India
Territorial Sea

- Prior agreement and estoppel rejected
- UNCLOS Art 15 applied
- St. Martin’s not special circumstance (as claimed by Myanmar)
- Equidistance line out to end of 12 nm overlap
Exclusive Economic Zone/Shelf to 200

- Applicable law: Arts. 74 & 83
  - “achieve an equitable solution”
  - But take into account customary law developments (i.e. equidistance/relevant circs)

- Definition of relevant coasts: essentially full coastal front of Bangladesh, Myanmar south to Cape Negrais
Approach to delimitation

- Adopted equidistance/relevant circs
- Following *Romania v Ukraine, Barbados v Trinidad & Tobago* etc
- Provisional equidistant line, adjust for relevant circs.

Anomalies

- Delimitation “method” vs ‘methodology” or process?
- Removal of St Martin’s basepoints *before* drawing provisional line?
Provisional Equidistance Line

Sketch-map No. 5:
EEZ/CS
Tribunal's provisional equidistance line

Mercator Projection (20°N)
WGS 84

This sketch-map, on which the coasts are presented in simplified form, has been prepared for illustrative purposes only.
Relevant Circs. And Adjustment

- Bangladesh: Bengal depositional system; St. Martin’s, concavity and cutoff
- Tribunal: concavity, “pronounced “cut-off: effect
- Deflection of line to $215^\circ$ from point x (where effect is marked)
Shelf Beyond 200 nm

Summary:

• Tribunal had jurisdiction to delimit and, if needed, rule on entitlement (was an issue)
• Both parties had entitlements throughout area
• Applied same approach as in EEZ: and found concavity & cut-off still had impact
• Continued 215 ° line until areas where third party rights affected
• Contra earlier ICJ approach??
Sketch-map No. 9:
Tribunal's
delimitation line

Mercator Projection (20°N)
WGS 84

This sketch-map, on which the coasts
are presented in simplified form, has been
prepared for illustrative purposes only.
Test of Disproportionality

Coasts
1 : 1.42 favour of Myanmar

Area:
1 : 1.54 for Myanmar
Entitlement Issues: Grey Area

- Grey Area created outside Bangladesh 200
- Neither zone “trumps” the other
- Consequence of delimitation
- Does not remove Myanmar’s entitlement to water column
- For parties to deal with difficulties – cooperative measures
- Does **not** delimit both: EEZ would be unilateral (due regard)
Common Methods

- Rigorous Equidistance (opposite)
Adjacent

LATERAL LINE OF EQUIDISTANCE
graphic method

STATE "A"

STATE "B"
Perpendiculars and Bisectors

• Simply bisect angle formed by general direction of coastline(s)
  • Where unidirectional – perpendicular
  • If two directions – bisector

• Advantages:
  • Reflects **basis of equidistance**
  • Adjustable (by angles)
  • Filters out distortions in equidistance caused by particular features (e.g. peninsulas, concaviy)
  • Effect of such features is eliminated
Sample of Issues Arising: Methods

- **Simplified Equidistance: US-Mexico**
• **Modified Equidistance – Saudi Arabia - Iran**
Common Special Circumstances

- Islands on “wrong” side of median line
- Distorting effect on boundary out of proportion with size, significance
- Same for peninsulas
Possible Solutions

French claim in the Atlantic Region.

UK claim in the Atlantic Region.

Boundary segments drawn by the Court of Arbitration, 1977.

12-nautical mile territorial sea enclaves for the Channel Islands established by the Court of Arbitration, 1977.
Other Options – Disregard as Basepoints

- Green Island in St. Pierre negotiated boundary
- Boundary runs along low-water mark of island
- See also Filfla Island – Libya-Malta – no effect
• Concavity of coastline
Geographic Disadvantage: Effect of Congested Areas and Semi-Enclosed Seas
Islands – Boundary vs Entitlement

• As discussed earlier – islands are common example of “special” or “relevant” circumstances justifying departure from strict equidistance

• Key issue: does location of Island result in inequity: is the impact that matters

BUT – there are further issues re – entitlement of “islands” to zones
Article 121: Regime of Islands

1. An island is a naturally formed area of land, surrounded by water, which is above water at high tide.

2. Except as provided for in paragraph 3, the territorial sea, the contiguous zone, the exclusive economic zone and the continental shelf of an island are determined in accordance with the provisions of this Convention applicable to other land territory.

3. Rocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf.
Effect on Delimitation

• Assume for argument that islands “entitled” to generate all zones – this is *entitlement*.

• Does not mean that they will be given full, or any, effect in a *delimitation*.

• Recall that some clear “islands” – eg. Filfla (Malta), Sable (Canada), have been given no effect or partial effect in delimitations – even though they are entitled to generate zones.
Aves Island / Bird Rock - Venezuela
Residual Sovereignty Disputes

• How to put aside dispute over status of Island, land mass – and still proceed on boundary?

• Possible solutions: two stage arbitration (Eritrea-Yemen)

• “Set aside” Canada-US, Denmark
Machias Seal Island – Canada - US
Hans Island Sector – Denmark (Greenland) - Canada
“I can assure this House, this government will not surrender any sovereignty of any of Canada’s lands in the Arctic or anywhere else in the world.”

Bill Graham MFA – May 2018: Bilateral Task Force to resolve (and finalize agreement over a sector to the north)
Sector Approaches

• Use of multiple methods appropriate where coastal relationship changes over course of boundary

• Common in practice, jurisprudence
Remaining Issues?

- Delimitation of outer continental shelf – beyond 200: ICJ vs ITLOS
  - No need to wait for Commission on Limits of Cont. Shelf

- Gray Zone Issue? *Bangladesh v Myanmar*, Canada/France; Canada/US

- Do different principles apply?
  - Will natural prolongation re-emerge as a significant factor? (Probably no)
Shelf versus EEZ overlap?
1992 Boundary with SPM?

Approximate Limits of Canadian Extended Continental Shelf Claim
Okinotori-shima
Kingman Reef – listed as basis for EEZ claim by CIA publication (with Palmyra?)