

Environmental Assessment and Fisheries Management **Richard Caddell** Cardiff University

# Introduction and structure

- Application of environmental assessment in current fisheries management
- Assessment of prospective activities: new and exploratory fisheries
- Assessment of expanded activities: deep-sea fishing and VMEs
- Next steps?



## Environmental assessment and fisheries

- Few clear global obligations towards environmental assessment in fisheries
- Status of EIA in international law questions over SEA and cumulative EA
- Article 206 LOSC silent on fisheries assessment
- Commitments are very general in a fisheries context: e.g. Article 5(c) UNFSA
- Some elements of EA applied in the context of new/exploratory fisheries and bottom fisheries

## New and exploratory fisheries

- Intriguing example of assessment requirements for developmental fisheries
- Demonstrates that environmental assessment can be a valuable tool in developing a responsible and precautionary approach
- "Perfect storm" of depleted fisheries resources and potentially profound impacts of climate change
- Fishing effort increasingly displaced to different areas, depths and species; possibly different fishing gear
- Presents a challenge to international fisheries law, which is essentially based on predictability of fishing patterns and stocks
- A problem not contemplated by the LOSC
- Accretion of practice and standards since 1989: can now identify clarity in intended processes

## Challenges of new fisheries

- Unequal priority for RFMOs some highly proactive, others have not had to address this issue substantively
- Little knowledge of target stock and ecosystems – difficult to ascertain what damage may be done by authorising industrial fishing
- Commercial transition presents a strong challenge to precautionary approach to fisheries management
- UN Fish Stocks Agreement 1995, Article 6(6)
- Practice of particular RFMOs notably CCAMLR

### UN Fish Stocks Agreement

- First formalised recognition of NEF in a global fisheries instrument
- Article 6(6): "For new or exploratory fisheries, States shall adopt as soon as possible cautious conservation and management measures, including, inter alia, catch limits and effort limits. Such measures shall remain in force until there are sufficient data to allow assessment of the impact of the fisheries on the longterm sustainability of the stocks, whereupon conservation and management measures based on that assessment shall be implemented. The latter measures shall, if appropriate, allow for the gradual development of the fisheries."

### CCAMLR

- Most entrenched practices on NEF; informed UNFSA approach
- Dates back to 1989; first CM in 1991
- Specific policies developed for both "new" and "exploratory" fisheries
- Distinction triggered on levels of available data
- Developed to curtail unilateralism and unsustainable practices in CCAMLR Area
- Primary NEFs: Patagonian and Antarctic toothfish



## CCAMLR Regulation

- CM 21-01:New fisheries are those for which CCAMLR lacks initial data as to stocks
- Notification process: Fisheries Operation Plan and commitment to collect data
- Subject to prior approval and clean disciplinary record
- Interesting definitional practice established members v new entrants
- CM 21-02: exploratory fisheries are previously new fisheries and retain this status until agreed information is received by Scientific Committee
- Similar administrative processes for annual notifications
- Influential in framing responses by other RFMOs

## CCAMLR Practice

- Pioneered in crab fishery voluntary submission to scientific review by US
- NEFs now predominantly for toothfish
- Initial concerns about non-prosecution: costs now lie on applicant
- Uneven pursuit of NEF predominantly in Ross Sea; concerns of over-capacity raised
- Tagging requirements carrot-andstick approach



## Challenges

- Data collection challenges
- Uneven state of knowledge across EFs
- Increased "blurring" of categories of research fishing (Efs, Data-Poor EFs, closed areas, newly exposed marine areas)
- Transition to managed status procedures and criteria

# Towards managed status?

- Ross Sea toothfish fisheries
- Notified in 1997; by 2004 Scientific Committee notes potential over-capacity
- 2010: WG-FSA considers data collection requirements to have been met; criticism by other commentators
- Not yet formally submitted by SC to Commission as research and assessment framework considered beneficial
- Intriguing case study: appears that transitioned fisheries may be subject to more intensive observer coverage and ongoing research and monitoring requirements



#### Bottom fisheries

- Framework of (non-binding) UNGA Resolutions concerning deep-sea bottom fishing
- FAO Deep-Sea Fishing Guidelines 2008
- RFMO practices and procedures
- Contemplates that bottom fishing shall not occur until assessments have demonstrated that there are no significant adverse impacts on VMEs
- Broadly positive development, but a number of challenges remain



## Assessment issues: Bottom fisheries

- Limited EIAs mapping exercises have provided some insights into areas of activity, but often address quite limited areas
- Relatively limited closures have been instituted
- Documentation has been variable
- Thresholds for encounter protocols and "move-on" rules set at arguably too high a threshold to provide effective protection
- UN S-G: cumulative assessments (UNGA RES 66/68) have been essentially marginalised

#### Next steps...

- NEFs have been subject to proactive and effective EA processes – but geographically limited
- Bottom-fishing Resolutions have helped close regulatory gaps, but provide an imperfect assessment process
- Strong need for "big picture" image of ecosystem – necessary to promote clear SEA and cumulative assessment requirements and procedures

## NEREUS PROGRAM Predicting Future Oceans



## Thank you!