FAO International Guidelines on Deep-sea Fisheries in the High Seas

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CODE OF CONDUCT FOR RESPONSIBLE FISHERIES

International Plan’s of Action IPOAs

Seabirds  Sharks  Capacity  IUU Fishing

FAO Technical Guidelines

FAO International Guidelines
Background

Request: by COFI to assist States and RFMO/As in sustainably managing deep-sea fisheries and in implementing the UN General Assembly Resolution 61/105, concerning responsible fisheries in the marine ecosystem

Result: the FAO International Guidelines for the Management of Deep-sea Fisheries in the High Seas adopted in August 2008 by 69 States, the EC and the Faroe Islands

Process: multi-stakeholder (FAO Members, industry, NGOs/IGOs, scientists and researchers)
Process for the Development of the Deep Sea Guidelines

Expert Consultation and workshops
- 2006/2007 – Two ECs
  - Data and Knowledge
  - Vulnerable Ecosystems and Destructive Fishing in Deep-sea Fisheries.
  - A trawl industry perspective on the International Guidelines

Technical Consultation and adoption
- 2008 – Two TCs

Next steps...
- Implementation of the Guidelines
- Review of Implementation in Busan (2010)
FAO Deep-sea Guidelines: Scope

Guidelines designed for fisheries that occur beyond national jurisdiction, and where:

- catch includes species that can only sustain low exploitation rates, and
- fishing gear may contact the sea floor

Objective of the guidelines:

- to provide tools, and guidance on their application, and to facilitate and encourage the efforts of States and RFMO/As towards;
  - sustainable use of marine living resources,
  - prevention of significant adverse impacts on deep-sea VMEs,
  - protection of marine biodiversity that these ecosystems contain.
Description of Key Concepts

- Characteristics of species
- Vulnerable Marine Ecosystems
- Significant Adverse Impacts

Vulnerability ~ related to likelihood that a population, community, or habitat will experience substantial alteration from short-term or chronic disturbance / recovery / time-frame

The vulnerability of populations, communities and habitats must be assessed relative to specific threats.

The risks to a marine ecosystem are determined by:
1. its vulnerability,
2. the probability of a threat occurring, and
3. the mitigation means applied to the threat.
Description of Key Concepts

- Characteristics of species
- Vulnerable Marine Ecosystems
- Significant Adverse Impacts

SAIs compromise ecosystem integrity in a manner that: (i) impairs the ability of affected populations to replace themselves; (ii) degrades long-term natural productivity of habitats; or (iii) causes, on more than a temporary basis, significant loss of species richness, habitat or community types.

The scale and significance should be considered:
1. the intensity or severity of the impact;
2. the spatial extent of the impact;
3. the sensitivity/vulnerability of the ecosystem;
4. the ability of an ecosystem to recover and rate of recovery;
5. extent to which ecosystem functions may be altered, and
6. timing and duration of the impact relative to the period in which a species needs the habitat during life history stages.

Duration and frequency at which impact is repeated
Governance and Management

States and RFMO/As should manage DSFs, in a manner consistent with the Code and the UN Fish Stocks Agreement) and to:

- adopt measures to ensure the conservation of target and non-target species (including reference points, measures for prevention of SAIs & the protection of the marine biodiversity)
- identify areas or features where VMEs are known or likely to occur, and the location of fisheries in relation to these areas and features;
- develop data collection and research programmes to assess the impact of fishing
- base the management of DSFs on the best scientific and technical information available taking into account fishers knowledge
- develop and use selective and cost-effective fishing methods and promote efforts to further improve such selectivity
- implement and enforce conservation and management measures through effective MCS
- take appropriate measures to address the problems of overcapacity, overfishing and IUU fishing,
- ensure transparency and public dissemination of information, in accordance with appropriate standards for confidentiality, as well as enable participation of relevant stakeholders.
Governance and Management

- Measures for the sustainable conservation and management of DSFs are adopted and implemented consistent with the precautionary approach.

- DSFs should be rigorously managed throughout all stages of their development: experimental, exploratory and established.

- RFMO/As should develop mechanisms for communication, cooperation and coordination among themselves, as well as with relevant international organizations and scientific bodies.
Management and Conservation Steps

Data, reporting and assessment

relevant protocols governing data confidentiality

- …RFMO/As should develop standardized and consistent data collection procedures and protocols

- Data collection programmes should
  - cover all stages of fishery development (inclu. historical fishery data)
  - Include socio-economic surveys (catches, value of landings and employment in harvesting and processing sectors)
  - Submit sufficiently fine-scale data for stock assessments and evaluation of impacts on VMEs
  - Use national or international training programmes for fishers and scientific observers to improve catch identification and biological data collection
Management and Conservation Steps

Data, reporting and assessment

- …RFMO/As should cooperate in intl. efforts to **collate** biogeographic information, including oceanographic parameters, and make use of this information.

- ….RFMO/As should obtain and apply information for adaptive management to prevent SAIs on VMEs, including indicators and benchmarks.

- States and RFMO/As should ensure that data reporting and analysis is as **transparent** as possible.

- ….RFMO/As should collaborate in assessing deep-sea stocks throughout their range of distribution.
Identifying VMEs and Assessing SAIs

VME Criteria
1. Uniqueness or rarity
2. Functional significance of the habitat
3. Fragility
4. Life-history traits of component species that make recovery difficult
5. Structural complexity

EBSA Criteria
1. Uniqueness or rarity
2. Special importance for life-history stages of species
3. Importance for threatened, endangered or declining species and/or habitat
4. Vulnerability, fragility, sensitivity
5. Biological productivity
6. Biological diversity
7. Naturalness
Identifying VMEs

- The criteria should be adapted and additional criteria developed as experience and knowledge accumulate, or to address particular local or regional needs.

- Where site-specific information is lacking, other information that is relevant to inferring the likely presence of vulnerable populations, communities and habitats should be used.

- ...When identifying a VME characteristics should be weighted according to their relative contribution to an ecosystem’s vulnerability.
Assessing SAIIs

Assessments should be conducted if deep-sea fishing activities are likely to produce significant adverse impacts in a given area.

- type(s) of fishing conducted or contemplated, [vessels and gear types, fishing areas, target and potential bycatch species, fishing effort levels and duration of fishing (harvesting plan)];
- best available scientific and technical information on the current state of fishery resources and baseline information on the ecosystems, habitats and communities in the fishing area;
- identification, description and mapping of VMEs known or likely to occur in the fishing area;
- data and methods used to identify, describe and assess the impacts of the activity, the identification of gaps in knowledge, and an evaluation of uncertainties;
- identification, description and evaluation of the occurrence, scale and duration of likely impacts;
- risk assessment of likely impacts by the fishing operations to determine which impacts are likely to be significant adverse impacts;
- proposed mitigation and management measures.
Assessing SAIs

- RFMO/As should consider... relevant information from similar or related fisheries, species and ecosystems.

- RFMO/As should develop an appropriate mechanism for reviewing assessments, etc., incl. evaluation and advice by a scientific committee.

- RFMO/As should make publicly available: (i) impact assessments; (ii) existing and proposed conservation and management measures; and (iii) advice and recommendations provided by the RFMO/A scientific or technical committee.

- When an assessment concludes that the area does not contain VMEs, (or unlikely SAI) the assessments should be repeated when significant changes to the fishery or other activities in the area, or when significant changes in natural processes.
Enforcement and Compliance

- States, both individually and cooperatively through RFMO/As, should work to implement **effective MCS frameworks**

- National or international cooperative **observer programmes** should be implemented

- States should maintain and periodically update vessel registers or records to document changes in fleet characteristics and submit vessel register or record data on at least an annual basis to RFMO/As

- States and RFMO/As should cooperate to **prevent, deter and eliminate IUU fishing in DSFs**, and to take action related to IUU vessels and their listing.
Management and conservation tools

- Comprehensive maps showing the spatial extent of existing fisheries should be compiled by RFMO/As.

- Where VMEs have been designated, or are known or likely to occur, States and RFMO/As should close such areas to DSFs until appropriate conservation and management measures have been established.

- … RFMO/As should have an appropriate protocol for how fishing vessels in DSFs should respond to encounters with a VME, including defining what constitutes evidence of an encounter.
  - Based on encounters, adopt or modify management measures.
Fishery Management Plans

- RFMO/As should develop and adopt fishery management plans for specific DSFs, including a set of measures with defined long-term/multi-annual management objectives.

- RFMO/As should also develop and adopt their fishery management plans for DSFs using a transparent process.

- States (& RFMOs) should encourage dialogue and collaboration with responsible DSF operators.
  - Recognising the value of industry information & experience in resource assessment and fisheries management, identification of VMEs, responsible fishing techniques, gear development, and implementation methods to avoid or mitigate significant adverse impacts on VMEs.
Final sections

Assessments and Reviews

- transparent system for regular monitoring of the implementation of fishery management plans
- regularly review the scientific information on deep-sea fish stocks, known or likely location of VMEs & the impacts of DSFs on VMEs
- regular and independent reviews of the data and impact assessments

Special requirements of developing countries

Others

- …RFMO/As should collaborate to address common issues such as the development of compatible standards, tools and information
- … RFMO/As should provide assistance and support to develop a global database on VMEs in ABNJ
Issues in implementation
Busan workshop recommendations (May 2010)

- Compile, develop guidance, make available information on:
  - impacts and risk assessment;
  - encounter protocols and related mitigation measures, and the move-on rule; and
  - use of the VME criteria, including triggers for what degree of presence constitutes a “significant concentration”

- Evaluation of the implementation of the Guidelines and convening of further workshops at regular intervals
Issues in implementation (cont.)

- Step-wise approach to implementation, prioritize the main provisions
- Procedures to build confidence between scientists and industry for improved collaboration including protocols for collaboration
- Collection of historical data
- Sharing experiences and best practices between RFMOs & RFMO scientists
- Build awareness among deep-sea skippers, operators and crew
Publications

- Report on bottom trawling in the southern Indian Ocean for orange roughy (*Hoplostethus atlanticus*). *(In press)*
- Management of demersal fisheries resources of the Southern Indian Ocean. 2006.
- Summary and review of Soviet and Ukrainian scientific and commercial fishing operations on the deepwater ridges of the Southern Indian Ocean. 2003.