

**H₂O LAW LAW-SCIENCE INTERFACES WITHIN THE LAW
OF THE SEA AND FRESH WATER LAW**

**THE INTERPLAY BETWEEN SCIENTIFIC
ADVISORY BODIES AND INTERNATIONAL LAW
FOR THE PROTECTION OF THE MARINE
ENVIRONMENT**

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- **INTRODUCTION OF THE TOPIC**
- **CATEGORIES OF SCIENTIFIC ADVISORY BODIES**
- **ENHANCING THE ROLE OF SCIENTIFIC ADVICE: FROM POLICY INSTRUMENT TO FUNCTION OF THE IO**
- **“BEST AVAILABLE SCIENCE” AND SCIENTIFIC UNCERTAINTY**
- **FURTHER RESEARCH**

CATEGORIES OF SCIENTIFIC ADVISORY BODIES

1. **Providing Expert Advice:** provide advice for decision making and reports with policy impacts (Group of Experts on the Scientific Aspects of Marine Environmental Protection, IPCC, UN Scientific Advisory Board on Trust in Science, International Whaling Commission Scientific Committee)
2. **Environmental status assessment:** Assessment of environmental status, providing baseline data for reporting obligations (OSPAR)
3. **Monitoring and Evaluation:** Projects monitoring, reviewing of reports, evaluating project progress using provided indicators (HELCOM)
4. **Setting Standards and Guidelines:** help develop and update standards, guidelines, and best practices in various fields, ensuring consistency and quality (GESAMP)
5. **Facilitating Knowledge Exchange:** Enhancing scientific research, network building, interface of law, policy and science (IPBES)

ENSURING THE QUALITY OF SAB'S WORK: EXTERNAL OR PEER-REVIEW

Example of SAB publications

- Technical reports: informing policy-making process (IOC Technical Series, CBD Technical Series)
- Guidelines and factsheets: providing scientific support for implementation (GESAMP report on Sources, Fate and Effects of Microplastics in the Marine Environment)
- Status reports: status of the environment (IPCC reports, State of the Ocean Report)
- Periodic reports: project deliverables/ progress (OSPAR Quality Status Report)

Reports and other publications from scientific advisory bodies usually undergo peer-review processes and external evaluation

INTERNATIONAL OBLIGATIONS TO TAKE SCIENTIFICALLY-GROUNDED MEASURES

Arts. 61(2) and 119(1) of UNCLOS (duty to take measures to prevent over-exploitation of the living resources and to produce maximum sustainable yield, “**taking into account the best scientific evidence available**” to the States concerned)

Art. V(2)(b) ICRW: “... amendments of the Schedule [for the conservation and utilization of whale resources] ... *(b)* **shall be based on scientific findings; ...**”

Art. IX(1)(f) CCAMLR: the Commission shall “formulate, adopt and revise conservation measures **on the basis of the best scientific evidence available**”

PROVISION OF SCIENTIFIC ADVICE: INSTRUMENT OF POLICY AND INTEGRAL FUNCTION OF IOs

SABs not only assist states in fulfilling treaty obligations, their provision of scientific advice may also become a function of the IOs.

See, e.g., **CCAMLR**:

- Commission expressly obliged to take “take full account of the recommendations and advice of the Scientific Committee” (Art. IX(4))
- Commission accepted recommendations by SC-CCAMLR as the “best available science” (CCAMLR 1990, para. (p) 7.6))
- No significant disagreement among IO and member states on CCAMLR objective of science-informed conservation, including rational use (Art. II), conducive to creating “very high” quality scientific research output.
- The marine ecosystem approach towards conservation requires a comprehensive scientific research and cooperation, compared to the narrower approach of species-by-species management in RFMOs.

“BEST AVAILABLE SCIENCE” AND SCIENTIFIC UNCERTAINTY

Typically undefined in treaties; ordinary meaning is ambiguous.
The literature typically conjures the idea of “epistemic communities” (Haas 1997) and scientific consensus.

Challenges:

- 1) Consensus is indeterminate. Delegation of interpretive authority to SABs streamlines knowledge production and management but member states may exert influence to prevent consensus.
- 1) Consensus does not eliminate knowledge gaps and scientific uncertainty. They can always be invoked to attack scientific advice – **see history of IWC SC**

ARE IOs FREE TO GO AGAINST SCIENCE? QUESTION FOR FURTHER RESEARCH

When an IO persistently adopts conservation measures without or contrary to scientific advice (e.g., invoking precautionary principle) – would sidelining science amount to *ultra vires* acts or, rather, the modification of the IO's functions through subsequent practice?
(see ICJ *Certain Expenses* Advisory Opinion)

→ Japan's argument that the IWC moratoria on commercial whaling lacked scientific basis was not addressed by the ICJ in the *Whaling* case
(see Japan's Counter-Memorial para. 27)

Thank you!

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