



IMO



FAO



UNESCO



IOC



WMO



UNIDO



IAEA



UN



UNEP



UNDP

# GESAMP

THE NEXT 50 YEARS!

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BUILDING ON THE STRATEGIC VISION  
FOR GESAMP

GESAMP over the last  
50 Years

Reputation and  
Credibility



### GESAMP's mission

**To provide authoritative, independent, interdisciplinary scientific advice to organisations and governments to support the protection and sustainable use of the marine environment**

GESAMP assists its UN sponsoring organisations to reduce duplication and identify areas of common interest and potential cooperation

GESAMP provides governments with a single 'shop' for scientific advice on marine environmental issues from an international perspective

*“GESAMP has been praised for its rigorous scientific assessments and reporting and is held in considerable esteem by the scientific community’ (from a 2005 Independent Review of GESAMP)”*

## The 2005 Review

### Science for Sustainable Oceans – a Strategic Vision for GESAMP

### General Findings

*“GESAMP is a unique mechanism for inter-agency cooperation and coordination among UN Oceans organisations”*

*“GESAMP’s advice is generally intended to inform the work of the UN Sponsoring Organizations in their respective mandates and is also highly relevant in being able to provide advice to governments when requested”*

*“GESAMP’s strategic approach to assessments of the global marine environment will be a three-step process of:*

- 1. Design: To define the nature, scope and structure of the assessment*
- 2. Execution: of the assessment as an essentially scientific exercise independent of political influence*
- 3. Interaction with governments and other bodies in the analysis of management and policy implications of GESAMP’s advice”*

Recommendations  
from the Review  
already  
Implemented by  
GESAMP  
  
Institutional

Closer relationship with partner organisations (which include governments, intergovernmental organisations, regional bodies, scientific bodies and international NGOs)

GESAMP and its sponsoring organisations have recognised that ocean sustainability requires a policy approach by the UN agencies that is:

- Cross-sectoral and interdisciplinary
- Based on scientific understanding of marine ecosystems and human activities that affect them
- Avoids duplication within the agencies while identifying areas of common interest

GESAMP has access now to an extensive network of experts on which it can draw as and when required and not just its core members.

Recommendations  
from the Review  
already  
Implemented by  
GESAMP  
  
Products

GESAMP now recognises that its effectiveness depends on the extent to which its products contribute to planning and policy-making

Furthermore, GESAMP acknowledges that this requires high scientific quality and relevance, and that GESAMP products need to be visible, user-friendly and readily available, well-publicised and presented to appropriate fora

From time to time, GESAMP may, at its own discretion, consider new and emerging issues and report back on these to the Executive Committee and Secretariat

GESAMP's productivity and output has increased noticeably over the last decade with many new Reports and more specific and direct involvement in issues emerging and evolving during that period (e.g. ballast water management, plastics in the oceans, marine geoengineering, etc)

Recommendations  
from the Review  
that are Still in  
Progress or Remain  
to be Addressed

- A. International bodies and governments have requested greater involvement of GESAMP at the regional level and not just the global level. Closer linkages within the regional seas organisations and other regional scientific bodies should be developed
- B. Strengthen engagement, both with the broader scientific community and with governments and other major user groups to enhance the relevance and legitimacy of GESAMP's advice
- C. Re-Visit Working Group Studies and Findings on a periodic basis
- D. Assist governments and other bodies in the analysis of management and policy implications of GESAMP's advice and the formulation of management/policy guidelines

## Proposed Mechanisms

### A. Greater Involvement at the Regional Level

#### **Regional Seas Programmes:**

UNEP as the the lead sponsoring organisation to request further appropriate input from GESAMP as needed. Other separate regional ecosystem management bodies may also request assistance (e.g. OSPAR, CCAMLR)

#### **RFMOs:**

FAO as the lead sponsoring organisation dealing primarily with RFMOs to request further appropriate input from GESAMP as needed. Other separate regional fisheries management bodies may also request assistance (e.g. WCPFC)

#### **LMEs and other GEF International Waters Projects:**

GEF does not have a direct relationship with GESAMP. However, many of the LME projects globally are implemented through GEF IAs that constitute UN GESAMP sponsors.

GESAMP could provide a number of stronger supportive roles to the LME projects, particularly at the TDA stage. GESAMP could also help to capture lessons and practices from LMEs in support of IW:LEARN

**Proposed  
Mechanisms**

B. Strengthen  
Engagement with the  
Broader Community  
and Major User  
Groups

**United Nations Decade for Ocean Science for  
Sustainable Development 2021-2030**

GESAMP can provide a valuable role in reviewing the status of SDG 14 as of 2020 (When several Targets are due to be met) and make recommendations on next steps. This would make a significant contribution to the UN Decade for Ocean Science under IOC-UNESCO

**Support to Governments**

GESAMP is available to advise governments on an individual basis or on a 'group' basis (on issues shared geographically or thematically)

Due process would require that such requests go through the Secretariat for consideration of their relevance and time/cost implications for GESAMP members and/or 'pool' experts

**Proposed  
Mechanisms**

**C. Re-Visit Working  
Group Studies and  
Findings on a  
Periodic Basis**

Some Working Groups have continued to function and update their assessments beyond the initial reporting stage (e.g. WG 38 on Atmospheric Input to the Marine Environment)

However, this is not so with many other Working Groups and was not included in their initial ToRs

Working Group Chairs, in collaboration with the GESAMP Secretariat, should periodically review any new information available on their subject matter and decide if their assessments/reports need updating

**Proposed  
Mechanisms**

**D. Analysis of  
Management and  
Policy Implications  
and Formulation of  
Guidelines**

GESAMP has been commended many times on the quality and value of its scientific Reports and Studies

The 2005 Review noted, however, that “*expectations have not been so forthcoming in the area of marine environmental policy and management*” despite GESAMP’s advice being generally intended to inform policy formulation

*“Ultimately, the effectiveness of GESAMP depends on the extent to which its products contribute to planning and policy-making”*

GESAMP is therefore exploring the development and adoption of an Adaptive Management and Policy Advice mechanism that builds on its scientific assessments

This new strategy would include a “Weight-of-Evidence” assessment approach

Weight-of-  
Evidence and  
Associated Peer-  
Review as a  
Potential  
Mechanism for  
GESAMP

GESAMP reviews the existing knowledge and information available when making Reports on specific issues

Some of this information can have very strong levels of confidence supported by many different sources of evidence

Other information and publications can present new evidence that has less rigorous supportive documentation and science but is nonetheless valuable in raising concerns and 'red-flagging' potential new issues

In order to address the recommendations from its Review that GESAMP should "assist in the analysis of the policy implications of its advice" it is proposed that GESAMP adopt a further step in its assessment process

This would aim to identify the strength and likely implications of concerns and issues raised by the scientific community with a view to providing advice on possible adaptive management measures alongside prioritising further studies and research

Such a 'Weight-of-Evidence' strategy is commonly used in both the legal and medical professions and is an important tool for IPCC

**GESAMP and the  
Weight-of-Evidence  
Approach**

**Using WG 38 as a  
Test-Case**

Working Group 38 – Atmospheric Input of Chemicals to the Ocean

Scientific data from WG 38 suggest seasonally increased inputs from iron, nitrogen etc. in the western Indian Ocean

There seems to be a possible correlation with increased productivity in some areas which has previously baffled scientists

This may have implications for fisheries in the long-term

But the scientific evidence is still not sufficiently 'confident' to make defensible conclusions although there does seem to be a definite 'trend'

Using a peer-review process and workshop GESAMP would aim to:

- A. Define the level of reliability/probability of this trend
- B. Define whether there might therefore be a need for any adaptive management advice or policy considerations and ensure such guidance and advice reaches the appropriate bodies
- C. Make recommendations for further studies and their urgency in order to strengthen the evidence and better define the management implications

## A Proposed Weight-of- Evidence Peer Review Process

1. At the request of the Secretariat, an initial scoping paper by appropriate members and experts within or associated with GESAMP. If this scoping exercise finds sufficient probability of a trend or linkage, then...
2. A Peer-Review/Stakeholder Workshop including appropriate scientific, socioeconomic, management and even policy level representation
3. Draft as a 'Weight-of-Evidence' document for further external review and to define levels of 'probability'
4. Draft and agreed Management Implications and Adaptive Management Guidelines
5. Distribution to various clients (UN agencies, regional bodies etc.)
6. Recommendations for further studies and associated funding priorities

## Summary of Priorities for GESAMP Moving Forward

- Developing a closer working relationship with regional bodies such as RSPs, RFMOs and the LME projects and management mechanisms
- Working closely within the UN Decade of Ocean Science process to assist in reviewing SDG 14 target achievements and on-going needs
- Re-visit and re-assess Working Group Studies and findings periodically to ascertain if further updating is required
- Evolving a mechanism within GESAMP for expanding scientific evidence and trends into peer-reviewed adaptive management guidelines and recommendations



**50<sup>th</sup>**  
Anniversary  
(1969-2019)



**GESAMP**

Joint Group of Experts on the  
Scientific Aspects of Marine  
Environmental Protection



Advancing into the next 50 years of scientific  
assessment and support to the United Nations  
and its Member States

Thank You for Your Interest