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THE NEW GESAMP

SCIENCE FOR SUSTAINABLE OCEANS

A strategic vision for the
IMO/FAO/UNESCO-IOC/WMO/WHO/IAEA/UN/UNEP
Joint Group of Experts on the Scientific Aspects
of Marine Environmental Protection



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PREFACE

The UN Commission on Sustainable Development (CSD), at its fourth (1996) and seventh (1999) sessions recognized GESAMP as a “source of agreed, independent scientific advice” but invited GESAMP’s Sponsoring Organizations to review GESAMP 30 years after its establishment “with a view to improving its effectiveness and comprehensiveness” and “establishing a means for GESAMP to interact with scientific representatives of Governments and major groups”. Consequently, the Sponsoring Organizations commissioned in 2000 an independent and in-depth review to evaluate how GESAMP might be improved in light of CSD’s concerns, and, more fundamentally, whether GESAMP is still both relevant and necessary.

The review, completed in July 2001 by a four-person Evaluation Team, strongly recommended that GESAMP should continue. It also recommended major changes in GESAMP’s *modus operandi*, products, and product delivery, concluding that such changes “would result in GESAMP becoming the world’s first choice for marine environment protection advice and guidance.” Detailed recommendations from the review provided the building blocks for a new structure for GESAMP.

Subsequently, in 2002, a consultant was commissioned to prepare this Strategic Vision. The cost of the evaluation of GESAMP and the Strategic Vision/Plan, totalling US\$85 000, was borne by the Sponsoring Organizations. The Strategic Vision is published by the Administrative Secretary of GESAMP on behalf of the Sponsoring Organizations. Layout, formatting and desktop publishing of this publication was done by Ms S. Borghesi of FAO’s Fisheries Department. Several images are from the UN Atlas of the Oceans (<http://www.oceansatlas.org>). This publication was printed through IMO, and can be obtained by contacting IMO at the address below or at the GESAMP website: www.gesamp.imo.org.

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EXECUTIVE SUMMARY

GESAMP¹ is a group of experts that advises the United Nations (UN) system on the scientific aspects of marine environmental protection. GESAMP is needed first because of the international policy requirement for a cross-sectoral, interdisciplinary, and science-based approach to marine environmental affairs, and second to meet the practical requirement for coordination and cooperation among UN agencies with relevant responsibilities through a joint advisory mechanism.

GESAMP consists of 25-30 experts in a wide range of disciplines relevant to marine environmental protection, including socio-economic ones. Experts act in an individual capacity, not as representatives of their governments or institutions, ensuring the independence of GESAMP's advice. Individual studies and assessments are usually carried out by specialist working groups that also include experts who are not current members of GESAMP. This broadens the network of experts involved in GESAMP activities and provides for the tailoring of expertise to specific projects. From its establishment in 1969 to June 2003, GESAMP produced 43 in-depth technical studies and 4 broad assessments of the state of the global marine environment.

GESAMP's mission is

“To provide authoritative, independent, interdisciplinary scientific advice to organizations and Governments to support the protection and sustainable use of the marine environment.”

To fulfill its mission GESAMP will, in response to requests:

1. Integrate and synthesize the results of regional and thematic assessments and scientific studies to support global assessments of the marine environment;
2. Provide scientific and technical guidance on the design and execution of marine environmental assessments;
3. Provide scientific reviews, analyses, and advice on specific topics relevant to the condition of the marine environment, its investigation, protection, and/or management.

In addition GESAMP will regularly:

4. Provide an overview of the marine environmental monitoring, assessment, and related activities of UN agencies and advise on how these activities might be improved and better integrated and coordinated;

¹ IMO/FAO/UNESCO-IOC/WMO/WHO/IAEA/UN/UNEP Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection

5. Identify new and emerging issues regarding the degradation of the marine environment that are of relevance to governments and sponsoring organizations.

In 2001 GESAMP's eight sponsoring organizations commissioned an independent review that concluded that GESAMP should be continued as an agreed source of independent scientific advice on marine environmental protection to the UN system, but with changes to its organization, work methods, and management. The resulting discussions among GESAMP experts, its sponsoring organizations, and a variety of interested external parties have led to a strategic vision for a "New GESAMP" that will:

- maintain and strengthen GESAMP's established **credibility**;
- 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; and
- ensure **professionalism** in work methods, management, and product delivery.

A key feature of the strategy is the establishment of a pool of experts from which members of GESAMP and its working groups will be selected. Governments, intergovernmental and regional organizations, scientific bodies, international NGO's, and other major groups will be encouraged to nominate experts to the pool.

Access to this large pool of expertise will ensure GESAMP's inclusiveness and multi-disciplinarity, thereby reinforcing its scientific credibility. Perhaps more importantly, the pool provides a vital mechanism to engage the broader scientific community. Pool experts who are not current members of GESAMP and its working groups will be kept up to date on GESAMP's activities and products, and have opportunities to participate through, for example, peer review, issue identification, and contributing to *ad hoc* task teams. This will not only raise GESAMP's profile but also build capacity to participate, not just in GESAMP but in scientific advisory processes generally.

GESAMP will proactively seek partnerships for its projects and activities. Governments, intergovernmental and regional organizations, scientific bodies, and international NGO's may, for example, propose and/or sponsor GESAMP projects. In addition, GESAMP will regularly report its findings and advice directly to intergovernmental fora such as the United Nations Open-Ended Informal Consultative Process (ICP), Commission on Sustainable Development (CSD), and the governing bodies of its sponsoring organizations.

To ensure the relevance, or salience, of GESAMP's advice, members of important user groups such as scientists, environmental management practitioners, and policy makers will be explicitly engaged at all phases of GESAMP projects, including their design and execution and the

peer review of results. GESAMP products will be professionally edited and produced in appropriate formats to ensure their relevance and user-friendliness, and promoted and distributed so as to maximise their visibility and availability, and therefore their impact.

The results of GESAMP's major reviews, analyses, and assessments will continue to be published in the long-standing *GESAMP Reports and Studies* series, with improved production standards to make the reports more visible and user-friendly. Other GESAMP products will include:

- an *Annual Report of the Chair* on GESAMP's activities, conclusions, and recommendations; consensus statements on new and emerging issues and major events related to marine environmental protection;
- biennial overviews of the marine environmental assessment activities of the UN sponsoring organizations and other organizations; and
- an annual business report.

This strategic plan provides concrete mechanisms to ensure GESAMP's professionalism, including its effectiveness, efficiency, transparency, and accountability. A GESAMP Office will be established to provide centralized management and a focal point for GESAMP's interactions with governments and other major groups. All GESAMP activities will be managed on the basis of a two-year rolling work plan, updated annually. Projects will be executed according to a design brief that details the agreed budget, efficient

and effective work methods including deadlines and milestones, and plans for the publication, distribution, and promotion of outputs. The annual business report will include performance auditing of GESAMP activities against the work plan and project briefs.

GESAMP's core activities will be financed from a Trust Fund, an initial budget estimate for which is USD 600,000 annually. Individual project activities will be financed from separate project accounts, which will vary according to project requirements.

Of particular interest to GESAMP's sponsoring organizations, their member governments, and other stakeholders is GESAMP's role in marine environmental assessment, particularly in the establishment of the regular Global Marine Assessment (GMA) process called for in UN General Assembly resolution A/RES/57/141. GESAMP has considerable experience in assessing the state of the global marine environment, and is the only established mechanism for inter-agency scientific cooperation and coordination among UN organizations with responsibilities in marine environmental protection. GESAMP is therefore well-suited for a leading role in a global scientific assessment panel that designs the scientific component of the GMA and synthesises regional results. GESAMP also believes that, to provide the necessary linkages with the overall process, it should be involved at other levels of the GMA, for example in regional assessments, capacity building, and policy review, but in an information exchange and support role rather than a leadership role.

THE NEW GESAMP: SCIENCE FOR SUSTAINABLE OCEANS

GESAMP Mission Statement

“To provide authoritative, independent, interdisciplinary scientific advice to organizations and governments to support the protection and sustainable use of the marine environment.”

In fulfillment of its mission GESAMP has the following functions:

In response to requests, to:

1. Integrate and synthesise the results of regional and thematic assessments and scientific studies to support global assessments of the marine environment;
2. Provide scientific and technical guidance on the design and execution of marine environmental assessments;
3. Provide scientific reviews, analyses, and advice on specific topics relevant to the condition of the marine environment, its investigation, protection, and/or management.

On a regular basis, to:

4. Provide an overview of the marine environmental monitoring, assessment, and related activities of UN agencies and advise on how these activities might be improved and better integrated and coordinated;
5. Identify new and emerging issues regarding the degradation of the marine environment that are of relevance to governments and sponsoring organizations.

1. INTRODUCTION

GESAMP¹ is a scientific advisory body of the United Nations system, consisting of experts in a range of disciplines relevant to marine environmental protection who are appointed by GESAMP's sponsoring organizations. In 1969 growing concern about marine pollution led several UN agencies to establish GESAMP to provide multidisciplinary advice on marine pollution issues and to help the agencies coordinate, collaborate, and minimise duplication of effort. GESAMP has since widened its activities to encompass all scientific aspects of marine environmental protection, including socio-economic ones.

More than 500 scientists from at least 50 countries have participated in GESAMP and its working groups. GESAMP has produced 43 technical reports on a spectrum of marine environmental issues, and four broad assessments of the state of the global marine environment. This work is held in considerable esteem by the scientific community, as evidenced by its frequent citation in peer-reviewed literature, particularly during the 1990s². GESAMP has made important contributions to the development of international initiatives for marine environmental protection including the 1972 Stockholm Conference, the MARPOL 73/78 Convention, the UN Convention on the Law of the Sea, the

World Commission on Environment and Development ("Brundtland Commission"), UNCED Agenda 21, and the 1995 Washington Declaration on land-based activities. More recently, GESAMP has participated in the process leading to the UN General Assembly's call for the establishment of a regular process for assessment of the global marine environment³.

The UN Commission on Sustainable Development (CSD), at its fourth (1996) and seventh (1999) sessions recognised GESAMP as a "source of agreed, independent scientific advice"⁴ but invited GESAMP's sponsoring organizations to review the group "with a view to improving its effectiveness and comprehensiveness"⁵ and "establishing a means for GESAMP to interact with scientific representatives of governments and major groups⁶." In 2000 the sponsoring organizations commissioned an independent review to evaluate how GESAMP might be improved in light of CSD's concerns, and more fundamentally whether GESAMP is still relevant and needed at all. The review, completed in 2001, strongly recommended that GESAMP should be continued. It also recommended sweeping changes in GESAMP's *modus operandi*, products, and product delivery, concluding that such changes "would result in GESAMP becoming the world's first choice for marine environment protection advice and guidance."⁷

¹IMO/FAO/UNESCO-IOC/WMO/WHO/IAEA/UN/UNEP Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection.

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²Cordes, R. 2004. Is grey literature ever used? Using citation analysis to measure the impact of GESAMP, an international marine scientific advisory body. *Canadian Journal of Information and Library Science* 28:45-65.

³UN GA resolution A/RES/57/141 paragraph 45 (<http://ods-dds-ny.un.org/doc/UNDOC/GEN/N02/547/54/PDF/NO254754.pdf?OpenElement>).

See further: http://www.un.org/Depts/los/general_assembly_resolutions.htm. <http://www.un.org/documents/ecosoc/docs/1996/e1996-28.htm>

⁴CSD, Report on the Fourth Session, doc. E.CN.17/1996/38, decision 4/15, para 45c.

⁵op cit.

⁶CSD, Decision 7/1 Oceans and seas, 1999, doc. E/1999/25, Section I.C, para. 32a.

⁷Independent and in-Depth Evaluation of GESAMP. Report of the Evaluation Team, July 2001. p. 9.

2. THE STRATEGIC VISION

In consultation with GESAMP experts and interested external parties, GESAMP's sponsoring organizations have developed the proactive plan described herein to update and improve GESAMP's organization, management, and work methods in accordance with the recommendations of the independent review. The plan includes clear objectives, strategies, and measures to address concerns raised by CSD and others. More broadly, it represents a strategic vision for a "New GESAMP" that will:

- Maintain and strengthen GESAMP's established **credibility**;
- Strengthen its **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; and
- Ensure **professionalism** in GESAMP's work methods, management, and product delivery.

2.1 Why GESAMP?

The international policy arena⁸ has repeatedly recognised and reaffirmed that sustainable use of the marine environment and its resources can only be achieved through a policy approach that is both:

- cross-sectoral and interdisciplinary, because "the problems of ocean

space are closely interrelated and need to be considered as a whole"⁹; and

- based on scientific understanding of marine ecosystems and the human activities that affect them.

Despite the almost universally recognised need for a holistic approach to marine environmental affairs, the UN system largely mirrors the sectoral organization of most governments. In a 1968 report, the UN Administrative Committee on Coordination (ACC) noted that several UN agencies have potentially overlapping responsibilities for marine environmental protection, and that the range of information required to meet these responsibilities spans a wide range of scientific disciplines. The ACC concluded that an interdisciplinary scientific advisory body, independent of the influence of industry, institutions, and governments, was needed to evaluate the available information. GESAMP was created to meet this need. After three decades, the independent review of GESAMP concluded that the UN system and its constituency still need independent, interdisciplinary, scientific advice on the marine environment, and that GESAMP remains the best mechanism to provide it.

In addition to meeting this accepted policy imperative, GESAMP provides the only established, formal mechanism in the UN system for inter-agency

⁸Examples include the Stockholm Conference (1972), UN Convention on the Law of the Sea (UNCLOS, 1982), UNCED (1992), Global Programme of Action (1995), WSSD Plan of Implementation (2002), and UN General Assembly resolutions 54/33 (2000), 56/12 (2001), and 57/141 (2002).

⁹3rd preambular paragraph of UNCLOS



scientific coordination on marine environmental affairs. The informal interactions that take place through GESAMP's Executive Board (formerly known as the Joint Secretariat) are also very valuable. GESAMP thus helps its sponsoring organizations to reduce duplication and identify areas of common interest and potential cooperation, in accordance with the oft-expressed wishes of governments. Indeed, GESAMP was established *inter alia* to encourage its UN sponsors to “disband or refrain from establishing other interdisciplinary groups on the subject and so avoid duplication of efforts.”¹⁰

GESAMP provides its sponsors collectively with an agreed source of advice and individually with expertise and perspectives outside their core areas of interest that would be difficult to access otherwise. GESAMP's assessments of the global marine environment also help the sponsoring organizations put their particular

responsibilities and activities into a broader context.

For governments, GESAMP provides a single “shop front” for scientific advice on marine environmental issues from an international perspective. For many governments it provides access to expertise that may not be readily available nationally. The new GESAMP will also help build scientific advisory capacity, in particular through the establishment of a pool of experts as described below.

2.2 Credibility

Credibility, along with salience and legitimacy, is one of three critical attributes of scientific assessments that are effective in guiding public policy.¹¹ Credibility is particularly important for issues that are scientifically controversial and for which the state of the science is relatively immature¹², both of which arguably apply to marine environmental science. Maintaining GESAMP's credibility is at the heart of its strategic vision.

2.2.1 Scientific Credibility

GESAMP's first and foremost strength is its scientific credibility, which derives from:

- The professional qualifications and reputations of GESAMP members;
- Their scientific independence in acting in an individual capacity and

¹⁰Updated Memorandum (1994) on the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP).

¹¹Eckley, N. 2001. Designing effective assessments: The role of participation, science and governance, and focus. European Environment Agency, Copenhagen - Environmental issue report No. 26 (http://www.reports.eea.eu.int/environmental_issue_report_2001_26/en)

¹²*op.cit.*

not as representatives of governments, institutions, or organizations;

- The range of expertise in GESAMP and its working groups, and a resultant interdisciplinary perspective that is essential to credibility; and
- The widely acknowledged scientific quality of GESAMP's reports.

Several features of the new GESAMP will reinforce these existing strengths. GESAMP's sponsoring organizations are establishing a pool of experts from which members of GESAMP and its working groups will be centrally selected on the basis of transparent criteria. This will broaden the collective expertise available to GESAMP, particularly with regard to social science, and reinforce GESAMP's independence; both of these also enhance GESAMP's credibility. The separation of scientific analysis from policy processes (Section 2.5) will also enhance independence. A strengthened peer review process will maintain and improve the quality and credibility of GESAMP's reports.

2.2.2 Sponsorship by the United Nations System

GESAMP's status as an inter-agency organ of the UN system is also a source of credibility and, especially, legitimacy. The GESAMP mechanism will therefore continue to function under the auspices of the UN system. An important strategic goal for the new GESAMP, therefore, is to obtain the support of all UN bodies with responsibilities related to marine environmental protection. This



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can only be achieved by efficiently delivering useful products to the UN system.

2.3 Engagement

Proactive engagement with scientists, governments, intergovernmental processes, and other institutions, organizations, and user groups outside the UN system is a second key component of GESAMP's strategic vision. This engagement will ensure GESAMP's credibility and the utility and impact of its advice.

2.3.1 Participation: Engaging the Broader Science Community

Scientific advisory processes tend to draw repeatedly upon known individuals, developing an unintended institutional inertia with regard to membership change¹³. Measures to



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¹³Fritz, J-S 1998. Report on international scientific advisory processes on the environment and sustainable development. CSD 6th Session. Background Paper 21 (<http://www.un.org/documents/ecosoc/cn17/1998/background/ecn171998-bp21.htm>)



avoid this and ensure the improved and continuing inclusiveness of the new GESAMP include:

- Phasing out GESAMP's longest-serving members, which commenced at its 32nd session in May 2002;
- Enforcing a maximum term of membership of 4 years, except for an additional term of 2 years if members are elected as Chair or Vice-Chair at the end of their term;
- Soliciting nominations to GESAMP's pool of experts from governments, intergovernmental bodies including regional organizations, international scientific unions, and NGOs, thereby ensuring a broad and representative base of available expertise;
- Managing the expert pool as a database, so that members of GESAMP and its working groups can be selected on the basis of transparent criteria including field of expertise and geographic and gender balance; and
- Providing opportunities for pool experts who are not current members of GESAMP to participate, for

example by peer-reviewing reports and calling issues to GESAMP's attention. This will build capacity to contribute not only to GESAMP but to scientific advisory processes in general.

2.3.2 Relevance: Engaging the Users

To effectively support the protection and sustainable use of the marine environment, GESAMP's advice must be salient, i.e. relevant to its intended users in both content and delivery. GESAMP's strategy to ensure the relevance of its outputs is to explicitly consider the needs of users and involve them in designing and developing GESAMP's products, as follows:

- Key user groups for project outputs will be clearly identified when work is initiated;
- Members of those groups will be involved in project design, including the development of terms of reference for GESAMP working groups;
- Members of major user groups will

participate in GESAMP and its working groups;

- *GESAMP Reports and Studies* will be peer-reviewed by members of key user groups;
- GESAMP products will be designed to meet the needs of users in content, language, format, and mode of delivery, while remaining accessible to a broad audience; and
- GESAMP's outputs will be effectively publicised and presented in appropriate fora.

2.3.2.1 Interaction with Governments

Because its advice is generally intended to inform policy formulation, GESAMP's relevance to governments is particularly important. To improve the policy relevance of its advice, GESAMP's expertise in socio-economic aspects of marine environmental protection, including the economic valuation of ecosystems, will be broadened and strengthened. GESAMP will also improve its interactions with governments through mechanisms including:

- Encouraging governments and other organizations to nominate experts to the GESAMP Pool of Experts, as noted in section 2.3.1 above;
- Proactively seeking partnerships and interactions with governments and other relevant organizations and activities;
- Establishing a central GESAMP Office as the focal point for such interactions;
- Encouraging governments and other organizations to propose work for GESAMP; and



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- Direct reporting to the United Nations Open-Ended Informal Consultative Process (ICP), CSD, the UN Secretary-General, and the governing bodies of the sponsoring organizations.

GESAMP has little comparative advantage in policy analysis and formulation *per se* and will not attempt to develop policy recommendations independently. When GESAMP does participate in policy processes it will adopt the multi-tiered approach described in section 2.5, in which scientific review and analysis and policy review are conducted at different stages of the process.

2.3.2.2 Interaction with Regional Bodies

GESAMP has heretofore functioned on a primarily global level, but its independent evaluation, various



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international fora, and indeed GESAMP itself¹⁴ have noted the desirability of greater involvement at a regional level. Such involvement, however, should be initiated by regional organizations and institutions. GESAMP's strategy for increased regional involvement is first to raise awareness of GESAMP and its capabilities at the regional level and second to provide mechanisms for cooperation with regional bodies. These include:

- Nomination by regional bodies of experts to the GESAMP pool;
- Accepting proposals for GESAMP projects from regional bodies; and
- Potentially, joint execution of projects with regional bodies.

In addition, an informal network of focal points/liaisons within regional seas organizations and regional scientific bodies will be developed.



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2.4 Professionalism

A professional, businesslike approach to planning, management, work methods, and product delivery will ensure GESAMP's continuing efficiency, transparency, accountability, and effectiveness.

2.4.1 Planning and Management

The planning and management of GESAMP's work programme, previously distributed among the sponsoring organizations, will be centralised in the newly created GESAMP Office. The work programme will be managed on the basis of a rolling 2-year work plan, updated annually, that includes agreed budgets, milestones, and deadlines for each activity. Among other advantages, the centralisation of planning, budgeting, and management:

- Achieves cost efficiencies;
- Provides a uniform, professional GESAMP identity;
- Improves the integration of activities;
- Facilitates the selection of GESAMP members and scheduling of sessions around the work programme;
- Fosters transparency and accountability; and
- Allows regular performance auditing against the work plan.

2.4.2 Work Methods

GESAMP must not only deliver reports and other products of high scientific quality, it must produce them

¹⁴GESAMP (IMO/FAO/UNESCO-IOC/WMO/WHO/IAEA/UN/UNEP Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection) 2002. Report of the Thirty-first Session, New York, 13-17 August 2001. Rep. Stud. GESAMP No. 72, 56 pp. (http://gesamp.imo.org/no72/GESAMP_No_72.doc)

in the most efficient and timely manner possible. To accomplish this, GESAMP and its working groups will adopt modern, businesslike work methods including:

- Increased emphasis on intersessional work, in a planned and structured manner;
- Scheduling GESAMP sessions around the requirements of the work plan, rather than at fixed time intervals;
- Performing the regular functions of GESAMP (functions 4 and 5) by very small working groups that work primarily by correspondence and meet only in conjunction with GESAMP sessions;
- Businesslike management of individual projects and working groups on the basis of project briefs that detail terms of reference, work plan and methods, deadlines and milestones, provisions for the peer review, publication, distribution, and marketing of reports, and a realistic budget;
- When appropriate, realistic provisions for compensating experts or their employers to ensure the timely completion of projects;
- A target of 12-18 months for the production of most major studies and reports;
- The detailed review of working group reports at no more than one session of GESAMP, with the review focusing on scientific and technical issues rather than editorial matters; and
- Final approval of GESAMP reports by correspondence as a matter of routine.



2.4.3 Impact of GESAMP Products

Ultimately the effectiveness of GESAMP depends upon the extent to which its products contribute to planning and policy-making. This requires not only high scientific quality and relevance to users, but also that GESAMP products are visible, user-friendly, and readily available. In addition to engaging governments and other user groups as described in section 2.3, the strategy to ensure the impact of GESAMP products includes:

- Higher publication standards to make GESAMP products attractive and easy to read;
- Greater emphasis on publicity and marketing of GESAMP products;
- An improved GESAMP web site and increased emphasis on electronic product dissemination; and
- An increased role for the GESAMP Chair and Vice-Chair in promoting GESAMP and its products to users.

2.5 GESAMP and Assessment of the Global Marine Environment

GESAMP is the only inter-agency body available to provide advice to the UN system on marine environmental

assessment, and has extensive experience in assessing the state of the global marine environment¹⁵. The independent evaluation concluded that GESAMP's assessments have been its most influential work, and marine environmental assessment remains central to its mission and functions. The strategic approach outlined herein is designed to further enhance GESAMP's existing credibility, salience, and legitimacy, the three key requirements of effective assessment processes.



GESAMP's strategic approach to assessments of the global marine environment is a three-step process of:

- **Design**, including interaction with international bodies, governments, NGOs, and other stakeholders to define the nature, scope, and structure of the assessment;
- **Execution** of the assessment as an essentially scientific exercise independent of political influence;
- Participation in **policy review** through interaction with governments and other bodies to assist in the analysis of the policy implications of GESAMP's advice and the formulation of policy options.

This approach parallels the approach outlined in the report of the Bremen technical workshop on establishing a regular process for global marine assessment (GMA)¹⁶, including the two-tiered reporting format of separate scientific and policy reports described in paragraph 57 of that report. Given its experience in global marine assessment and its inter-agency support, GESAMP is well-placed for a leadership role in the global scientific panel during both the initial Design/Stakeholder Engagement phase and in the synthesis of national and regional assessments into the global scientific assessment¹⁷.

¹⁵GESAMP, 1982. The review of the health of the oceans. *Rep. Stud. GESAMP* No. 15, 108 pp.

GESAMP, 1990. The state of the marine environment. *Rep. Stud. GESAMP* No. 39, 111 pp.

GESAMP, 1994. Guidelines for environmental assessment. *Rep. Stud. GESAMP* No. 54, 28 pp.

GESAMP, 2001. A sea of troubles. *Rep. Stud. GESAMP* P No. 70, 35 pp.

GESAMP, 2001. Protecting the oceans from land-based activities. Land-based sources and activities affecting the quality and uses of the marine, coastal, and associated freshwater environment. *Rep. Stud. GESAMP* No. 71, 162 pp.

¹⁶Proceedings of the Technical Workshop for Establishing a Regular Process for the Global Assessment of the Marine Environment. Bremen (Germany): 18-20 March 2002.

¹⁷*Op cit.*, para. 52 and Annex X.

Global assessments depend almost entirely on information provided by national and regional assessment programmes. GESAMP's experience has been that existing national and regional assessments generally lack sufficient data and comparability for the purpose of a global synthesis. A recent survey of assessment activities relevant to the GMA reached similar conclusions.¹⁸ Thus, improved global assessments of the marine environment require significant improvements in the quality, comparability, and regularity of regional and national assessments. Facilitating such improvements could be a major benefit of the *regular* GMA process called for by the UN General Assembly¹⁹. The most appropriate role for GESAMP in regional assessments and capacity building is a supporting rather than leading one, for example in providing guidance on the design and execution of assessments or undertaking thematic studies to support national or regional assessments. In this support role GESAMP will seek to cooperate with regional bodies and other mechanisms and organizations, such as GIWA, GEO, and the Millennium Ecosystem Assessment.

The role of the Global Coordinating Mechanism²⁰ for the GMA is probably best performed by UN bodies with responsibilities related to the marine environment, through appropriate



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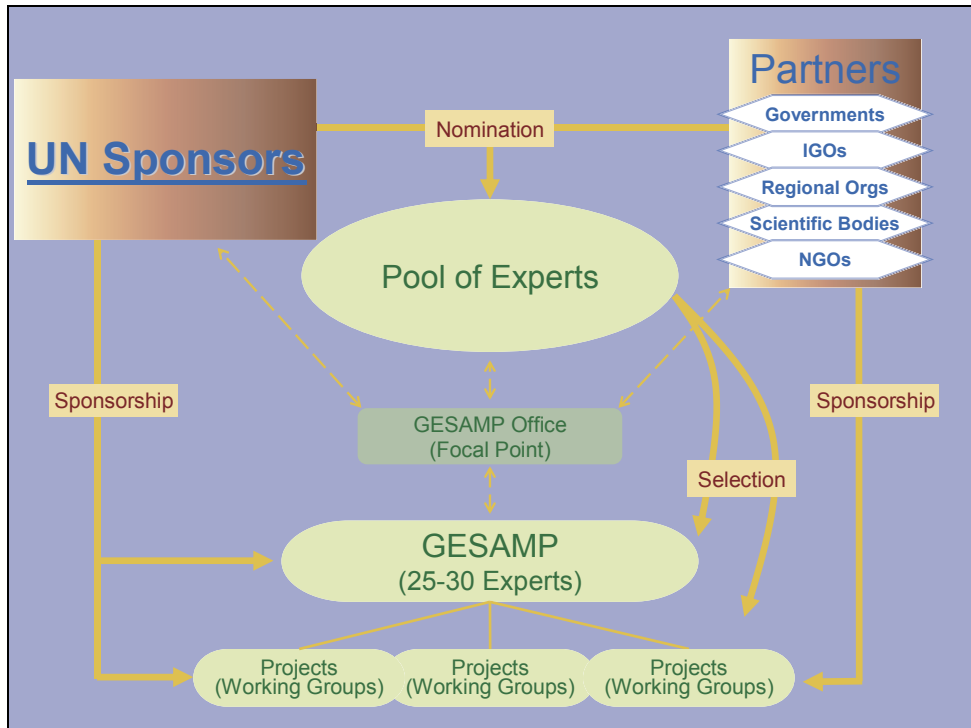
existing interagency cooperation. This role is not suitable for GESAMP, but it would be essential for GESAMP's scientific role to be closely linked to the Global Coordinating Mechanism. The GESAMP Office would provide a useful mechanism both to support GESAMP's scientific role in the GMA and for linking the broader science components of the GMA with the Global Coordinating Mechanism.

¹⁸UNEP-WCMC/UNESCO-IOC, 2003. A survey of global and regional marine environmental assessments and related scientific activities.

¹⁹UN General Assembly resolution A/RES/57/141, para. 45.

²⁰*Op cit.*, Annex IX.

Figure 1. Organizational relationships in the new GESAMP



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3. CONCEPTUAL FRAMEWORK

3.1 Institutional Framework

The “new GESAMP” as a whole is an integrated mechanism (Figure 1) that includes:

- GESAMP itself, i.e. the sitting group of experts, which provides overall scientific guidance, perspective, and oversight;
- Working groups, composed of both members of GESAMP and other experts selected from the GESAMP pool, that execute the individual projects that make up most of the substantive work programme;
- UN sponsoring organizations, under whose auspices and imprimatur the mechanism as a whole resides;
- Partner organizations, which may include governments, inter-governmental organizations, regional bodies, scientific bodies, and international NGOs, that co-sponsor specific GESAMP projects; and
- Supporting organizations, which provide financial or other support to GESAMP but are not actively involved in the design or execution of projects.

3.1.1 UN Sponsoring Organizations

Each UN sponsoring organization appoints a Technical Secretary for GESAMP. Together the Technical Secretaries form an Executive Board, which along with the Chair and Vice-Chair of GESAMP meets as the Executive Committee. Day-to-day administration and management of GESAMP will largely be performed by the GESAMP Office. The primary



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roles of the Executive Board will be to provide policy direction and technical guidance to the Office and advocacy and liaison within the sponsoring organizations. The Executive Board will also nominate the Chair and Vice-Chair and review candidates for the Senior Officer, who will be in charge of the GESAMP Office. The Executive Committee will develop GESAMP's budget and work plan, appoint GESAMP members, and generally supervise the activities of the Office. Technical Secretaries will also have responsibilities in connection with the sponsorship of working groups and other GESAMP-related activities of their individual organizations.

3.1.2 Partner Organizations

GESAMP will actively seek to work in partnership with other organizations, *inter alia* through co-sponsorship of working groups and other activities. Governments and organizations may initiate partnerships, for example by proposing potential work for GESAMP through the GESAMP Office. The preferred arrangement for partnership activities will be to use the GESAMP structure and to produce products under the GESAMP banner, with partner organizations as full and equal co-sponsors. If a working group is co-sponsored by both GESAMP



sponsoring organizations and external partner organizations, for example, it is preferred that working group members be selected from the GESAMP pool and the output published in *GESAMP Reports and Studies*. Partner organizations would act equally with the relevant UN sponsoring organizations in the selection of working group members, development of terms of reference and work plan, etc., and receive full recognition as equal co-sponsors of the working group. It is recognised that such an arrangement may not always be acceptable to all parties, and partnership arrangements will be developed on a case-by-case basis. The primary considerations for GESAMP in establishing partnerships will be making GESAMP's activities inclusive and safeguarding the scientific credibility and independence of GESAMP's advice.

3.1.3 Supporting Organizations

Individuals or organizations may wish to support GESAMP's work while not actively participating in it through contributions to the GESAMP Trust Fund or by other means. Supporters will be prominently identified on the GESAMP web site and promotional materials.

3.2 GESAMP Office

A dedicated GESAMP Office will be established to centralise GESAMP's administration and management, thereby reducing duplication and increasing efficiency and transparency. The Office will also have important new functions needed to increase GESAMP's effectiveness. In particular, the Office will provide a single "shop front", a focal point for interactions with governments and external organizations. It will also promote and disseminate GESAMP's products and capabilities to make them more visible to users, and develop an active fund-raising program. The Office will operate under the direction of the Executive Committee.

3.3 Outputs

3.3.1 Formal Outputs

To date *GESAMP Reports and Studies* have been the primary formal outputs of GESAMP. These include reports of GESAMP sessions and in-depth scientific studies and assessments of a range of topics related to marine environmental protection. The latter are prepared by working groups and formally approved by GESAMP. *GESAMP Reports and Studies* will be continued, but to provide greater flexibility, raise GESAMP's profile, and better meet user needs the new GESAMP will expand its range of formal outputs. These will follow standardized style guidelines to ensure a colourful, reader-friendly format and a uniform image for GESAMP products.

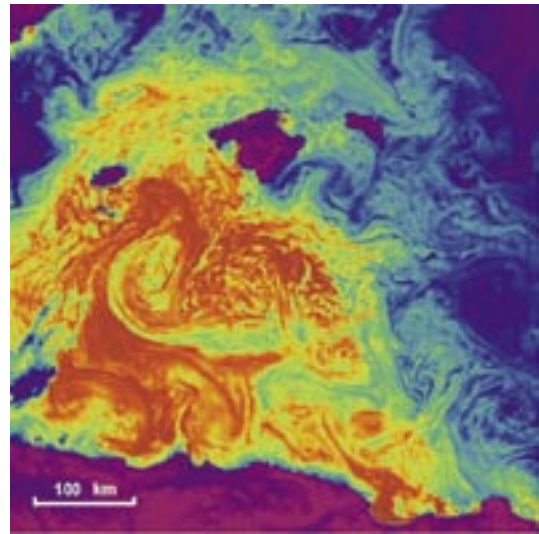
3.3.1.1 GESAMP Reports and Studies

GESAMP's major thematic studies will continue to be published as *GESAMP Reports and Studies*. They will be conducted by working groups in accordance with a comprehensive project brief prepared at the inception of each study. All reports will be externally peer-reviewed, reviewed and approved by GESAMP, professionally edited, and published in an attractive, reader-friendly format. Their release will be adequately publicised, and their results presented to appropriate international fora such as intergovernmental meetings and scientific conferences. It is intended that *GESAMP Reports and Studies* or papers based on them will also be published in the open scientific literature under the personal names of the authors, but with their GESAMP origin prominently identified.

The cost of report printing and distribution is high, particularly with the improved publication standards (especially colour printing). Presently



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each agency maintains a separate mailing list, and central distribution by the GESAMP Office should eliminate some duplication and reduce postage costs through bulk mailing. The Office will also replace the distribution of printed copies with electronic distribution as much as possible. Printed reports will continue to be distributed free as required for the sponsoring organizations to meet their obligations to their constituencies. Otherwise, printed copies will be sent free to developing-country recipients and on a cost-recovery basis to recipients in developed countries.

3.3.1.2 Annual Report of the Chair

The Chair of GESAMP will prepare a succinct annual report summarising GESAMP's major achievements, conclusions and recommendations, and future work plan, with new products such as the *Overview of Marine Assessment Activities* and *GESAMP Statements* (see below) attached. The *Annual Report of the Chair* will be delivered in writing to the Executive



Heads of the sponsoring organizations, ICP, CSD, the UN Secretary-General, and all GESAMP partner and supporting organizations. The Chair will regularly present the report to meetings of the ICP and the governing bodies of the sponsoring organizations. The Chair would also report to any new coordinating mechanism that might be created as recommended by ICP²¹.

3.3.1.3 Overview of Marine Assessment Activities

GESAMP will prepare a biennial overview of the marine environmental monitoring, assessment, and related activities of the sponsoring organizations and other international organizations. The *Overviews* will include advice on how these activities might be improved and better coordinated. The primary users will be the sponsoring organizations and other intergovernmental organizations and processes. Their intended use is to help organizations reduce duplication of effort and unhealthy competition, improve coordination and cooperation, and identify important gaps. The *Overviews* will be included in the

Annual Report of the Chair. They will be widely circulated for comment and will require GESAMP's approval, generally by correspondence, prior to release.

3.3.1.4 GESAMP Statements

GESAMP will periodically issue consensus statements on issues regarding the degradation of the marine environment. Regular *GESAMP Statements on New and Emerging Issues* will be produced in fulfilment of GESAMP's function 5 through a small, standing working group of GESAMP members led by the Chair of GESAMP. Prompt advice in response to significant events involving risks to human health and marine ecosystems will be delivered in *GESAMP Statements* prepared by *ad hoc* task teams. *GESAMP Statements* will not be externally peer-reviewed, but experts in the GESAMP pool will be invited to comment on them prior to release.

3.3.1.5 Reports to GESAMP

GESAMP sometimes forms task teams or correspondence groups to investigate an issue of interest to ascertain its current status and/or scope for potential work for GESAMP. These groups may include members of GESAMP, its working groups, or other members of the pool of experts. The groups generally work by correspondence and report the results of their investigations back to GESAMP. Such reports provide valuable background information on marine environmental issues, but in the past have been published solely as Annexes to reports of GESAMP

²¹Report of the third meeting of ICP (2002, doc. A/57/80), paras. 48-49, relating to the discontinuation of ACC-SOCA.

sessions. To disseminate the information more widely, and make GESAMP's work more transparent, these reports will be published electronically in a new series, *Reports to GESAMP*. *Reports to GESAMP* are primarily intended for use by GESAMP itself but they will also be of interest to governments, sponsoring organizations, and the scientific community.

3.3.1.6 User- and Project-Specific Outputs

GESAMP may produce other outputs tailored to the special requirements of particular users, projects, or programmes. A prominent example of this is the chemical hazard evaluations produced by the standing working group on the Evaluation of the Hazards of Harmful Substances Carried by Ships. Other examples might include peer review of the work of other bodies or the development of training materials or handbooks. The nature of such outputs and method of producing them will be determined *ad hoc*.

3.3.1.7 Annual Business Report

The GESAMP Office will prepare an annual report of GESAMP's activities and accomplishments including a performance audit of activities against their project briefs, financial statement, and updated marketing and work plans. The *Annual Business Report* is intended primarily for internal use by the GESAMP Office and GESAMP's sponsoring and partner organizations for "corporate governance" and in attracting clients and financial support. It will also be posted on the GESAMP



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web site and delivered to governments and organizations upon request.

3.3.2 Informal Outputs

GESAMP may make contributions to the protection and sustainable use of the marine environment in addition to the formal outputs described above. Past examples include GESAMP's participation in preparatory expert meetings for the development of UNCED Agenda 21 and the representation of GESAMP on the Steering Group of the Global International Waters Assessment (GIWA). More recently, GESAMP has participated in meetings to study the feasibility of conducting regular assessments of the marine environment²².



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²²Reykjavik, Iceland (12-14 September 2001), Bremen, Germany (18-20 March 2002), Paris, France (8-9 September 2003) and New York, USA (23-26 March 2004).



3.4 Participation and Membership

3.4.1 GESAMP Pool of Experts

The primary mechanism for participation in GESAMP will be its pool of experts, from which members of GESAMP and its working groups will be recruited. Pool experts who are not current members of GESAMP or its working groups will have opportunities to participate by providing peer reviews, bringing new and emerging issues to GESAMP's attention, and commenting upon draft *GESAMP Statements*. Pool experts may also be invited to serve on *ad hoc* task teams.

The GESAMP Office will establish and maintain the pool as a database of expertise. Nominations to the pool may be made by the sponsoring and other UN organizations, their Member States, regional organizations, international scientific bodies and non-governmental organizations, and sitting members of GESAMP. To

foster broad participation and publicise the re-organization of GESAMP, the GESAMP Office and sponsoring organizations will actively solicit nominations. Criteria for inclusion of experts in the pool are:

- Postgraduate degree or equivalent experience in a relevant discipline;
- Recognition and excellence in field of expertise;
- Willingness to declare any conflicts of interest;
- Ability to serve in an independent, individual capacity; and
- Willingness to serve on a voluntary basis.

Pool experts will be briefed on GESAMP's background and operations, receive electronic copies of GESAMP products, and be regularly updated on current GESAMP activities via an electronic mailing list and dedicated area of the GESAMP web site.

The participation of pool experts in GESAMP's work will actively engage a large number of scientists from governments, non-governmental organizations, and industry, enhancing GESAMP's interactions with these groups. These ongoing interactions will not only raise the profile of GESAMP and its products, but also enhance the capacity of pool experts to contribute to GESAMP, and to scientific advisory processes in general. The pool will also greatly broaden the expertise available to GESAMP and increase its ability to respond rapidly to pressing issues.

3.4.2 GESAMP Members

GESAMP itself will consist of 25-30 experts nominated by the Executive Board from the GESAMP pool, largely on the basis of their scientific credentials and experience. The duties of GESAMP members are to:

- Participate in the sessions of GESAMP; and
- Contribute to the intersessional work of GESAMP including reviewing terms of reference, project briefs, and draft reports, contributing to consensus statements and the identification of emerging issues, and participating in *ad hoc* task teams, correspondence groups, and working groups as appropriate.

The first consideration in nominating experts to GESAMP will be to maintain the necessary disciplinary composition (a) to service the current work plan and (b) to maintain broad multi-disciplinarity so that GESAMP's advice remains balanced and policy-relevant.

The range of disciplines represented in GESAMP should notionally include:

- Marine chemistry/geochemistry
- Physical oceanography
- Ecotoxicology
- Risk assessment and communication
- Air-sea interactions/atmospheric science
- Biological oceanography/marine ecology
- Coastal geomorphology
- Coastal/offshore engineering
- Coastal management
- Waste management
- Environmental impact assessment and monitoring
- Environmental/resource economics, including ecosystem valuation
- Fisheries/aquaculture
- Marine regulatory/institutional policy
- International environmental law/ law of the sea
- Public health



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GESAMP members will also be nominated so as to maintain geographic and gender balance. All members will be treated equally within GESAMP regardless of their background.

GESAMP members are expected to act in their individual capacities and not as representatives of their home institutions, governments, or associations. They must be willing to serve on a *pro bono* basis, and be willing and able to work intersessionally on routine GESAMP matters via electronic and conventional correspondence. GESAMP members must be prepared to declare any conflicts of interest that may arise in connection with their GESAMP responsibilities. The maximum continuous term of membership will be four years, unless at the conclusion of his/her term an expert is elected to a further 2-year term as Chair or Vice-Chair.

3.4.3 Working Group Members

Working group members are experts in disciplines required for the completion of the working group's terms of reference, collectively representing both breadth and depth of expertise. Generally, about three-quarters of working group members should not be current members of GESAMP.

The duties of working group members are to contribute to fulfilling the working group's terms of reference under the leadership of the working group Chair and according to the working group's work plan. This may involve attending working group meetings, work by correspondence, or both. Working group Chairs have the additional duties of coordinating the working group with support from the GESAMP Office, delivering working group reports in an acceptable form, and presenting the products of the working group to sessions of GESAMP and international fora as appropriate.

In most cases working group members serve *pro bono*, but members or their employers may sometimes be compensated for their time and effort. This will depend upon the nature of the work and be decided on a project-by-project basis at the outset of each project.

Working group members will generally be selected for geographic and gender balance, though a lack of geographic balance may be justified if the work has a particular regional focus. Working groups will in principle include members of the identified key user groups for the working group's product(s). All members of a working

group will be treated equally regardless of their background.

3.5 Financial Summary

The GESAMP Office will manage GESAMP’s finances according to UN standards and procedures on behalf of all sponsoring organizations and under the oversight of the Executive Committee. Finances will be managed as a Trust Fund for core activities including regular functions and individual project accounts for “on-request” functions. An overhead charge will be paid from project funds to the Trust Fund to cover project support

services. A summary 3-year budget for core activities (i.e. excluding on-request projects) is shown in Table 1. This represents a notional budget for the immediate, full implementation of the strategic vision for the New GESAMP presented herein. It is important to recognise, however, that the vision has been developed primarily as a tool for planning and strategic thinking. The New GESAMP is likely to be implemented over time and, because of pragmatic considerations and changing circumstances, not necessarily exactly as described in this strategic vision.

TABLE 1. GESAMP CORE ACTIVITIES EXPENDITURE BUDGET (USD)

	Annual		3-year	
	Cash	In-Kind	Cash	In-Kind
GESAMP Office - Staffing	230 000	85 000 ^{a)}	690 000	85 000
GESAMP Office - Operations	140 000	40 000	420 000	120 000
GESAMP Sessions	120 000	0	360 000	0
Travel & Support for Chair/Co-Chair	60 000	0	180 000	0
Web Site & PR Startup	50 000	0	150 000	0
GESAMP Core Activities Total	600 000	125 000	1 800 000	205 000

^{a)} Year 1 only



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This strategic vision for the New GESAMP, "Science for Sustainable Oceans", sets out the path which GESAMP intends to take when providing authoritative, independent, interdisciplinary, scientific advice to organizations and Governments to support the protection and sustainable use of the marine environment. It explains why GESAMP is needed as an interagency organ of the United Nations system, how GESAMP plans to engage with the users of its advice and the broader scientific community, how it achieves a more professional business approach to planning, management, work methods and delivery of its advice. It also informs on the organizational relationships in the New GESAMP, its output, participation and membership and gives a summarized 3-year budget for full implementation of this strategic vision.

