

Memorandum of Agreement
To Establish and Implement the Pacific Islands Ocean Observing System (PacIOOS)

Section I. Parties

This Memorandum of Agreement is entered into by the signatories (representatives of institutions, government agencies, incorporated organizations, or divisions thereof with legal status) and any other entities that may become signatories to this agreement in the future (the “Parties”).

Section II. Background

The Pacific Islands Ocean Observing System (PacIOOS) is the insular Pacific regional association established and responsible for the development, operation, improvement and oversight of the regional ocean observing system in the US Pacific Region (Hawaii, Guam, American Samoa, Commonwealth of the Northern Mariana Islands), Pacific nations in Free Association with the US (Republic of the Marshall Islands, Federated States of Micronesia, Palau), and the US Minority Outlying Islands (Howland, Baker, Johnston, Jarvis, Kingman, Palmyra, Midway, Wake). Regional Ocean Observing Systems—which are networks of observations, data management, analysis, and product development systems—will be nested within the national Integrated Ocean Observing System (IOOS®). IOOS is the developing U.S. network that will coordinate with the Global Ocean Observing System (GOOS) and systematically acquire and disseminate data and information on past, present, and future states of the oceans and the nation’s Exclusive Economic Zone (EEZ). IOOS is being developed under the auspices of the National Ocean Research Leadership Council through the National Oceanic and Atmospheric Administration in partnership with 16 other federal agencies. Specifically, IOOS is being designed to meet the following needs:

- Detecting and forecasting oceanic components of climate variability;
- Facilitating safe and efficient marine operations;
- Ensuring national security;
- Managing resources for sustainable use;
- Preserving and restoring healthy marine ecosystems;
- Mitigating natural hazards; and
- Ensuring public health.

Congress specifically authorized the Administrator of the National Oceanic and Atmospheric Administration to certify or establish regional information coordination entities under Section 12304 (c)(4)(A) of the Integrated Coastal and Ocean Observation System Act of 2009. In the explanatory statement accompanying the Omnibus Appropriations Act of 2009 (Public Law 111-8), Congress further directed NOAA to develop a strategy for incorporating observations systems from estuaries, bays and other near shore waters as part of the IOOS regional network of observatories. PacIOOS is one of eleven Regional Associations under the NOAA IOOS Program. NOAA is presently

working towards the establishment of certification standards for the IOOS Regional Associations. PacIOOS intends to pursue certification as a regional information coordination entity at such time as the Administrator releases certification standards for its IOOS Regional Associations.

Section III. Findings

Per the final report of the Pew Oceans Commission, “America’s Living Oceans: Charting a Course for Sea Change”, the U.S. Commission on Ocean Policy’s final report, “An Ocean Blueprint for the 21st Century”, the White House Council on Environmental Quality “Interim Report of the Interagency Ocean Policy Task Force”, and initial scoping meetings with stakeholders throughout the Insular Pacific region:

- There is a need for more rapid detection and timely prediction of a broad spectrum of ocean and atmospheric conditions.
- There are considerable impacts on society as a result of changes in these conditions.
- Priorities for detecting and predicting changes in marine and coastal ecosystems vary among regions in the United States.
- Regional associations responsible for the development and operation of regional observing systems provide the most effective means for identifying users and user needs, and developing the products for those users.

Section IV. Purpose

This MOA outlines the initial functions and responsibilities agreed to by the participating Parties to establish and implement a regional association to develop, operate, and improve the regional coastal ocean observing system known as PacIOOS, which will serve as the first Pacific Islands member of the IOOS Association. The regional association will serve as the Pacific Islands node for integrating and coordinating coastal and ocean observing activities.

There must be a concerted effort and commitment to monitor, maintain, and protect the long-term sustainability and health of the insular Pacific marine ecosystems, their habitats, and resources. This can be accomplished, in part, through collaborative, coordinated efforts by the Parties to the MOA, each of which has an interest in the coastal and ocean waters of the insular Pacific. This MOA will provide a framework for the Parties to work cooperatively to more effectively accomplish their individual and common missions and enhance broad user access to ocean knowledge, data, tools, and products.

Section V. Definitions

a. Regional Ocean Observing System—A system that links the needs of users to measurements of the coastal oceans on regional or sub-regional scales. The Pacific

Islands Ocean Observing System will be a heterogeneous, distributed system of linked elements, with organizational structures and interfaces developed where common good is identified. PacIOOS will coordinate ocean observing system elements within the Pacific Islands region that will complement the national backbone of IOOS. PacIOOS will establish, fund, and provide for the operation of selected components of the observing system whose functionality includes and extends beyond the roles and interests of the individual participating entities. Examples might include network links, master databases and indexes, or collaborative tools and services. The system will be a virtual system, consisting of the physical links, servers, and other elements that contribute to the overall purpose of PacIOOS, without regard to ownership or operational responsibility. The system will have the following capabilities:

- Observations on spatial and temporal scales appropriate for a diversity of end users' needs;
- Data and information gathering and management;
- Long-term research to advance the capabilities of the observing system;
- Technology development to support PacIOOS objectives;
- Open access to data and information products such as nowcasts, forecasts, and maps to meet a diversity of user needs; and
- A web-based "commons" for access to models, algorithms, numerical techniques, etc. to foster improved predictions by users.

PacIOOS will foster and integrate linkages among assigned and partner elements in order to meet these six capabilities.

b. Geographic scope. The geographic scope of PacIOOS will include the waters of the State of Hawaii, the Commonwealth of the Northern Mariana Islands, the Territories of Guam and American Samoa, The Republic of Palau, The Republic of the Marshall Islands, the Federated States of Micronesia, and the United States Minor Outlying Islands in the Pacific from the coastline, including bays and estuaries, to the seaward extent of the Exclusive Economic Zone.

c. Functioning Bodies. This MOA establishes the following bodies:

(1) PacIOOS Governing Council. The membership of the Governing Council will be composed of the executive leadership of international, federal, territorial, and state agencies, academic and research institutions, private entities, industry, and non-governmental organizations (or their designees) that are party to this Agreement. The Governing Council will provide general oversight, policy guidance, ensure Parties provide sustained support of the regional association, approve implementing documents, and make major decisions for the Regional Association. The Governing Council shall select, from the Council Members, a Chairperson upon the execution of this MOA. The initial Chairperson shall serve through September 30th 2011; thereafter, the Chairperson shall serve for a two-year term. Each Member, with the exception of ex-officio Members and the PacIOOS Director who shall not vote, shall be entitled to one

vote. A majority of the voting Members of the Governing Council shall constitute a quorum for the transaction of business at any meeting thereof. If a quorum is present all matters shall be decided by the vote of a majority of the Members present.

Election of Council Members

The signatories to this MOA will be classified into two classes (sub-regional and regional signatories) for the purposes of electing Members to the Governing Council.

Members

Sub-regional signatories and regional signatories will be divided into eight distinct groups for the purposes of electing Members of the Governing Council. Signatories from the seven sub-regional jurisdictions within PacIOOS (Palau, the Marshall Islands, the Federated States of Micronesia, Guam, American Samoa, Hawaii, CNMI) will comprise one unique group each. An eighth group will be comprised of signatories to this MOA whose interests and responsibilities in the region transcend political boundaries surrounding jurisdictions (e.g. Federal agencies, regional NGOs).

Twelve (12) Member seats on the Governing Council will be apportioned between sub-regional jurisdictions based on the proportion of population and geographical size of the EEZ within each jurisdiction (Marshall Islands: 1; Palau: 1; Federated States of Micronesia: 1; American Samoa: 1; CNMI: 1; Guam: 1; Hawaii: 6). Five (5) additional Member seats will be reserved for regional signatories.

Groups	Governing Council Members
<i>Sub-Regional Signatories</i>	
American Samoa	1
Guam	1
Hawaii	6
Northern Mariana Islands	1
Republic of Palau	1
Federated States of Micronesia	1
Republic of the Marshall Islands	1
<i>Regional Signatories</i>	
	5

Term of Service

As Parties become signatories to the MOA they will automatically be granted a Member seat to the Governing Council within their respective group until such time the number of signatories exceeds the maximum number of allotted seats for that group.

The initial Members of the Governing Council will serve until all Member seats within each group have been filled. Beginning in the calendar year subsequent to the filling of all Member seats, annual elections will be held to allow for exchange of Council Members. Elections will be for a 3-year term and will follow a 3-year cycle, with 1/3 of Council seats up for a vote each year. The slate of seats to be voted on in each of the

first three elections will be provided to the Governing Council by the PacIOOS Director and will be determined in chronological order by the date each Council seat was initially filled.

Elections for Governing Council Members will occur through a majority vote of signatories in each group prior to the expiration of the proceeding term of service. Council Members may serve more than one term consecutively.

The Governing Council may establish an Election Committee to oversee and manage the election of Governing Council Members within groups. Each signatory within each group may nominate a representative from their organization as a candidate for the Governing Council. The Election Committee will present a slate of candidates within each Group to the signatories within that Group. All signatories within that Group may vote on their Group candidates. The Election Committee shall supply ballots (by regular mail or electronic) to the Group members, tally those ballots and maintain a record of elections.

A Member of the Governing Council may be removed, at the discretion of the Chairperson, should they miss two or more consecutive meetings of the Council. A signatory from the same group as the removed Member will be appointed by the Chairperson to fill the remainder of the term. Notice of action will be provided in writing.

Conflict of Interest

All Members of the Governing Council will declare any conflict of interest he or she may have and will recuse him or herself from voting if they believe they have or are determined to have a conflict of interest. A conflict of interest occurs when a Member or a Member's direct family member stands to benefit personally or professionally from a programmatic funding, partnership, or business decision. Providing full disclosure and excusing oneself from voting in matters determined to be a conflict of interest is the responsibility of each Member, and serves to protect the interests of PacIOOS, its employees, Council members, offices, and members.

International Partners

The US IOOS Program encourages the development of collaborative relationships between regional IOOS partners and foreign/international observing programs. To encourage and promote such partnerships and to facilitate the transfer of best practices between PacIOOS and established observing programs within the Pacific region, the Chairperson may appoint up to two (2) representatives from foreign and/or international partner programs to a non-voting term on the Governing Council. Such terms will last no more than three (3) years at a time, though can be renewed upon the consent of the Council.

(2) Officers. The elected officers of PacIOOS shall include a Chairperson and other officers as determined by the Governing Council. Officers of PacIOOS will be elected from sitting Members of the Governing Council. Each officer

of the regional association is charged with the responsibility of representing and promoting the interests of PacIOOS within and outside the region.

Chairperson

The Chairperson shall be the principal officer of PacIOOS and Chairperson of the Governing Council. The Chairperson shall preside at meetings of the Governing Council and shall execute any instruments that the Governing Council has authorized to be executed. The Chairperson will be one of the two representatives from PacIOOS to the Board of the IOOS Association.

(3) Executive Committee. There shall be established an Executive Committee of the Governing Council comprising the Chairperson, and one to four additional Members each elected by a majority vote of all the Members eligible to vote for a term of two years. Alternate Executive Committee members shall be selected from among the sitting Members of the Governing Council.

The Chairperson or his/her designee will chair the Executive Committee. A majority of the five (5) possible members of the Executive Committee shall constitute a quorum for the transaction of business at any meeting thereof. The Executive Committee shall act only in the intervals between meetings of the Governing Council.

Any person dealing with PacIOOS shall be entitled to rely upon any act or authorization of any act by the Executive Committee to the same extent as an act or authorization of the Governing Council. The Executive Committee may delegate authority to the staff for execution of PacIOOS activities. The Executive Committee shall keep full and complete records of all meetings and actions, which shall be reported to and open to inspection by the Governing Council. At each Executive Committee meeting all questions and business shall be determined by a majority vote of those present, or in the absence of a face-to-face meeting by unanimous consent in writing.

(4) PacIOOS Director. The Director of PacIOOS is a salaried position, funded through the PacIOOS cooperative agreement with the NOAA IOOS Program Office. The Director reports to and receives guidance from the Governing Council. The Director will be responsible to the Governing Council and will communicate directly and solely through the Council Chairperson or the Chairperson's designee. The Director may join Governing Council and Executive Committee meetings but may not vote. The Director will be one of the two representatives from PacIOOS to the Board of the IOOS Association. Specific duties of the Director shall include:

- Management and execution of the Pacific Islands Ocean Observing System enterprise.
- Organization of and presiding over PacIOOS planning workshops.
- Coordination of official PacIOOS correspondence.
- Preparation or cause the preparation of plans and policy documents for PacIOOS including the Strategic Plan and funding proposals.
- Performance of other functions, as directed by the Governing Council.

(5) PacIOOS Office. The PacIOOS Office will function as the official representative of PacIOOS and have cognizance over the components of the ocean observation and information system. The Office will include a Director (as defined above), an Outreach and Program Coordinator, sub-regional liaisons, and an administrative/support staff, as appropriate. Other partners may be represented at appropriate times. The Office will initially be co-located with the School of Ocean and Earth Science and Technology at the University of Hawaii at Manoa in Honolulu, Hawaii.

The PacIOOS Office will:

- Develop and maintain a document detailing the long-range vision of the integrated ocean observing system for the Pacific Islands. Such a document will serve as the strategic plan for the system.
- Serve as the Pacific Islands regional node to coordinate PacIOOS activities with IOOS, the IOOS Association, and other federal and non-federal partners.
- Monitor and support the work of Governing Council standing committees.
- Report regularly to the Governing Council and/or Executive Committee for guidance. Provide an annual assessment of observing system status, products, and planned directions including results of external reviews.
- Recommend enhancements to the existing system, new projects, need areas for research and development, and identify system components appropriate for transition from research to operations.
- Carry out all other tasks as directed by the Governing Council.

(6) Standing Committees. By resolution adopted by two-thirds (2/3) of all Members of the Council, the Governing Council may designate one or more standing committees to provide input on each major component of the ocean observing effort (e.g. modeling, data management, education/outreach, stakeholder engagement, science and research). Each such committee may be comprised of parties not represented on the Governing Council and said committees shall serve at the pleasure of the Council. Members and other parties serving on committees are entitled to one vote each in the transaction of committee affairs.

Section VI. Information and Data

To enhance communications and availability of information, the Parties agree to:

1. Provide data required to support PacIOOS operations, research, and education efforts in accordance with applicable laws, regulations, and policies of the participating entities;
2. Develop compatible data standards and quality control procedures so data are of the highest quality and compatible between participating agencies; and

3. Cooperate in jointly synthesizing the results of ongoing monitoring and research efforts undertaken by the Parties and other research entities.

Section VII. Fiscal Sponsorship

PacIOOS will secure fiscal sponsorship from appropriate entities to enable PacIOOS to apply for grants and implement grant proposals, as well as to accept overall coordination funds from PacIOOS parties as provided. The initial fiscal sponsor for PacIOOS will be within the University of Hawaii at Manoa.

Through the fiscal sponsor(s), PacIOOS will receive and distribute PacIOOS-related funding and other resources from federal, state, county, other public agencies, foundation sources, corporations, non-governmental organizations, and private donors, according to the identified priorities.

A representative from the fiscal sponsor will serve as an *ex officio* Member of the Governing Council.

Section VIII. Shared Resources

This undertaking requires active participation of the involved parties in promoting collaboration between agencies and in ensuring compatibility and interoperability. To reduce costs, increase efficiency, and avoid duplication of effort, the Parties agree to expedite access to and sharing of each other's facilities and equipment, pooled inventories of costly technology development projects, and scarce human skill sets, consistent with each Party's policies and regulations.

Section IX. Intellectual Property

In general terms, the Parties intend that ownership of intellectual property, patent rights and copyright ownership shall be allocated and vested pursuant to the rules and guidelines adopted by the applicable grantor or fiscal sponsor entity.

Section X. Joint Meetings

The Parties agree to meet jointly as often as needed, in addition to the meetings of the Governing Committee and other committees. These meetings will help foster cooperation among the Parties, share findings with other participatory agencies, evaluate plans and progress for implementation, and coordinate in establishing priorities for the ocean observing system.

Section XI. Participation of Other Entities and Facilities

The Parties recognize that adding new participatory organizations to this MOA will better enable all participatory organizations to reach shared goals. The Parties agree to:

1. Recognize and promote the participation of other organizations that may contribute to the shared interests of monitoring and research in the insular Pacific's ocean and related watersheds; and
2. Establish a mechanism through which new participants may participate in the planning and implementation of the ocean observing system.

Section XII. Non-Binding

This MOA is intended to express the good faith plans, aspirations and general intentions of the Parties, and does not create any legally enforceable obligations including, without limitation, any duty to negotiate.

Section XIII. General Provisions

1. Effective Date. This MOA becomes effective upon the date of the signature of the third Party to execute it and is subject to the availability of funds. This MOA may be executed in counterparts, each of which will be considered an original document.
2. Withdrawal. Any Party to this MOA may withdraw without obligation upon three months formal written notice to the other Parties.
3. Termination. This MOA shall remain in effect until it is terminated by written agreement of the Parties.
4. Authority. Nothing in this MOA shall be construed to limit or modify the independent authority or individual responsibility of any participating agency.
5. Amendment. This MOA may be amended in writing by the unanimous written agreement of all Parties.
6. Antideficiency. Nothing in this MOA shall be construed as obligating any of the Parties, their agents or employees, to expend funds in excess of that authorized by law.
7. Third Parties. This MOA is not intended to, nor shall it, vest rights in persons or entities who are not Parties.
8. Dispute Resolution. Disputes among parties will be resolved by a majority vote of the Governing Council.
9. Notice. Any notice, request, order, or communication to the Parties pursuant to this MOA shall be in writing to each Party at the address that follows: Pacific Islands Ocean Observing System, University of Hawaii at Manoa, 1680 East-West Road, POST 105B, Honolulu, Hawaii, 96822, or to such other address as any Party may designate in writing.

Accepted as affirmed by our signatures below:

Signature _____ Date _____

Printed Name, Institution Representing