#### **ARPAE**

## Agenzia regionale per la prevenzione, l'ambiente e l'energia dell'Emilia - Romagna

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#### Atti amministrativi

Determinazione dirigenziale n. DET-2021-935 del 22/12/2021

Oggetto: Struttura Idro-Meteo-Clima. Adesione al

Mediterranean Oceanography Network for the Global

Ocean Observing System (MONGOOS).

Proposta n. PDTD-2021-976 del 22/12/2021

Struttura adottante Struttura Idro-Meteo-Clima

Dirigente adottante Cacciamani Carlo

Struttura proponente Struttura Idro-Meteo-Clima

Dirigente proponente Dott. Cacciamani Carlo

Responsabile del procedimento Valentini Andrea

Questo giorno 22 (ventidue) dicembre 2021 presso la sede di Viale Silvani, 6 in Bologna, il Responsabile della Struttura Idro-Meteo-Clima, Dott. Cacciamani Carlo, ai sensi del Regolamento Arpae per l'adozione degli atti di gestione delle risorse dell'Agenzia, approvato con D.D.G. n. 114 del 23/10/2020 e dell'art. 4, comma 2 del D.Lgs. 30 marzo 2001, n. 165 determina quanto segue.

## Oggetto: Struttura Idro-Meteo-Clima. Adesione al Mediterranean Oceanography Network for the Global Ocean Observing System (MONGOOS).

#### RICHIAMATI:

- la L.R. 19 aprile 1995, n. 44 che istituisce l'Agenzia Regionale per la Prevenzione e l'Ambiente dell'Emilia-Romagna (ARPA) ed in particolare l'art. 5 che definisce le attività nell'ambito delle quali il Servizio Idro-Meteo-Clima di Arpa (Arpa-SIMC) opera;
- l'art. 5 della stessa legge che, al comma 2, prevede: "per l'adempimento delle proprie funzioni, attività e compiti, Arpa può definire accordi o convenzioni con aziende ed enti pubblici, operanti nei settori suolo, acque, aria, ambiente; in particolare per quanto concerne la raccolta dei dati e la gestione di sistemi informativi e di rilevamento";
- l'art. 15 della L. 7 agosto 1990, n. 241, ai sensi del quale le pubbliche amministrazioni possono concludere tra loro accordi per disciplinare lo svolgimento in collaborazione di attività di interesse comune;
- la L.R. 30 luglio 2015 n. 13 "Riforma del sistema di governo regionale e locale e disposizioni su città metropolitana di Bologna, province, comuni e loro unioni" che, all'articolo 16 ridenomina questo ente "Agenzia regionale per la prevenzione, l'ambiente e l'energia dell'Emilia-Romagna" (acronimo Arpae) estendendone le competenze;

#### PREMESSO:

- che Arpae-SIMC esegue, in collaborazione con l'Aeronautica Militare Ufficio Generale Spazio Aereo e Meteorologia (USAM), già Ufficio Generale di Meteorologia, ed ARPA Piemonte, previsioni meteorologiche ad area limitata quotidiane attraverso il modello meteorologico italiano COSMO (risoluzioni 5 e 2.2 km, EPS nazionale a 2.2 km);
- che Arpae-SIMC esegue simulazioni numeriche e previsioni oceanografiche e di stato del mare quotidiane attraverso il proprio modello oceanografico Adriac-COAWST ed il modello d'onda SWAN;
- che Arpae-SIMC gestisce la rete di stazioni idrometeorologiche dell'Emilia-Romagna RIRER composta da stazioni meteorologiche, idrometri, pluviometri, radar, autosonda e boa ondametrica direzionale;
- che Arpae SIMC dispone di risorse specializzate in modellistica numerica previsionale, calcolo parallelo e sviluppo e gestione di procedure operative;

- che Arpae-SIMC sta investendo in strumentazioni per la misura del mare (mareografi, sonde multiparametriche, nuova boa ondametrica, webcam costiere) attraverso dei finanziamenti europei derivanti dai progetti strategici AdriaClim, CASCADE e STREAM;
- che nel 1999 è stato concluso un memorandum d'intesa per creare un'associazione che promuova partenariati e sviluppo di capacità per il Sistema di osservazione globale dell'oceano nel Mediterraneo ("MedGOOS") riconosciuto come alleanza regionale GOOS;
- che nel 2005 è stato concluso un Memorandum of Agreement (MOA) per la creazione della rete
  oceanografica operativa del Mediterraneo ("MOON") come evoluzione dell'EuroGOOS Mediterranean Task Team per consolidare il sistema operativo di osservazione e modellizzazione nel Mar
  Mediterraneo e per dimostrare l'utilizzo dell'ambiente marino sistema di previsione per la gestione
  integrata dell'oceano aperto e delle aree marine costiere;
- che MedGOOS e MOON hanno lavorato a stretto contatto per diversi anni, contribuendo con competenze complementari a sforzi reciprocamente vantaggiosi per la promozione dell'oceanografia operativa nel Mar Mediterraneo;
- che si riconoscono i numerosi vantaggi per la società di dati di osservazione e modellizzazione oceanografici affidabili e accurati e che la fornitura di tali dati è notevolmente migliorata quando gli sforzi di MedGOOS e MOON sono combinati;

#### CONSIDERATO:

- che nel mese di novembre 2021 è stato redatto un nuovo Memorandum of Agreement (MOA) tra i membri di MONGOOS, allegato al presente atto;
- che lo scopo del presente MOA è che:
  - o i Membri collaboreranno per sviluppare ulteriormente l'oceanografia operativa nel Mar Mediterraneo
  - o si promuovano partenariati e sviluppo di capacità per GOOS nel Mar Mediterraneo;
  - si elabori un quadro di lavoro continuo con EuroGOOS e GOOS Africa per definire ruoli e attività comuni nel Mar Mediterraneo e favorire la collaborazione con tutte le Alleanze regionali GOOS.

#### RITENUTO:

- che è interesse di tutte le Parti collaborare per la promozione scientifica, produzione e utilizzo di servizi di oceanografia operativa ("Servizi") perseguendo gli obiettivi principali:
  - o promuovere la scienza marina. Migliorare una visione scientifica del Mar Mediterraneo per promuovere applicazioni per benefici sociali;

- o promuovere la visibilità e il riconoscimento dei Servizi presso le agenzie governative e le aziende private, favorire la loro integrazione a livello nazionale, regionale, europeo e mondiale;
- o migliorare la fruibilità dei servizi, gli sviluppi tecnologici e la loro utilità per l'attuazione delle politiche, le esigenze della società e la scienza;
- o supportare la progettazione e realizzazione di iniziative internazionali di oceanografia operativa e promuovere la partecipazione dei paesi mediterranei extra UE alla produzione dei Servizi;

#### PRECISATO:

che l'adesione al Mediterranean Oceanography Network for the Global Ocean Observing System (MONGOOS) attraverso la sottoscrizione del Memorandum of Agreement (MOA) non comporta alcun onere finanziario per Arpae-SIMC come specificato nell'art. III del MOA allegato al presente atto:

#### SU PROPOSTA:

- del dott. Carlo Cacciamani, il quale ha espresso parere favorevole in merito alla regolarità amministrativa del presente provvedimento;

#### DATO ATTO:

- che il referente tecnico-scientifico relativamente alla presente collaborazione è l'ing. Andrea Valentini;

#### **DETERMINA**

- 1. di approvare l'adesione al Mediterranean Oceanography Network for the Global Ocean Observing System (MONGOOS) attraverso la sottoscrizione del Memorandum of Agreement (MOA);
- 2. di dare atto che la presente adesione non comporta alcun onere finanziario per Arpae-SIMC come specificato nell'art. III del MOA allegato al presente atto.

Allegato A): Memorandum of Agreement (MOA)

IL RESPONSABILE DELLA STRUTTURA IDRO-METEO-CLIMA

(F.to Dott. Carlo Cacciamani)



### Mediterranean Oceanography Network for the Global Ocean Observing System

#### MEMORANDUM OF AGREEMENT

Memorandum of Agreement, dated 01 Jannuay 2022, by and among the signatories listed in Annex I here to, as may be amended from time to time (each a "Member").

#### **PREAMBLE**

WHEREAS a Memorandum of Understanding was concluded in 1999 to create an association that promotes partnerships and capacity building for the Global Ocean Observing System in the Mediterranean ("MedGOOS") recognized as a GOOS Regional Alliance;

WHEREAS a Memorandum of Understanding creating the Mediterranean Operational Oceanography Network ("MOON") was concluded in 2005 as an evolution of the EuroGOOS Mediterranean Task Team to consolidate the operational observational and modelling system in the Mediterranean Sea and to demonstrate the usage of the marine environmental prediction system for integrated management of open ocean and coastal marine areas;

WHEREAS MedGOOS and MOON have worked closely for several years, contributing complementary expertise toward mutually beneficial endeavours in furtherance of Operational Oceanography in the Mediterranean Sea;

RECOGNISING the many benefits to society of reliable and accurate oceanographic observational and modelling data, and that the provision of such data is greatly improved when MedGOOS and MOON efforts are combined;

WISHING to build on their complementarity to better meet the needs of intermediate users and service providers in support of environmental and maritime user groups;

WHEREAS on November 2021 a MOA was concluded between the members of MONGOOS and the parties have recently expressed their desire to reformulate the content in part, drafting this new agreement;

NOTED that the stipulation of this new MOA will be resolved the previous one;

NOW, THEREFORE, in consideration of the foregoing and of the mutual undertakings and benefits set forth herein, the signatories agree as follows:



## ARTICLE I PURPOSE AND OBJECTIVES

#### Section 1.01. Purpose.

The purpose of this Memorandum of Agreement ("MoA") is for the Members to:

collaborate to further develop operational oceanography in the Mediterranean Sea by integrating their activities under the name of Mediterranean Oceanographic Network for the Global Ocean Observing System ("MONGOOS");

promote partnerships and capacity building for GOOS in the Mediterranean Sea; and

elaborate a continuous working framework with EuroGOOS and GOOS Africa to define common roles and activities in the Mediterranean Sea, and foster collaboration with all the GOOS Regional Alliances.

#### Section 1.02. Objectives.

MONGOOS shall engage in activities related to the scientific promotion, production and use of operational oceanography services ("Services"), as set forth in Annex II (Activities), in furtherance of four principal objectives:

**Promote marine Science**. Enhance a science-oriented view of the Mediterranean Sea to foster applications for societal benefits.

**Greater Awareness.** Promote the visibility and recognition of the Services with governmental agencies and private companies, encourage their integration at national, regional, European and global levels.

**Increased Downstreaming.** Enhance the usability of the Services, technological developments and their usefulness for policy implementation, societal needs and science.

**Improved Capacity Building.** Support the planning and implementation of international initiatives involving operational oceanography and promote the participation of non-EU Mediterranean countries in producing the Services.



## ARTICLE II MEMBERSHIP AND GOVERNANCE

#### Section 2.01. Members.

- (a) MONGOOS members are national research institutions that are involved in oceanography and that fully share the goals and principles of MONGOOS. Members may join the network upon approval by the Assembly in accordance with Section 4.02
- (b) Each Member, at the moment of signature of this MoA, shall appoint a representative to participate in the Members' Assembly (each a "Member Representative").

#### Section 2.02. Associate Members.

- (a) Other stakeholders not eligible to become Members under 4.02, including private companies, may participate as Associate Members of MONGOOS.
- (b) Associate Membership may be initiated by invitation or request of the candidate, and subject to the approval of the Assembly.
  - (c) Associate Members may participate in MONGOOS by:
    - (i) attending Assembly meetings as non-voting observers;
    - (ii) participating in the *ad hoc* and/or standing committees created under Section 2.03;
    - (iii) signing side agreements; and
    - (iv) other activities as decided by the Members' Assembly, as defined below.

#### Section 2.03. Members' Assembly.

- (a) A Members' Assembly ("Assembly") shall be formed by each Member Representatives.
- (b) The Assembly shall meet at least once each year and shall hold additional meetings at the request of at least  $\frac{1}{3}$  of the Members. Decisions shall be taken by consensus or, if necessary, by a  $\frac{2}{3}$  supermajority.
  - (c) The Assembly shall be responsible for:
    - (i) defining MONGOOS strategies and initiatives;
    - (ii) approving new Members and Associate Members application;
    - (iii) ratifying Executive Board decisions;



- (iv) electing the two Chairpersons;
- (v) approving amendments to this MoA;
- (vi) establish its internal rules and procedures.
- (d) The Assembly may create *ad hoc* Working Groups (WG's hereafter) to effectively realize the purpose and objectives of MONGOOS, and shall set term limits and renewal clauses when creating any WG.
- (e) MONGOOS will appoint ambassadors to each of the EuroGOOS Task Teams (TT hereafter) and WG's (see section 2.04).

#### Section 2.04 EuroGOOS Ambassadors.

- (a) MONGOOS will assign one person to serve as ambassador per EuroGOOS TT's and WG's. The selected persons for this role should be part of MONGOOS institutions.
- (b) Ambassadors will act as the liaisons, aiding communication and conveying information, promoting the coordination and synergy between MONGOOS and the different EuroGOOS TT's, WG's and other Regional Operational Observing Systems (ROOS). Ambassadors will acknowledge the developments taking place at EuroGOOS TT's and WG's level (i.e. standards definitions) and will establish actions to transfer the potential benefits to MONGOOS community.
- (c) Ambassadors will serve one three-year term that can be renewed up to one more period upon confirmation of the Assembly

#### Section 2.05. Executive Board.

- (a) An Executive Board ("Board") shall be established, composed by the chairs, working group leaders and ambassadors. Relevant international bodies shall be invited to attend Board meetings as observers.
  - (b) The Board shall be responsible for, *inter alia*:
    - (i) the implementation of the Mediterranean Strategic Plan;
    - (ii) executing Assembly decisions, in consultation with the relevant advisory group(s);
    - (iii) organizing the implementation of MONGOOS projects, initiatives and other activities;
    - (iv) proposing candidates for Chairpersons;
    - (v) proposing MoA amendments to the Assembly.
- (c) The Board shall meet at least every six months. All decisions of the Board shall be taken by consensus. Votes may be held (i) during Board meetings or (ii) at any time via email or other written, time-stamped communication. Any matter to be put to a vote shall be presented to all Board members at least 15 days in advance.



#### Section 2.05. Chairpersons.

- (a) The Members' Assembly shall elect two Chairpersons, to serve one three-year term that can be renewed up to one more period upon confirmation of the Assembly. Either Chairperson may give three months' advance notice of his or her intention to resign early, in which case a new Chairperson shall be appointed at the following Members' Assembly meeting to serve out the remainder of the outgoing Chairperson's term. In the event and only in the event that a new co-chair is not appointed, the network activity may continue with a single chair until he/she is elected in a new assembly.
- (b) The Chairpersons shall carry out the following duties, jointly or individually according to expertise:
  - (i) calling, setting the agenda for, and conducting Board meetings;
  - (ii) following up on decisions taken at Board meetings;
  - (iii) receiving requests and notices from Members and communicating them to the Board, for information or action as appropriate;
  - (iv) acting as spokesperson for the Members' activities under this MoA at international meetings; and
  - (v) informing the Assembly on the progress achieved and the decisions taken under this MoA.

#### Section 2.06. Bureau and Secretariat.

- (a) A Bureau shall be established to support the Chairpersons in carrying out their duties. Each Bureau shall comprise the Chairpersons of the immediately preceding term
- **(b)** A Secretariat shall be organized by the Chairpersons to facilitate implementation of MONGOOS activities by, among other things, supporting preparations for meetings and workshops, including invitations, logistical arrangements, and publicity; keeping and distributing minutes of meetings to all Members; and acting as focal point for relations with other institutions and agencies, the press, government ministries, and other entities that may request or provide relevant information.

#### ARTICLE III FINANCIAL AND LEGAL MATTERS

#### Section 3.01. Contributions.

- Members shall bear their own costs for attending meetings and participating in the activities of MONGOOS.
- Members shall support MONGOOS activities and meetings and may help cover such costs by hosting meetings; organising workshops, ad hoc study groups or pilot projects; providing consulting services to national and multilateral bodies; covering their own communications costs; and other activities that Members offer to undertake under this Agreement.

#### Section 3.02. No Partnership.

- Nothing in this MoA shall imply any partnership or other formal legal relationship among the Members or Associate Members.
- Except as otherwise provided in this MoA or under a separate agreement, no Member or Associate Member may:
  - act for, or assume any obligations on behalf, of any other Member or (i) group of Members; or
  - benefit from any other Member's or group of Members' rights under (ii) any agreement or entitlement, unless agreed in writing among the Members concerned.
- No Member shall be held liable for the default of any other Member or Associate Member unless expressly agreed in writing.

#### Section 3.03. Survival of Rights and Obligations.

The rights and obligations of each Member under pre-existing agreements shall survive the effectiveness of this MoA.



### ARTICLE IV OTHER MATTERS

#### Section 4.01. Effectiveness and Term.

This MoA shall become effective upon its signature by at least two Members from different countries and shall remain effective until terminated by consensus among the Members.

#### Section 4.02. Entrance and Exit of Members.

- (a) The participation of new Members shall be subject to a super-majority vote by the Assembly, following a candidate's request made in the form and manner specified in Annex III.
- (b) Any Member may withdraw from participation in MONGOOS, for any reason, by providing three months' advance written notice to the Chairpersons, who shall promptly communicate such notice to all other Members.
- (c) The participation of any Member may be terminated for any reason by unanimous vote of the Assembly, excluding that of the Member in question.

#### Section 4.03. Amendments.

Any amendment to this MoA shall be made in writing and signed by all Members.



Carlo Cacciamani
(Full name of signatory)
Carlo Cacciamani
Head of the Hydro-Meteo-Climate Service of Arpae Emilia-Romagna
(Name of authorised signatory)
(Signature)
(Date)



**ANNEX I** Initial List of Members



#### ANNEX II MONGOOS Activities

#### 1. General

- (a) Organise user forums and stakeholder consultations to assess policy implementation impacts and societal needs, and to ensure the usability of the Services;
- (b) Increase the free and open access to operational oceanography products for the entire community of users, including for the research community to advance scientific understanding of the Mediterranean Sea ecosystem dynamics;
- (c) Organise workshops and training initiatives to plan the upgrade and innovative development of the services and products of its members;
- (d) Promote the participation of members in projects and scientific initiatives to implement the MONGOOS strategy;
- (e) Encourage the use of operational oceanography products and services in growing the blue-green economy;
- (f) Promote the development of risk assessment and adaptation plans to pollution, the effects of climate change and other natural and man-made hazards;
- (g) Promote links between operational oceanographic services and the maritime sector;
- (h) Development of MONGOOS data center and MONGOOS showcase tool and catalogue for operational services and applications;
- (i) Active participation of MONGOOS members in forums and outreach activities.

#### 2. **National Level**

- (a) Strengthen and upgrade national operational monitoring and forecasting services;
- (b) Respond to national user groups by providing specialized services;
- (c) Coordinate national and regional contributions to GOOS and GEOSS.

#### 3. **Regional Level**

- (a) Identify pan-regional Mediterranean priorities for operational oceanography;
- (b) Support training, education and technology transfer in operational oceanography of the Mediterranean Sea;
- (c) Improve Northern African Countries participation in MONGOOS;



- (d) Facilitate linkages with regional organisations, agencies and programs and support their education in and ability to use the Services;
- (e) Organise the representation of MONGOOS as the Mediterranean Regional Alliance for GOOS;
- (f) Design services to support countries in implementing regional conventions, in particular the Barcelona Convention and Galway Declaration;
- (g) Contribute to the consolidation of the MONGOOS oil spill observing and forecasting system.

#### 4. European Level:

- (a) Link with and contribute to GMES Marine Services;
- (b) Contribute to EMODnet and the Integrated Maritime Policy;
- (c) Collaborate with European and regional meteorological offices;
- (d) Act as a ROOS for EuroGOOS in the Mediterranean and nominate ambassadors;
- (e) Work with European agencies, including EEA, EMSA, EUMETSAT UNEP-MAP, UfM, REMPEC, JCOMM, Marine Board, JPI-Ocean, CIESM, and ESA and harmonize MONGOOS and EuroGOOS initiatives to their mutual benefit.
- (f) Promote the further development and integration of MONGOOS members Operational Oceanography systems. This will be done through:
- (g) Promotion of EU funded projects with the participation of MONGOOS members;
- (h) Fostering adoption of good practices, integration of systems, data sharing and exchange of information in the framework of Copernicus and EMODNET initiatives;
- (i) Publish a MONGOOS reference publication into EuroGOOS;
- (j) Consolidate the activities in support to EU Blue Growth strategy.

#### 5. Global Level:

- (k) Facilitate linkages with international and regional organisations, agencies and programs;
- (l) Contribute to the international planning and implementation of the Global Ocean Observing System;
- (m) Promote inter-regional cooperation through GRA's
- (n) Coordinate and harmonize the development of a sustainable Integrated Observing System at the basin and shelf/coastal scales;
- (o) Contribute to JCOMM observing systems;
- (p) Strengthen relationships with other IOC and WMO programs.



#### **ANNEX III Form of Request to Participate in MONGOOS**

Name, Address of Institute or Organisation:	
Official Mandate and Activities:	
Proposed Contribution to MONGOOS Objectives:	

Declaration of No Conflict of Interest

