

ARPA
Agenzia Regionale per la Prevenzione e l'Ambiente
dell'Emilia - Romagna

* * *

Atti amministrativi

Determinazione dirigenziale	n. DET-2014-849	del 11/12/2014
Oggetto	Servizio Idro-Meteo-Clima. Sottoscrizione del Memorandum tra i partecipanti per la realizzazione del progetto comune di ricerca Decision Support and Risk Assessment for Asset Planning (DeSRAAP).	
Proposta	n. PDTD-2014-863 del 11/12/2014	
Struttura adottante	Servizio Idro-Meteo-Clima	
Dirigente adottante	Cacciamani Carlo	
Struttura proponente Nazionale	Area Modellistica Meteorologica e Centro di Competenza	
Dirigente proponente	Dott.ssa Paccagnella Tiziana	
Responsabile del procedimento	Dott.ssa Paccagnella Tiziana	

Questo giorno 11 (undici) dicembre 2014 presso la sede di Viale Silvani, 6 in Bologna, il Direttore del Servizio Idro-Meteo-Clima, Dott. Carlo Cacciamani, ai sensi del Regolamento Arpa sul Decentramento amministrativo, approvato con D.D.G. n. 65 del 27/09/2010 e dell'art. 4, comma 2 del D.Lgs. 30 marzo 2001, n. 165 determina quanto segue.

Oggetto: Servizio Idro-Meteo-Clima. Sottoscrizione del Memorandum tra i partecipanti per la realizzazione del progetto comune di ricerca Decision Support and Risk Assessment for Asset Planning (DeSRAAP).

VISTI:

- l'art. 15 della Legge n. 241 del 7 agosto 1990, ai sensi della quale le Pubbliche Amministrazioni possono concludere tra loro accordi per disciplinare lo svolgimento in collaborazione di attività di interesse comune;
- la L.R. n. 44 del 19 aprile 1995, che istituisce l'Agenzia Regionale per la Prevenzione e l'Ambiente e riorganizza le strutture preposte ai controlli ambientali ed alla prevenzione collettiva;
- l'art. 5, 2° comma, della stessa legge, che prevede che, per l'adempimento delle proprie funzioni, attività e compiti, ARPA possa definire accordi o convenzioni con Aziende ed Enti Pubblici;

PREMESSO:

- che ARPA-SIMC ha tra i propri compiti istituzionali definiti dalla L.R. n. 44/95, (art. 5 comma 1) “la realizzazione, anche in collaborazione con altri organismi ed istituti operanti nel settore, di iniziative di ricerca applicata sui fenomeni dell'inquinamento e della meteorologia, sulle condizioni generali dell'ambiente e di rischio per l'ambiente e per i cittadini, sulle forme di tutela degli ecosistemi (lett. a)”; lo svolgimento di “attività di studio, ricerca e controllo dell'ambiente marino e costiero” (lett. r) e di “gestire il sistema delle reti idro-meteo-pluviometriche della Regione” (lett. t ter).
- che, all'interno dell'Organizzazione del Trattato dell'Atlantico del Nord (North Atlantic Treaty Organization, in sigla NATO), il Centro NATO per la Sperimentazione e la ricerca marina (Centre for Maritime Research and Experimentation, in breve CMRE) è organo esecutivo del Dipartimento per la Scienza e la tecnologia con il compito di organizzare e svolgere attività di ricerca e sviluppo tecnologico scientifico nel settore marino, per individuare soluzioni innovative e di interoperabilità utili ad esigenze di difesa e sicurezza dell'Alleanza nel suo complesso;
- che, dal 9 all'11 luglio 2014, si è svolto a La Spezia il workshop *Decision Support and Risk Assessment for Asset Planning (DeSRAAP)* - forum riservato a enti militari e di governo, a strutture di ricerca e a comunità industriali afferenti ai 28 paesi NATO - per la discussione delle problematiche relative a impatto ambientale, valutazione dei rischi, supporto alle decisioni e pianificazione delle attività sia dal punto di vista militare che civile;

CONSIDERATO:

- che, in risposta alle priorità individuate durante il citato workshop, il CMRE sta cercando di creare progetti comuni di ricerca e sviluppare consorzi per la stesura di future proposte progettuali da proporre nell'ambito del programma europeo Orizzonte 2020, di bandi dell'Ufficio per la Ricerca navale degli Stati Uniti o come progetti multinazionali NATO;
- che, a tal fine, il CMRE ha proposto, a tutti gli enti presenti al workshop e interessati alle problematiche legate al rischio ambientale, l'adesione volontaria al progetto comune di ricerca Decision Support and Risk Assessment for Asset Planning (DeSRAAP), avente l'obiettivo di progettare e attuare strumenti di supporto alle decisioni e alla valutazione dei rischi per la pianificazione delle attività, considerando come punto di partenza le condizioni ambientali, in particolare le condizioni meteorologiche e oceanografiche (METOC);
- che questo Servizio, visti i propri compiti istituzionali nel settore marino, è interessato all'approfondimento delle seguenti tematiche:
 - previsione dell'incertezza;
 - valutazione del rischio;
 - inquinamento da idrocarburi;
 - gestione della costa;
 - interoperabilità (infrastrutture e standard), inclusi scambio di dati e parametri di valutazione;

CONSIDERATO INOLTRE:

- che, per aderire al progetto DeSRAAP, il CMRE ha proposto di sottoscrivere un Memorandum tra i partecipanti (Memorandum among participants) in breve MAP, il cui schema si allega sub A) al presente atto quale parte integrante e sostanziale;
- che lo scopo del MAP è quello di creare una cornice formale, con condizioni chiaramente definite, per facilitare la collaborazione e la condivisione di dati e software tra i partecipanti, in modo che gli obiettivi comuni del progetto possano essere raggiunti;
- che il MAP entrerà in vigore dal 1° dicembre 2014 o, se successiva, dalla data di sottoscrizione da parte di ciascun partecipante, fino al 31 dicembre 2015;

RITENUTO:

- opportuno, in seguito alle precedenti considerazioni, aderire al progetto comune di ricerca Decision Support and Risk Assessment for Asset Planning (DeSRAAP) e procedere alla sottoscrizione del MAP, il cui schema si allega sub A) al presente atto quale parte integrante e sostanziale;

- di dare atto che il MAP avrà effetto dal 1° dicembre 2014 o, se successiva, dalla data di sottoscrizione da parte di ARPA-SIMC fino al 31 dicembre 2015;
- che ciascun partecipante potrà recedere dal presente MAP previa comunicazione scritta con anticipo di almeno 180 giorni agli altri partecipanti;
- che, nel rispetto delle proprie norme interne, tutti i partecipanti convengono di scambiarsi reciprocamente dati e conoscenze a titolo gratuito ed esclusivamente per le finalità del progetto DeSRAAP;

SU PROPOSTA:

- della dott.sa Tiziana Paccagnella, Responsabile dell'Area Modellistica Numerica di ARPA-SIMC la quale ai sensi del Regolamento sul decentramento amministrativo approvato con Delibera del Direttore Generale n. 65 del 27/09/2010 ha espresso parere favorevole in merito alla regolarità amministrativa e tecnica del presente atto;

DATO ATTO:

- che si è provveduto a nominare responsabile del procedimento, ai sensi del combinato disposto di cui agli articoli 4, 5 e 6 della Legge 7 agosto 1990, n 241 e della Legge Regionale n. 32/1993 la dott.ssa Tiziana Paccagnella;

DETERMINA

- 1) di approvare la partecipazione al progetto comune di ricerca Decision Support and Risk Assessment for Asset Planning (DeSRAAP):
- 2) di approvare la sottoscrizione del Memorandum tra i partecipanti (Memorandum among participants) in breve MAP, il cui schema si allega sub A) al presente atto quale parte integrante e sostanziale;
- 2) di dare atto che il MAP avrà effetto dal 1° novembre 2014 o, se successiva, dalla data di sottoscrizione da parte di ARPA-SIMC fino al 31 dicembre 2015;
- 3) di dare atto che dalla stipula del MAP, di cui al precedente punto 2, non deriveranno oneri per ARPA.

All.: A) Schema di Memorandum tra i partecipanti

IL DIRETTORE DEL
SERVIZIO IDRO-METEO-CLIMA
(Dott. Carlo Cacciamani)

NATO UNCLASSIFIED

*Decision Support and Risk Assessment
for Asset Planning (DeSRAAP)*

Joint Research Project (JRP)

Memorandum Among Participants (MAP)

NATO S&T Organization (STO)
Centre for Maritime Research and Experimentation (CMRE)

US Naval Research Laboratory (NRL)
Monterey, USA

United Kingdom Ministry of Defence (UK MoD)
London, GBR

European Commission – Joint Research Centre (EC-JRC)
Ispra, ITA

Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA)
Università degli Studi di Genova
Genova, ITA

Faculty of Electrical Engineering, Czech Technical University in Prague (FEE-CTU)
Prague, CZE

Agenzia Regionale per la prevenzione e l'ambiente dell'Emilia-Romagna
Servizio Idro-Meteo-Clima (ARPA-SIMC)
Bologna, ITA

SASEMAR / Centro Jovellanos
Gijón, ESP

Italian National Institute for Environmental Protection and Research (ISPRA)
Rome, ITA

Signal Theory and Communications (STCD), University of Alcalá (UAH)
Alcalá de Henares (Madrid), ESP

Istituto di Scienze Marine, Consiglio Nazionale delle Ricerche (ISMAR-CNR)
Venice, ITA

25 November 2014

NATO UNCLASSIFIED

Official information

Releasable for Internet transmission

No Public Release

The NATO Science and Technology Organization (STO) Centre for Maritime Research and Experimentation (CMRE); the Naval Research Laboratory (NRL) - Monterey, USA; the United Kingdom Ministry of Defence (UK MoD), GBR; the European Commission – Joint Research Centre (EC-JRC), ITA; the Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Università degli Studi di Genova, ITA; the Faculty of Electrical Engineering, Czech Technical University in Prague (FEE-CTU), CZE; the Agenzia Regionale per la prevenzione e l'ambiente dell'Emilia-Romagna Servizio Idro-Meteo-Clima (ARPA-SIMC), ITA; the SASEMAR / Centro Jovellanos, ESP; the Italian National Institute for Environmental Protection and Research (ISPRA), ITA; the Signal Theory and Communications Department (STCD), University of Alcalá (UAH), ESP; and the Istituto di Scienze Marine, Consiglio Nazionale delle Ricerche (ISMAR-CNR), ITA; from now on the Participants, having regard to the North Atlantic Treaty, signed in Washington on 4 April 1949, considering the manifestation of the common interests of the Participants in the *Decision Support and Risk Assessment (DeSRAAP) Joint Research Project (JRP)*; have reached the following understanding:

1. Overview

- 1.1. This Memorandum Among Participants (MAP) details the commitment of the Participants to the DeSRAAP JRP.
- 1.2. The overall objectives of the JRP are the design and implementation of decision support and risk assessment tools for asset planning considering as a principle the environmental conditions. i.e. the meteorological and oceanographic (METOC) conditions of the environment (e.g. the maritime domain).
- 1.3. The purpose of this document is to create an official framework with clearly defined regulations and conditions to facilitate research collaboration and data and software sharing among the Participants, so that the common objectives of the JRP can be achieved.
- 1.4. The Participants of this JRP include:
 1. NATO STO CMRE: NATO Science and Technology Organization Centre for Maritime Research and Experimentation, La Spezia, ITA
 2. NRL-Monterey: Naval Research Laboratory, Monterey, USA
 3. UK MoD: United Kingdom Ministry of Defence, GBR
 4. EC-JRC: European Commission – Joint Research Centre, ITA
 5. DICCA-UniGenova: Dipartimento di Ingegneria Civile, Chimica e Ambientale, Università degli Studi di Genova, ITA
 6. FEE-CTU: Faculty of Electrical Engineering, Czech Technical University in Prague, CZE
 7. ARPA-SIMC: Agenzia Regionale per la prevenzione e l'ambiente dell'Emilia-Romagna Servizio Idro-Meteo-Clima, ITA
 8. SASEMAR: SASEMAR / Centro Jovellanos, ESP
 9. ISPRA: Italian National Institute for Environmental Protection and Research, ITA

10. STCD-UAH: Signal Theory and Communications Department, University of Alcalá, ESP
11. ISMAR-CNR: Istituto di Scienze Marine, Consiglio Nazionale delle Ricerche, ITA

1.5. The topics to be addressed within the DeSRAAP JRP include:

- Predicting Uncertainty:
 - Forecast (variability, ensembles, etc.).
 - Behavior modeling (red team, adversary, etc.).
 - Transfer (environmental field to application).
- Managing Uncertainty:
 - Risk = Hazard x Exposure x Impact (/vulnerability)
 - Portray:
 - Risk and confidence.
 - Human factors and visualization.
 - Response
 - Asset Allocation.
 - Optimization.
 - Context beyond the environment (Situational Awareness, Events, etc.).
 - Validation and verification (intelligent agents).
- Scenarios of potential common interest:
 - Counter piracy.
 - Illicit activity.
 - Irregular migration.
 - Oil spill.
 - Ice.
 - Coastal areas.
- Interoperability (infrastructures and standards):
 - Data and model feeds (including quality control).
 - Computational frameworks.
 - Metrics for evaluation.

A relationship of the research topics and particular interest of each of the participants is provided in Figure 1.

1.6. The potential benefits and value of addressing these topics include:

- Development of advanced tools related to the JRP objectives that could not be done by one institution by itself.
- Improvement of their own tools by being used and tested by other participants.
- Strength of relationships between participants and generation of new ideas for concurring to future research project calls.

1.7. The Participants will support this JRP by endeavoring to contribute at least one type of the following resources:

- Data (e.g. in-situ or forecast METOC data)
- Source code (already developed or developed along the duration of this JRP)

- Software and tools already developed
- 1.7.1. It is understood that each Participant will bear all of its own costs (direct and indirect) for participation in the JRP. Accordingly, this document does not constitute a binding commitment of resources.
- 1.7.2. NATO STO CMRE will facilitate a server to host all the data, software and code the participants want to share, just in case it is needed. NATO STO CMRE will also create common spaces in the server for specific collaborations between a sub-set of participants, restricting the access to these spaces to this sub-set of participants.

	NRL	MAKCOM	ECIRC	ECIRC	FEECTU	STOD-LIAH	DICCA	ARPA-SIMC	ISMAR-CNR	SASEMAR	CMRE	ISPA	UK GED	UK Mod	ITA-AF
•Predicting Uncertainty	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Forecast (variability, ensembles,...)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Behavior modelling (red team, adversary,...)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Transfer (environmental field to application)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
•Managing Uncertainty	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Risk = hazard x exposure x impact (/vulnerability)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Portray	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Risk and confidence	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Human factors and visualization	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Asset Allocation	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Optimization	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
•Context beyond the environment (Situational Awareness, Events,...)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Validation and verification (intelligent agents)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
•Scenarios of potential common interest	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Counter piracy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Illicit activity	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Irregular migration	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Oil spill	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Ice	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Coastal areas	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
•Interoperability (Infrastructure and standards)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Data and model feeds (incl. quality control)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Computational frameworks	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
--Metrics for evaluation	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

*1 Interest in models and display, not in course of action
 ? Not decided yet

Figure 1.- Relationship of research topic interests of each DeSRAAP JRP participant.

2. Data / Information Exchange Plan

2.1. Definition of Terms:

2.1.1. "Project" means this JRP.

2.1.2. "Information" means knowledge that can be communicated by any means, regardless of form or type including, but not limited to, knowledge of a scientific, technical, business, or financial nature whether or not subject to copyright, patent, or other legal protection.

2.1.3. "Background Information" means Technical Information, data and intellectual property useful for this Project but generated either prior to this Project or outside of activities that have been agreed by Participants as being JRP activities (such as the results of national or CMRE research programs).

2.1.4. "Foreground Information" means Technical Information, data and intellectual property generated by activities that have been agreed by Participants as being JRP activities.

2.1.5. "Jointly Generated Foreground Information" means Information jointly generated by two or more of the contributing Participants in the performance of this Project.

2.1.6. "National Foreground Information" means Information generated solely by one of the contributing Participants in this Project.

2.2. General Policy Toward Exchange of Data and Information

2.2.1. Through the course of this JRP, information and data may be exchanged between all Participants subject to each Participant's national laws, regulations, and policies. Each Participant will ensure that information received from other Participants is safeguarded against unauthorized disclosure.

2.2.2. Each contributing Participant retains primary responsibility for the protection and safeguarding of its own proprietary or sensitive information and data. If a contributing Participant has additional requirements above and beyond those set forth in the policies noted, it is responsible for communicating these requirements to other contributing Participants, who will comply with the requirements communicated by the requesting Participant.

2.3. Ownership of Data and Information

2.3.1. All rights, title and interest in proprietary Background Information will remain vested in the Participant that owns it.

2.3.2. All rights, title and interest in Jointly Generated Foreground Information, and collected data (if this is the case), will be vested in the JRP Participants that jointly generated the information. Data and intellectual property, which are provided through exchange in the course of this project without restriction on further disclosure, will be considered to be fully shared without fee among all Participants. It is understood by all Participants that fully sharing such information with NATO means that the CMRE may share such information with all NATO member nations on request and without fee. NATO member nations are then free to use the information for defence purposes.

2.3.3. In the event that a Participant withdraws from this Project, that Participant will retain rights as set out in this Section, in respect of Foreground Information, up to the date of its withdrawal. The withdrawing Participant will, subject to its national laws, regulations, and policies, use reasonable efforts to ensure that the remaining Participants continue to have, under the terms and conditions established above, free of charge, access to and use of Background and Foreground Information generated prior to the date of its withdrawal.

2.4. Marking of Data and Information

2.4.1. All technical information exchanged in the course of the JRP, whether Background or Foreground Information, will contain a clear statement describing its origin, ownership, and all applicable restrictions on disclosure, if any.

2.4.2. Any release of information developed as a result of this JRP should be clearly marked with the following statement:

“This work was made possible by the Decision Support and Risk Assessment for Asset Planning (DeSRAAP) Joint Research Project (JRP), including as participants Institution 1, Institution 2, ... and Institution N”

Each the Institutions from the list of participants provided in Section 1.4 contributing to this specific work should be cited. Note it is not necessary that all the participants contribute to this specific work.

2.5. Information Security

2.5.1. The Participants are individually responsible for complying with their own national laws, regulations, and policies regarding information security. To the extent that Participants are obligated to do so by their national laws, regulations, and policies, they will comply with NATO, and Centre regulations concerning Security and Management of Classified and Non-Classified Information, specifically including (but not limited to) NATO Documents C-M(2002)60, “The management of non-classified NATO Information,” C-M(2002)49, “Security within the North Atlantic Treaty Organisation,” and AC/35D/2002 Rev 2, “Directive on the Security of Information.”

2.5.2. It is anticipated that Information classified up to NATO RESTRICTED may be collected by or exchanged between the Participants in the course of this Project. Each Participant will treat the classified information according to its classification and share the data within its organisation only with staff that have an appropriate security clearance and a need-to-know such information. Information may also be marked with Dissemination Limitation Markings, which restrict release of information to the JRP Participants or authorize release of information to non-NATO entities.

NATO [classification]
DeSRAAP JRP
ONLY

And / Or

NATO [classification]
Releasable to [non-NATO
entities]

2.5.3. The Participants will respect any restrictions on the collection, distribution, and reproduction of data established by a provider of equipment or vessels as a condition for use of the equipment or vessels.

2.6. Data and Information Release

2.6.1. For the purpose of making transfers of documents in respect of this Project and in accordance with any separate arrangements between the Participants, the Participants will seek to have their national laws, regulations, and policies governing the export of materiel and technology, applied in a spirit of cooperation.

2.6.2. Participants will not transfer data received from other Participants under this Project to any non-Participant third party without first fully complying with any requirements or restrictions on further disclosure as may be imposed by the Participant that originally provided the data. The providing Participant is solely responsible for authorizing or obtaining authorization for such transfer and, as applicable, specifying the method and conditions for implementing such transfer. Releasability to and use of data by non-Participant third parties will require prior written agreement among the JRP Participants.

2.6.3. Participants may publish results of the project in scientific reports, conferences, or journals. Scientific reports including contributions from more than one Participant will be subject to scientific review by the Participants involved. No review is required for other independently published reports. However, descriptions of system specific information will be published within the guidelines established by system owners as a condition for use of the system. Participants have the right to withhold any sensitive/proprietary information of their organization, should they choose, from the joint work of the JRP. References of published reports should be provided to other Participants as a professional courtesy.

2.6.4. Reports and publications should appropriately acknowledge the specific contributing Participants (and/or their contractors), for the use of specific equipment, software, results or any other Participant-specific contributions.

2.6.5. Any transfer of data or software from this JRP to a non-Participant third party will be disclosed to all Participants at the time of transfer. The Participant that wants to transfer this information should first ask for permission and get the official/formal approval of the Participant that originated the data or software.

2.6.6. Any open-literature publication by a Participant or non-Participant third party that uses data or software obtained through this JRP will be disclosed to all Participants by the time of publication. Prior to this, the Participant should ask for permission and get the official/formal approval of the Participant that originated the data or software.

3. *Entry into Effect, Amendment, Duration, Termination, and Withdrawal*

- 3.1. This MAP will enter into effect on **December 1st, 2014** for those Participants who have provided a signature by this date, with the understanding that the MAP applies to only those Participants who have provided a signature.
- 3.2. For a Participant who provides a signature after **December 1st, 2014**, the MAP will enter into effect for that Participant on the date of signature, with the understanding that the MAP applies to only those Participants who have provided a signature.
- 3.3. A Participant who has provided a signature will be known as a Signed Participant. A Participant who has not provided a signature will be known as an Unsigned Participant.
- 3.4. This MAP will apply to only Signed Participants. Unsigned Participants will not be entitled to any of the benefits of this MAP, including denied access to data and/or software provided by the Signed Participants.
- 3.5. This MAP will remain in effect until **December 31st, 2015**.
- 3.6. Any Participant will have the right to propose amendments to this MAP at any time. Any proposed amendments will be made in writing. This MAP may be amended only upon the unanimous written consent of the Signed Participants for whom the MAP is currently in effect. Any amendments will enter into effect upon the date of the last signature of the Signed Participants for whom the MAP is currently in effect.
- 3.7. This MAP may be extended to new Participants by the unanimous written consent of the Signed Participants.
- 3.8. This MAP may be terminated at any time by the unanimous written consent of the Signed Participants.
- 3.9. A Signed Participant may withdraw from this MAP upon 90 days written notification to the other Participants. The withdrawing Participant will continue participating until the effective date of withdrawal.
- 3.10. This MAP will be renewed on a yearly basis, updating article 3.5. To do so, each Signed Participant should send a written renewal confirmation by means of an email from the Participant Point of Contact to the other Participant Point of Contacts prior to the end of the MAP valid period. Such renewal implies uniquely the continuation of the collaborative framework without any further amendment.

Signature

Date

RADM J.W. Ort, NLD N (Ret.)
Director
NATO STO CMRE

Signature

Date

Dr. Edward R Franchi
Associated Director of Research, Code 7000
Naval Research Laboratory (NRL), Monterey
(USA)

Signature

Date

Title and Name – To be determined

Position – To be determined

United Kingdom Ministry of Defence (UK MoD)
(GBR)

Signature

Date

Title and Name – To be determined

Position – To be determined

European Commission – Joint Research Centre (EC-JRC)
(ITA)

Signature

Date

Prof. Giorgio Roth
Dean of Department
Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA)
Università degli Studi di Genova
(ITA)

Signature

Date

Prof. Ing. Pavel Ripka, CSc.
Dean of the Faculty
Faculty of Electrical Engineering
Czech Technical University in Prague (FEE-CTU)
(CZE)

Signature

Date

Dr. Carlo Cacciamani

Director

Agenzia Regionale per la prevenzione e l'ambiente dell'Emilia-Romagna Servizio
Idro-Meteo-Clima (ARPA-SIMC)

(ITA)

Signature

Date

Mr. Juan Luis Pedrosa Fernández
Director
SASEMAR / Centro Jovellanos
(ESP)

Signature

Date

Mr. Stefano Laporta

Director

Italian National Institute for Environmental Protection and Research (ISPRA)
(ITA)

Signature

Date

Dr. Jose Carlos Nieto-Borge

Associate professor

Signal Theory and Communications Department, University of Alcalá
(ESP)

Signature

Date

Dr. Fabio Trincardi

Director

Istituto di Scienze Marine, Consiglio Nazionale delle Ricerche (ISMAR-CNR)
(ITA)

ANNEX: Participant points of contact (POCs)

NATO STO CMRE

Dr. Raúl VICEN
NATO Science and Technology
Organization Centre for Maritime
Research and Experimentation (CMRE)
Viale San Bartolomeo, 400
19126 La Spezia, Italy
Tel: +39 0187 527 340
Fax: +39 0187 527 330
E-mail: vicen@cmre.nato.int

NRL-Monterey, USA

Dr. James Hansen
Head, Meteorological Application
Development Branch
Naval Research Laboratory, Marine
Meteorology Division
7 Grace Hopper Ave
Monterey, CA 93943, USA
Tel: +01 831 656 4741
E-mail: jim.hansen@nrlmry.navy.mil

UK MoD, GBR

Provisional POC:
Derek Swannick, CDR RN
United Kingdom Ministry of Defence
(UK MoD)
Tel (provisional): +44 (0)1392 884204
E-mail (provisional):
derek.swannick@metoffice.gov.uk
Final POC data – To be determined

EC-JRC, ITA

Dr. Michele Vespe
European Commission – Joint Research
Centre (EC-JRC) - Maritime Affairs Unit
Via E. Fermi, 21027 Ispra (VA), Italy
Tel: +39 0332 78 9154
Fax: +39 0332 78 9156
E-mail: michele.vespe@jrc.ec.europa.eu

DICCA-UniGenova, ITA

Prof. Giorgio Roth
DICCA, Università degli Studi di Genova
Via Montallegro 1 - 16145 Genova
Tel: +39 010 353 2486
Fax: +39 010 353 2546
E-mail: giorgio.roth@unige.it

FEE-CTU, CZE

Dr. Ondrej Vanek
Czech Technical University in Prague
Faculty of Electrical Engineering
Dept. of Computer Science and
Engineering
Karlovo namesti 13, 121 35, Praha 2
Tel: +420 22435 5743
E-mail: ondrej.vanek@agents.fel.cvut.cz

ARPA-SIMC, ITA

Dr. Andrea Valentini
Agenzia Regionale per la prevenzione e
l'ambiente dell'Emilia-Romagna
Servizio Idro-Meteo-Clima (ARPA-
SIMC)
Viale Silvani 6 - 40122 Bologna
Tel: +39 051 525922
Fax: +39 051 6497501
E-mail: avalentini@arpa.emr.it

SASEMAR / Centro Jovellanos, ESP

Mr. José Manuel Díaz Pérez
Training Manager (SASEMAR/Centro
Jovellanos)
Centro Jovellanos
33393 Veranes Gijón,
Spain
Tel: +34 985 159 800
Fax: +34 985 167 604
E-mail: jmldiaz@telefonica.net

ISPRA, ITA

Mr. Stefano Laporta
Italian National Institute for
Environmental Protection and Research
Address: Not provided
Tel: Not provided
Fax: Not provided
E-mail (provisional):
sara.morucci@isprambiente.it

STCD-UAH, ESP

Dr. José Carlos Nieto
Signal Theory and Communications
Department, University of Alcalá
Ctra. A2 km 33,1, Alcalá de Henares,
Madrid, Spain
Tel: +34 91 885 6654
Fax: +34 91 885 6699
E-mail: josecarlos.nieto@uah.es

ISMAR-CNR, ITA

Dr. Fabio Trincardi
Istituto di Scienze Marine, Consiglio
Nazionale delle Ricerche (ISMAR-CNR)
Castello 2737/F, 30122 Venice, Italy
Tel: +39 041 2407 997 (Secretary)
Fax: +39 041 2407 940
E-mail: fabio.trincardi@bo.ismar.cnr.it
