# Memorandum of understanding Between

# PERSEUS and SEADATANET II PERSEUS and MYOCEAN II

# for in situ data management

"PERSEUS: Policy-oriented marine environmental Research for the Southern European Seas "

The purpose of this Memorandum of Understanding is to define the conditions under which Perseus, MyOcean and SeaDataNet consortia shall develop the further collaboration on in situ data management activities.

Perseus is represented by the WP3 leader Joaquin Tintore and Evangelos Papathanassiou

MyOcean II is represented by the In-Situ TAC work package leader Sylvie Pouliquen and Pierre Bahurel, MyOcean II

Coordinator SeaDataNet II is represented by SeaDataNet II Coordinator, Michèle Fichaut







#### 1 RATIONALE

**MyOcean** is the implementation project of the GMES Marine Core Service, aiming at deploying the first concerted and integrated *Pan*-European capacity for ocean monitoring and forecasting. Within this project, the in-situ thematic assembly centre (in-situ TAC) of MyOcean is a distributed service integrating data from different sources for operational oceanography needs. The MyOcean in-situ TAC is collecting and carrying out quality control in a homogeneous manner on data from outside MyOcean data providers to fit the needs of internal and external users. It provides access to integrated datasets of core parameters for initialization, forcing, assimilation and validation of ocean numerical models which are used for forecasting, analyses (nowcast) and re-analysis (hindcast) of ocean conditions. Since the primary objective of MyOcean is to forecast ocean state, the initial focus has been on observations from automatic observatories at sea (e.g. floats, buoys, gliders, ferrybox, drifters, SOOP) which are transmitted in real-time to the shore. The second objective is to set up a system for re-analysis purposes that requires products integrated over the past 25 years.

SeaDataNet is a European infrastructure (DG-Research - FP6/FP7) project which is developing and operating a Pan-European infrastructure for managing, indexing and providing access to ocean and marine environmental data sets and data products (e.g. physical, chemical, geological, and biological properties) and for safeguarding the long term archival and stewardship of these data sets. Data are derived from many different sensors installed on research vessels, satellites and in-situ platforms that are part of various ocean and marine observing systems. Data resources are quality controlled and managed at distributed data centres that are interconnected by the SeaDataNet infrastructure and accessible for users through an integrated portal. The data centres are mostly national oceanographic data centres (NODCs) which are part of major marine research institutes that are developing /operating national marine data networks, and international organizations such as IOC/IODE and ICES. The data sets managed come from various sources and time periods. This imposes strong requirements towards ensuring quality, elimination of duplicate data and overall coherence of the integrated data set. This is achieved in SeaDataNet by establishing and maintaining accurate metadata directories and data access services, as well as common standards for vocabularies, metadata formats, data formats, quality control methods and quality flags.

**Perseus** is a FP7 programme. The overall scientific objectives of Perseus are to identify the interacting patterns of natural and human-derived pressures on the Mediterranean and Black Seas, assess their impact on marine ecosystems and, using the objectives and principles of the MSFD-Marine Strategy Framework Directive- as a vehicle, to design an effective and innovative research governance framework based on sound scientific knowledge. Well-coordinated scientific research and socio-economic analysis is being applied at a wide-ranging scale, from basin to coastal. The new knowledge will advance the understanding on the selection and application of the appropriate descriptors and indicators of the MSFD. New tools are being developed in order to evaluate the current environmental status, by way of combining monitoring and modelling capabilities. The existing observational systems will be upgraded and extended.







By signing this MoU the three consortia agree to collaborate to make available a comprehensive dataset of in-situ observations from both operational oceanography programmes and scientific surveys to serve both the operational oceanography and research communities as well as other users

Acknowledging the importance of making the in situ marine observation data circulate in an efficient way

Acknowledging that Perseus is an important source of marine observation data in the areas of Mediterranean Sea and Black Sea.

Noting that SeaDataNet and MyOcean provide an efficient data circulation structure in delayed mode or in near real-time respectively.

Recalling that a Memorandum of Understanding –MOU- has been adopted by SeaDataNet and MyOcean and that this MOU strengthens the links between the two projects

Recalling that in the Perseus description of work –DOW-, it is written that Perseus Observation Data must and are planned to circulate through MyOcean (near real-time) and through SeaDataNet (delayed mode).

Recalling that the circulation of marine observation data must be based on existing standards developed within SeaDataNet and MyOcean.

The undersigned Projects, represented by their coordinators hereby enter this non-binding Memorandum of Understanding (the "MOU") as of this XXXXX (the "Effective Date") to set up a collaboration between the 3 FP7 Projects Perseus, MyOcean and SeaDataNet.

The Projects agree that they all contribute to an ocean observation system either by collecting data in the Southern Europeans Seas (Perseus) or providing a data circulation infrastructure in delayed mode (SeaDataNet) or in near real time (MyOcean through the TAC thematical assembling centre)

## 2 THE PARTIES AGREE UPON THE FOLLOWING







#### ARTICLE 1 - CONFIDENTIALITY

Considering that, in general, the exchange of information between the projects shall be of a non-confidential nature, and that the MyOcean data policy is fully open, Perseus marine observation data will be distributed through MyOcean and SeaDataNet when no restriction is required for data distribution. Perseus observation data will be distributed using SeaDataNet facility each time a restriction to data dissemination is needed.

### ARTICLE 2: HANDLING AND USE OF DATA

Considering that the Perseus data policy is defined in the document "Perseus Intellectual Property Rights, Use and Dissemination Rules and Data Policy (see Annex)

Considering that the Perseus data policy is intended to increase the success of the project, ensuring that the valuable data collected by researchers are properly archived so they can be effectively analysed.

Considering that within the project (during the funded lifetime of Perseus) data exchange, archiving and cataloguing are an important component of the research program.

Considering that the key focus points of the policy are data and metadata sharing, responsible archiving of data and metadata inventories. In this policy "metadata" is defined as descriptive information that characterises a set of measurements, distinguishing that dataset from other similar measurement sets. Metadata should contain sufficient information to allow a user to define whether that dataset will be of use to them.

Considering that visibility and acknowledgment of the contribution of Perseus to a regional ocean observing system is an important issue.

Acknowledging that important work has already been performed within the Projects SeadataNet and MyOcean in the field of marine data management

Acknowledging that standards have been developed within SeaDataNet (delayed mode data circulation) and MyOcean (near real time data circulation)

Acknowledging that Perseus is an important provider of marine observation data in the areas of Mediterranean Sea and Black Sea

Acknowledging the importance of making marine observation data available, especially those collected within the framework of Perseus

Acknowledging that it is of first importance to use existing, well established standards whenever possible







Acknowledging that Perseus aims to apply a truly open data access policy that will remove barriers and ease access to data for the whole scientific and operational community The goal is to maximise the exploitation and impact of data for both generation of new knowledge(especially for Ph.D theses) and sustained operations and downstream services.

Partners participating in the project Perseus are committed to distribute marine observation data collected during the Perseus project, in line with the Perseus DOW.

Thus partners participating in the project Perseus are committed distribute the marine observation data collected during the Perseus project, according to the Perseus Data Policy and using the channels developed by the Perseus project, namely:

NRT data: near real time data and metadata shall be distributed through the in situ thematic assembling centre (in situ TAC) for MyOcean either through the regional Data Assembling Centre (HCMR for Mediterranean Sea and IOBAS for Black Sea) or through the global distribution unit (Coriolis). The regional data assembling Centres shell provide possibility to copy Mediterranean and Black Sea data into Perseus project oriented database (IOLR).

DM data: Delayed mode data and meta data shall be submitted by Perseus partners to the Perseus project oriented database. On completion the project all new data will be released to the National Oceanographic Centres (NODCs) and distributed through SeaDataNet.

SeaDataNet and MyOcean will make the necessary efforts to make the Perseus contribution visible.

#### ARTICLE 3 - GENERAL PROVISIONS

This MOU shall come into force on the following effective date: 01/02/2014.

The obligations of confidentiality herein stated in article 1 shall remain in force for a period of five (5) years after the end of Perseus, unless expressly superseded by the terms of the Consortium Agreement in case of award of a Grant Agreement by the European Commission for the Project.

Should any clause of this agreement be or become legally ineffective, the validity of the agreement as a whole shall not be affected. The parties rather undertake to replace ineffective clauses by legally effective ones which comes as close as possible to the sense of the ineffective clauses and the purpose.

Disputes that might arise concerning this MOU shall be settled amicably. In case of disputes for which no amicable solution is possible, settlement will exclusively take place by the competent court of Belgium

Any dispute shall be governed and construed in accordance with the laws of Belgium.

This MOU shall be executed in 3 counterparts, all of which together shall constitute one and the same instrument. Every Party shall sign one (1) original counterpart and return it to the Coordinator for counter-signature.

The Coordinator shall collect the signed counterparts and have an obligation to send copies of all signed counterparts to each Party within sixty (60) days of receipt of the last signed counterpart from the Parties.







Perseus WP3 leader: Dr Joaquin Tintore

MyOcean II Coordinator : Dr Pierre Bahurel

MyOcean II In-Situ TAC work package leader Mrs Sylvie Pouliquen

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