



## JOINT PROGRESS REPORT

IMPLEMENTING ARRANGEMENT
between
the Joint Research Centre of the European Commission
and
the National Oceanic and Atmospheric Administration
of the Department of Commerce
of the United States of America
for scientific and other cooperative activities
in the fields of climate, weather, oceans, and coasts

#### 1 June 2013

On 31 May 2012, the JRC Director General Mr Dominique Ristori and the US Under Secretary of Commerce for Oceans and Atmosphere and Administrator of NOAA, Dr Jane Lubchenco, signed an Implementing Arrangement (IA) for scientific and other cooperative activities in the fields of climate, weather, oceans and coasts.

Under the Arrangement, a Steering Group was established with two co-chairs, Charles Wooldridge (NOAA) and David Wilkinson (JRC). The co-chairs would like to take the opportunity of this first anniversary of the signing of the Implementing Arrangement to report on progress thus far.

The Steering Group has completed the initial biennial Work Programme for the IA, which covers:

- 1. Earth observation data collection, quality control, and sharing;
- 2. Climate prediction, monitoring, and services;
- 3. Development of a common global/regional modelling and analysis tool for coastal hazards and extreme events;
- 4. Space weather prediction and impact mitigation;
- 5. Atmospheric and air quality monitoring;
- 6. Disaster monitoring and crisis management;
- 7. Environmental contaminants and effects in the marine environment;
- 8. Fisheries & aquaculture research for control and management;
- 9. Promoting coastal activities within multilateral fora; and
- 10. Bridging science and policy-making in relation to Oceans and Seas.

For each of the ten thematic areas identified, the Work Programme includes project descriptions, expected results and deliverables, and methodology and milestones. Nearly 60 collaborators and 25 projects have been identified and included in the work plan.





At the time of the signing of the IA, the JRC and NOAA selected four near-term priority activities. A summary of activities and achievements for these four areas includes:

### 1. Climate prediction, monitoring, and services

- JRC and NOAA National Climatic Data Center (NCDC) advanced work on implementation of Essential Climate Variables, including chaired meetings at the Climate from Space Week 18-22 February 2013 in Geneva, Switzerland.
- NCDC and JRC collaborated on a proposed characterization of metadata to enable high-quality climate applications and services through a climate monitoring architecture.

#### 2. Space weather prediction and impact mitigation

- NOAA and JRC are sharing information from ionospheric scintillation monitoring to undertake model-data comparison. In February 2013, JRC started receiving ionospheric scintillation data from Navis in Vietnam.
- NOAA and JRC are working on developing reliable and easy-to-use measurement indices for space weather-induced effects.
- JRC, NOAA and the Swedish Civil Contingencies Agency have agreed to plan an EU-US space weather workshop on electric grid vulnerability to be held in October 2013, in Ispra, Italy. A planning meeting to develop the outline and content of the workshop took place on 28 May in Stockholm, Sweden.

### 3. Fisheries & aquaculture – research for control and management

• The two sides are jointly coordinating and sponsoring an international symposium "Information Needs for Sustainable Fisheries, Second Symposium on Fishery-Dependent Information" to be held in Rome, in Italy on 3-6 March 2014.

# 4. NOAA and JRC are collaborating on the development of common global/regional modelling and analysis tools for tsunamis

• Initial discussions took place between JRC and NOAA collaborators in late 2012. However, activities in 2013 have not yet been initiated due to current resource constraints at NOAA.

In addition, the Steering Group recently identified several new projects added to the Work Programme over the past year:

- 1. NOAA and JRC will exchange information and experiences in the development of Drought Early Warning and Information Systems (DEWIS), including integrated indicators, forecasting, and impact assessments. In addition, the two sides will collaborate in the development of a Global Drought Information System.
- 2. JRC has proposed to NOAA and AAAS to co-organize a high level event on "Scientific support to Oceans and Seas: protecting and enhancing the value of resources" to be held in Washington in 2014. It is proposed to address three main themes: (i) Marine energy & Ocean mining, (ii) Food and (iii) Health, by analysing ways to promote sustainability and the development of the resources' potential.





The first year of cooperation following the signature of the Implementing Arrangement between the JRC and NOAA highlighted that significant progress has been achieved in the implementation of joint activities. Furthermore, new topics of common interest further broaden the span of interactions between the two entities and the agreed coordination mechanism ensures appropriate oversight of collaboration between the JRC and NOAA.

JRC co-chair:

David Wilkinson
Director for Scientific Policy

and Stakeholder Relations

NOAA co-chair:

Charles Wooldridge
Deputy Director,
International and Interagency Affairs
Division,

NOAA Satellite and Information Service