

**MEMORANDUM OF UNDERSTANDING BETWEEN
THE RESEARCH COUNCIL OF NORWAY (RCN) AND
THE FOUNDATION FOR SCIENCE AND TECHNOLOGY (FCT) IN PORTUGAL FOR
OCEAN-RELATED SCIENTIFIC AND TECHNOLOGICAL COOPERATION**

Facilitating worldwide communication and transport, the oceans and the seas also supply our population with healthy and nutritious seafood. Furthermore they represent a plentiful source of pharmaceuticals, energy, geological and genetic resources, sustaining diversified eco-services (such as climate regulation, carbon dioxide capture and sequestration, oxygen production, and pollutant storage and recycling), yielding crucial added value into economies.

The importance of the oceans and the seas has long been a focus of key international fora, and there is currently broad awareness of the need for an ecosystem-based approach to sustainable development, enlightened by recent key milestones such as the Management Plans for Norwegian marine areas and EU's Integrated Maritime Policy. An integrated approach to ocean management and maritime affairs is in line with Norwegian thinking and policy, and Norway cooperates closely with the EU in this field. Portugal has also advanced considerably in this field, and further to its national ocean strategies – released since 2004 – it adopted in 2014 the first Maritime Spatial Planning Parliament Act of Europe. Cross-cutting policies such as Blue Growth are strategic focus areas for Horizon 2020 aiming to unlock the potential of the oceans. Maritime issues and the blue economy in particular – encompassing areas such as aquaculture, coastal tourism, marine biotechnology, ocean energy or seabed mining – are the most relevant drivers for smart, sustainable and inclusive growth as set out in the Europe 2020 strategy and national strategies. In addition, the more traditional maritime and marine industries such as maritime transport, fisheries, shipbuilding and maritime equipment and services are the major sources of maritime value creation, employment and growth.

This critical, complex, global reality calls for an adequately comprehensive approach, from the political (setting of global priorities, better governance, and articulation of national policies), to the economic (managing scarce resources and increasing added value), to the scientific and technological (fostering competitive and innovative solutions and promoting a better sharing of knowledge).



The maritime expanses of Portugal and Norway are two of the largest in Europe. As such, both countries benefit from marine natural resources, in the case of Norway this potential has been tapped in the form of fossil fuels, vibrant fisheries, and aquaculture development. Portugal is considering new ways and means to exploit its maritime areas, including its geopolitical situation at the crossroads between the North and South Atlantic basins and in proximity to the Mediterranean Sea.

Norway is a seafaring nation, with much of its population living along the nearly 29 000 km mainland coastline and dependent on the sea (whether in the areas of fisheries, petroleum or shipping), and with jurisdiction over ocean areas extending into the High North. The management and exploitation of marine resources is based on science and technology development, and involves international cooperation.

With a coastline of more than 1 200 km length, Portugal is endowed with one of Europe's largest exclusive economic zones of maritime space (EEZ), of more than 1 700 000 km² – eighteen times its continental shelf, and the future sovereignty or jurisdiction over maritime space far exceeding the present EEZ area - which comprises some of the most important ocean ecosystems on a global scale. 75% of total population and 85% of GDP is located in the coastal municipalities of continental Portugal and the islands.

Portugal and Norway present interesting complementarities regarding the exploration of the sea, including the characteristics of their marine ecosystems, climates, geo-locations, scientific areas of expertise, and their maritime economies. These complementarities can be exploited to the great benefit of both countries.

Norway's leading position as a marine knowledge nation entails special responsibilities, also in a global context. It is essential for the country to invest in targeted marine research activities. The HAV21 R&D Strategy for a Marine Nation of Substance and other national strategies set out recommended priorities to enable Norway to achieve its industrial, managerial and political objectives for the ocean sectors. Consistent, comprehensive research activities of high quality are essential to generating relevant, up-to date knowledge about the marine environment. The long-term plan for research and higher education sets out the primary objectives and priorities for the period from 2015 to 2024. "The Ocean" is one of seven priorities.

Also a leader in ocean affairs at the international level, including in the United Nations and the European Union, Portugal is fully committed to promoting innovative forms of sustainable exploitation of the ocean resources, helping to foster the sea economy and maritime industries, and focusing on sciences and technologies of the sea. The National Strategy for the Sea, the Portuguese Strategy for Smart Specialisation (Research and Innovation), and the National Strategy for Sustainable Development underscore this commitment and the use of the ocean as a major factor for differentiation and development.

In addition to a long-standing history of trade relations in the fishing industry, Portugal and Norway have been involved in dynamic cooperation in the field of marine sciences, and have been well represented in numerous bilateral and multilateral vehicles of cooperation, including joint applications under the 7th Framework Programme, ERA-NETS, Joint Programming Initiatives such as JPI Oceans, and bilateral programmes.

Enhancing the strategic partnership between Portugal and Norway in ocean affairs is the determination of the present Memorandum of Understanding (MoU), which delineates efficient ways to streamline and upgrade the existing cooperation on qualitative and quantitative grounds.



The Research Council of Norway (RCN) and the Foundation for Science and Technology (FCT) (hereinafter referred to as the "Signatories");

ESTEEMING the long-standing cultural, economic and trade relations between Portugal and Norway and broader factors of affinity which pave the way for strengthened cooperation, at both the bilateral and the multilateral levels;

DESIRING to strengthen cooperation between the two countries, particularly in the fields of science, technology and innovation, which are critical to the development of their national economies and socio-economic standards and vectors of geo-strategic influence;

CONSIDERING that similarities, complementarities, and differences between the two countries – economic, scientific, and technological – can potentiate beneficial complementary dynamics aimed at upgrading specialisation of economic structures and competitiveness of the research and innovation systems;

AIMING AT a fruitful approach when addressing strategic issues, such as the Blue Economy, identified as crucial for upgrading competitiveness in global terms;

TAKING INTO ACCOUNT the vast existing spontaneous cooperation between the two scientific communities in ocean sciences, and the need to establish a strategic framework for and further focus on higher levels of scale, scope and productivity, as well as to address global value chains;

STIMULATING bilateral, multilateral, and global initiatives, and, whenever possible, achieving concerted common positions and complementarities.

DESIRING to establish a strategic partnership in areas of common interest, namely the oceans and the seas, within the context and scope of the European Research Area instruments;

ACKNOWLEDGING Norway's position as the world's second major exporter of fish and fishery products, ranging from farmed salmonids to small pelagic species and traditional whitefish products – according to FAO World Review of Fisheries and Aquaculture 2014, Norway has the world's largest mariculture finfish production, and the largest production per person – which will bring considerable knowledge on marketing and efficient production of marine finfish into the cooperation.

CONSIDERING Portugal's membership of the Community of Portuguese-Speaking Countries (CPLP) – amply endowed with sea natural resources – with a shared language and heritages as invaluable and prolific enablers, ADDING to the potential of Norway-Portugal cooperation in science, technology, and innovation;

WISHING to improve the process of knowledge transfer to the economic fabric and capturing better levels of foreign direct investment;

HEREBY DECIDE as follows:

CLAUSE 1

Objectives

The Signatories shall promote and support the development of cooperation in the fields of science and technology between their countries on the basis of equality and mutual benefit, according to the provisions of this agreement.

CLAUSE 2

Modalities of cooperation

Cooperation between the Signatories in the fields of science and technology shall be effected by the following mechanisms, in conformity with the Signatories' international responsibilities and with the national legislation and other rules in force in their respective countries:

- (a) Formulation and implementation of different modes and mechanisms of joint funding of R&D projects mutually decided upon, including demonstration and pilot lines;
- (b) Organisation of bilateral scientific and technological seminars, symposia, workshops and other meetings in areas of mutual interest, so as to promote interaction between relevant institutions, research groups, and companies of both countries with a view to producing a joint roadmap and identifying the prospects for cooperation, to be done partly in Norway and partly in Portugal.
- (c) Exchange of scientists, researchers, technical experts, and scholars aiming at the promotion of research, consultation and exchange of experiences within R&D joint research projects;
- (d) Incentive to further involvement of business enterprises, as active actors in the process of knowledge transfer and innovation, in the scope of bilateral exchange and matchmaking;
- (e) Facilitating the exchange of scientific and technological information and documentation;
- (f) Facilitating the exchange of information and best practices among the public agencies involved in this collaborative process, aiming at a better understanding of the two countries' landscapes and more effective support for mutual cooperation;
- (g) Other modalities of scientific and technological cooperation as decided upon by the Signatories.

CLAUSE 3

Scope of Collaboration

Cooperation between the Signatories in the fields of science and technology shall be geared towards building capacity and stimulating initiatives, safeguarding where possible common positions and complementarities at the bilateral, multilateral, and global levels.

At the multilateral level, cooperation shall aim at consolidating common positions and stepping-up of joint performance under H2020, and other collaborative platforms such as Joint Programming Initiatives (in particular JPI Oceans), ERA-NETS, EUROSTARS, EIT marine initiatives, and others.

Conformity with the Signatories' international responsibilities and with the national legislation and other rules in force in their respective countries must be observed.

CLAUSE 4

Areas of Collaboration

The main purpose of this MoU is to promote research and innovation projects and other forms of cooperation in the areas listed below. The Signatories acknowledge that the scale and format of the cooperative activities may vary within each of these areas.

- a) marine biotechnology (including marine biodiscovery);
- b) seafood (including fisheries, aquaculture and fish processing);
- c) marine environment (including marine ecosystems, management, human impact on marine environment, i.e. marine pollution and climate change);
- d) underwater technologies and offshore systems;
- e) deep sea (including deep-sea mining);
- f) offshore energy (including fossil fuels, renewables, and future sources such as methane hydrates).

CLAUSE 5

Competent Authorities

The competent authorities responsible for the implementation of this Agreement are:

- a) For the Kingdom of Norway: the Research Council of Norway (RCN)
- b) For the Portuguese Republic: the Foundation for Science and Technology (FCT) of the Ministry of Education and Science, in collaboration with the National Innovation Agency (ANI)

CLAUSE 6

Joint Steering Committee

The Signatories will establish a Joint Steering Committee (JSC) consisting of representation from each Signatory with a total of up to 4-5 members, a co-Chair and Member Secretary from each side. The JSC will consider and review the matters related to the implementation of this MoU. The JSC will meet annually in alternate countries to evaluate progress and identify possible new areas of cooperation under the MoU.

CLAUSE 7

On the Formalisation

In order to implement this Agreement, both Signatories agree to establish Work Plans, to be revised at 3- year intervals.

CLAUSE 8

On the Funding of Collaborative Activities

RCN and FCT are charged with fostering and supporting academic research within their own communities in their respective countries and they agree to seek to exploit existing national funding schemes (activities and programmes) when implementing this Agreement.

Costs related to the implementation of the various activities under this cooperation shall be agreed upon for each specific case or activity. Where the implementation involves arranging of joint calls or other modes of joint funding, the details of such cooperation, including the economic commitment of both Signatories, shall be formalised in a separate joint call or funding agreement.

The expenses of organising the joint meetings referred to in Clause 2 (b) and the meetings of the Joint Steering Committee will be borne by the Host Signatory and the travel expenses of the participants will be borne by the Sending Signatory.

The costs of complementary projects and other activities, namely those emerging from the academic research, shall be supported by the respective country in compliance with its legislation and other rules.

CLAUSE 9

Medical Matters

The cooperating Signatory or entity sending visiting personnel to the other country shall ensure that the personnel has taken out medical insurance in their country for the duration of their stay in the other country.

CLAUSE 10
On the Validity and Denouncement

- a) For each Signatory, this Memorandum of Understanding will come into force on the date of signature by the Signatory authorised representative and shall remain in force for a period of seven years and until finalisation of ongoing cooperative activities and jointly funded projects.
- b) This statement may be amended or modified by written agreement of all signatories or their substitutes.
- c) This statement is a mutual statement of intent among Signatories, who agree to make every reasonable effort to fulfil the intentions expressed herein.

CLAUSE 11
On the Controversies

Any controversy or dispute that may arise during the implementation of this Agreement shall be settled amicably through consultation or negotiations between the Signatories.

Done in Oslo on 4 May 2015, in two originals, both in the English language.

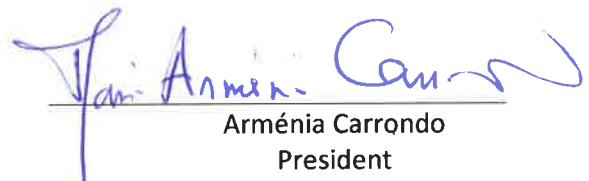
Signed,

FOR THE RESEARCH COUNCIL
OF NORWAY



Arvid Hallén
Director General

FOR THE FOUNDATION FOR
SCIENCE AND TECHNOLOGY



Arménia Carrondo
President