**Terms of Reference for Contract (IRD-NMU)**

**Description:**

This is a 5-week contract to perform a synthetic 4-page report on the analysis of needs to create a new joint Master Program in Ocean Sciences in South Africa.

The university of Brest, seconded by the IRD, wish to respond to the ERASMUS+ Capacity Building for High Education call for proposals in 2020, together with a number of South African universities and other European partners, by creating ***a new Joint Master curriculum in Ocean Sciences***. The objective would be the accreditation of the new master curriculum by the Department of Higher Education and Training[[1]](#footnote-1) three years after the beginning of the project. Erasmus+ Capacity Building projects content typically five parts, which must include a description of the different partners, an analysis of the needs, a presentation of the objectives and the actions taken, and a strategy for the dissemination of our achievements and make them sustainable.

Several partners have already been identified and are listed below. However, this list is not exhaustive and is likely to be modified:

* For South-Africa: the University of Cape Town (UCT), the University of Western Cape (UWC), the Nelson Mandela University (NMU), possibly the University of Kwazulu Natal (UKZN), the University of Stellenbosch (US), the University of Fort Hare (UFH), the Cape Peninsula University of Technology (CPUT), University of Rhodes, etc …
* For Europe: the University of Brest (UBO), the University of Montpellier (UM), and the University of Kiel (UK).

**Objective:**

This job offer wishes to contract someone a report that includes 2-page synthetic summary that will help us building the analysis of needs required for our Erasmus+ Capacity Building for High Education proposal. The report will have to be submitted by 1st of October 2019 to Pr. Mike Roberts (NMU).

**Contents needed in the report:**

The report must aim at identifying the gap in South-Africa between today existing offer in high-level education in ***ocean sciences***, and the mid/long-term (> 5-10 years) needs for the country in terms of employability to fulfill its objectives of development.

The results of the report will be presented end of October during a meeting attended by all partners of this future project. The objective of this meeting will be to design the new master’s curriculum, and a list of side actions in a way that it fills up the gaps identified in the report.

Our definition of Ocean Sciences includes Marine Biology, Marine Biogeochemistry, Physical Oceanography, Marine Geology, Fisheries, Coastal Management of Marine protected Areas.

We expect the 4 pages report to be composed of three parts:

1. State of the art of today high-level education and employability in the field of Ocean Sciences in South Africa.
   1. An exhaustive list of South-African available undergraduate and post-graduate education programs in the field of Ocean Sciences. Information required is the name of the universities proposing the curriculum, the nature of the curriculum (level, applied or research course, taught masters or masters by dissertation), the skills taught during the program, the number of hours of teaching, the number of students concerned, some statistics of gender and race and social backgrounds in these programs, and figures concerning the employability of these students once they graduate.
   2. Some official statistics that describe the job market within the field of Ocean Sciences (applied or non-applied) in South Africa. Our project needs to justify what was summarized in the concept note sent to the department of Science and Technology by Pr. Marcello Vichi in 2017 which was to create a new Master program in Ocean Sciences in South Africa. Therefore, we require this synthetic document to report on:
      1. the percentage of the SA economy directly and indirectly linked to the ocean sciences (Blue Economy);
      2. the main economic players within this field, with some figures detailing the employability in the state versus private sector.
   3. Some officials statistics on the unemployment rate in South Africa, with a differentiation based on gender, race, social background, graduated versus non graduated persons
2. Mid-Long term (5-10 years) projections of South-Africa’s needs in terms of human power and skills for the Blue Economy.
   1. An analysis of the government’s projections for the Blue Economy: the report should provide a list and analysis of available official governmental references that details the state projections and objectives in terms of:
      1. Policy making to drive a sustainable management of its environment resources and reach the 17 sustainable development goals of UNESCO.
      2. International ranking and prestige of its scientific research related to climate change.
      3. Skills and human power needed in Ocean Sciences for South Africa in order to foster a sustainable marine development through Science, Services, Observations, Data Exchange.
   2. An analysis of the private sector‘s projections in terms of employability and skills needed to continue to exploit resources, comply with international and national regulations, develop their capacity to predicting the economic activity in function of environmental parameters.
3. An identification of the gaps between the existing offer and the needs

The person will have to engagewith high-level government (DHEST) and university officials, and possibly the Human Ressource of some oil and insurance companny. Figures and statistics written in the report should be refering to official publications and/or studies.

**Applications:**

Please direct enquiries and applications to:

Dr Steven Herbette (Lecturer, UBO, Brest)

Email: steven.herbette@univ-brest.fr

The application closing date is 31 August 2019.

1. DST and DHET merged as the Department of Higher Education, Science and Technology in May 2019 [↑](#footnote-ref-1)