

## Terms of Reference for ‘Omics Expert Working Group (EWG)

The purpose of the EWG is to work with the NEOMICS project and NERC and with inputs from the research community, to produce a coherent NERC ‘Omics Strategy for the next 5-10 years.

Specifically the EWG should provide an *independent oversight of and advice to* the NEOMICS project which has the following objectives:

- a) assess the role ‘omics plays in delivery of the wider NERC Strategy *Next Generation Science for Planet Earth* and the support required to achieve this in the context of existing investments
- b) assess the particular NERC needs for infrastructure, bioinformatics and data management
- c) identify technological, bioinformatics or data issues unique to environmental ‘omics that may require strategic investment
- d) assess the needs for training and skills development to support the use of ‘omics in environmental science
- e) assess how NERC can remain flexible and take advantage of emerging technologies and new applications of ‘omics techniques
- f) assess how NERC can work most effectively with other UK ‘omics funders (including research councils, charitable trusts, and industry) in supporting research, training and provision of facilities
- g) assess how NERC should seek to interact with key international activities such as ELIXIR and the EBI
- h) produce a costed roadmap to deliver the short-term and long-term requirements identified via the activities above

The EWG will work with the NEOMICS project to explore a range of scenarios or “strawman” models to meet these objectives. The NEOMICS project will be responsible for delivery on the key objectives, in part, informed by the advice from EWG in an iterative process.

The EWG should provide advice on key stages of the NEOMICS project including the final report. Although the report will be prepared by the NEOMICS project it is expected that the EWG would be able to endorse the final report.

Summary EWG advice to the NEOMICS project should be published as an Annex to the final report.

### *Membership*

The EWG will have an independent Chair and relevant expert membership from across all sectors of the NERC community, including Research Centres and HEIs. Membership will be developed in response to an open nominations process, and augmented with invited members if necessary. The EWG will work closely with the NEOMICS project team members and with representatives of key UK ‘omics funders including Research Councils, charitable trusts and industry.