NERC’s vision for Digital Environment

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NERC Delivery Plan

Delivery Plan 2019

Environmental Solutions

Productive Environment

Pushing the frontiers of understanding

Healthy Environment

Resilient Environment

Digital Environment

Global Environment

Best Environment for R&I
Digital Environment
Delivery Plan: Long-Term Actions

- Grasp the possibility of harnessing the ground-based, high-bandwidth terrestrial mobile phone network.

- Continue to exploit Earth Observation data for scientific benefit from UK government investment in satellite programmes.
Delivery Plan: Long-Term Actions

- Invest in research and innovation that uses cutting-edge technology to advance environmental outcomes.

- Employ the wide range of sensor technologies now available to connect to and visualise the local and national environment, enabling real-time decision-making and the deriving of new insights across disciplines.
Exploit environmental data as a testbed for machine learning and analytics.

Combine environmental data with economic, health, social science and administrative data, to unlock insights, create digital services, contribute to smart cities and improve outcomes for people as well as the environment.
Delivery Plan: Near-Term Actions

- Deliver the £10.4 million ‘Constructing a Digital Environment’ programme, supported by the Strategic Priorities Fund, to integrate technological advances in order to monitor and predict the natural environment at high resolution and enable more effective decision-making.

- Invest £1.7 million in the Multidisciplinary Drifting Observatory for the Study of Arctic Climate (MOSAiC) programme to improve the ability of climate models to predict Arctic environmental change using a distributed regional network of autonomous, remotely operated sensors to improve the data for modelling.
Delivery Plan: Near-Term Actions

- Invest £5.5 million in 2019/20 in a single Environmental Data Service (EDS) to provide a single, large data service for the environmental science community, and invest in the ARCHER, JASMIN, MONSooN2 and NEXCS supercomputers to provide access to key data storage and processing services.


- Invest £5 million in 2019/20 for Digital Solutions Programme to create an innovative digital service facilitating the acquisition of environmental and multi-disciplinary datasets.