I am replying to the letter from Stephen Metcalfe, former Chair of the Science and Technology Committee, of 26th April 2017 which highlighted some key points from the Committee's inquiry into ocean acidification.

I thank the Committee for its findings. Further information on the specific issues raised in the letter is annexed to this letter.

UK scientists have played a key role in advancing our understanding of ocean acidification. Since I gave evidence to the Committee, ocean acidification has been a major area of discussion at the UN Ocean Conference in June 2017, where Defra chaired a well-attended side-event in partnership with the Global Ocean Acidification Observing Network and others. The Intergovernmental Call for Action agreed at the conference identified the threat posed by ocean acidification and the need to develop effective adaptation measures to protect ocean biodiversity.

Yours sincerely,

[Signature]

DR THERESE COFFEY MP
Results of the PLACID (Placing Ocean Acidification in a wider Fisheries Context) study

Cefas is finalising the PLACID study which is due for publication this autumn. Cefas are also working with Seafish (UK Seafood Industry Authority) and the UK Marine Climate Change Impacts Partnership (MCCIP) to communicate emerging evidence of acidification to commercial stakeholders. The first annual Seafish/MCCIP ‘watching brief report’ on climate change will be published (by Seafish) later this month. Additionally, Seafish and CEFAS are planning to publish a climate change/ocean acidification risk assessment and adaptation report focussing on marine aquaculture in 2018.

Support for science facilities when research funding ends

NERC, Defra and DECC funded the carbonate chemistry facility at the University of Southampton for the life-time of the UKOA programme to handle the large volume of samples from the programme and for a limited period at the start of the PLACID programme. NERC is now providing a ‘pay as you go’ facility for scientists, through its Services and Facilities portfolio to maintain part of its national capability. In September 2016, NERC consulted on this portfolio, inviting research communities to provide evidence of the need for current and new Services and Facilities. Following the consultation, NERC convened an advisory group to look at the outcomes. NERC is currently assessing the group’s advice and recommendations before implementing the final outcomes.

Marine monitoring

Defra recognises the importance of including ocean acidification in strategic monitoring programmes designed to assess the state of UK and regional seas. Such monitoring is best achieved through a collaborative, integrated and international response. Accordingly UK and USA scientists have helped establish a joint International Council for the Exploration of the Sea (ICES) and Oslo Paris Commission (OSPAR) Study Group on Ocean Acidification. This has developed an ocean acidification monitoring programme for the waters of the North East Atlantic including chemical monitoring guidelines. The UK continues to record measurements of ocean acidification, both in the English Channel at Plymouth Marine Laboratory’s long term monitoring station L4, and also at Stonehaven in Scotland.

As the Committee recognised, increased political cooperation through processes such as the G7’s Future of the Seas and Oceans Working Group will identify the additional actions needed to enhance and refine routine ocean observations including ocean acidification. The aim of the G7 Initiative is to increase the scientific knowledge necessary to inform more coordinated and appropriate policies. The UK is co-leading four of the five action areas under this initiative as follows:
• enhancing global sea and ocean observation systems (such as Global Argo Network, amongst other platforms);

• strengthening ocean assessment through the UN Regular Process to develop a consensus view on the state of the oceans;

• strengthening collaborative approaches to encourage the development of regional observing capabilities and knowledge networks, including supporting capacity building of developing countries; and,

• promoting increased G7 political-cooperation by identifying actions needed to enhance future routine ocean observations.

If desired, BEIS can report back to the Committee on this activity later this year.

The DfT is also working through the International Maritime Organization (IMO) to reduce ships' contribution to pollution and climate change. To date, the IMO has successfully adopted measures to reduce greenhouse gas emissions of ships and the EU is about to adopt a measure to monitor and report CO₂ emissions from ships. The UK Government hopes to achieve agreement in spring 2018 on an Initial IMO Strategy to reduce greenhouse gas emissions, with a Revised IMO Strategy to follow in 2023.

Requirement for strategic coordination and oversight by funders

In 2016 Defra, BEIS and FCO sponsored a Government Office for Science (GO-Science) Foresight project to explore the 'Future of the sea' and examine implications for government. The project is assessing long-term changes to the ocean environment and economy, and their implications for the UK’s marine interests. GO-Science expects to publish findings this summer/autumn. These will include cross government integration on marine issues and the role of marine science in responding to long-term challenges and opportunities facing the UK.