



Department for
Business, Energy
& Industrial Strategy

1 Victoria Street
London SW1H 0ET

T +44 (0) 20 7215 5000
E www.beis.gov.uk/contact
www.beis.gov.uk

Sir William Cash MP
Chair, European Scrutiny Committee
European Scrutiny Committee
House of Commons
London
SW1 0AA

Our ref
Your ref

26 March 2018

Dear Bill,

5282/18: Proposal for a Council Regulation on establishing the European High Performance Computing Joint Undertaking

Thank you for your comments on the above proposal submitted on January 29th 2018.

The UK currently operates 15 of the world's top 100 supercomputers as recorded by Top 500 an independent ranking of global HPC capacity. 5 UK systems are in the top 50, specifically at the Met Office and European Centre for Medium-Range Weather Forecasts.

However, the list of fastest or most powerful computers is not necessarily the best reflection of the UK's capability. The UK has developed a very strong skills base in both high performance computing and the fundamental computer science skills needed to maximise the impact of supercomputers. Software, mathematics and algorithm development are all areas of strength in the UK and facilities like the Alan Turing Institute are continuing to develop those capabilities further.

The UK has not typically led in the construction of early generation super computers, preferring to procure the best systems available from the market and utilise such systems effectively at reasonable cost to support areas of research excellence. It is as yet unclear whether the different approach being taken in the Euro HPC project will enable Europe to compete effectively with the US, Japan or China in this respect.

We have tasked UK Research and Innovation (UKRI) to create a long-term (up to 2030) research and innovation infrastructure roadmap based on a picture of existing UK infrastructure, future requirements and resulting investment priorities. As part of this, UKRI will examine the long term e-infrastructure capabilities required by researchers in the UK across disciplines and across sectors including, if appropriate, exascale technology. It will aim to deliver a strategy maximising the UK's current position and existing international relationships to deliver the best value for money for the UK while meeting the needs of the scientific and industrial community. This will help us answer questions about what the UK can and should be delivering in terms of new HPC hardware.

To support this work, Sir Mark Walport has set up an e-infrastructure advisory board, consisting of experts from across industry, academia and the public sector. Dave Watson, formerly of IBM will chair the new group. Future UK membership of Euro-HPC will be considered by this group and as part of this wider strategic look at research infrastructure priorities across the UK. Euro-HPC has not yet formed and


the UK is actively involved in official-level discussions aimed at setting up the initiative. To this end, we do not consider it a high risk that through this initiative European industry will gain a significant advantage over UK industry.

The Euro-HPC declaration of intent was presented as part of the celebrations of the 60th Anniversary of the Treaty of Rome. The UK chose not attend these events and so did not participate in the earliest phase of discussions on Euro-HPC. However, the UK continues to work closely with European partners on High Performance Computing and is actively involved in the current discussions about the setup of Euro-HPC. We have a significant track record in European cooperation in HPC and are significant partners in two existing HPC initiatives: Partnership for Advanced Computing in Europe (PRACE), a European system for sharing computing resources; and the European Technology Platform for High Performance Computing (ETP4HPC) a European think tank on the development of HPC capacity for Europe. The UK is a significant user of European HPC capacity, and plays a strong role in European HPC research and development; there are no tensions between the UK, EU or Member States in this regard.

You will be aware that the Government has set out its intention to agree a wide ranging science and innovation pact with the EU following our exit from the EU. It is our intention that this will form the basis of future cooperation in HPC and other areas.

I am copying this letter to the Chair of the European Union Select Committee, House of Lords, the Clerks of both Committees, Les Saunders (Cabinet Office) and Jenny Steinitz (BEIS).

Yours sincerely,

A handwritten signature in black ink, appearing to read 'S. Gyimah', written in a cursive style.

Sam Gyimah MP
Minister of State for Universities, Science, Research & Innovation
Department of Business, Energy & Industrial Strategy