**Report on the third meeting of the Fusion Energy APPG**

**Tuesday 23 February 2021 4-5pm**

*ITER – what are the benefits and opportunities for the UK?”*

This meeting focussed on ITER – the major fusion project currently under construction in Cadarache, France, which is well on the way to starting operation in 2025. The success of ITER is vital for fusion research worldwide – including here in the UK. Experiments on the European JET device (the European Union’s fusion machine, hosted and operated by UKAEA at Culham in Oxfordshire) this year, are vital for preparing ITER operation and wider UK industry have won major ITER contracts in recent years, with the promise of more to come now that the UK has agreed a close association on Euratom.

Laban Coblentz, ITER Head of Communications gave an illuminating introduction to ITER. He described how the project was set up – and especially how contracts are divided amongst the 7 partners – the EU, USA, Japan, China, India, S Korea and Russia. He noted the complexity of the project – with so many cutting edge and new technologies being adopted – but noted that it is 72% complete and on schedule to start in 2025. He described major elements of the project including those recently delivered/installed and those being manufactured on site. He also outlined the progress in manufacturing major outstanding components – and the key role that the EU is playing in this activity.

Stuart Codling, Director, Business Development, Fusion Power and Big Science, Jacobs Plc gave an informative presentation on the key role that Jacobs is playing in delivery of key ITER contracts. He described how Jacobs has benefitted from these contracts – in terms of profit, high skill jobs and expertise; and also how this work is and will lead to further opportunities in ITER, other fusion projects and other industries. Headline figures …

Tim Bestwick, UKAEA Chief Technology Officer and Director of Strategy, Communications and Business Development wrapped up the session – stressing from UKAEA’s and UK’s perspective how crucial ITER is to the drive to put fusion on the grid. He outlined UKAEA’s vision for fusion development including three main pillars :

* Major international collaborations - such as ITER and JET - are vital both in addressing key technical challenges in fusion and engaging the supply chain in substantial contracts.
* Ambitious national programmes - such as the MAST and STEP programmes operated by UKAEA - are helping drive the field of fusion forward
* A thriving private sector - including both fusion companies (such as Tokamak Energy and First Light Fusion) and supply chain companies (such as Jacobs) - is essential to the deliver of practical fusion

A lively Q & A session ensued, with discussions on the ITER schedule and when realistically full power DT plasma would be achieved; discussion on a broad roadmap for fission and fusion in the UK; asking about differences between fission and fusion (a document will be finalised and placed on the APPG website) and the present status of outreach to schools and how this helps with recruitment.