Tritium research centre plans move ahead with £5m contract

The consortium will design, supply and install the mechanical and electrical instrumentation necessary for the new plant at Culham Science Centre.

The purpose of the new Hydrogen-3 Advanced Technology (H3AT) facility will be to support the development of new technologies to process and store tritium, one of the fuels that could be employed in future fusion power plants.

The facility, which will be commissioned in 2021, will have the capacity to hold tritium and, uniquely, will provide a 'closed-loop' research system. Although the stand-alone technologies for each component are used elsewhere, the H3AT facility will be the first to bring these together in one place, and will represent a small-scale forerunner of the tritium facility for the multinational ITER fusion project in France.

This 'closed-loop' system allows for the recycling and reuse of tritium as well as the ability to use it for further experiments – a valuable resource, therefore, for tritium R&D.

Contracts for a suite of sub-systems for the facility will also be awarded by tender to industry in the coming months.

Colin Walters, Director of the National Fusion Technology Platform at UKAEA, said: "The H3AT facility will provide a truly world-class capability, and will enable the development of technology, expertise and skills to support UK industry growth."

Thomas Keegan, Group Chief Executive Officer at DBD, said: "H3AT is a dream project for Different by Design; it allows us to use our skills on an internationally important facility. We were thrilled to be appointed as a delivery partner to UKAEA and are looking forward to the collaboration."