Next STEP in fusion

The spherical tokamak is a promising type of compact fusion machine, which has been under development since the 1980s. UKAEA will start operating its new spherical tokamak called <u>MAST-U</u> in 2020, opening an exciting new chapter in the drive towards practical fusion energy.

The STEP programme will develop and identify solutions to the challenges of delivering fusion energy, benefiting from UKAEA's breadth of expertise and its suite of research facilities – <u>RACE</u>, <u>MRE</u>, H3AT and FTF – to deliver an integrated concept design.

The technical objectives of STEP are:

- Deliver predictable net electricity greater than 100MW
- Innovate to exploit fusion energy beyond electricity production
- Ensure tritium self-sufficiency
- Materials and components qualification under appropriate fusion conditions
- Viable path to affordable lifecycle costs

The UK government has announced £20 million for the first year, launching STEP as a collaborative programme that combines the strengths of UKAEA with industry, universities and other organisations.

STEP offers numerous procurement opportunities, set out in the <u>STEP Programme</u> <u>Procurement Plan Schedule</u>. This is published every quarter and sets out procurement opportunities as well as details of the responsible procurement officer who can be contacted for more information. Note that tender dates are subject to change.