



Fit For Nuclear Programme¹ – opportunities for UK companies. (Jan 2016)



Fit for Nuclear (F4N), is a unique service to help UK manufacturing companies get ready to bid for work in the civil nuclear supply chain.

F4N lets companies measure their operations against the standards required to supply the nuclear industry – in new build, operations and decommissioning – and take the necessary steps to close any gaps.

F4N has been developed by the Nuclear Advanced Manufacturing Research Centre (AMRC) with the support of its top tier partners including Areva and EDF Energy. These industry leaders are using F4N to identify potential companies for their own supply chains.

The Nuclear Advanced Manufacturing Research Centre combines the knowledge, practices and expertise of manufacturing companies with the capability of universities.

We are now working with government to develop the next generation of supplier development programmes, with the support of the UK's nuclear new build developers and the Nuclear Decommissioning Authority. Full details will be announced shortly.

UK CAPABILITIES

The UK has a strong track record in nuclear engineering, but much of its capability has declined over the past two decades. With a new generation of nuclear power stations in the UK and worldwide, there are significant opportunities for UK companies to take advantage of this new market.

Even though the new generation of reactors are being provided by overseas providers (Areva, Westinghouse and Hitachi-GE), the UK supply chain can capture a significant market share in areas where it has existing capabilities or can rapidly develop new capabilities.

¹ Ref namrc.co.uk Nuclear AMRC is led by the University of Sheffield and The University of Manchester, with Rolls-Royce as lead industrial partner. Other founding partners are Areva, Westinghouse, Sheffield Forgemasters and Tata Steel.



MANUFACTURING CAPABILITIES

A new nuclear power plant requires a wide range of plant and equipment. Components range from specialised equipment such as stainless steel pump casings for the reactor, to conventional items such as tankage and pipework.

UK companies have significant capabilities in nuclear engineering, manufacturing and site installation, and could provide an estimated 50% of the plant and equipment required for a new site. With selected investment in facilities and skills, this capability could be increased to around 70%.

Many UK companies are market leaders in their field. Key areas include:-

- High quality forgings.
- Precision material components and assemblies, including valves and pumps.
- **Plant instrumentation and control for reactor, generating plant and ancillary equipment.**
- Specialised equipment and services including high integrity pipework; core component handling equipment; primary circuit auxiliary systems; craneage and fuel handling machines; specialist radiation retaining doors; radiation detection and monitoring products.
- Accumulators, tanks and heat removal systems.
- Fuel transfer tubes and key interlock systems.
- Validation of advanced NDT, inspection and materials.
- Waste measurement instrumentation.
- Radioactive waste management systems.
- HVAC systems.

Additionally the University of Sheffield is working with key companies within the civil nuclear industry based within the UK and abroad, with the aim of helping participants on the European F4N Programme to win work by connecting them with these potential purchasers.

To facilitate this the University of Sheffield and relevant government departments may wish to share the details of participants on the EF4N Programme with such third party companies, who may then contact the participants directly: such information will be limited to company name; contact details; nature of business; size of company; ISO accreditation; references; and the company's level of engagement within the EF4N Programme.

If you would like details on how to access this market – please contact AIM Professional Services.

Tel.07860919296

Email:- g.jenks@aimproserv.co.uk