Research: supplementary programme, Joint Research Centre JRC for the EAEC 2004-2006, Petten reactor

2003/0287(CNS) - 05/12/2003 - Legislative proposal

PURPOSE : to adopt a supplementary research programme involving the high flux reactor (HFR) for a period of three years to be implemented by the Joint Research Centre for the European Atomic Energy Community. PROPOSED ACT : Council Decision. CONTENT : The current four-year supplementary research programme concerning the operation of the High Flux Reactor (HFR) of Petten expired on 31 December 2003. This proposal deals with a new three-year programme (2004 - 2006). Euratom and the Netherlands concluded an agreement concerning the High Flux Reactor (HFR) in Petten on 25 July 1961 for a period of 99 years. In order to execute it, the two parties concluded a long lease for 99 years conferring a right in rem (bail emphyteotique) on 31 October 1962. The proposal makes the following points: - HFR plays an important role in the EU in support to safe nuclear technologies, in materials research for thermonuclear fusion, in fundamental research and in medical research and applications. It is active in the improvement of the safety of the existing reactors. - HFR is also used by an association of European centres working on a new treatment for encephalic cancers by using the BNCT (Boron Neutron Capture Therapy) techniques. The HFR reactor also supports other medical research, like production of new type of isotopes and development of other technical BNCT-applications like for melanoma and other pathologies. - In the frame of thermonuclear fusion, several projects have been undertaken at the HFR to test structural and breeding materials for future fusion reactors. The emphasis on materials development lies with low activation properties obtained at higher temperatures as these promote both the environmental and thermal efficiency of the future fusion power plants. These experiments support the European Long-term Fusion Materials Development Programme. - Fundamental research makes use of neutron beams for the study of the material's-structure. This activity is under permanent development and contributes to the understanding of degradation mechanisms and their mitigation relevant to the safety of existing plants. - The reactor also produces isotopes necessary for more than 60% of the 10 million of medical diagnoses executed each year in Europe. Its qualities and reliability make it an important device for all the European pharmaceutical companies in this field. Moreover, through its location in Europe, the reactor's production is rapidly directed to the European medical centres. This is essential for the most currently used short-life isotopes and is crucial for Europe's autonomy of supply. - The HFR is also a training facility hosting doctoral and post doctoral students, as well as post doctoral fellows performing their research activities. FINANCIAL IMPLICATIONS : the proposal mentions only the contribution to come from two participating Member States, namely The Netherlands and France. The contribution is about EUR 30.6 million. This amount includes provisions for decommissioning. By mid-2004 the current licence held by the JRC will expire and a new operating licence will be granted to a third party who until now has been entrusted with the operation of the reactor undercontract with the JRC. The JRC and the partners have jointly engaged in an analysis in order to explore longer term options for the future exploitation of the HFR. With this end in view, the period 2004-2006 will be actively exploited to finalise this process and, if appropriate, to design a new legal framework for HFR operation beyond 2006.