

Call for partners in response to the FP7-Fission-2007 call: Management of Radioactive Waste: *Geological Disposal* Fission-2007-1.1.1: Phenomenology and performance assessment

Partners, so far:

Newcastle University:

ISRU Industrial Statistical Research Unit

EDC Engineering Design Centre

Nirex Ltd

... plus others



EU project expertise

- Newcastle University is a major UK institution with over 4500 staff and 17700 students
- Under FP6 Newcastle University has signed contracts for 91 projects worth €34million and has a further 50 projects in the process of negotiation

Project idea:

A strategy for an Integrated Systems Analysis Framework

- **The aim of this work is to develop a methodology to identify the probability that waste packaging will contain a latent fault**
- **Such problems can have significant consequences for repository operations**
- **The objective is to design and develop a system that can monitor radioactive waste systems during the packaging and transportation stages**
- **Monitor the packaging at all stages so that latent faults can be identified and remedied appropriately**

Project idea (continued): A strategy for an Integrated Systems Analysis Framework

FP7 EURATOM Call:

Management of Radioactive Waste: *Geological Disposal*

Fission-2007-1.1.1: Phenomenology and performance assessment

- **Both ISRU and EDC have carried out a pilot study with Nirex,**
 - a potential partner in this area
- **Have developed:**
 - an area of expertise in this area
 - created a basis for further development by designing an Integrated Systems Analysis Framework (ISAFe)
- **Scale of 3 to 5 years to design and provide a proof-of-concept system to:**
 - monitor the management of radioactive waste, and
 - to detect and prevent latent faults in the process
- **Budget: initial estimate €10M – dependent on number of partners**
- **Number of partners: at least 4, target 5 to 8**
- **ISRU have coordinated 2 EU Framework Projects, and ISRU & EDC have participated in a number of other FP's**

Additional expertise needed

- **Manufacturing and materials**
 - i.e. construction of waste disposal containers
- **Geology: experience of environmental disposal issues**
- **Other industrial collaborators**
 - i.e. European equivalents to Nirex
- **IT experience in developing distributed systems, databases etc.**
- *... open to any other suggestions*

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