



IT system tracks nuclear material

Daniel Thoma:

THE UK Atomic Energy Authority (UKAEA) has developed an IT system to help organisations comply with new European legislation concerning the tracking and tracing of nuclear materials.

Working with IT supplier Fujitsu Services, UKAEA has designed the Accountability and Tracking of Material (Atom) management software to help power stations and nuclear research laboratories adhere to reporting regulations from the European Commission's Directorate-General for Transport and Energy.

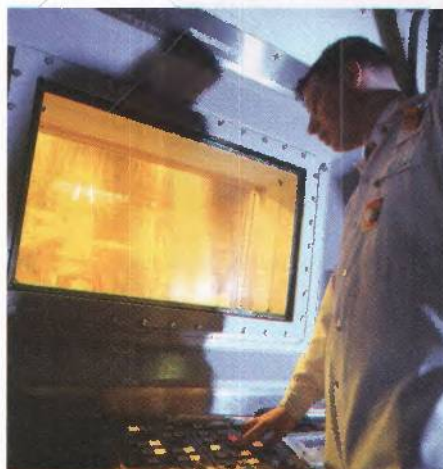
By March 2008, all European Union organisations that use nuclear materials will need to have adapted systems to include an XML format that allows the unique, sequential numbering of each report. Additional reporting systems about nuclear waste will also be required.

The UKAEA, working with Fujitsu, has developed its own system, which has received approval from national and international regulators. It is now looking to recoup its £5m development costs by providing the system as a product to other firms.

The web portal technology, which uses Microsoft servers and Oracle's relational database, can be accessed from desktops, and stores information about individual items of nuclear material.

'The whole system is based around each item of nuclear material, whether it is a tiny calibration sample or a transportation flask,' said Dik Third, nuclear materials advisor at UKAEA. 'We record descriptions, radiological data, physical make-up and how the material is used.'

UKAEA says it has achieved operational



Atom can automate reports for regulators

efficiencies of 40 per cent since installing the system at its Harwell, Windscale, Winfrith and Dounreay sites.

'We have thousands of items of nuclear materials that need to be recorded and tracked on a monthly basis,' said Third. 'If we didn't use a computerised database system then we would have a lot of people working on paper-based reports.'

'If the system knows something needs to be reported to the regulator it will generate a report for them, it does not rely on people making that decision.'

Atom also uses added security, including designated employee access rights, to ensure that sensitive data cannot be accessed by unauthorised people.

Further reading

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