

Development and Operational Experience of Global Positioning Systems for UF₆ Packages - ABSTRACT

Radioactive Material during transit requires additional physical security measures to ensure public safety at all times.

Every year approximately 1/2 a million transports of radioactive material occur, without issue or concern. However, these transports are only possible by the dedication and competence of the consignors and carriers and by using a variety of methods to ensure physical protection during transportation.

Global Positioning Systems (GPS) have been derived from military systems into the civilian logistics' industry, and are now used in a wide number of areas such a navigation systems and asset management.

For many years, the nuclear industry has been tracking vehicles transporting radioactive material. Urenco has now taken this technology to the next level, using an advanced intelligent tracking system to track its global consignments of enriched UF₆ fissile packages.

This paper will provide an overview of the GPS system Urenco has implemented in 2007, our operational experience so far, and benefits of the system.