

*Project title:* Dynamic Decisions in Maintenance**Start date** : 01.09.2005**End date** : 28.2.2009**Duration** : 42**# of Partners** : 17*Submitted by* : Kenneth Holmberg*Company* : VTT Technical Research  
Centre of Finland*Phone* : +358-20-5442285*Email* : kenneth.holmberg@vtt.fi*Address* : VTT / MK6, P.O.Box  
1000, 02044 VTT, Finland**Partners (Industrial, SME, Institutes):**

VTT Technical Research Centre of Finland (coordinator), Manchester and Sunderland University in the UK, Université Henri Poincaré in France, Tekniker in Spain, Växjö University in Sweden and VTT in Finland, FIAT (Italy), Volvo (Sweden), Goratu (Spain), Zenon (Greece), Wyselec and Hydrox-Pipeline (Finland), Martechnic (Germany), Engineering Statistical Services and Diagnostic Solutions (UK), Prisma Electronics (Greece) and IBK Krates (Estonia).

**Project objectives:**

The project objectives of DYNAMITE (Dynamic Decisions in Maintenance) are to produce an infrastructure for global e-maintenance to allow mobile monitoring of machinery and processes. It includes hardware and software as well as mobile devices for access to and reporting from the e-maintenance infrastructure. Further tools and methods are developed for cost-effective applications of maintenance technologies for continuous enhancement of companies' profitability and competitiveness.

**Project description:**

The maintenance of machinery is a huge cost to European industry. Studies over the last 20 years have indicated that around Europe, the direct cost of maintenance is equivalent to between 4 percent and 8 percent of the total sales turnover.

The monitoring of machines and processes for predictive maintenance and control is crucial for a sustainable and competitive industry in Europe. Distributed, autonomous monitoring is fundamental to the penetration of e-maintenance to the cutting edge of a high capital and highly productive plant.

DYNAMITE will create an infrastructure for mobile monitoring technology and create new devices which will make major advances in capability for decision systems incorporating sensors and algorithms. The key features include wireless telemetry, intelligent local history in smart tags, and on-line instrumentation.

**Field of Application:**

Industrial machinery maintenance