

Comon: Nuclear Command and Control Engineering Chain

Background

Amid increasingly scarce oil resources and booming energy demand from emerging countries like China and India, many countries are introducing or re-starting nuclear energy programs. Around 150 new nuclear plants are forecast to be built worldwide in the next 15 years. Moreover, renovation work on existing nuclear plants should significantly extend their lifetimes. All these nuclear plants —existing and future— will need a **reliable, integrated command and control system that is relatively easy to use**. The Comon R&D project aims to develop command and control software for nuclear plants using a novel approach that limits complexity and ensures safety.

Innovation

Most control and command systems are comprised of several different software applications. In addition, many operations are performed manually which creates discontinuity, introduces interpretation, and takes-up a lot of time. The longer time needed for checks and confirmations has a considerable effect on costs and production schedules.

The Comon project will **develop a command and control engineering chain for nuclear plants, covering all steps from overall plant design to construction of the command and control center**. It will use innovation to enhance existing methods, and automate them in order to boost productivity and minimize the risks related to design and construction.

Partners

Corporate

Atos Origin - Rolls-Royce Civil Nuclear

SME

Corys TESS

Research laboratories

UJF - Verimag

Key figures

Budget: €3 million

Duration: 30 months

Human resources allocated: 25 FTE

