

Third International Conference on Nuclear Knowledge Management - Challenges and Approaches



Contribution ID: 115

Type: oral

Applying Digital Technologies to Strengthen Nuclear Safety

Monday, 7 November 2016 15:45 (15 minutes)

The paper describes how the development of some information technologies can further contribute to the safety of nuclear facilities and their competitiveness. After repositioning the nuclear industry engineering practices in their historical and economic context, the paper describes five engineering practices or use cases widely developed especially in the aerospace industry: requirement management, business process enforcement by digitization of data and processes, facilities configuration management, engineering information unification, and digital licensing.

Information technology (IT) plays a mandatory role for driving this change since IT is now mature enough to handle the level of complexity the nuclear industry requires. While the detailed evaluation of the expecting gains in cost decrease or safety increase can be difficult to quantify, the paper presents illustrative benefits reachable by a development of these practices.

Country or International Organization

France

Primary author: Mr HUFFETEAU, Simon (Dassault Systèmes, Vélizy-Villacoublay, France)

Co-author: Mr ROY, Christophe (Dassault Systèmes, Vélizy-Villacoublay, France)

Presenter: Mr HUFFETEAU, Simon (Dassault Systèmes, Vélizy-Villacoublay, France)

Session Classification: PL03

Track Classification: Track 1: Strategic and cross-cutting KM issues in organizations