

JS3P: Junior Staff Programme Pilot Project

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Concept

The objective of the project is to allow junior staff members from the European Technical Safety Organisations (TSOs), IRSN, GRS and AVN, to work together with the final goal of creating a junior staff network, based on technical, cultural and personal interests.

These projects are to show junior staff members at a very early stage during their career the need for European collaborations. They are also a tool to explore new subjects of co-operation. It is an initiative that should strengthen the links between the organisations and contribute to establishing the future of nuclear safety in Europe.

A JS3P (*Junior Staff Programme Pilot Project*) is a project done jointly by "junior" staff members from the three TSOs, where experience of "seniors" is also integrated when needed. Compared to other collaborative activities, it has certain specific features. The JS3P favours staff exchanges, and technical meetings of several days should be planned during a project in order to encourage people to work together. Technical objectives are shared and the work is done jointly (*reports, articles*). The team involved in the JS3P should be as small as possible to favour its efficiency. The JS3P is short and easy to realise. Its duration is fixed to a maximum of about 12 months with the option to be prolonged.

Typical topics are bibliographic work, comparison issues, scientific surveys, benchmark exercises and prospective investigations on innovative ideas. They can be linked to existing joint projects and then form a smaller module integrated into the large project. Topics may concern prospective issues, tentatively investigating new topics that can be seen as exploratory co-operation projects. Subjects may also concern research issues that are not a priority but that deserve to be investigated as new attractive topics.

The JS3P is defined and managed by junior staff members. It is approved by a management board committee and supervised by a technical steering committee. The JS3P is currently tested during an exploratory period until EUROSAFE Forum 2007.



Members of the JSP at Eurosafe 2005 in Brussels

The first JS3Ps

Application of IPA methods to generic disposal concepts in clay:

The objective is to apply integrated performance assessment (IPA) tools used by AVN, GRS and IRSN to two generic and simplified models for the disposal systems in clay. The comparison of the results from different tool chains aims at a deeper comprehension of the safety functions in clay and of the IPA methodology in general. A. De Hoyos (IRSN), S. Keesmann (GRS), O. Smidts (AVN).

Scaling methods in thermal hydraulics:

The objective is to study the "Scaling methods" with the final goal to understand their outcomes in the field of thermal hydraulics codes for nuclear safety applications from joint bibliographical study. (*Proposal in progress*) N. Trégourès (IRSN), N. Reinke (GRS), A. Bucalossi (AVN).

Sharing experience in fracture mechanics for nuclear safety applications – Evaluation of the Master Curve methodology:

Within the framework of the surveillance of reactor pressure vessel integrity, the Master Curve methodology has been presented as an alternative to the ASME fracture toughness curve. The objective of this project is to share a common understanding of the Master Curve approach, and to compare the differences in conservatism with the ASME curve. I. Delvallée (IRSN), W. Uyttenhove (AVN).

Options and realisation of a web platform of communication:

The objective is to develop a web-platform to build a database for the JSP documents and to present the JSP to involved TSOs and externals. (*Proposal in progress*) S. Weber (GRS).

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