## ONET TECHNOLOGIES and ESI Group, an efficient and long term collaboration

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## **ONET TECHNOLOGIES**

The collaboration between ONET TECHNOLOGIES and ESI Group has lasted for many years since it began in 2003 with the first SYSTUS license of COMEX NUCLEAIRE and quickly gained momentum with the completion of the first stress reports relating to the first supply of MHI's 900MWe GVs., work which lasted several years from 2004 to 2008 to cover mechanical calculations, fluid mechanics and thermal-hydraulics calculations to meet regulatory requirements relating to pressure equipment. Since, this collaboration continues with important and innovative work, one of them being the project of the licensing of the compact nuclear fuel storage racks with the particularity of a complete innovative modeling of the storage pool and the direct consideration of the hydraulic and thermal coupling between the fluid and the fuel elements; the work lasted also several years with the VPM code.

Other field of collaboration, ONET TECHNOLOGIES uses the SYSTUS code daily for all its sizing and justification calculations for nuclear components that it supplies to EDF, CEA, ANDRA and ITER (steam generators, heat exchangers, special machines, handling equipment, piping systems, etc.) as well as for development studies (thermal treatment processes, fracture mechanics, fatigue with environment effects, complex non-linear calculations, etc.).

The ONET TECHNOLOGIES collaboration is set to continue, or even intensify as ONET TECHNOLOGIES aims to be more and more present in new nuclear constructions both in France and internationally.

Regarding the international it is important to stress that ONET TECHNOLOGIES, ESI Group and APAVE have joined forces through their Indian subsidiaries to form a Consortium (MINS Consortium) intended to provide engineering support to the Indian supply chain for the EDF project to build 6 EPRs at JAITAPUR.

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