

EASIT² Project Completed



The 2 year EASIT² project came to completion at the end of September. The main aim of this Leonardo da Vinci European Transfer of Innovation project was to set out the knowledge and skills that a competent simulation engineer should possess. Managed by a strong EU-wide partnership, the project was led by the University of Strathclyde. In addition to NAFEMS, the other project partners included AMEC Power & Process Europe, EADS Innovation Works, EnginSoft, E.ON, Geofem Ltd., Nevesbu, Nokia Corporation, RENAULT, SELEX Galileo and Tetra Pak, covering 9 key European industry sectors.

Project Deliverables

There are three deliverables from the project: an educational base, a competency framework and a competency-based professional qualification. Following the end of the project, NAFEMS has ownership of the three project deliverables detailed below.

1. Educational Base

The educational base is a set of statements outlining and explaining the competencies a competent simulation engineer should possess. It

covers areas of technology including: Finite Element Analysis; Mechanics, Elasticity & Strength of Materials; Materials for Analysis & Simulation; Fatigue; Flaw Assessment & Fracture; Non-Linear Effects & Contact; Beams, Membranes, Plates & Shells; Dynamics & Vibration; Optimisation; Plasticity; Computational Fluid Dynamics; Thermo-Mechanical Behaviour; Simulation Management; Buckling & Instability; Multi-Physics; Composite Material & Structures; Heat Flow & Mass Transfer; Creep & Time Dependency; Multi-Scale Analysis; Probabilistic Analysis; Noise, Acoustics & Vibro-Acoustics; Electromagnetics; Multi-Body Dynamics.

Within the educational base, links will be provided to relevant books and training courses that can be utilised by individuals to fulfil the competencies contained within the educational base.

2. Competency Framework

The Competency Framework is a computerised system that allows the skills and competencies developed by individuals to be tracked and logged. This can then be used by individuals to plan and monitor their

development as a simulation engineer throughout their career. The competency framework can also be used by organisations as a database of their staff competencies - individually and of their combined workforce.

3. Competency-Based Professional Qualification

The Professional Qualification is a competency-based replacement for the NAFEMS 'Registered Analyst Scheme' (RA Scheme) based around the competencies set out in the Educational Base and Competency Framework. The current 'RA Scheme' attempts to qualify the experience and skills of engineering analysts and simulation engineers through a series of methods including interviews, references and tracking of experience using a points based system. Its replacement will be a competency-based equivalent with an electronic opposed to paper-based application process.

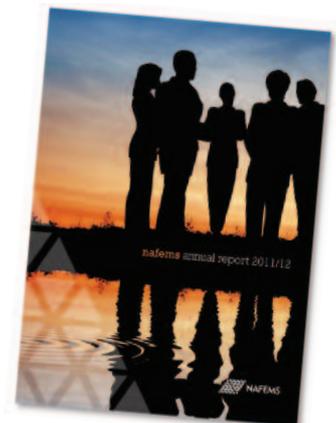
The three deliverables will be officially launched by NAFEMS in 2013. Further information will be available in January's issue.

NAFEMS Collaborates with



NAFEMS and the International Council on Systems Engineering (INCOSE) have announced a joint relationship for mutual participation and collaboration for the advancement of engineering simulation and model based systems engineering. This collaboration includes the implementation of a joint cross organizational working group on Systems Modeling & Simulation. NAFEMS will launch a new international Technical Working Group (TWG) in concert with INCOSE to promote a deeper understanding of lifelike behaviour to integrate

mechanical analysis and simulation within their Model Based System Engineering initiative. Additionally, through this collaboration NAFEMS and INCOSE will provide mutual assistance and support for international standards and develop a joint approach for interfacing with other organizations in related professional areas. The memo of understanding (MOU) was signed by both organizations at the 22nd Annual INCOSE International Symposium (IS2012) held in Rome, Italy.



The 2011/12 Annual Report is now available and was sent to all NAFEMS members via email. A copy has been included with this issue for NAFEMS Member Contacts.

The 2012 AGM will take place on October 16th in Frankfurt, Germany.