

EASIT²

Engineering Analysis Simulation Innovation Transfer²

update

NAFEMS is a key partner in the EASIT² project, which now has 6 months to completion. From October 2012 NAFEMS will assume exclusive rights for the maintenance and development of the project deliverables, for the benefit of members and the wider analysis and simulation community.

As shown in Figure 1, the project will produce several important deliverables forming a sound educational platform for future developments.

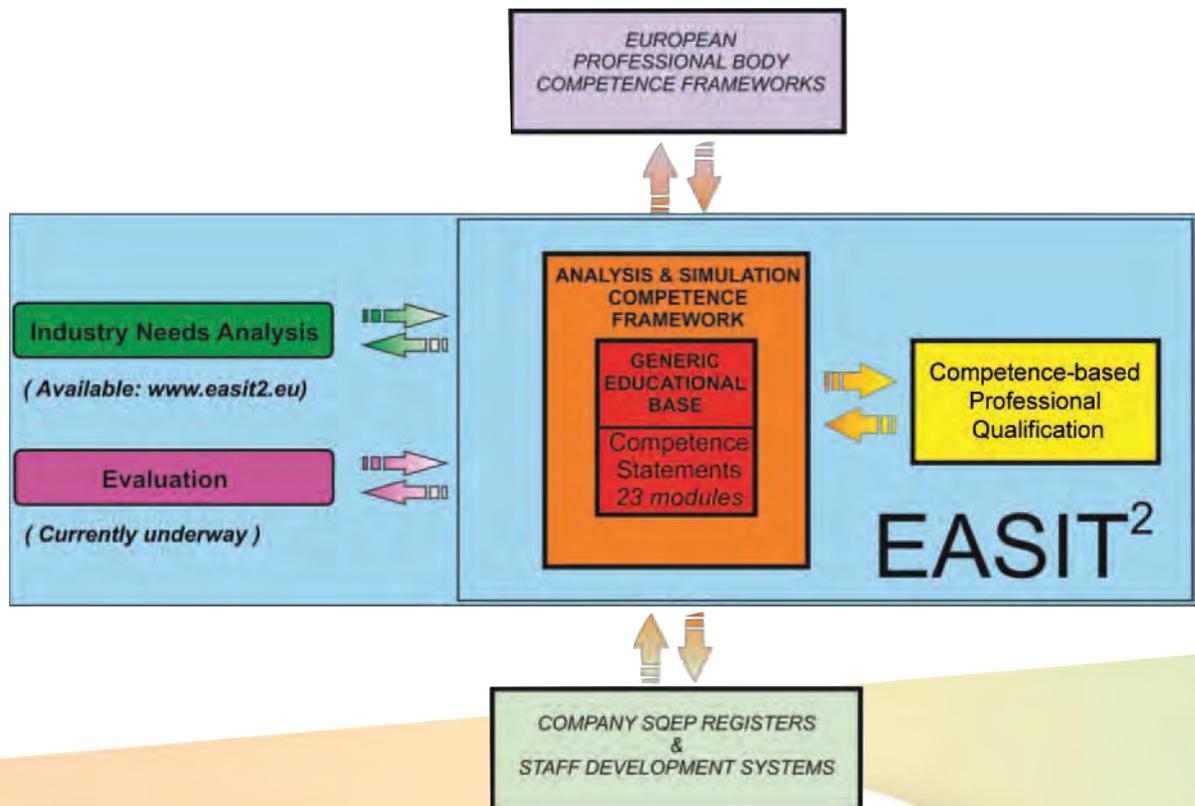


Figure 1: The EASIT Project Deliverables

The key project deliverable is a web-based **Competence Framework** that will allow individuals to direct their personal development. In addition, companies or managers will be able to document the analysis and simulation-related competences and experience of groups of staff. It is anticipated that such a framework will prove useful to organisations required to demonstrate the availability of suitably qualified and experienced personnel (SQEP) to clients and regulatory authorities. The reporting tools within the framework will provide the necessary details.

At the heart of the Competence Framework will be a freely available **Educational Base** consisting of non-industry-specific statements of competence covering the following areas:

*Fatigue (64);
Electromagnetics (48);
Optimization (80);
Simulation Management (184);
Finite Element Analysis (89);
Dynamics and Vibration (92);
Multi-physics Analysis (24);
Plasticity (63);
Multi-Scale Analysis (45);
Buckling and Instability (43);
Multi-body Dynamics (58);
Probabilistic Analysis (44).*

*Mechanics, Elasticity & Strength of Materials (54);
Materials for Analysis and Simulation (38);
Flaw Assessment and Fracture Mechanics (51);
Nonlinear Geometric Effects and Contact (29);
Beams, Membranes, Plates and Shells (51);
Composite Material and Structures (52);
Computational Fluid Dynamics (39);
Fundamentals of Flow, Heat & Mass Transfer (122);
Noise, Acoustics and Vibro-acoustics (59);
Thermo-Mechanical Behaviour (44);
Creep and Time-Dependency (38);*

The number of statements in each module is shown in brackets for each topic and each one has a link to identified sections within one or more references that can be used by individuals to develop understanding. The Educational Base is "open" and modules, statements of competence and references can be added, modified or deleted. For example, new industry or company specific statements of competence can be added or the entire text can be translated.

In addition to proving valuable for informal personal development, these competence statements will provide useful information for the development of short courses, web-based learning, text books and even formal masters level modules, aimed at delivering these competencies.

In each of the above technical areas there will be a small number of key competences that will be used in a new accreditation scheme to be launched by NAFEMS. In essence, the intention is that the scheme will be a modern and competence-based replacement for the existing points based Registered Analyst Scheme.

On completion of EASIT², the above developments will be taken forward under the auspices of the various NAFEMS Working Groups, in collaboration with industry partners, sector bodies and regulators as appropriate.

for more information visit

www.easit2.eu