



European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

End User e-Skills Framework  
Requirements Project

# End-User e-Skills Framework Requirements Project

8<sup>th</sup> Eastern European  
eGovernment Days 2010

Prague

23rd April 2010

Presented by Dudley Dolan



## Project Team:

- Neil Farren – ECDL Foundation
- Dudley Dolan – Trinity College / Q-Validus
- Christine Leitner – Centre for European Public Administration
- Wilfried Berlin - Airbus



# End User e-Skills Framework Requirements

## Project Objective:

To survey the requirements for an end-user e-skills framework as articulated by industry, certifying organisations, and individuals and propose practical tool sets derived from such a framework.

## Key Project Elements

- Examination of the current end-user e-Skills Framework landscape.
- Documenting different types of user for the framework.
- Choosing a research methodology to gather requirements.
- Developing the necessary research instrument.
- Surveying members of the four user groups.
- Workshop with key stakeholder representatives.
- Synthesis of the survey activity findings.
- Making recommendations of the possible framework and tool set structure to support end user e-Skills.
- Communicate the findings.

# European End User e-Skills Frameworks

## Norway

ICT skills included within the framework for basic skills for adults. 3 Levels of competence for each of the skills.

## UK

ITQ Framework, a unitized framework with each discipline having a standard.

Levels – Entry, Level 1, Level 2, Level 3.

E-skills UK – defined framework & standards.

## France

Min. of Higher Education and Research – Job Profiles Portal.

C2i – Certificate Computer and Internet

## The Netherlands

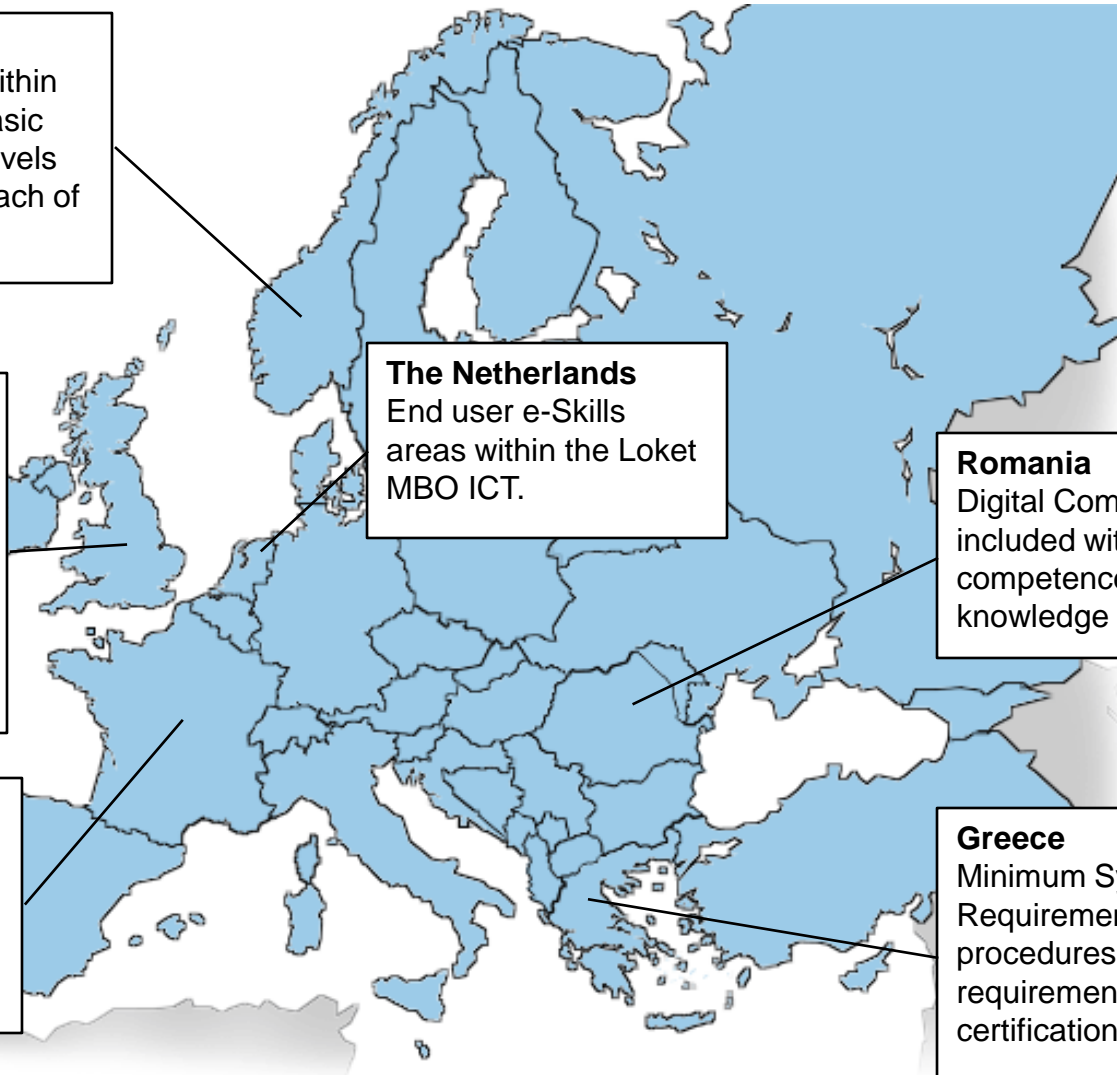
End user e-Skills areas within the Loket MBO ICT.

## Romania

Digital Competences included within 8 key competences for a knowledge society.

## Greece

Minimum Syllabus Requirements – procedures, regulations and requirements for private certification bodies in IT field.



## Research Methodology

- The team adopted a two pronged research approach involving:
- Quantitative Survey
  - Broad circulation of survey to a number of countries with & without an existing framework for end user e-skills.
  - Spread across 4 target groups
  - Including respondents from multiple sectors
- Qualitative Interviews
  - Focused qualitative interviews with a sub-set of those contacted for the survey



## Project Focus – End User e-Skills

*End user e-skills: the capabilities required for effective application of ICT systems and devices by the individual in either a work or personal environment. Individuals apply ICT systems as tools in support of their own activities, which is, in most cases, not ICT.*

*End user e-skills cover the utilisation of common generic software tools and the use of specialised tools supporting business functions. End user e-skills vary in complexity from introductory up to an advanced usage level. (Adapted from European e-Skills Forum 2004 definition)*

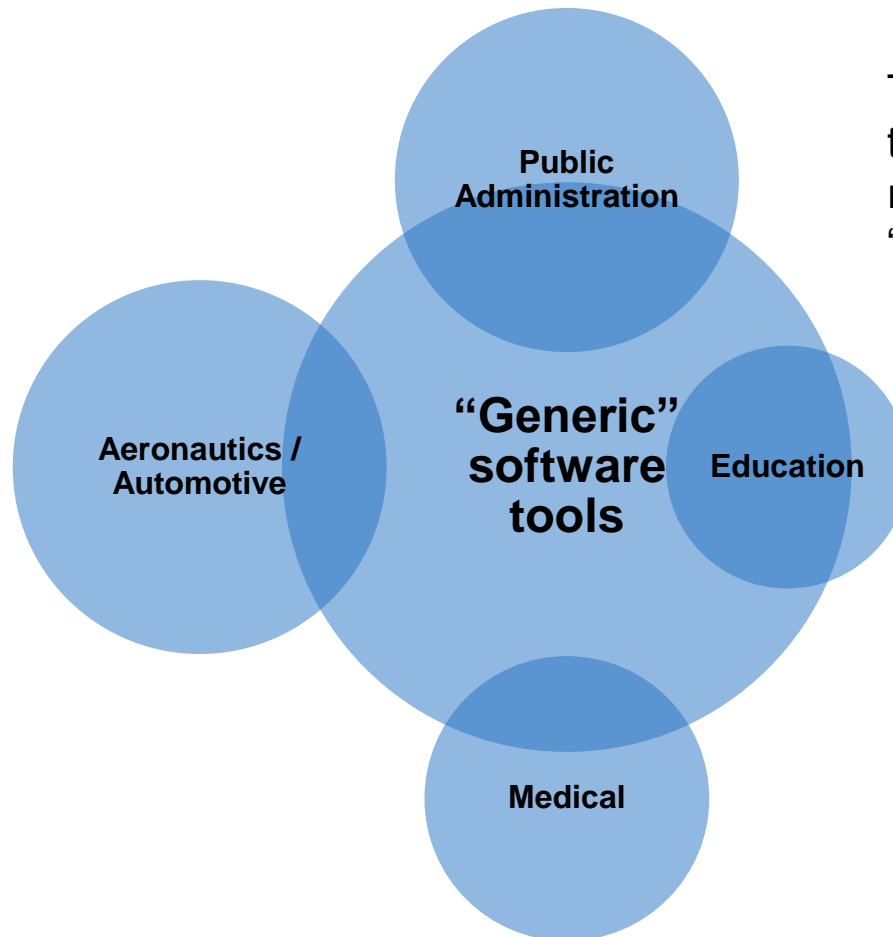


## End User e-Skills Framework

To further clarify the domain it was important to attempt to define an end user e-Skills framework:

*An end user e-Skills framework is a simplified conceptual structure used to categorise and express end user e-Skills, to various degrees of granularity, across proficiency level(s).*

## Sector Specific Approach to defining end-user e-Skills



The light blue area outside the "Generic" circle represents the specialised "sector" tools



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# Key Survey Results



## Target Groups (Potential Framework Users)

- Human resource and training functions
- Training and/or certification organisations
- Individuals
- Regulatory authorities

## Location of Survey Respondents



**118** respondents

**22** European Nations participated in the survey.

Responses also received from beyond Europe :  
Egypt  
China  
USA

## Key Survey Results

- Flexibility required in terms of detail (high to medium level of detail required by most respondents) and a preference for a three proficiency levels (e.g. beginner, intermediate, advanced).
- Framework should be based on competence and supported by knowledge and skills.
- Most popular applications to include in the framework were:
  - Word Processing, Spreadsheets, Presentations, Web Browsing, E-mail
- 81% of respondents stated that the framework was extremely important, very important or moderately important.
- 76% of respondents are not currently using any tools to address the needs the framework could fulfil.

## Benefits of an end user e-Skills framework (1)

### Training and Certification

- To provide a reference to National or European Qualifications Frameworks.
- To assist individuals in completing a curriculum vitae (e.g. Europass CV).
- To support Human Resource decision making and planning.

### Human Resources and Recruitment

- To assist individuals in completing a curriculum vitae (e.g. Europass CV).
- To act as a benchmarking tool to give a snapshot of employee e-Skills and highlight targets to improve e-Skills.
- To support cross referencing of certifications and qualifications.
- To assist in identifying appropriate candidates.

## Benefits of an end user e-Skills framework (2)

### **Government and regulatory bodies**

- To enhance individual mobility through use of a recognisable description of skills.
- To assist individuals in completing a curriculum vitae (e.g. Europass CV).
- To use as a reference framework for computer skills.

### **Individuals**

- To support cross referencing of certifications and qualifications.
- To allow me to enhance mobility prospects through use of a recognisable description of skills.
- To assist individuals in identifying required skills to participate in the Information Society.
- To evaluate training options or purchase training.



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# Key Interview Results

## Interviews – key points

- Framework could contribute to harmonisation of training, education and qualification recognition.
- Consistency of skills definitions would contribute to mobility, enhanced efficiency and assist in resource selection.
- The framework can assist in the cross referencing of qualifications and help in the development of training programmes.
- Potential to assist in identifying skills gaps using gap analysis, build job specifications and linking to appropriate training / certification programmes
- Framework could ensure skills are more related to work processes

## Interviews – key points (2)

- Framework should be easy to access (online and in print) and should be simple to use.
- Support from the EU for deployment of a future framework in companies and in the education system would be beneficial.
- Few felt that the framework could facilitate the development of high end power users to entry level IT practitioner roles.
- The potential for the framework to include sector-specific skills was welcomed.
- A multi-stakeholder partnership such as the European e-Skills Association could assist in promoting the framework.



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# **Mini case study – UK experiences with NOS**

## UK Case Study

- A mini case study of the UK experiences of the NOS framework has been included in the final report.
- The case was based on interviews & correspondence with :
  - BCS
  - E-Skills UK
  - UK Cabinet Office
- The NOS was seen to offer many benefits including:
  - Providing a clear articulation of end user e-skills for work.
  - Assisting education establishments in developing learning products.
  - Assisting individuals in carrying out self assessment of skills.
  - Assisting employers in assessing the skills of their workforce.



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Requirements Project

# Project Recommendations

## Framework Structure (1)

- We recommend a framework structure that has flexibility regarding the level of detail provided.
  - Should be able to expand from a low level of detail to provide further detail when required, including a list of competences associated with a domain.
- The framework should not provide too much detail to ensure it maintains relevance to the many target groups.
- We recommend that the framework structure is based around competences stemming from categories (e.g. Word processing). These competences can be further supported by knowledge and skills items across the three proposed proficiency levels.

## Framework Structure (2)

- We recommend that any future framework developments look to align the framework to existing national qualifications frameworks (which would in turn link with the EQF).
- We recommend the need for some awareness raising of sectoral framework developments, particularly with those developing and maintaining national qualifications frameworks.
- It is not recommended to look to include the end user e-skills framework within the current European e-Competence Framework, although it will be important to have some degree of consistency of approach to maintain the links between ICT user skills and ICT practitioner skills, within the broader European e-Skills strategy.

## Framework Content

- We recommend that the development of an end user e-skills framework begin with competence associated with the use of the most commonly used applications, as identified in our report:
  - Word Processing, Spreadsheets, Presentations, Web Browsing and e-mail.
- The framework will also be able to expand beyond these initial applications, following successful development of a process for framework development.

## Framework Tools

- We recommend that the framework structure has the necessary degree of flexibility to ensure that the framework can successfully provide the various benefits identified.
- We recommend that a future end user e-skills framework is designed to offer the potential for development of supplementary tools to assist the target groups in tasks such as skills gap analysis, assessments, and training planning.
- We recommend that a future framework should be used in the Computer skills and competences section of the Europass CV.
- We recommend that development of an end user e-skills framework is used to raise awareness of the overall importance of end user e-skills in work, personal life and society in general.

## Next Steps

- We recommend that CEN supports a follow-on “Developing a European End User e-Skills Framework” project to develop these recommendations into a working pan-European framework for end user e-Skills.
- We recommend that CEDEFOP monitor future development of the end user e-skills framework with a view to utilising the framework as a structure/input for the Computer skills and competences section of the Europass CV.
- We recommend that further research could be carried out to assess the impacts of existing national level end user e-skills frameworks.



## Finalising the Project

- The project will be completed and a final report prepared for submission on 31<sup>st</sup> May 2010.
  
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# Thank You!

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