

ICS 35.020

English version

Implementing e-Competence Framework into SMEs

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Foreword

This CWA (CEN Workshop Agreement) focuses on the issues raised by the implementation of the eCompetence Framework in ICT SMEs and to move SMEs towards a greater awareness of their e-competence needs and e-certification opportunities. This CWA was produced within the project Implenemntation of the European Ecompetence Framework 2.0 into ICT SMEs project, carried out in the framework of the CEN WS ICT Skills with finacing from the European Commission. The production of this CWA was formally accepted at the CEN WS ICT Skills plenary meeting on 25 May 2009. The draft CWA was presented and discussed with industry representatives during three Open meetings in Brussels on 15 September 2010, 03 February 2011 13 April:2011. The draft CWA was made available for a 60-day public comment from 31 May 2011 until 31 July 2011.

A list of the individuals and organizations which supported the technical consensus represented by the CEN Workshop Agreement is available to purchasers from the CEN-CENELEC Management Centre. These organizations were drawn from the following companies:

AICA
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The endorsement was carried out electronically for one week in August 2011

The CWA contains the following outcomes:

- The current set of ICT SME e-CF competences and levels with possible language simplifications
- A tool for e-competence need analysis within ICT SMEs that will replace the semi-structured questionnaire as new release shared and adjusted with SMEs

- An e-certification chart example based on e-CERT method (current CWA on e-Certifications) connecting ICT SMEs e-CF competences to e-certifications available on the market (both proprietary and open source)
- A synthetic document with conclusions of interviews within SMEs (including the files of each SME interviews as annex, already elaborated for the interim report)
- Overall considerations on costs of e-competence formal recognition (i.e. e-certifications) for SMEs

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Comments or suggestions from the users of the CEN Workshop Agreement are welcome and should be addressed to the CEN-CENELEC Management Centre.

1 Introduction

1.1 Project Objectives

The *Commission services priorities for ICT standardisation in 2009*, included in the *EC 2009 ICT Standardisation Work Programme*, mention the “European e-Competence Framework: methods and tools for the development, the promotion, the acceptance, the implementation and the maintenance of a European e-Competence Framework”. In accordance with this priority, the eCF into SMEs project is focused on implementing the European e-Competence Framework (eCF) into ICT SMEs (small and medium sized enterprises). This goal also opens up “the development of guidelines to facilitate the mutual recognition of training, transparency of qualifications” and related certifications, within SMEs.

With respect to this, the objective of the project is to move ICT SMEs towards a greater awareness of their e-competence needs and e-certification opportunities, considering that skilled people are key success factors for business development and competitiveness. In particular, the project sets out to answer some questions arising in relation to ICT SMEs:

- How SMEs’ e-competence requirements may be estimated;
- To what extent and how available competence-professional standards may be used;
- Which e-certifications are suitable for SMEs;
- To what extent they are different from and comparable to one another.

1.2 Project Outcomes

The targeted outcomes are as follows:

1. **A proposal for adapting the eCF according to SME requirements.** The eCF adaptation will likely include a subset of eCF competences with further specifications and possible new e-competences if needed.
2. **An easy tool for e-competence needs analysis within SMEs based on the eCF.** The questionnaire used to perform the in-field survey is improved by gathering experiences and needs expressed by pilot SMEs and related to identified SME clusters. Accordingly, an agile and easy device, which will allow local associations to check with SMEs if the subsets of their eCF competences are still up-to-date or need to be reviewed.
3. **An initial chart connecting ICT SMEs’ e-competences to e-certifications available on the market** (both proprietary and open source), based on the e-CERT mapping method (i.e. the CWA on e-Certification). This tool will be an initial reference to orient SMEs through e-certifications. Additionally, it may help SMEs better understand e-certifications, compare them and evaluate their costs with respect to the e-Competence Framework.

1.3 Target Group

The SMEs considered in this project are software houses, IT consultants and some VARs (Value Added Resellers) in the field of “Computer services” representing more than 60 % of the ICT SMEs in EU¹. The considered size is mainly micro (because they “represent 93 % of SMEs in ICT services” as reported by IDC)². However, some larger SMEs (i.e. up to 50 employees) have also been interviewed.

The typical ICT SME company is involved in delivering IT software, systems and services, either to its own customer base or as a sub-supplier to a larger enterprise. The sector is highly innovative: everyday many companies arise offering a new service, a new software, an ingenious new product or idea. Many of them will die but some survive and become prosperous and high-growth businesses.

Thus, the target group of software houses, consultants and VARs represents a substantial part of the ICT value chain, from software development to sales, installation, maintenance and service (in the broad sense).

2 Project Methodology

2.1 The Sample

The project has involved 30 ICT SMEs and 2 associations, within 6 countries including; France, Germany, Italy, the UK, Spain and Poland. Company size ranged from 1 to 50 employees with a special focus on micro enterprises (from 1 to 10 employees).

Interviewed ICT SMEs covered nearly the whole ICT process (see Figure 1) from SW development to selling, installation, maintenance, service (in a broader meaning), taking into account software houses, consultants.

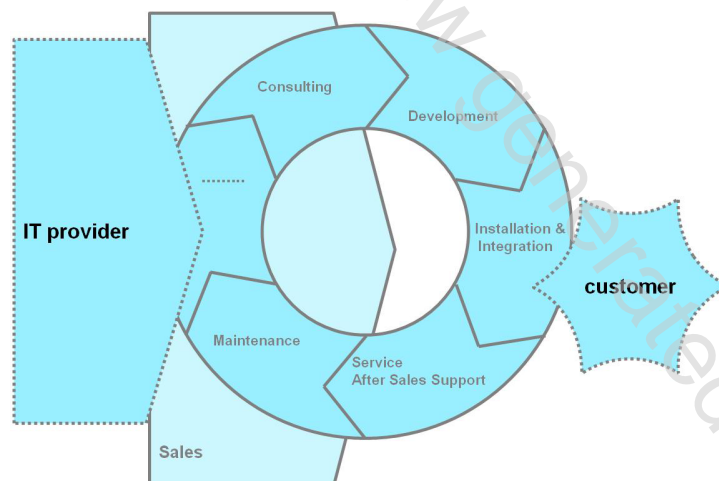


Figure 1 ICT SMEs business/work process provisional schema

¹ IDC, 2007, *Study on Innovative ICT SMEs in Europe (EU 25)*

² According to IDC: “The total number of ICT enterprises under 250 employees (SMEs) is 732.000, corresponding to 4 % of the total universe of European enterprises (excluding banking and the public sector). This includes the main ICT manufacturing industries, plus computer and telecommunication services. The largest subsector by far is Computer Services, counting almost half a million enterprises. Micro enterprises with 1 to 9 employees represent 93% of SMEs in ICT services”.