SLOVENSKI STANDARD
SIST-TP CEN/TR 16234-2:2016

01-oktober-2016

Krovni seznam e-usposobljenosti (e-CF) - Skupno evropsko okolje za poklicne strokovnjake v vseh industrijskih sektorjih - 2. del: Vodilo za uporabnike

e-Competence Framework (e-CF) - A common European Framework for ICT Professionals in all industry sectors - Part 2: User Guide

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Ta slovenski standard je istoveten z: **CEN/TR 16234-2:2016**

__ICS:__

03.100.30	Vodenje ljudi	Management of human resources
35.240.01	Uporabniške rešitve informacijske tehnike in tehnologije na splošno	Application of information technology in general

SIST-TP CEN/TR 16234-2:2016 en,fr,de

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TECHNICAL REPORT

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

CEN/TR 16234-2

August 2016

English Version

e-Competence Framework (e-CF) - A common European Framework for ICT Professionals in all industry sectors - Part 2: User Guide

This Technical Report was approved by CEN on 4 July 2016. It has been drawn up by the Technical Committee CEN/TC 428.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

CEN/TR 16234-2:2016 (E)

Contents

Page

European foreword

This document (CEN/TR 16234-2) has been prepared by Technical Committee CEN/TC 428 "Project Committee - e-Competences and ICT Professionalism", the secretariat of which is held by UNI.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes CWA 16234-2:2014.

This Technical Report is the second part of the EN 16234 series, which is made up of the following three parts and which will replace CWA 16234-1:2014, CWA 16234-2:2014 and CWA 16234-3:2014:

— EN 16234-1, *e-Competence Framework (e-CF) - A common European Framework for ICT Professionals in all industry sectors - Part 1: Framework*

— CEN/TR 16234-2, *e-Competence Framework (e-CF) - A common European Framework for ICT Professionals in all industry sectors - Part 2: User guide*

— prCEN/TR 16234-3, *e-Competence Framework (e-CF) - A common European Framework for ICT Professionals in all industry sectors - Part 3: Methodology*

Part 1 is a fully standalone document, whilst part 2 and 3 rely on part 1.

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A relationship with the European ICT Professional Profiles (CWA 16458:2012, original CWA updated by e-CF 3.0 competences and re-published in 2014) is established. A number of relevant e-Competences and their applying level(s), as defined by this standard, are assigned to each Profile.

CWA 16234-4:2014, composed of 15 case studies illustrating e-CF practical use from multiple sector perspectives, remains published and can be downloaded for free from the internet (*Official e-CF website: www.ecompetences.eu*).

CEN/TR 16234-2:2016 (E)

Introduction

EN 16234-1 was established as a tool to support mutual understanding and provide transparency of language through the articulation of competences required and deployed by Information and Communication Technology (ICT) professionals.

The underpinning philosophy and principles adopted during the standard's construction that are vital for its application and for successive updates are explained in the Introduction of EN 16234-1.

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1 Scope

This Technical Report supports understanding, adoption and use of EN 16234-1. It supports Information and Communication Technology (ICT) stakeholders, in particular:

— ICT service, demand and supply companies;

— ICT professionals, managers and human resource (HR) departments;

— vocational education institutions and training bodies including higher education;

— social partners (trade unions and employer associations);

— professional associations, accreditation, validation and assessment bodies;

— market analysts and policy makers; and

— other organizations and stakeholders in public and private sectors across Europe,

to adopt, apply and use the framework in their environment.

2 Normative reference

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 16234-1, *e-Competence Framework (e-CF) - A common European Framework for ICT Professionals in all industry sectors - Part 1: Framework*

3 Terms, definitions, symbols and abbreviated terms

For the purposes of this document, the terms, definitions, symbols and abbreviated terms given in EN 16234-1 apply.

4 General principles

This Technical Report provides guidance on how to apply EN 16234-1 from multiple ICT stakeholder perspectives. It addresses the fact that a European reference set of ICT competence definitions is unlikely to match all company or institution's needs perfectly. EN 16234-1 is intended for guidance and is designed to provide a common shared reference tool which can be implemented, adapted and used in accordance with ICT stakeholder requirements. The following implementation guidance is structured by stakeholder groups.

5 Adapting EN 16234-1 as a shared European reference to specific needs

5.1 Case studies

To support EN 16234-1 application within multiple environments, a series of illustrative case studies provide examples, benefits and hints of how to make best use of EN 16234-1. They relate to practical EN 16234-1 application experiences and have been elaborated together with EN 16234-1 applying organizations throughout Europe.

All case studies have been published as Part 4 of the European e-Competence framework version 3.0 CWA 16234-4:2014 and they can be downloaded for free from the internet (Official e-CF website:

CEN/TR 16234-2:2016 (E)

www.ecompetences.eu). Table 1 provides an overview of the case studies published together with their respective key perspectives on EN 16234-1 application.

Table 1 — 15 case studies covering multiple ICT sector perspectives – overview

Case study	Title	Key perspectives
A	e-CF in large ICT demand organizations	• Job profile creation • Internal ICT staff development • Cross company and cross border common language
B	e-CF in a corporate/ ICT supplier environment	• e-CF for consultants • Identifying training needs • Training development • Competence gap identification
C	e-CF for SME's - competence need analysis and managerial dashboard	• Application in a micro enterprise environment • e-CF as a marketing aid • e-CF as a business development tool • Competence need analysis • Linking business strategy and competence development • Develop or buy new competences • e-CF for SME consultants
D	SME competence assessment and business card creation based upon the e-CF	• SME competence self-assessment • Business card creation • Business capability • e-CF for SME consultants
E	e-CF to build SME job descriptions	• Job description development • Intercompany communication • Recruitment aid
F	e-CF for qualification providers	• Matching education supply to market needs • The difference between competence development and traditional learning • Student motivation from a competence approach • EQF and e-CF compliance
G	e-CF in a certification environment	• Matching certification supply to market needs • Increasing transparency in the European e-Skills landscape
H	e-CF for ICT professional self-assessment	• Self-assessment • CV / Self promotion

6

Case study	Title	Key perspectives
I	e-CF for linking e-curricula supply and demand	• Competence connected to learning outcomes • e-CF and EQF compliance • Personal career development • Competence based e-curriculum
K	e-CF for ICT professional associations	• Assessment • Benchmark criteria • Community building
L	e-CF for ICT training quality improvement	• Specialized competences • Specialist role development • Matching education supply and demand
M	e-CF for assessment and career tools	• Assessing an ICT professional's capability • Recognition of formal and informal learning
N	e-CF for National and EU policy makers	• Ensuring qualified ICT workforce in the long term • Communication between policy makers and ICT business • e-Curricula building • Cross-European common language
O	e-CF to relate or integrate to other frameworks	• e-CF use in an established structure • Relating the e-CF to other frameworks • Relating workplace and qualification perspective by EQF and e-CF
P	e-CF for European ICT professional Profiles creation	• Including competence into a job Profile • Communication between HR, management and ICT professionals • Building and linking local profiles to a recognized European structure

5.2 Human resources management in ICT services (demand and supply – public and private)

5.2.1 General

Competence management, people development and HR planning are valuable components of employee management within companies and the public sector.

At a minimum, each employee should have:

— *In an existing role*, a clear description of the position to which he/she is assigned, including a mission statement, responsibilities, activities, outcomes, performance indicators and resources/ experience/ certifications required to perform the job correctly.

— *In a new role*, a competence assessment to measure the gap between his/her knowledge, skills and experience and those required by the position. When necessary, an individual development plan is established to fill the gaps.

At a more intensive level of people management, the following points are relevant:

— position descriptions derive from part of one or several job profile structures, each job profile including the levels of required competence;

— each job profile is part of a career path, allowing employees to understand progression routes;

— HR strategy and annual individual objectives derived from company needs (or ambitions);

— individual development plans taking into consideration annual individual objectives;

— using training catalogues, a training plan is created from consolidation of combined individual development plans.
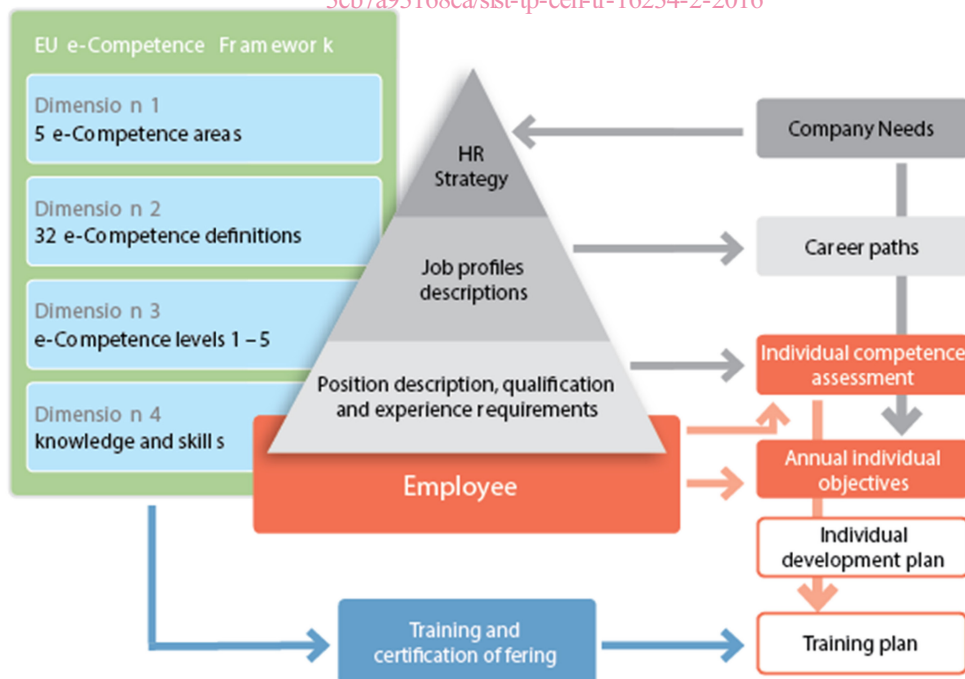
Figure 1 — The use of the European e-Competence Framework is multiple within ICT organizations

The four dimensions of EN 16234-1 support the employee and the competence management process on multiple levels. As shown in Figure 1, it provides a consistent level of granularity and continuity.

For further practical illustrations, see Table 2.

Table 2 — Case studies illustrating EN 16234–1 use in support of HR management (Source: CWA 16234–4:2014)

Case study	Title	Key perspectives
A	e-CF in large ICT demand organizations	• Job profile creation • Internal ICT staff development • Cross company and cross border common language
B	e-CF in a corporate/ ICT supplier environment	• e-CF for consultants • Identifying training needs • Training development • Competence gap identification

5.2.2 Small and medium-sized enterprises (SMEs)

There are differences between ICT SMEs and larger organizations when considering the application of competences. Such differences are more related to business approach than size. In particular, agile SMEs focused on continuous improvement and innovations are likely the target groups of EN 16234-1.

However, size may influence:

— the type of e-competences considered as relevant for the organization; namely, the smaller the enterprise, the smaller its interest in standardization and formalization of internal processes;

— the perspective of e-competence application and use. The smaller the enterprise, the greater the interest in e-competences, for internal business purposes;

— EN 16234-1 as an internal tool becomes more and more relevant when size increases.

In this ICT SME context, types of EN 16234-1 application may be as follows:

1. self-assessment, addressing people, the organization, the company as such;

2. company presentation to clients, as a business card;

3. support company growth, as a compass, a managerial dashboard.

The key perspectives of the possible EN 16234-1 applications mentioned above can be summarized as follows:

— Competence need analysis tool;

— Marketing aid;

— Competence development tool linked consistently to the business strategy.

Mapping skills and competence with EN 16234-1 is straightforward. Enterprises may access EN 16234-1 vocabulary and definitions and, if doubts arise, consult this Technical Report or check with the official e-CF website where FAQs and answers are available.

CEN/TR 16234-2:2016 (E)

For small ICT enterprises, it is very useful to demonstrate ownership of competences required to fulfil client demands. Customers no longer look for technical skills only; they seek business partners able to work in teams, manage projects and processes, and communicate.

EN 16234-1 describes such skills within full competence descriptions. Using EN 16234-1, enterprises are able to describe technical and soft competences inclusively, a key ability when managing relationships with other companies and stakeholders as it enhances the quality of communication.

Therefore, EN 16234-1 is an effective tool to help SMEs identify, articulate and communicate their complex 'know-how'.

Moreover, Dimension 2 of EN 16234-1 can support SMEs in identifying e-competences that describe their core activities and their business. EN 16234-1 provides the structure and appropriate articulation by which management can analyse current competence capability, future requirements and support the development of business strategy.

Generally, the SME start point for use of EN 16234-1 is analysis of Dimension 2. Some guiding questions to help navigate EN 16234-1 for e-competence need analysis, linked to the business strategy, are as follows:

— Is this competence coherent with my business?

— Have I ever fully practiced this competence?

— If I haven't, for what business aims would it be useful?

The aim is to analyse the relevance of e-competences to the mission and strategy, recording whether such e-competences are currently prevalent within the company or not and at which "intensity"; high, medium, low.

If the exercise is aimed at building a business card for clients, then for each e-competence identified as prevalent in the company at a high level, the entrepreneur and staff need to list specific evidence illustrating those e-competences. The evidence examples may be products/services, developed projects, examples of clients, etc. Then the entrepreneur and staff should also be able to identify assessment criteria to evaluate their e-competences.

The task of identifying assessment criteria is supported by EN 16234-1 as the operational descriptions implicitly include the way of evaluating them.

Finally, to make ICT SMEs more familiar with navigating EN 16234-1, the entry point to reach the 40 e-competences does not need to follow Dimension 1, Plan, Build, Run, Enable and Manage but may deploy an alternative route using:

1. Company Overview;

2. Markets and Customers;

3. Innovation and Research;

4. Business environment and business competences.

To each of these four categories a set of e-Competences has been related. This alternative navigation approach called the EN 16234-1 functional view looks as in Table 3.