



e-Competence Framework:

the SME way through the European standard
on digital competences

What is the e-Competence Framework?

Who should use the e-CF?

Why use the e-CF?

Step-by-step guide to using the e-CF
(How to use the e-CF)



Introduction

This SME User Guide provides support for European small and medium-sized enterprises (SMEs) to apply the EN standard 16234 on the e-Competence Framework (e-CF). It aims to help SMEs understand and make practical use of the e-CF, whereas the standard itself follows a global approach.

What is the European e-Competence Framework?

The European e-Competence Framework (e-CF) is a common reference for ICT knowledge, for use by SMEs in all industry sectors across Europe. A key part of the European Commission's Digital Agenda, the e-CF has a sector-specific relationship to the European Qualifications Framework (EQF).

The e-CF defines 40 digital competences, all of which can be flexibly implemented. Aimed at Information and Communication Technology professionals, the e-CF describes general and comprehensive e-Competences, specified at five proficiency levels. These e-Competences can be customised and adopted by enterprises, professionals and stakeholders in different contexts.

The e-CF can be applied by various types of organisation in both the public and private sectors. It can also be used to promote clearer understanding of digital organisations' competence needs, as it uses a common language for competences, skills and capability levels that are easily understood across Europe.

What are competence, knowledge, skills and attitude?

Competence

'A demonstrated ability to apply knowledge, skills and attitudes for achieving observable results.'

Knowledge

The 'set of know-what' (e.g. programming languages, design tools, etc.) and can be described by operational descriptions.

Skills

The 'ability to carry out managerial or technical tasks' – which are components of competences and specify some core abilities that form a competence.

Attitude

The 'cognitive and relational capacity' (e.g. analysis capacity, synthesis capacity, flexibility, pragmatism, etc.) plus the motivation to do something. Skills and knowledge are the main components of competence, whereas attitudes are the glue, binding them together.

The e-Competence Framework is now a European standard: **EN 16234**

In 2016, the e-CF became a European standard, adopted automatically by every National Standardisation Body in Europe. Established by consensus and approved by the CEN, this standard provides rules, guidelines or characteristics for professional ICT activities – for common and repeated use.

So every company in the 28 European Countries can refer to a unique, common language suitable for managing professional ICT competences in the digital world.

Who should use the e-CF?

- ICT micro-, small and medium-sized enterprises that develop, install, and maintain software, digital services and products as well as SMEs using ICT services and products;
- Organisations and/or individuals who need to have a common, European benchmark to assess or certify the ICT competences of suppliers, employees and consultants;
- Public authorities that want to improve the specifications of digital public procurement contracts;
- Professionals who want to qualify themselves.



Why use the e-CF?

Before the publication of EN standard 16234 on the e-CF, there were no European rules or common language to describe digital competences, jobs and roles. This made it hard to evaluate CVs and commercial offers. Thanks to the introduction of the e-CF, SMEs have access to a common tool to define and evaluate digital competences, knowledge and skills. Here are several different **use scenarios for EN 16234**, applicable especially to SMEs:

Self-assessment

Identifying and raising awareness of digital competences, skills and knowledge in a company.

Identifying competence gaps in a company

Identifying which competences are needed to fill existing gaps in a company.

Recruitment

Setting requirements useful for the evaluation and recruitment of staff.

Building job profiles

Introducing a common approved methodology to describe professional profiles for Europe-wide reference, to help human resources management, e.g. database administrator, developer, digital media specialist, ICT consultant, ICT operational manager, etc.

Curricula Vitae

Defining a common language to write clear and harmonised CVs, in support of the European digital single market.

Training

Providing guidelines to define training schemes and other ways of learning, e.g. formal training or 'learning-by-doing'.

Public procurement tendering

Implementing the e-CF standard significantly improves the process of public procurement. SMEs can enhance their credibility as bidders, by submitting offers that call on the standard's common European language.

How the e-CF is structured



Example: IT User Support

European e-Competence Framework

Dimension 1 e-Comp. area	C. RUN				
Dimension 2 e-Competence: Title + generic description	C.1. User Support Responds to user requests and issues, recording relevant information. Assures resolution or escalates incidents and optimises system performance in accordance with predefined service level agreements (SLAs). Understands how to monitor solution outcome and resultant customer satisfaction.				
Dimension 3 e-Competence: proficiency levels e-1 to e-5, related to EQF levels 3 to 8	Level 1	Level 2	Level 3	Level 4	Level 5
	Interacts with users, applies basic product knowledge to respond to user requests. Solves incidents, following prescribed procedures.	Systematically interprets user problems and identifies solutions and possible side effects. Uses experience to address user problems and interrogates database for potential solutions. Escalates complex or unresolved incidents. Records and tracks issues from outset to conclusion.	Manages the support process and accountable for agreed SLA. Plans resource allocation to meet defined service level. Acts creatively, and applies continuous service improvement. Manages the support function budget.	–	–
Dimension 4 Knowledge examples <i>Knows / aware of / familiar with</i>	K1 relevant ICT user applications K2 database structures and content organisation K3 corporate escalation procedures K4 software distribution methods and procedures for fix application and file transmission methodologies applicable to software fixes K5 sources of information for potential solutions				
Skills examples <i>Is able to</i>	S1 effectively interrogate users to establish symptoms S2 analyse symptoms to identify broad area of user error or technical failure S3 deploy support tools to systematically trace source of error or technical failure S4 clearly communicate with end users and provide instructions on how to progress issues S5 record and code issues to support growth and integrity of online support tools				

Step-by-step guide to using the e-CF

Download or purchase the e-Competence Framework (e-CF)

<http://www.ecompetences.eu/get-the-e-cf/>



Download or purchase EN standard 16234 (e-CF)

This European standard is available for purchase at the national sales points of National Standardisation Bodies (NSB). The price of the standard may vary significantly from one NSB to another.

The e-CF standard is available in English, French and German.

Select and understand the e-Competence

e.g. 'User Support' (C.1) competence:

- Dimension 1 outlines the e-Competence needed at the 'Run' phase of an information system;
- Dimension 2 describes what the expert must do or understand to apply/demonstrate the 'User Support' e-Competence;
- Dimension 3 defines the relevant proficiency levels. For example, a level 1 expert interacts with the user and answers questions; a level 3 expert manages the support process.

Assess the need for knowledge and skills

Dimension 4 lists the knowledge and skills that an expert must fully or partly possess.

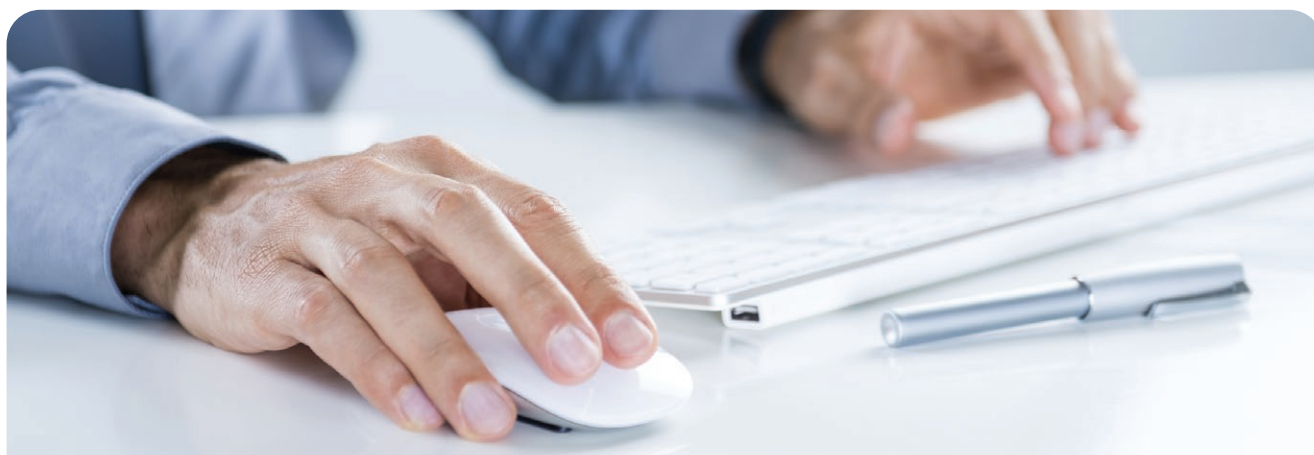
Note that this is not an exhaustive list. Standard users of the e-CF can also call on additional knowledge and/or skills.

Do you need new knowledge and/or skills?

New references to knowledge and skills can always be added to the e-CF, but only if reference is made to the e-CF methodology, syntax and vocabulary. For organisations and professionals, adding new references can make all the difference to their competitiveness when hiring staff or developing competences.

Looking for further information or help?

If so, please get in touch with your National Standardisation Body or the National member of the European DIGITAL SME Alliance.





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