



# Illustrative Case Study (P)

## e-CF for European ICT Professional Profiles creation

**ABOUT THE e-CF.** The European e-Competence Framework (e-CF) provides a reference of 36 competences as required and applied at the Information and Communication Technology (ICT) workplace, using a common language for competences, skills and capability levels that can be understood across Europe. As the first sector-specific implementation of the European Qualifications Framework (EQF), the e-CF was designed and developed for application by ICT service, user and supply companies, for managers and human resource (HR) departments, and for education institutions and training bodies, and other organizations in public and private sectors.

The framework was developed under the umbrella of the CEN ICT Skills Workshop through a process of close cooperation between ICT business and human resource (HR) experts, stakeholders and policy institutions from many different countries and at the EU level. Published by CEN for the first time in 2008 and followed by a further enhanced version 2.0 in 2010, the framework brings benefits to a growing community of users throughout Europe and overseas.

To support e-CF application within multiple environments, a series of illustrative case studies provide examples, benefits and hints of how to make best use of the e-CF.

**The following case study illuminates the e-CF application from the viewpoint of European ICT Professional Profile creation, as a shared EU reference for all type of stakeholders interested in ICT Profile descriptions.**

### Key perspectives

- Including competence into a job profile
- Communication between HR, management and ICT professionals
- Building and linking local profiles to a recognised European structure

## Summary

From a start point of several hundred, profile titles and thousands of descriptions of jobs and role profiles across Europe; the aim of creating European ICT Professional Profiles was to provide a high level reference to facilitate, connect to or provide inspiration for any ICT related profile build.

There are two significantly different approaches taken by management when developing constructs to establish clear understanding of a job or role requirements to be performed by ICT professional staff. The first alternative is a structured job description, developed either locally, regionally, or nationally to reflect the content of a job and its key components including tasks, performance criteria and qualifications required. The second is less detailed but more flexible and depends upon defining the competence requirements of a specific job or role. Choices about which approach to take are influenced by culture of the organization or maybe the country and also the national education system. As, in general, most decisions have merits and disadvantages, the approach to job definitions involves the same dilemmas. It is, however, possible to merge these two options and benefit by mitigating the disadvantages of both through deploying the e-CF as a key component of a job role.

A combination of these concepts may be addressed at many levels local, regional levels or national. To facilitate a broader understanding of how this can be achieved and to provide a framework structure for job profile creation, a family of European ICT Professional Profiles has been developed under the stewardship of the CEN ICT Skills Workshop community. The 23 ICT Professional Profiles are constructed at a European level and its principles have been established based on ability to relate and use the same structure for more granular approaches required such as workplace applications.

## e-CF Value

Incorporating the content of the e-CF within a job/role profile provides a substantial component of any profile and ensures that the profile has a European wide connection. Furthermore the currency of the e-CF will ensure the profile will benefit from the common language contained within each competence. Of significant benefit to any profile builder, is the availability of the pre prepared descriptors from the e-CF and avoid starting from a 'blank canvas'. The modular construction of the e-CF readily supports mix and match of competence components and provides clearly articulated statements for inclusion across a broad range of specialist ICT roles.

## Challenges encountered

Job or role profiles contain a number of elements and the decision about which to include within the European ICT Professional Profiles family required a consensus approach from many contributors across Europe. The elements chosen were based upon the need to make them relevant to a broad ICT population and for long-term sustainability. There are thousands of job/role profile titles in existence across Europe and in order to relate to each the granularity of the constructed profiles needed to be very high. A subjective decision was taken to create around twenty profiles and this determined the level of detail encompassed in each profile.

### Benefits highlighted

The availability of the e-CF made it possible to anchor each profile in a real world environment, firmly connected to the knowledge, skills and capabilities required. The competences articulated within the e-CF provided clear pointers to the tasks that needed to be identified. The e-CF provided a commonly recognized EU competence language and a bridge between the two differing viewpoints of competence and job profiling, facilitating the application of competence management within the traditional approach of job profiling or structuring. This leads to better understanding by management of the roles within their organizational environment and provides an interpretation that is useful to educational institutions for guiding curriculum development matching industry needs.

### The method adopted

The European e-job profiles were structured and based upon cross European input and feedback under the governance of the CEN plenary workshop. A standard format was developed and used as a template for each profile. The template is reproduced below.

<b>Profile title</b>	<b>Gives a commonly used name to a profile.</b> Identification exercise and multi-stakeholder agreement as described in chapter 2.1.		
<b>Summary statement</b>	<b>Indicates the main purpose of the profile.</b> The purpose is to present to stakeholders and users a brief, concise understanding of the specified ICT Profile. It should be understandable by ICT professionals, ICT managers and Human Resource personnel. The structure should consist of a short sentence (up to approximately 15 words). It should not repeat the entire ICT Profile name. It should provide a statement of the job's main activity.		
<b>Mission</b>	<b>Describes the rationale of the profile.</b> The purpose is to specify the designated job role defined in the ICT Profile. It should provide the performance context of the job within an organizational structure. The following verbs may be used within the description or at least for structuring the thinking about how to express the mission: <i>Guarantees, Ensures, Contributes.</i>		
<b>Deliverables</b>	<b>Accountable (A)</b>	<b>Responsible (R)</b>	<b>Contributor (C)</b>

	<p><b>Specifies the Profile by key deliverables.</b></p> <p>The purpose is to illuminate the ICT Profiles and to explain relevance including the perspective from a non-ICT point of view.</p> <p>Also add the dimension of responsible following the RACI model</p> <p>Select only the most important deliverables, which help to illustrate the ICT Profile, not more than 5 in total (A,R,C together). Mention the level of responsibility – A accountable, R responsible, C contributor – to be carried out by the profile.</p>
<p><b>Main task/s</b></p>	<p><b>Provides a list of typical tasks to be performed by the profile.</b></p> <p>A task is an action taken to achieve a result within a broadly defined context.</p> <p>Tasks may be associated with deadlines, resources, goals, specifications and/or the expected results. These elements depend upon the context of the task and may be omitted, however the action must always be described.</p> <p>A task is defined by a short description using a verb and the objective or goal of the action. List no more than 10.</p> <p>SELECTION CRITERIA: A task contributes to define a Profile.</p>
<p><b>e-CF competences assigned</b></p>	<p><b>Provides a list of necessary competences (from the e-CF) to carry out the mission.</b></p> <p>Must include 1 up to 5 competences.</p> <p>Level assignment is important. Can be (usually) 1 or (maximum) 2 levels.</p> <p>SELECTION CRITERIA: A competence is a consequence of the previously derived Profile definition and helps to separate profiles one from another.</p>
<p><b>KPI Area</b></p>	<p><b>Based upon KPIs (Key Performance Indicators) a KPI area is a more generic indicator, congruent with the overall profile granularity level. It is provided to add depth to the mission.</b></p> <p>Not prescriptive. Non-specific measurements. Use general examples.</p> <p>The principle is to provide KPI areas (which are stable, general and long lasting) providing users with an inspiration to enable development of specific KPI's for specific roles (such KPI measurements can be more short-term oriented).</p> <p>Must be related to the key deliverables in order to measure them.</p> <p>Focus on long-term deliverables (Profile), not short term (Job position).</p> <p>The KPI area should always be translatable into detailed measurable KPI examples.</p> <p>Be described in a single sentence.</p>

The European ICT Profile descriptions are based on two fundamental concepts:

- **European e-Competence Framework:** for defining ICT Profiles a list of e-competences can be identified, to provide differentiation between profiles;
- **Outcomes/ Deliverables**
  - An ICT Profile is defined by a list of Deliverables, either in terms of accountable, responsible or in terms of contribution;
  - A Deliverable is a predefined result of a task in a working context;
  - One Deliverable can have only one associated accountable job but may have many contributors;
  - A deliverable may or may not be seen by users, may be intermediate or final, but must always be observable.

The deliverables concept adds a second innovative element to the European ICT Profiles description.

In general terms a 'Deliverable' is the outcome of an activity. Profiles can contribute in different ways towards the production of a 'Deliverable'. Deliverables are an important attribute in profile definitions; using them we can direct mission, tasks and competences to illustrate observable results. Choices were made to identify relevant deliverables which added value to ICT Profiles in order to better characterize the mission.

Applied at the same level of granularity as the e-CF, the European ICT Profiles provide generic skeletons of the most representative profile prototypes currently used in ICT Business structures. To add value, the European ICT Profiles need to be adaptable to the employment environment. They are not useful if, on the contrary, the employer has to change practices to meet profile descriptions.

The European ICT Profile descriptions are therefore reduced to core components and constructed to clearly differentiate one from each other. Further context-specific elements can be added to the profiles according to the specific environments in which the profiles are to be integrated.

**The tiles for profiles** were selected to fulfill the following criteria:

- i) easy to understand (plain English),
- ii) generic and
- iii) of similar granularity.

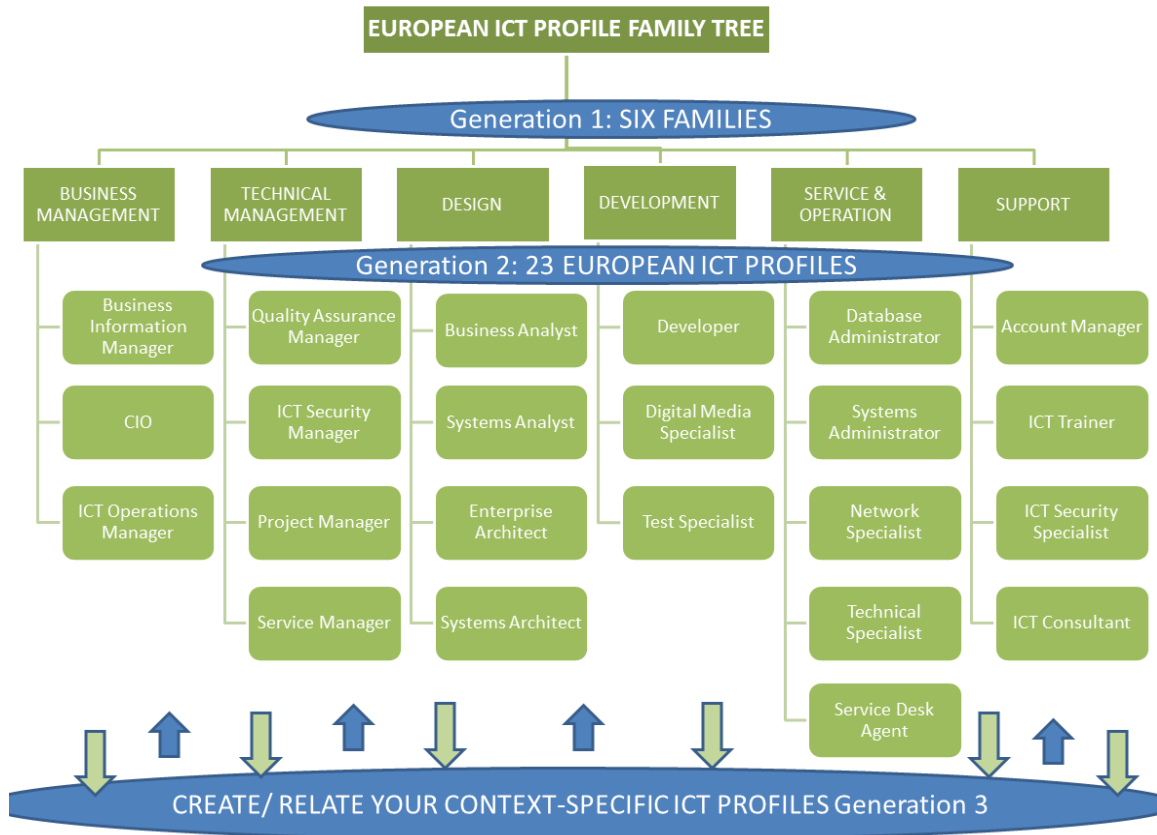
Over 140 job titles/roles were identified from European stakeholders. The twenty-three titles selected were tested against this non-exhaustive list to ensure that they could be represented by the selected role title profiles; all be it at a more generic level. This provided the basis for the profile titles.

An example of the final 23 ICT Professional Profiles, described according to the standard template developed, is displayed below.

Profile title	BUSINESS ANALYST (2)		
Summary statement	Analyses Information System for improving business performance.		
Mission	Identifies areas where information system changes are needed to support business plans and monitors the impact in terms of change management. Contributes to the general functional requirements of the business organization in the area of ICT solutions. Analyses business needs and translates them into ICT solutions.		
Deliverables	Accountable	Responsible	Contributor
	<ul style="list-style-type: none"> <li>• Business requirements</li> </ul>	<ul style="list-style-type: none"> <li>• Business case</li> <li>• Business relationship</li> </ul>	<ul style="list-style-type: none"> <li>• Business plan</li> <li>• ICT Strategy &amp; implementation</li> </ul>
Main task/s	<ul style="list-style-type: none"> <li>• Contribute to the preparation of the business plan of the organization</li> <li>• Identify areas for improvement in business processes providing possible ICT solutions compliant with the ICT strategy</li> <li>• Build requirements, specifications, business processes and the business case related to the proposed solutions</li> <li>• Analyze required information and documents</li> </ul>		
e-competences (from e-CF)	A.1. IS and Business Strategy alignment		Level 4
	A.3. Business Plan Development		Level 4
	E.5. Process Improvement		Level 4
KPI area	Adequacy of the business requirements in response to the business plan		

### Expansion to other examples

As discussed above, the intention of the European ICT Professional Profile development was to demonstrate the value of incorporating competence within profiles. The creation of, a final total of, twenty-three profiles was never expected to replace or provide coverage of all profiles required by managers and employees in all situations across Europe. To support the development of local profiles the European job profiles have been clustered into families. Furthermore, a detailed explanation is provided that helps profile builders to create their unique structures but connected to and structured in a similar manner to the European ICT Professional Profiles. Now, for the first time, local profiles can be linked to European profiles and a standard structure adopted readily understandable by a broad range of stakeholders. The principles of job profile construction and alignment with the European ICT Profile family are shown in the schematic below.



Feedback from stakeholders shows that this scheme has significant application potential that could be applied in other sectors. If at a European level, profile developers agree to make use of the above scheme, convergence, transparency, mutual understanding and mobility could be enhanced for roles that are increasingly interdisciplinary across industry sectors.

For further detailed explanation of how to construct a job profile please following the following link:

- European ICT Professional Profiles  
<http://www.ecompetences.eu/2165,ICT+Professional+Profiles.html>

Also for further examples of profile construction please see case studies A, D, and O.