

# e-CF: il quadro europeo delle competenze ICT

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## Breve storia dell'e-CF

[www.ecompetences.eu](http://www.ecompetences.eu)

L'e-CF nasce dalla domanda delle **grandi aziende utenti ICT** che, agli inizi degli anni 2000, chiedevano **uno strumento neutro**, in grado di:

- Esprimere l'insieme delle competenze ICT richieste nel settore
- Fornire una traduzione condivisa dei diversi framework locali e dell'offerta di competenze ICT dei grandi vendor

# Quadri di riferimento utilizzati nello sviluppo di e-CF

## EUCIP –EU

<http://www.eucip.it/>

COMPETENZE CORE, PIANIFICAZIONE, REALIZZAZIONE, ESERCIZIO; 21 POFILI, NELLE AREE, BUSINESS MNG, BUSINESS INNOVATION, CONSULENZA, SUPPORTO , SVILUPPO, OPERATION, TECHNICAL ADVISERS

## CIGREF –FR

«Promouvoir la culture numérique comme source d'innovation et de performance»

<http://www.cigref.fr/nomenclature-rh>

[http://www.cigref.fr/cigref\\_publications/RapportsContainer/Parus2011/2011\\_Metiers\\_des\\_SI\\_dans\\_Grandes\\_entreprises\\_Nomenclature\\_RH\\_CIGREF\\_FR.pdf](http://www.cigref.fr/cigref_publications/RapportsContainer/Parus2011/2011_Metiers_des_SI_dans_Grandes_entreprises_Nomenclature_RH_CIGREF_FR.pdf)

DESCRIVE «MESTIERI», ORA BASATI SLL'E-CF

## SFIA – UK

<http://www.sfia-online.org/>

The common language of IT

<http://www.sfia-online.org/about-sfia/what-is-sfia/>

BASATO SULLE COMPETENZE

- CEN Workshop sulle eSkills (avviato nel 2003/2004 e ancora in corso nelle sue varie evoluzioni);
  - Prima release e-CF, nel 2008 (CWA 15893-1/2:2008)
  - Seconda release e-CF, nel 2010 (CWA 16234-1:2010)
  - **e-CF 3.0, alla fine del 2013 (CWA 16234-1:2013, ha recepito gli input delle PMI ICT contenuti nel CWA 16367:2011)**



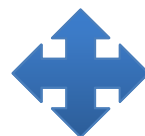
Imprese della domanda  
(Grandi Aziende Pubbliche  
e Private, PMI, Amministrazioni  
Centrali e Territoriali)



Lavoratori,  
Professionisti



Grandi vendor,  
aziende dell'offerta,  
educazione/formazione  
/ certificazione



## Dialogo, Costruzione del consenso

# Risultati del processo di «consensus building»

## L'e-CF consente a

- Grandi Aziende Pubbliche e Private e Piccole e Medie Imprese (della domanda e dell'offerta)
- Amministrazioni Centrali e Territoriali
- Lavoratori, Professionisti
- Mondo dell'educazione, formazione, certificazione

## di

- Condividere uno stesso linguaggio (alcuni vendor stanno mappando le loro certificazioni sull'e-CF)
- Accedere allo stesso insieme di competenze di riferimento su cui impostare il recruitment / placement, percorsi di carriera, formazione, certificazione, etc.

# Risultati del processo di «consensus building»

L'e-CF è stato recepito dalla Digital Agenda for Europe ed è diventato una delle sei «priorità chiave» della Grand Coalition for Digital Jobs

## **Norma quadro UNI**

per le Figure professionali operanti  
nel settore ICT (11506:2013)

## **Project Committee CEN**

(Settembre 2013 CEN PC/428)

L'e-CF è ora anche il riferimento base nella tassonomia ESCO – European Skills/Competences, Qualifications and Occupations, per il settore ICT, in fase di revisione e aggiornamento

(Riferimento DG Employment <http://ec.europa.eu/social/main.jsp?catId=1042&langId=en> )



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# Il metodo alla base dell'e-CF e la sua struttura

[www.ecompetences.eu](http://www.ecompetences.eu)



Basato su una definizione condivisa di competenza

**Competenza:**  
abilità DIMOSTRATA di applicare conoscenze, abilità  
e attitudini, allo scopo di ottenere risultati osservabili

Cinque livelli di  
Competenza collegati  
al Quadro Europeo  
 delle Qualifiche  
(European Qualifications  
Framework - EQF)

e-CF Level	related to EQF Level
e-5	8
e-4	7
e-3	6
e-2	4 and 5
e-1	3

## Indice delle competenze dell'e-CF 3.0

Dimension 1	Dimension 2	Dimension 3				
5 e-Comp. Areas (A-E)	40 e-Competences identified	e-Competence proficiency levels e1 to e5, related to EQF levels 3-8				
		e-CF levels identified per competence				
		e1	e2	e3	e4	e5
<b>A. PLAN</b>						
	A.1. IS and Business Strategy Alignment					
	A.2. Service Level Management					
	A.3. Business Plan Development					
	A.4. Product /Service Planning					
	A.5. Architecture Design					
	A.6. Application Design					
	A.7. Technology Trend Monitoring					
	A.8. Sustainable Development					
	A.9. Innovating					
<b>B. BUILD</b>						
	B.1. Application Development					
	B.2. Component Integration					
	B.3. Testing					
	B.4. Solution Deployment					
	B.5. Documentation Production					
	B.6. Systems Engineering					
<b>C. RUN</b>						
	C.1. User Support					
	C.2. Change Support					
	C.3. Service Delivery					
	C.4. Problem Management					
<b>D. ENABLE</b>						
	D.1. Information Security Strategy Development					
	D.2. ICT Quality Strategy Development					
	D.3. Education and Training Provision					
	D.4. Purchasing					
	D.5. Sales Proposal Development					
	D.6. Channel Management					
	D.7. Sales Management					
	D.8. Contract Management					
	D.9. Personnel Development					
	D.10. Information and Knowledge Management					
	D.11. Needs Identification					
	D.12. Digital Marketing					
<b>E. MANAGE</b>						
	E.1. Forecast Development					
	E.2. Project and Portfolio Management					
	E.3. Risk Management					
	E.4. Relationship Management					
	E.5. Process Improvement					
	E.6. ICT Quality Management					
	E.7. Business Change Management					
	E.8. Information Security Management					
	E.9. IS Governance					

- 5 aree di competenza (dimensione 1)
- 40 Competenze (dimensione 2)
- 5 livelli professionali (dimensione 3)
- ESEMPI di knowledge e skills (dimensione 4)

# European e-Competence Framework 3.0 - Overview

Dimension 1	Dimension 2	Dimension 3				
5 e-Comp. Areas (A-E)	40 e-Competences identified	e-Competence proficiency levels e1 to e5, related to EQF levels 3-8				
		e-CF levels identified per competence				
		e1	e2	e3	e4	e5
<b>A. PLAN</b>						
	A.1. IS and Business Strategy Alignment					
	....					
	A.9. Innovating					
<b>B. BUILD</b>						
	B.1. Application Development					
	....					
	B.6. Systems Engineering					
<b>C. RUN</b>						
	C.1. User Support					
	....					
	C.4. Problem Management					
<b>D. ENABLE</b>						
	D.1. Information Security Strategy Development					
	....					
	D.12. Digital Marketing					
<b>E. MANAGE</b>						
	E.1. Forecast Development					
	....					
	E.9. IS Governance					

**Dimensione 1**  
5 aree di competenza

**Dimensione 2**  
- 40 competenze (con una breve descrizione)

**Dimension 3**  
5 livelli professionali:  
- e1,.....,e5  
- EQF: 3, ...,8

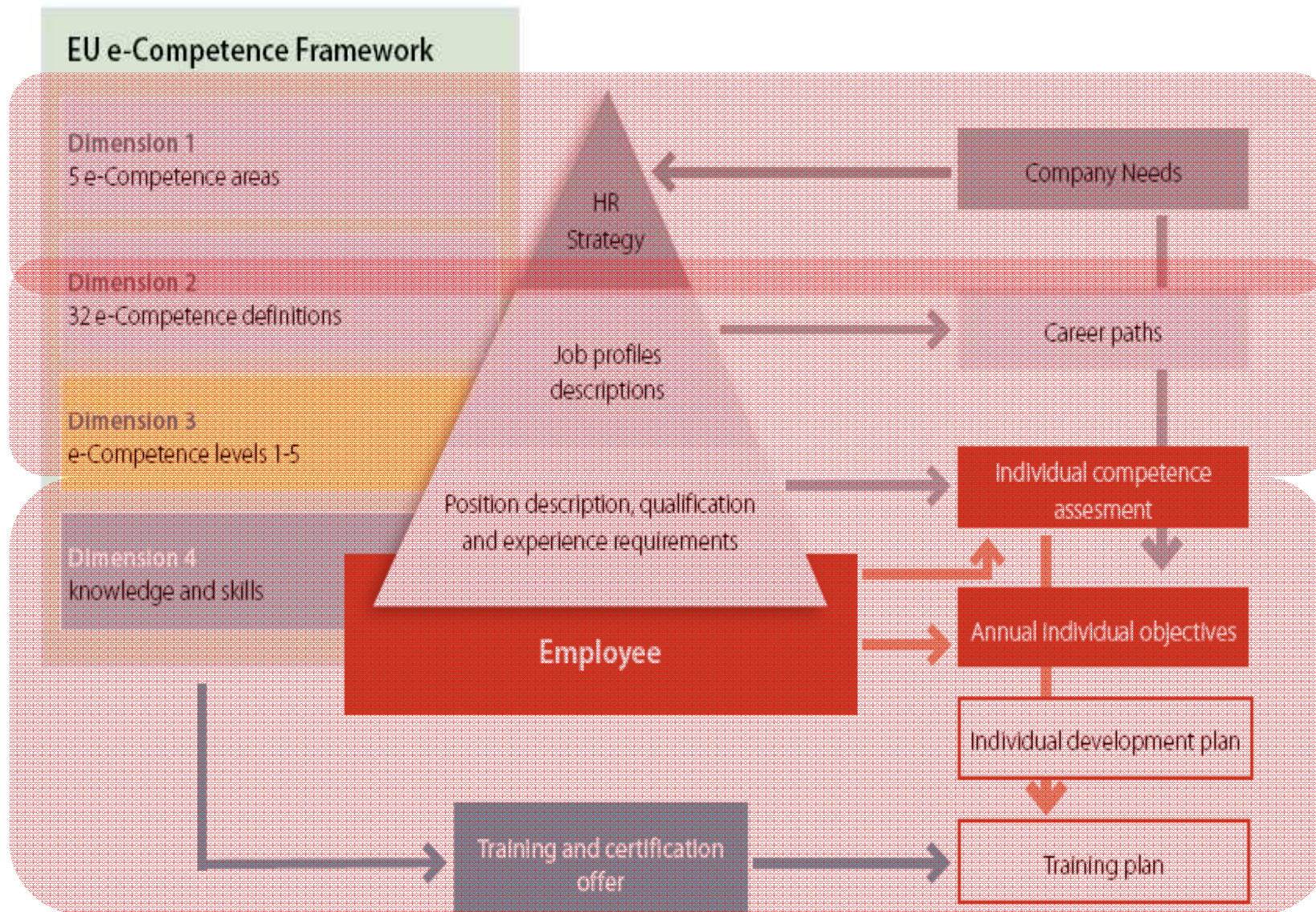
<b>Dimension 1</b> e-Comp. area	<b>A. PLAN</b>				
<b>Dimension 2</b> e-competence: Title + generic description	<b>A.3. Business Plan Development</b> Addresses the design and structure of a business or product plan including the identification of alternative approaches as well as return on investment propositions. Considers the possible and applicable sourcing models. Presents cost benefit analysis and reasoned arguments in support of the selected strategy. Ensures compliance with business and technology strategies. Communicates and sells business plan to relevant stakeholders and addresses political, financial, and organisational interests.				
<b>Dimension 3</b> e-Competence proficiency levels e-1 to e- 5, related to EQF levels 3 to 8	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
	--	--	Exploits specialist knowledge to provide analysis of market environment etc.	Provides leadership for the creation of an information system strategy that meets the requirements of the business (e.g. distributed, mobility-based) and includes risks and opportunities.	Applies strategic thinking and organisational leadership to exploit the capability of Information Technology to improve the business.
<b>Dimension 4</b> Knowledge examples <i>knows/ aware of/ familiar with</i>	K1 business plan elements and milestones K2 the present and future market size and needs K3 competition and SWOT analysis techniques (for product features and also the external environment) K4 value creation channels K5 profitability elements K6 the issues and implications of sourcing models K7 financial planning and dynamic K8 new emerging technologies K9 risk and opportunity assessment techniques				
<b>Skills examples</b> <i>is able to:</i>	S1 address and identify essential elements of product or solution value propositions S2 define the appropriate value creation channels S3 build a detailed SWOT analysis S4 generate short and long term performance reports (e.g. financial, profitability, usage and value creation) S5 identify main milestones of the plan				

**Dimensione 4**  
**Knowledge e skills:**

- esempi «dinamici»
- indicazioni di massima
- non sono esaustivi



# Esempio di utilizzo delle 4 dimensioni in azienda / nelle organizzazioni ICT(CWA 15893-1/2):2008



# I gruppi target principali

[www.ecompetences.eu](http://www.ecompetences.eu)

Uno strumento di lavoro pan-europeo per:

- **I professionisti e i manager dell'ICT**, fornendo chiare linee guida per posizionare le competenze ICT e svilupparle
- **Manager HR**, fornendo input per anticipare i fabbisogni di competenza e pianificare le azioni per soddisfarli
- **Istituti di formazione superiore, formazione professionale, certificazione**, facilitando la progettazione effettiva dei percorsi ICT
- **Policy maker e le ricerche di mercato**, fornendo un linguaggio comune per le competenze ICT

La capacità di sviluppare, gestire e pianificare competenze ICT per professionisti e manager, richieste in Europa sul medio-lungo periodo

## Esempi di profili professionali europei costruiti sulla base dell'e-CF

[www.ecompetences.eu](http://www.ecompetences.eu)



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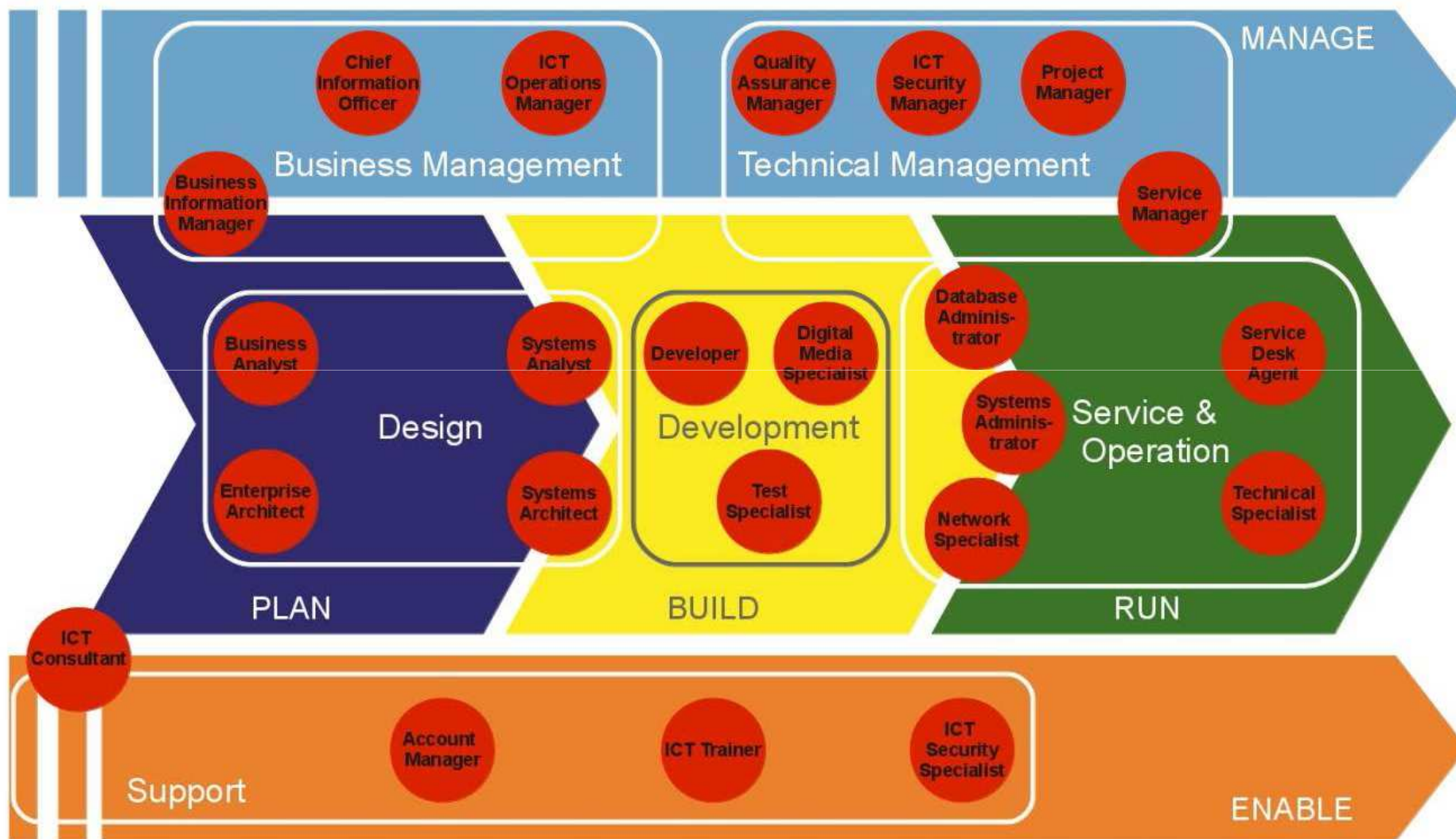


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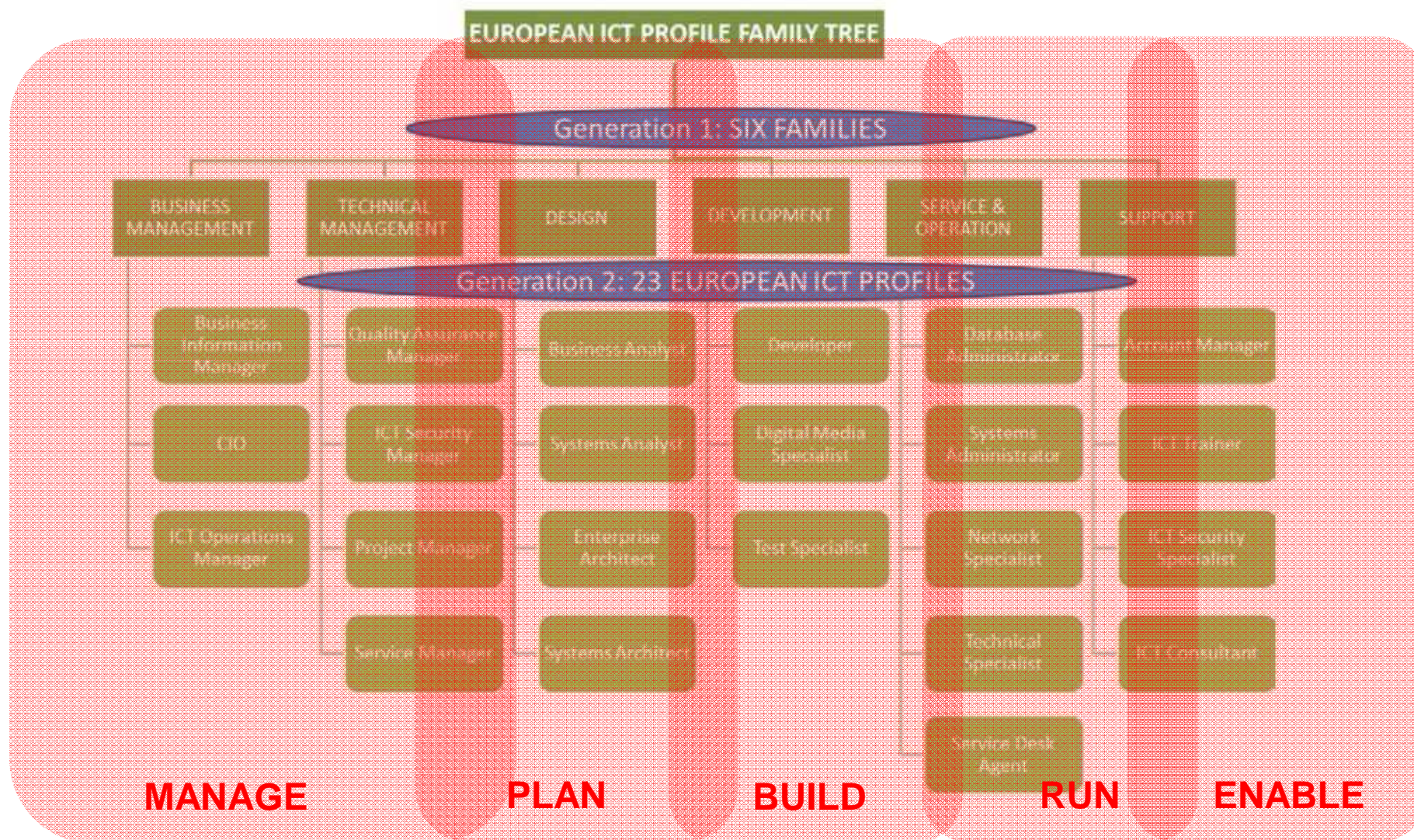
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# European ICT Professional Profiles: sei famiglie







Profile Title			
Summary statement			
Mission			
Deliverables	Account able	Responsible	Contributor
Main task/s			
e-competences			
KPI area			
Knowledge and skills			
Attitudes			
Qualifications / Certifications			
Hierarchy			

222



Profile Title	Business Information Manager (3)		
Summary statement	Proposes plans and manages functional and technical evolutions of the Information System within the relevant business domain		
Mission	Manages and implements updates to existing applications and maintenance activities guided by the needs, costs and plans agreed with internal users. Ensures quality of service and internal user satisfaction		
Deliverables	Accountable	Responsible	Contributor
	Project portfolio	Solution specification	Business plan
Main task/s	<ul style="list-style-type: none"> <li>Responsible for managing the information technology development within the business domain</li> <li>Anticipate changes to the Information System and the business impact and vice versa</li> <li>Formalize, consolidate and drive the development of the configuration of the information system</li> <li>Evaluate the relevance of the Information systems to the business domain</li> <li>Build a knowledge base through understanding the organization's information system</li> </ul>		
e-competences	A.1. IS and Business Strategy Alignment, Level 4 A.3. Business Plan Development, Level 4. D.10. Information and Knowledge Management, Level 5 E.2. Project and Portfolio Management, Level 4 E.7. Business Change Management I Level 4		
KPI area	Business User requirement satisfaction		

<b>Profile title</b>	<b>ICT SECURITY MANAGER (11)</b>		
<b>Summary statement</b>	Manages the Information System security policy.		
<b>Mission</b>	Defines the Information System security policy. Manages security deployment across all Information Systems. Ensures the provision of information availability. Recognized as the ICT security policy expert by internal and external stakeholders.		
<b>Deliverables</b>	<b>Accountable</b>	<b>Responsible</b>	<b>Contributor</b>
	<ul style="list-style-type: none"> <li>Information security policy</li> </ul>	<ul style="list-style-type: none"> <li>Knowledge or Information base</li> <li>Information security strategy</li> </ul>	<ul style="list-style-type: none"> <li>Risk Management policy</li> <li>New technology integration proposal</li> <li>ICT Strategy &amp; implementation</li> </ul>
<b>Main task/s</b>	<ul style="list-style-type: none"> <li>Define and implement procedures linked to IS security</li> <li>Contribute to the development of the organization's security policy</li> <li>Establish the prevention plan</li> <li>Inform and raise awareness among general management</li> <li>Ensure the promotion of the IT security charter among users</li> <li>Inspect and ensure that principles and rules for IS security are applied</li> </ul>		
<b>e-competences</b> <i>(from e-CF)</i>	A.7. Technology Watching		Level 4
	D.1. Information Security Strategy Development		Level 5
	E.3. Risk Management		Level 3
	E.9. IT Governance		Level 4
	E.8. Information Security Management		Level 4
<b>KPI area</b>	Security Policy effectiveness		

<b>Profile title</b>	<b>ICT SECURITY SPECIALIST (12)</b>		
<b>Summary statement</b>	Ensures the implementation of the organizations security policy.		
<b>Mission</b>	Proposes and implements necessary security updates. Advises, supports, informs and provides training and security awareness. Takes direct action on all or part of a network or system. Is recognized as the ICT technical security expert by peers.		
<b>Deliverables</b>	<b>Accountable</b>	<b>Responsible</b>	<b>Contributor</b>
	<ul style="list-style-type: none"> <li>Knowledge or Information base (Security)</li> </ul>	<ul style="list-style-type: none"> <li>New technology integration proposal (Security)</li> </ul>	<ul style="list-style-type: none"> <li>Risk Management policy</li> <li>Risk Management Plan</li> <li>Information security policy</li> </ul>
<b>Main task/s</b>	<ul style="list-style-type: none"> <li>Ensure security and appropriate use of ICT resources</li> <li>Evaluate risks, threats and consequences</li> <li>Provide security training and education</li> <li>Provide technical validation of security tools</li> <li>Contribute to definition of security standards</li> <li>Audit security vulnerability</li> <li>Monitor security developments to ensure data and physical security of the ICT resources</li> </ul>		
<b>e-competences</b> <i>(from e-CF)</i>	C.2 Change Support		Level 3
	C.3 Service Delivery		Level 3
	D.9 Personnel Development		Level 3
	D.10. Information and Knowledge Management		Level 3
	E.8 Information Security Management		Level 3-4
<b>KPI area</b>	Security measures in place		

## Esempi di utilizzo

[www.ecompetences.eu](http://www.ecompetences.eu)

# First example of G3 Profiles from IWA Italia, 21 G3 WEB PROFILES

PROFILE WSP-G3-001.COMMUNITY MANAGER  
PROFILE WSP-G3-002. WEB PROJECT MANAGER  
PROFILE WSP-G3-003. WEB ACCOUNT MANAGER  
PROFILE WSP-G3-004.USER EXPERIENCE DESIGNER 7  
PROFILE WSP-G3-005. BUSINESS ANALYST  
PROFILE WSP-G3-006. DBADMINISTRATOR  
PROFILE WSP-G3-007. SEARCH ENGINE EXPERT  
PROFILE WSP-G3-008.ADVERTISING MANAGER  
PROFILE WSP-G3-009. FRONTEND WEB DEVELOPER  
PROFILE WSP-G3-010. SERVER SIDE WEB DEVELOPER  
PROFILE WSP-G3-011. WEB CONTENT SPECIALIST  
PROFILE WSP-G3-012. WEB SERVER ADMINISTRATOR  
PROFILE WSP-G3-013.INFORMATION ARCHITECT  
PROFILE WSP-G3-014. DIGITAL STRATEGIC PLANNER  
PROFILE WSP-G3-015. WEB ACCESSIBILITY EXPERT  
PROFILE WSP-G3-016. WEB SECURITY EXPERT  
PROFILE WSP-G3-017. MOBILE APPLICATION DEVELOPER  
PROFILE WSP-G3-018. E-COMMERCE SPECIALIST  
PROFILE WSP-G3-019.ONLINE STORE MANAGER  
PROFILE WSP-G3-020.REPUTATION MANAGER  
PROFILE WSP-G3-021.KNOWLEDGE MANAGER



**P1**  
**Progettista di  
architetture ed  
interfacce adattive  
per AAL**

laurea II liv.

**P2**  
**Tecnico a supporto  
della ricerca in AAL**

diploma

**P3**  
**Esperto in  
interazione  
uomo/macchina in  
ambito AAL**

laurea II liv.

Per ciascun profilo:

**Cluster**  
**TAV -**  
**Design4AI**  
**I**  
CTN01\_00128\_297  
089

Scelta delle Competenze

Dim.2

Definizione dell' e-CF level

Dim.3

Esempi specifici di Knowledge e  
Skills

Dim.4

Individuazione INDICATORI

Individuazione EVIDENZE

3 -4 per ciascuna e-  
Competence e ciascun  
e-CF level d'interesse

Le PROVE che permettono  
di valutare se una  
competenza è presente.

**Quadro delle Competenze**

Dimension 1	Dimension 2	Dimension 3				
5 e-Comp. Areas (A-E)	40 e-Competences identified	e-Competence proficiency levels e1 to e5, related to EQF levels 3-8				
<b>P1 - Progettista di architetture ed interfacce adattive per AAL</b>		e-CF levels identified per competence				
		e1	e2	e3	e4	e5
<b>A. PLAN</b>						
	A.1. IS and Business Strategy Alignment					
	A.2. Service Level Management					
	A.3. Business Plan Development					
	A.4. Product /Service Planning					
	A.5. Architecture Design					
	A.6. Application Design					
	A.7. Technology Trend Monitoring					
	A.8. Sustainable Development					
	A.9. Innovating					
<b>B. BUILD</b>						
	B.1. Application Development					
	B.2. Component Integration					
	B.3. Testing					
	B.4. Solution Deployment					
	B.5. Documentation Production					
	B.6. Systems Engineering					
<b>C. RUN</b>						
	C.1. User Support					
	C.2. Change Support					
	C.3. Service Delivery					
	C.4. Problem Management					
<b>D. ENABLE</b>						
	D.1. Information Security Strategy Development					
	D.2. ICT Quality Strategy Development					
	D.3. Education and Training Provision					
	D.4. Purchasing					
	D.5. Sales Proposal Development					
	D.6. Channel Management					
	D.7. Sales Management					
	D.8. Contract Management					
	D.9. Personnel Development					
	D.10. Information and Knowledge Management					
	D.11. Needs Identification					
	D.12. Digital Marketing					
<b>E. MANAGE</b>						
	E.1. Forecast Development					
	E.2. Project and Portfolio Management					
	E.3. Risk Management					
	E.4. Relationship Management					
	E.5. Process Improvement					
	E.6. ICT Quality Management					
	E.7. Business Change Management					
	E.8. Information Security Management					
	E.9. IS Governance					

**P1**  
Progettista di architetture ed interfacce adattive per AAL

**Cluster TAV - Design4AI I**  
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**SMARTCOM**  
YOUR BUSINESS INTEGRATOR

AZIENDA    UNIT E SOLUZIONI    AREA CLOUD    CONTATTI

European e-Competence Framework 2.0 visione d'insieme

Livelli individuali per ciascuna competenza

Dimensione 1 5 aree e-CF	Dimensione 2 36 e-Competences identificate	Dimensione 3 - Livelli di Capacità livelli da e-1 a e-5, collegati ai livelli EQF 3-8				
		e-1	e-2	e-3	e-4	e-5
<b>A. PLAN (PIANIFICARE)</b>						
	A.1. Allineamento Strategie SI e di Business					X
	A.2. Gestione dei Livelli di Servizio			X	X	
	A.3. Sviluppo del Business Plan					X
	A.4. Pianificazione di Prodotto o di Progetto		X		X	
	A.5. Progettazione di Architetture			X		
	A.6. Progettazione di Applicazioni	X		X		
	A.7. Osservatorio Tecnologico				X	
	A.8. Sviluppo Sostenibile			X	X	
<b>B. REALIZZARE (BUILD)</b>						
	B.1. Progettazione e Sviluppo		X		X	
	B.2. Integrazione dei sistemi				X	
	B.3. Testing	X		X		
	B.4. Diffusione della soluzione	X		X		
	B.5. Produzione della documentazione	X		X		
<b>C. ESERCIRE (RUN)</b>						
	C.1. Supporto dell'utente	X		X		
	C.2. Supporto al cambiamento			X		
	C.3. Erogazione del servizio	X		X		
	C.4. Gestione del problema	X		X	X	
<b>D. ABILITARE (ENABLE)</b>						
	D.1. Sviluppo della Strategia della Sicurezza Informatica					X
	D.2. Sviluppo della Strategia della Qualità ICT					X
	D.3. Istruzione e Formazione	X		X		
	D.4. Acquisti		X		X	
	D.5. Sviluppo dell'Offerta	X		X		
	D.6. Gestione del Canale di Vendita		X			
	D.7. Gestione delle Vendite				X	
	D.8. Gestione del Contratto	X		X		
	D.9. Sviluppo del Personale		X			
	D.10. Gestione dell'Informazione e della Conoscenza			X		
<b>E. GESTIRE (MANAGE)</b>						
	E.1. Formulazione delle Previsioni			X		
	E.2. Gestione del Progetto e del Portfolio	X		X		X
	E.3. Gestione del Rischio			X		
	E.4. Gestione della Relazione	X		X		
	E.5. Miglioramento del Processo			X		
	E.6. Gestione della Qualità ICT	X		X		
	E.7. Gestione del Cambiamento del Business		X			
	E.8. Gestione della Sicurezza dell'Informazione	X		X		

L'e-CF può essere uno strumento di self-assessment sia per il lavoratore / professionista, sia per la piccola azienda IT (o l'ufficio IT di una grande azienda)

L'azienda o il lavoratore possono promuovere la propria expertise attraverso l'e-CF attraverso un linguaggio condiviso

<http://www.smart-com.it/lazienda-2/le-ns-competenze/>

## Cerco-Offro / Assessment

Sindacato Networkers ([UILTuCS](http://www.uiltucs.it)) e [Assintel](http://www.assintel.it): Jobict.it è il primo sito web italiano dedicato all'incontro tra la domanda e l'offerta di lavoro nel settore ICT basato sul modello e-CF

<http://www.jobict.it/>

AIP: L'e-CF come un entry point per associarsi

<http://www.aipnet.it/>

The screenshot shows the 'ICT profile none' interface. It features a grid where rows represent specific competencies and columns represent proficiency levels (e-1 to e-5). The grid is organized into five main areas: A. PLAN (blue), B. BUILD (yellow), C. RUN (orange), D. ENABLE (green), and E. MANAGE (light blue). Each cell in the grid contains a small bar chart indicating the proficiency level for that specific competency.

ICT profile none		e-Competence proficiency levels identified for each competence (related to ECF areas 2-5)				
		e-1	e-2	e-3	e-4	e-5
A. PLAN	A.1. IS and Business Strategy Alignment	██████	██████	██████	██████	██████
	A.2. Service Level Management	██████	██████	██████	██████	██████
	A.3. Business Plan Development	██████	██████	██████	██████	██████
	A.4. Product or Project Planning	██████	██████	██████	██████	██████
	A.5. Architecture Design	██████	██████	██████	██████	██████
	A.6. Application Design	██████	██████	██████	██████	██████
	A.7. Technology Watching	██████	██████	██████	██████	██████
	A.8. Sustainable Development	██████	██████	██████	██████	██████
B. BUILD	B.1. Design and Development	██████	██████	██████	██████	██████
	B.2. Systems Integration	██████	██████	██████	██████	██████
	B.3. Testing	██████	██████	██████	██████	██████
	B.4. Solution Deployment	██████	██████	██████	██████	██████
	B.5. Documentation/Production	██████	██████	██████	██████	██████
C. RUN	C.1. User Support	██████	██████	██████	██████	██████
	C.2. Change Support	██████	██████	██████	██████	██████
	C.3. Service Delivery	██████	██████	██████	██████	██████
	C.4. Problem Management	██████	██████	██████	██████	██████
D. ENABLE	D.1. Information Security Strategy Development	██████	██████	██████	██████	██████
	D.2. ICT Quality Strategy Development	██████	██████	██████	██████	██████
	D.3. Education and Training Provision	██████	██████	██████	██████	██████
	D.4. Purchasing	██████	██████	██████	██████	██████
	D.5. Sales Proposal Development	██████	██████	██████	██████	██████
	D.6. Channel Management	██████	██████	██████	██████	██████
	D.7. Sales Management	██████	██████	██████	██████	██████
	D.8. Contract Management	██████	██████	██████	██████	██████
	D.9. Personnel Development	██████	██████	██████	██████	██████
	D.10. Information and Knowledge Management	██████	██████	██████	██████	██████
E. MANAGE	E.1. Forecast Development	██████	██████	██████	██████	██████
	E.2. Project and Portfolio Management	██████	██████	██████	██████	██████
	E.3. Risk Management	██████	██████	██████	██████	██████
	E.4. Relationship Management	██████	██████	██████	██████	██████
	E.5. Process Improvement	██████	██████	██████	██████	██████
	E.6. ICT Quality Management	██████	██████	██████	██████	██████
	E.7. Business Change Management	██████	██████	██████	██████	██████
	E.8. Information Security Management	██████	██████	██████	██████	██████
	E.9. IT Governance	██████	██████	██████	██████	██████

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GRAZIE!

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