Presentación del Proyecto e-CF Council

CFTIC, Getafe, 14 noviembre 2017

eCF Council: A multi-stakeholder partnership for ICT

An Erasmus+ funded project – Sector Skills Alliance KA2

Co-funded by the Erasmus+ Programme of the European Union

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Proyecto eCF Council:
A multistakeholder partnership for ITC

- Proyecto Erasmus +
- Sector Skills Alliance
- Duración: 2015-2018
- Desarrollo de cualificaciones y habilidades para el sector TIC
- Integra los nuevos marcos de competencias

Proyecto eCF Council

Objetivos:

✓ Creación de una estructura estable de capacidades desarrolladas conforme al marco de e-Competencias Europeo (e-CF) y a las ocupaciones disponibles en la clasificación ESCO del sector TIC, que responda a las necesidades de cualificación que surgen de las nuevas tecnologías digitales.

✓ Desarrollo de programas de Formación Profesional, reconocidos y certificados basados en el nuevo estándar de competencias TIC (EN16234 eCF) y las profesiones TIC de ESCO, que fortalecerán la profesionalidad del sector a un nivel europeo e internacional.

✓ Establecimiento de una alianza estable en el sector de las TIC, agrupando a los principales actores del mercado en Europa.

Participantes

16 socios de 5 países: Italia, España, Bulgaria, Holanda y Bélgica

- ✓ Centros de Formación profesional
- ✓ Interlocutores sociales
- ✓ Organismos reguladores /organismos de acreditación

Socios españoles: Universidad de Alcalá, CCOO (Federación de Servicios de CCOO) y Comunidad de Madrid (Cons. de Economía, Empleo y Hacienda. DG De Formación)

Socios europeos, como por ejemplo: Politécnica di Milano (FPM), Digital Europe, EXIN, ESI CEE….

Participantes

No	Partner	Country	VET provider	Sectoral organisation	Regulatory body
1	**Fondazione Politecnico di Milano - FPM**	IT			x
2	CEFRIEL	IT	x		
3	CNA	IT		x	
4	ADFOR	IT			x
5	FIOM Lombardia	IT		x	
6	ESI CEE	BULG	x		
7	BASSCOM	BULG		x	
8	NAPOO	BULG			x
9	bITa Center	NDL	x		
10	CIONET	NDL		x	
11	EXIN	NDL			x
12	UAH	ES	x		
13	CCOO Servicios	ES		x	
14	DG de Formacion - Comunidad de Madrid	ES			x
15	PIN-SME	BELGIUM		x (UO)	
16	DIGITAL EUROPE	BELGIUM		x (UO)	

Acciones

- ✓ Diseño de un sistema de referencia común para las cualificaciones profesionales y sus certificaciones.
- ✓ Diseño de una serie de unidades de aprendizaje, relativas a 15 e-competencias.
- ✓ Diseño y desarrollo de un itinerario de una cualificación piloto y desarrollo de un procedimiento de certificación experimental para cada e-competencia incluida en la cualificación piloto.
- ✓ Puesta en marcha de la plataforma web para el proyecto e-CF Council

Estudio sobre la situación actual de las destrezas, competencias y perfiles profesionales en el ámbito europeo

1. A.9 Innovating
2. E.8 Information Security Management
3. A.5 Architecture Design
4. A.1 IS and Business Strategy Alignment
5. B.1 Application Development
6. B.6 Systems Engineering
7. D.1 Infomation Security Strategy Development
8. C.4 Problem Management
9. A.6 Application Design
10. D.2 ICT Quality Strategy Development
11. B.3 Testing
12. E.6 ICT Quality Management
13. A.3 Business Plan Development
14. A.7 Technology Trend Monitoring
15. B.2 Component integration

Detección de competencias más demandadas: 15 competencias seleccionadas de las 40 e-competencias de la versión 3.0 del marco e-CF

Priority Domains and Competencies
Business/Management
A.1. Information Systems and Business Strategy Alignment
C.4. Problem management
D.2. ICT Quality Strategy Development
Others
A.3. Business Plan Development
A.9. Innovating
E.6. ICT Quality Management
Software Development
A.5. Architecture Design
A.6. Application Design
A.7. Technology Trend Monitoring
B.1. Application Development
B.3. Testing
B.6. Systems Engineering
Cyber Security
D.1. Information Security Strategy Development
E.8. Information Security Management

Primer set de competencias

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
A. PLAN						
	A.1. IS and Business Strategy Alignment					
	A.6. Application Design					
	A.7. Technology Trend Monitoring					
B. BUILD						
	B.3. Testing					
C. RUN						
D. ENABLE						
	D.2. ICT Quality Strategy Development					
E. MANAGE						
	E.8. Information Security Management					

Estructura del perfil de la cualificación

e-Competence Qualification Profile

Title	<Name of the Competence>	**e-CF**	<Code>
Description	<The generic decription of the competence according to the e-CF>		
Sample Roles	<Name of the role, e.g. from the CEN Profiles>	**ESCO**	<Code>
Prerequisite Foundational Knowledge	<Title of the Foundational ICT Body of Knowledge>		
Main Subjects	<Subject>		
	<Topic>		

Learning Outcomes		
Level 1	**Description**	
	<Level desrciption from the e-CF>	
	Understanding	
	<Understanding/knowledge element>	
	Skills	
	<Skill>	
	ECVET Points Indication	
	<Number>	

Literature Examples	Author	Title
	<Author name(s)>	<Book title>

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Estructura de la unidad de aprendizaje

LU Title	
Description	
E-CQP	
Proficiency levels	
ECVET	
Understanding	
Skills	
Learning Objectives	
Learning content	
Evidences	
Resources	

Itinerarios de aprendizaje

A.1_IS and Business Strategy Alignment						
Num	Learning Unit Title	Proficiency Level				
		1	2	3	4	5
LU 1	Evaluation of the organisational digital maturity				■	■
LU 2	Fundamentals of security				■	■
LU 3	Effects of implementations				■	■
LU 4	Enterprise architecture understanding and frameworks				■	■
LU 5	Business requirements and ICT services				■	■
LU 6	New emerging technologies and business impacts				■	■
LU 7	Feasibility analysis of ICT solutions				■	■
LU 8	Sourcing models					■
LU 9	Business strategy and business models					■
LU 10	Analysis of future developments of business, customer needs and technology application					■
	not present in the eCF 3.0 standard					

A.6_Application Design						
Num	Learning Unit Title	Proficiency Level				
		1	2	3	4	5
LU 1	Requirements engineering	■	■	■		
LU 2	Requirements formalisation	■	■	■		
LU 3	Costs and time estimation for application development		■	■		
LU 4	Object-Oriented analysis and design	■	■	■		
LU 5	Data modelling techniques	■	■	■		
LU 6	User interface design	■	■	■		
LU 7	Application design related to development models		■	■		
LU 8	Application integration and innovative technologies	■	■	■		
LU 9	Application design process management			■		
	not present in the eCF 3.0 standard					

A.7_Technology Trend Monitoring						
Num	Learning Unit Title	Proficiency Level				
		1	2	3	4	5
LU 1	Radical Transparancy and Cooperation				■	■
LU 2	Radical Decentralisation and tech driven change				■	■
LU 3	Bits in Atoms - Next Tech					■
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	not present in the eCF 3.0 standard					

B.3_Testing						
Num	Learning Unit Title	Proficiency Level				
		1	2	3	4	5
LU 1	Fundamentals of Testing	■			■	
LU 2	Testing Throughout the Software Life Cycle			■	■	
LU 3	Testing Design Techniques		■		■	
LU 4	Tool Support for Testing	■	■	■		
LU 5	Test Management		■	■	■	
	not present in the eCF 3.0 standard					

D.2_ICT Quality Strategy Development						
Num	Learning Unit Title	Proficiency Level				
		1	2	3	4	5
LU 1	Principles of Quality Management and Process Management				■	
LU 2	Quality Management Models and Standards (CMM, COBIT, ISO, ITIL)				■	
LU 3	Processes Institutionalization				■	
LU 4	Process and Product Quality Management				■	■
LU 5	Quality Assurance of Service/Project Management Processes				■	■
LU 6	Quality assurance in agile environment (Scrum, XP, Kanban and others)					■
LU 7	Formulation / adopting of Quality Management Strategy for the organization					■

E.8_Information Security Management						
Num	Learning Unit Title	Proficiency Level				
		1	2	3	4	5
LU 1	Current security scenarios and ISM role		■			
LU 2	Technological security: attacks and countermeasures		■			
LU 3	Infosecurity governance and standard		■			
LU 4	Application level security		■			
LU 5	Vulnerability evaluation in real-world		■	■		
LU 6	Security in new techlologies			■		
LU 7	The overall risk and incident management process			■		
LU 8	Information security project management			■		
LU 9	Digital identity security			■		
LU 10	Legal aspects in information security				■	
LU 11	Forensics				■	
LU 12	Elements of Information Security Governance and Risk planning				■	
	not present in the eCF 3.0 standard					

Competencia B3 – Testing (según e-CF standard EN 16234)

e-Competence Qualification Profile			
Title	Testing	**e-CF**	B.3
Description			
	Constructs and executes systematic test procedures for ICT systems or customer usability requirements to establish compliance with design specifications. Ensures that new or revised components or systems perform to expectation. Ensures meeting of internal, external, national and international standards; including health and safety, usability, performance, reliability or compatibility. Produces documents and reports to evidence certification requirements.		
Sample Roles		**ESCO examples**	
	Developer		software tester
	Digital Media Specialist;		ICT usability tester
	Systems Administrator		ICT system tester
	Test Specialist		ICT accesibility tester
			ICT test analyst
			application software tester
			digital games tester

Itinerario de aprendizaje

B.3_Testing						
Num	Learning Unit Title	Proficiency Level				
		1	2	3	4	5
LU 1	Fundamentals of Testing	■			■	
LU 2	Testing Throughout the Software Life Cycle			■	■	
LU 3	Testing Design Techniques		■		■	
LU 4	Tool Support for Testing	■	■	■		
LU 5	Test Management		■	■	■	
	not present in the eCF 3.0 standard					

Curso Piloto B.3 Software Testing

- Curso para adquirir competencia B.3. Software Testing
- Dirigido a personal IT con conocimientos básicos en desarrollo de software.
- Cuenta con sesiones online con sesiones presenciales
- Doble certificación:
  - ✓ Certificado de “Curso de Extensión universitaria” expedido por la Universidad de Alcalá
  - ✓ Certificado de participación en el curso expedido por la eCF Alliance

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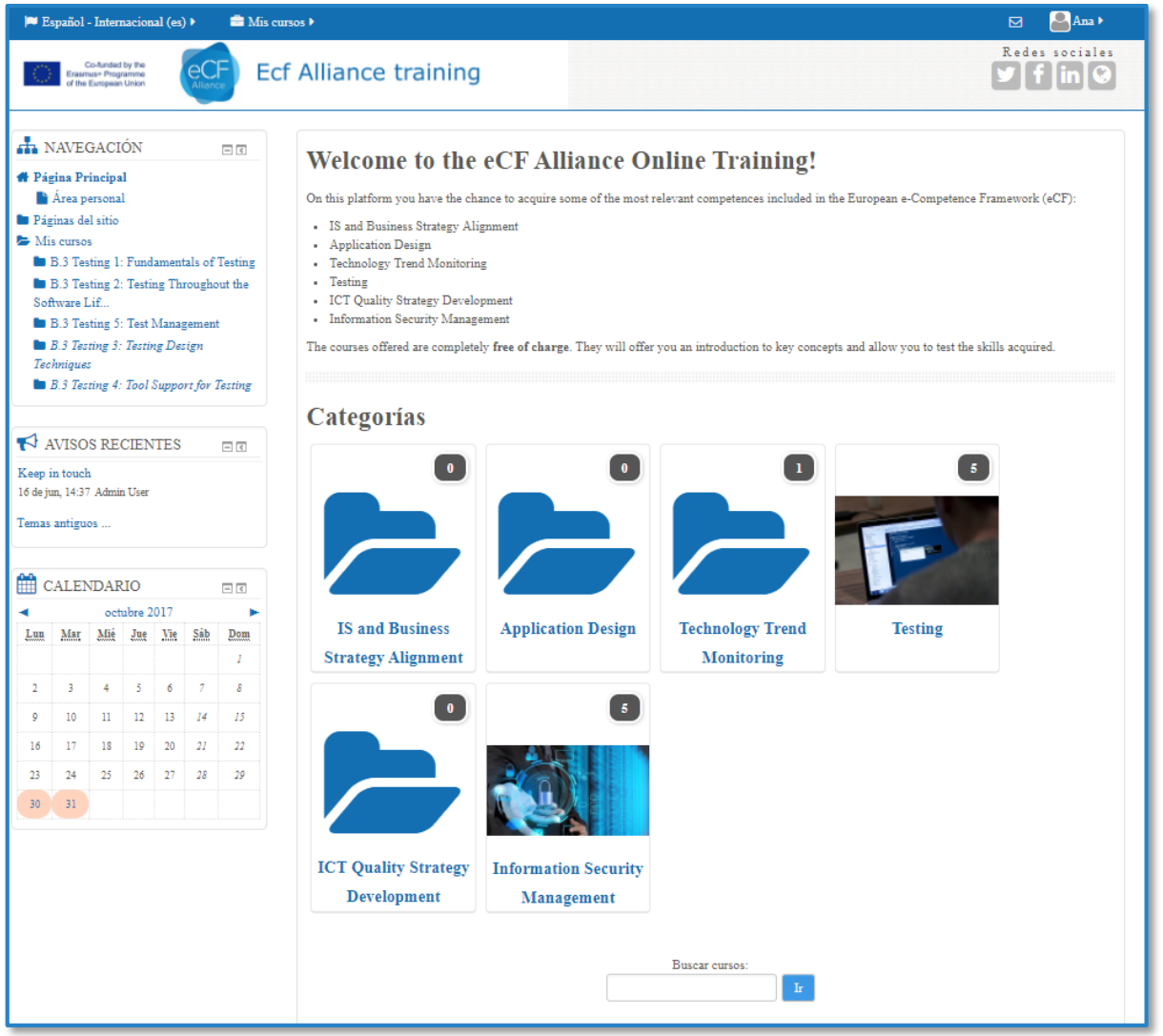
Plataforma Online

http://www.ecfalliance-training.org/



Web del proyecto: http://www.ecfalliance.org/

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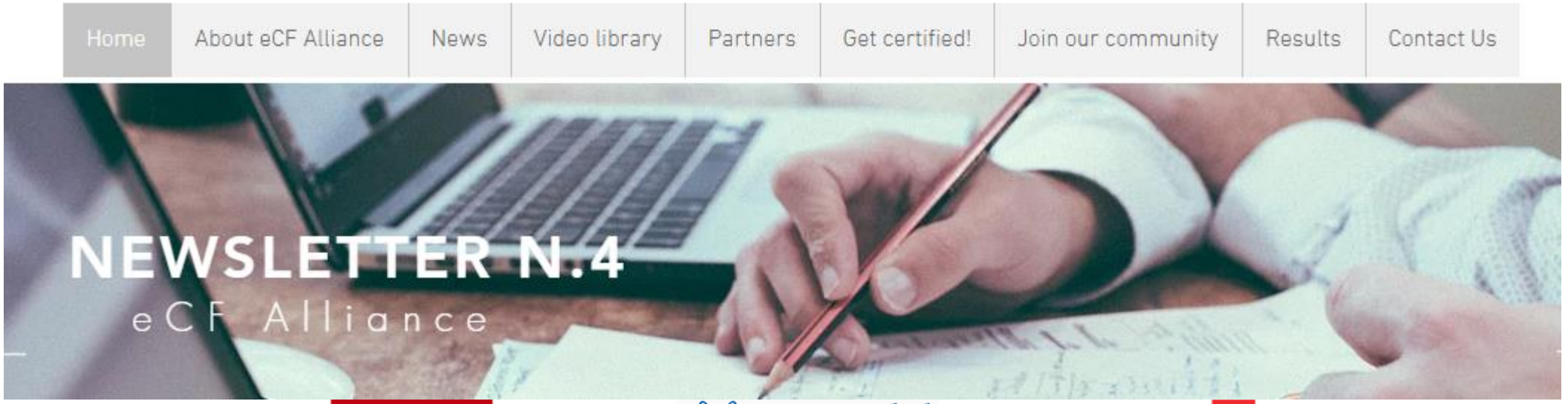

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CONSEJERÍA DE ECONOMÍA, EMPLEO Y HACIENDA
Dirección General de Formación

A modo de resumen

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15 e-competences from the e-CF 3.0 implemented into learning units

design a joint vocational qualification e-CF scheme & ESCO IT occupations and joint training actions

Feeding OCR Open Library

VET common reference scheme (reference ECVET) ensuring transparency and comparability

WEB platform

develop ESCO e-CF-based competence certifications pattern

Online community > 120 vocational programmes and certifications

pilot initiatives: at least 100 IT professionals workers

Curricula with new ICT skills; facilitate mobility, reducing mismatch and shortage

Face to face meetings and webinars

Para más información

www.efalliance.org

KO Press release

Erasmus+ dissemination platform

eCF Alliance flyer

Digital NLs on the web

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