



CEN Workshop on ICT Skills

A general overview plus e-CF description

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European standardization Workshops

Main features



- **Industry and stakeholder needs**

- ◆ Fast development of some reference documents (not all)
- ◆ Fast set-up of ad-hoc standardization groups

- **Workshops**

- ◆ Created for innovation-related subjects, originally all were ICT-related
- ◆ Quickly created, quickly disbanded
- ◆ Direct representation of stakeholders (not through national representation)

European standardization Workshops

Deliverables: CEN Workshop Agreements (CWAs)

- **CEN Workshop agreements (CWAs)**

- ◆ Development cycle *can* be very brief (6 months)
- ◆ Public commenting period exists (60 days)
- ◆ Deliverables are « pre-standards », not European standards in the full sense

- **Outreach**

- ◆ A few European Workshops have international visibility, participation
 - This is the case for WS ICT Skills
- ◆ Some even have worldwide acceptance
- ◆ The CEN Workshop structure was emulated at International level (ISO Workshops/IWAs)

CEN Workshop on ICT Skills

A curriculum vitæ (1/3)



- **Long-standing workshop**

- ◆ Created 2003
- ◆ 11 deliverables published
- ◆ 90 participants from 18 countries (mostly in Europe, also Japan, Canada, US)

- **Who**

- ◆ National and International representatives from the ICT industry
- ◆ Public and private vocational training organisations
- ◆ Social partners (unions)
- ◆ Software editors (often also training providers)

- **What for**

- ◆ “to create long-term human resources (HR) and competence development strategies for the European ICT community”

CEN Workshop on ICT Skills

A curriculum vitæ (2/3)



CWA number	Title	Year issued
14925	Generic ICT Skills profiles for the ICT supply industry	2004
15005	ICT curriculum development guidelines for the ICT supply industry	2004
15515	European ICT Skills Meta-Framework	2006
15893-1	e-Competence Framework v1 Part 1: Framework	2008
15893-2	Part 2: User guidelines	2008

CEN Workshop on ICT Skills

A curriculum vitæ (3/3)



CWA number	Title	Year issued
16052	ICT Certification in Europe	2009
16053	Interoperability of European e-Career Services	2009
16213	End User e-Skills Framework Requirements	2010
16234-1	European e-Competence Framework 2.0 Part 1: A Common European Framework for ICT Professionals in All Industry Sectors	2010
16234-2	Part 2: User guidelines	2010
16234-3	Part 3: Building the e-Competence Framework, a Combination of Sound Methodology and Expert Contribution	2010

CEN Workshop on ICT Skills

Current work

Title	Stage	Target
Implementing e-CF into SMEs	Public comments	2011
ICT Certification in Action	Public comments	2011
Towards e-Job Profile	Project team work	2011
Euromediterranean repository of digital professions, Phase 1	Project team work	2011
Developing an End User ICT Skills framework	Initiation	2012
ICT Skills for Green IT/Distributed IT	Preliminary	2013
e-Competence framework continuous adoption and maintenance (e-CF v3)	Preliminary	2013
Curriculum guidelines	Tentative	

Where we stand

- **The three « pillars » of ICT Skills pre-standards**

- ◆ ICT Practitioners:
 - ICT professionals
- ◆ E-business ICT skills:
 - Non-IT professionals for which strong ICT skills are an asset, requirement
- ◆ End user ICT Skills:
 - Everyone in any context of ICT use

These pillars are identified in the European Commission e-Skills Agenda

- **Workshop started on and expanded from « Practitioner » pillar**

- ◆ Greater need (matching industry needs and workforce offers)
- ◆ Greater potential for consensus
- ◆ Consistency and coherence of subject matter

- ◆ « End user » pillar is being developed
- ◆ E-business is at more preliminary, tentative stage

Relevance and visibility



● Place in European e-Skills agenda

- ◆ European Commission recognition
- ◆ CEN WS ICT Skills the body to develop ICT-Skills related standards
- ◆ Main and oldest EC contact: Directorate-General (DG) Enterprise and Industry
- ◆ Now associated in ICT-Skills related work and events:
 - DG Employment, Social Affairs and Inclusion
 - DG Education and Culture
 - DG Information society and Media
- ◆ All WS deliverables have been funded by the European Commission

● International outreach: US, Canada, Japan, Russia...

● Representation in events

- ◆ Workshop officials and prominent participants have been speakers at many ICT-Skills related, Information society and education related events in Europe and abroad



European e-Competence Framework

e-CF 2.0 overview

- 5 e-Competence areas (dimension 1)
- 36 e-Competences (dimension 2)
- 5 proficiency levels (dimension 3)
- knowledge and skills examples (dimension 4)

Dimension 1	Dimension 2	Dimension 3				
5 e-Comp. areas (A – E)	36 e-Competences identified	e-Competence proficiency levels e-1 to e-5, related to EQF levels 3-8				
		e-CF levels identified per competence				
		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. Design Architecture					
	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					

A common ICT competence currency



A Europe-wide working tool for:

- **ICT practitioners and managers** with clear guidelines for their competence positioning and development
- **HR managers** with inputs to anticipate, plan and develop competence needs
- **Higher Education, Vocational Training and Certification Providers**, enabling effective planning and design of ICT curricula
- **Policy makers and market research**, providing a common European ICT competence language
- **Procurement managers**, providing them with a common language for national and international bids assessment

Ability to develop, manage and plan ICT practitioner and manager competences that will be needed in a long term perspective across Europe

Competence Tool

European e-Competence Framework

Scroll to section - Open section - Close section - Open dimension - Close dimension -

A. PLAN Levels: 1 2 3 4 5

- ▶ 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 Levels: 1 2 3 4 5

- ▶ B.1. Design and Development
- ▶ B.2. Systems Integration
- ▶ B.3. Testing
 - Constructs and executes systematic test procedures for IT 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.
 - ▶ Proficiency Levels
 - ▶ Knowledge Examples
 - ▶ Skills Examples
- ▶ B.4. Solution Deployment
- ▶ B.5. Documentation Production

C. RUN Levels: 1 2 3 4 5

- ▶ C.1. User Support
- ▶ C.2. Change Support
- ▶ C.3. Service Delivery
- ▶ C.4. Problem Management

View / print / download Select all checkboxes Clear all checkboxes How to use this tool Information

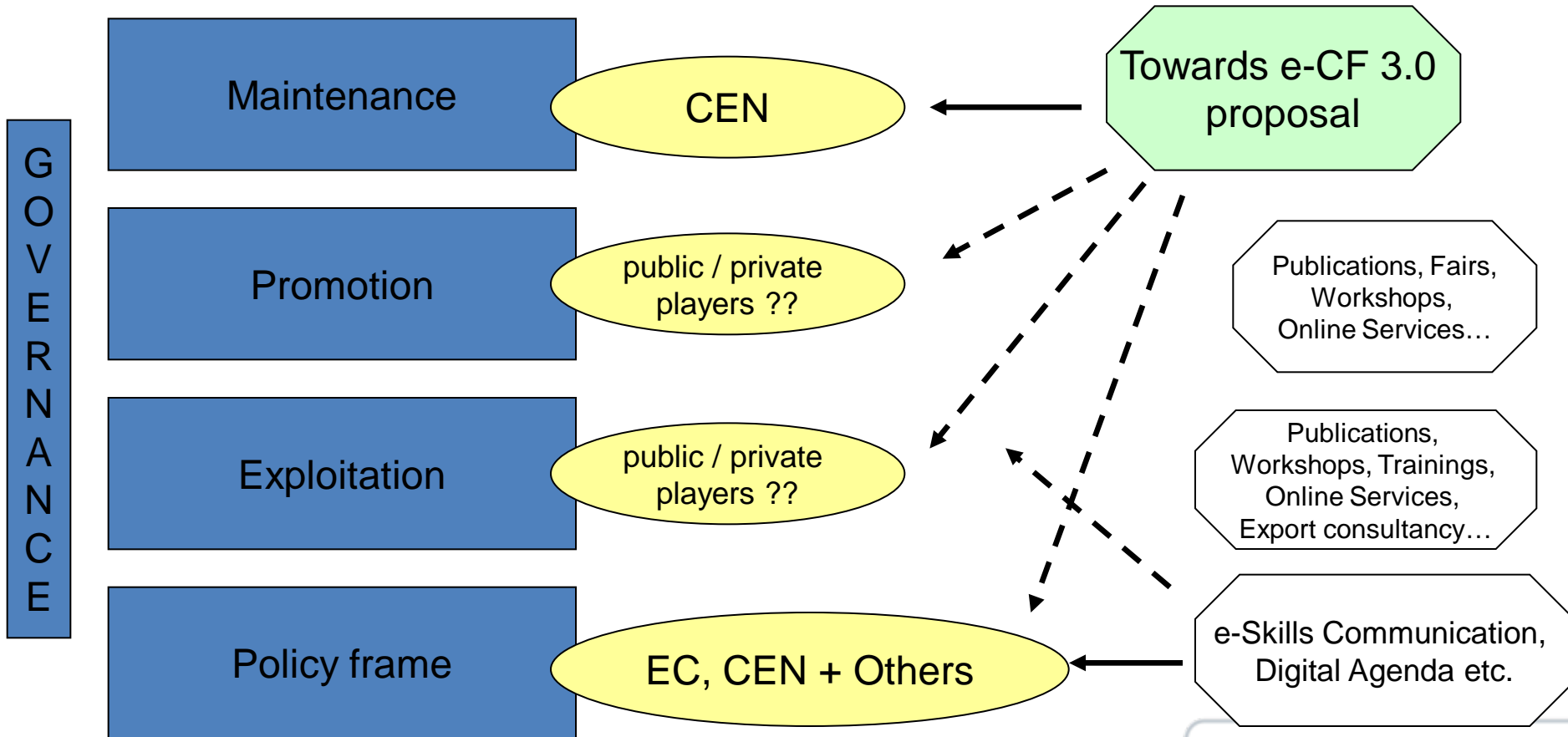
European e-Competence Framework v2.0 - Profile Tool

Internet

What is required?

- The e-CF is a successful and valuable tool enabling a common and structured approach to ICT skills identification and development.
- Continued success depends upon even wider dissemination and adoption by relevant stakeholders and continuous framework maintenance.
- Simplicity of application by e-CF users is an essential ingredient in adoption and wide deployment as potential users seek fast and efficient solutions.
- Relying upon market forces alone to provide user-friendly experience and tools would disadvantage e-CF in a complex and confusing environment.
- Potential users of e-CF need compelling arguments and support to enable simple and rapid deployment.
- **Three complementary pillars** have been identified to support the aims of
 - e-CF wide spread awareness
 - facilitation of value added deployment of the e-CF
 - continuous maintenance and updating

From e-CF projects to e-CF product stability



Considerations

- Business plan requires updating
- Future work towards full standards (Technical Committee as well as Workshop)
- Supporting standards for ICT Professionals
 - Competence Framework (e-CF)
 - Certification Standards and Qualifications
 - Bodies of Knowledge
 - Professional Ethics / Codes of Conduct

Considerations

- Workshop agenda compatible with CEPIS
- AICA support is very welcome
- Future work on Professionalism
 - European ICT Professional
- e-Business and e-Leadership Skills

Conclusion



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