European Committee for Standardisation

ICS

European e-Competence Framework

The Role of Standards in ICT Professionalism

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IT Professionalism

What is **IT professionalism**?

Abstract concept concerning the common standards and best practices for IT profession

We describe these in terms of the **four pillars of professionalism** in IT which signpost what standards are needed for a mature IT profession

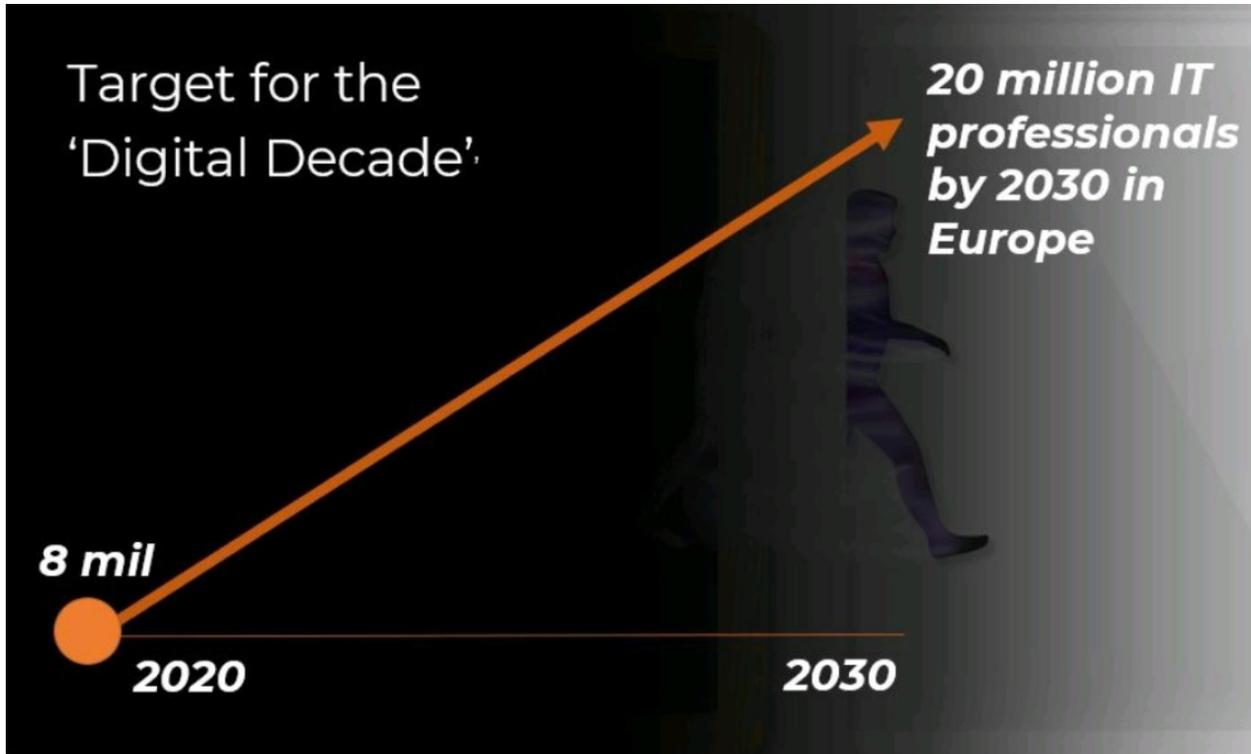Inside knowledge – what does the rest of the world know or think?

How do we portray our profession to stakeholders who create policy, employ our members, and educate new entrants?

CEN/TC 428

CEN/TC 428 as key player in provision of standards for IT profession

- Technical Committee on **ICT Professionalism and Digital Competences**
  - Remit to develop standards, technical reports and specifications
  - Inter-related programme of work – competence, body of knowledge, education and ethics

Collaboration among Stakeholders

- Delegates of CEN/TC 428 ICT Professionalism and Digital Competences are from **National Standards Bodies**
- Secretariat: **UNINFO** the Associated Body of UNI (the Italian Standardization Body)
- Established in 2014. Focus on **maturing the IT profession** based on the standard European e-Competence Framework (e-CF v. 4.0) published in December 2019)
- Responsible for **development** and **maintenance** of standards **related to ICT Professionalism and Digital Competences** and other prioritised areas
- Supported by European Commission

Target for the 'Digital Decade'

8 mil

2020

20 million IT professionals by 2030 in Europe

2030

Europe needs a competent, respected, mature IT Profession to drive recovery and resilience

We need 20m IT professionals by 2030 – we have 8m in 2021

We can't allow urgency to let quantity trump quality

Professional Standards

The new IT profession has no legal licencing council to lay down knowledge, skills, conduct etc

CEN, the European Committee for Standardization

- CEN/TC 428 - *ICT Professionalism and Digital Competences* - is responsible for standardization work related to the four building blocks of IT Professionalism

European eCompetence Framework (eCF) is the core standard (EN 16234-1) developed by CEN

- provides a reference of 41 competences, using a common language for competences, skills, knowledge and proficiency levels.

A European Professional Ethics Framework for the IT profession is currently in development

Also, curriculum guidelines and performance metrics standards pending

Dimension 1	Dimension 2	Dimension 3				
5 e-CF areas	41 e-Competences identified	5 e-Competence proficiency levels				
		e-1	e-2	e-3	e-4	e-5
A. PLAN	A.1. Information Systems 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. Sustainability Management				■	
	A.9. Innovating				■	■
	A.10. User Experience		■	■	■	
B. BUILD	B.1. Application Development	■	■	■		
	B.2. Component Integration	■	■	■		
	B.3. Testing	■	■	■		
	B.4. Solution Deployment	■	■	■		
	B.5. Documentation Production	■	■			
	B.6. ICT Systems Engineering		■	■	■	
C. RUN	C.1. User Support		■	■		
	C.2. Change Support		■	■		
	C.3. Service Delivery	■	■			
	C.4. Problem Management		■	■		
	C.5. Systems 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 Development		■	■		
	D.6. Digital Marketing		■	■		
	D.7. Data Science and Analytics		■	■	■	
	D.8. Contract Management			■	■	
	D.9. Personnel Development		■	■		
	D.10. Information and Knowledge Management			■	■	
	D.11. Needs Identification			■	■	
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. Information Systems Governance				■	■

European e-Competence Framework

But **standards** are merely regulations, rules or guidelines for technical, HR or ethics fields
They are developed by consensus among experts
Professional **practice** in IT is the set of **common behaviours** by IT workers that implement standards, covering:

- Approach to work and career
- Routine decision making and interpersonal relationships
- Emphasis on **competent** and **careful** individual practice, and collective action to ensure the IT profession is **recognised** and **respected.**

Professional Competence

- Technical, business and soft skills
- Validated learning
- Continuous professional development

Professional Attitude

- High quality and best practice
- Regulations, standards and legislation
- Impact positively on society and the environment

Professional Community

- Participate in professional communities
- Commit to a code of conduct
- Promote and protect the reputation of the IT profession

Professional Practice

Professional Standards

- e-CF
- BoK
- Ethics
- Curriculum
- KPI's

Professional Practice

- Competence
- Attitude
- Community

ICS

European
e-Competence
Framework

A Grown-up Profession

How do we make sure that IT is a mature, respected profession?

Acknowledge advances in last 20 years

- Common language in Europe for IT competence, skills, knowledge and proficiency level
- Common professional standards
- Common professional practice

A grown-up profession

- ✓European Policy Makers
- ✓National Policy Makers
- ✓Employers
- ✓Educators

Support	Support standards development
Use and demand	Use and demand professional standards
Reward	Reward professional practice
Support	Support CPD
Adopt	Adopt/adhere to appropriate code of ethics

Realising a competent, trusted and recognised IT profession in Europe

ITPE and CEN/TC428 event – 20th May, 2021

Introduction to the core elements of IT professionalism, making IT profession competent, trusted, and recognised in Europe.

- What is IT professionalism and why is it important?
- What are the building blocks of the IT professionalism?
- CEN/TC428, its role, how it works, its outputs and their use
- How to get involved
- What is e-CF and how it can be used?
- Professionalism standards projects and their practical benefits

Do **register** on ITPE website

Thank You

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