



European  
Committee for  
Standardisation



# The Role of Standards in ICT Professionalism

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## 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?

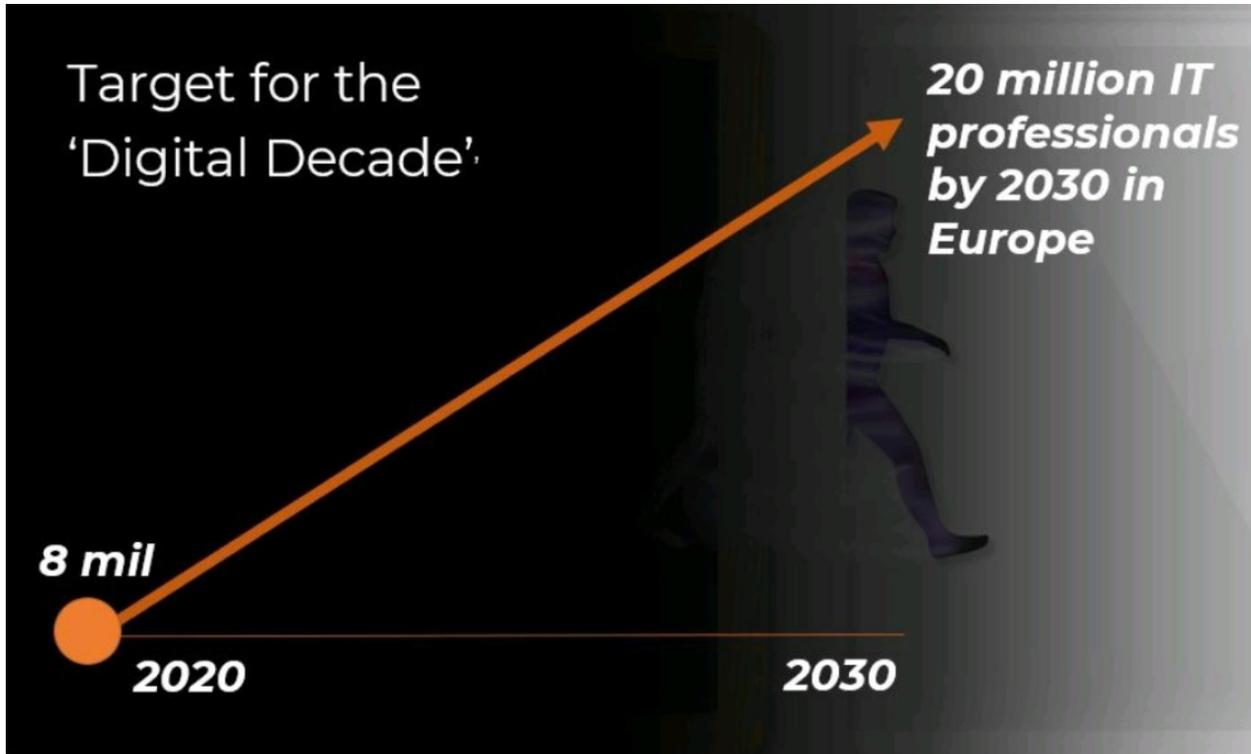
How do we portray our profession to stakeholders who create policy, employ our members, and educate new entrants?



CEN/TC 428 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

- 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



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

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

Dimension 1 5 e-CF areas	Dimension 2 41 e-Competences identified	Dimension 3 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					

Also, curriculum guidelines and performance metrics standards pending

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



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 levels
- Common professional standards
- Common professional practice
- New standards coming on stream

# 20 Million IT Professionals

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



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



**Thank You**

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