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# Education and Skills for the Information Society

## *IT STAR & CEN WS/ICT Skills Experience*

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# IT STAR - [www.itstar.eu](http://www.itstar.eu)

- **Regional ICT Association**

*Central, Eastern and Southern Europe*

- **Established in 2001**

*to promote a multi-stakeholder partnership on ICT-related issues  
and facilitate regional and international cooperation*

- **15 Institutional Members**

*Leading national IT societies in AT, BG, CY, CZ, GR, HR, HU, IT,  
LT, MK, PL, RO, RS, SK & SI - most of them also members of  
IFIP and CEPIS*



# Activities

## ■ Conferences

*ICT and the Eastern European Dimension, Prague 2004*

*R&D in Information & Communication Technology, Bratislava 2006*

*Universities and the ICT Industry, Genzano di Roma 2007*

*Nat. IS Experiences + ICT- Skills and Policies, Godollo 2008*

*ICT Skills Education and Certification, Rome 2009*

*Electronic Business, Zagreb 2010*

## ■ Publications

*Edited conference proceedings, IT STAR Newsletter- [nl.starbus.org](http://nl.starbus.org)*

## ■ Statements-recommendations-consultations

*Declarations on ICT policy issues circulated to academia, government, industry and professional ICT organizations*

## ■ Project development

*IT STAR Database pool of ICT professionals (in progress)*



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## CEN WS on ICT Skills - [www.cen.eu](http://www.cen.eu)

- Specialized body of CEN
- Contributes to e-Skills agenda of the EC
- Brings together industry, Academia and IT Associations
- Addresses professionalism, e-Skills shortages, and other issues related to competitiveness, growth, innovation, employment, social cohesion, ...
- 11 CWAs approved, 2 currently posted for public comment



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## Information Society

“An information society is a society in which the creation, distribution, diffusion, use, integration and manipulation of information is a significant economic, political, and cultural activity. People that have the means to partake in this form of society are sometimes called digital citizens. The markers of this rapid change may be technological, economic, occupational, spatial, cultural, or some combination of all of these. Information society is seen as the successor to industrial society.”

*Wikipedia*



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## The “lighter” side of Information Society





## Education and ICT Skills - Processes and programs

- Shortfall of ICT practitioners in Europe
- Need for easy comparison between Nat'l qualifications (EQF/e-CF)
- Strong tradition but observed decline of the educational system in CEE countries
- Stronger ties between Unis and Industry needed
- Importance of professional certification programs



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## E-SKILLS

- E-Skills are critical for IS development
- Need to standardize terminology -

3 broad areas of e-Skills:

*End-user,*  
*Practitioner,*  
*Business (Leadership) Skills*





## E-Skills

[www.ecdl.com](http://www.ecdl.com)



- International standard in end-user computer skills
- 7 Modules (Core)
  - Concepts of ICT
  - Using the Computer and Managing Files
  - Word Processing
  - Spreadsheets
  - Using Databases
  - Presentations
  - Web Browsing and Communication



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## E-SKILLS

<http://www.ecompetences.eu/>



*A benchmark from the ICT business employers' perspective consisting of ICT practitioner and manager competences, aligned to the EQF, structured as needed and applied on the workplace, and intended to assist transparency and mobility in the EU labor market*

<b>Dimension 1</b>	5 e-Competence areas, derived from the ICT business processes PLAN - BUILD - RUN - ENABLE - MANAGE
<b>Dimension 2</b>	A set of reference e-Competences for each area, with a generic description for each competence. 36 competences identified in total provide the European generic reference definitions of the framework.
<b>Dimension 3</b>	Proficiency levels of each e-Competence provide European reference level specifications on e-Competence levels e-1 to e-5, which are related to EQF levels 3-8.
<b>Dimension 4</b>	Knowledge and skills related to the e-Competences are indicated as optional framework components for inspiration. They are not intended to be exhaustive.



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## E-SKILLS



- European e-Competence Framework (e-CF)

*e-CF Developments: e-CF as the de-facto system for interoperability of available competence models and standards.*

EUCIP (European Certification of Informatics Professionals)  
SFIA models (Skills Framework for the Information Age),  
AITTS (Arbeitsprozessorientierte IT-Weiterbildung),  
Nomenclature 2005 CIGREF (Club Informatique des  
Grandes Entreprises Françaises) and other.



## E-Skills

[www.eucip.com](http://www.eucip.com)



**EUCIP**  
European Certification of  
Informatics Professionals

- EUCIP - Professional certification and competency development scheme, aimed at informatics practitioners.

Overall goals of the EUCIP program:

- \* Define an industry independent-driven vocational structure and standards for the informatics profession
- \* Establish a sustainable European services network for informatics competence development
- \* Contribute to closing the ICT professional skills gap in Europe
- \* Offer a vehicle for life-long learning and competency enhancement for the ICT profession



## E-Skills



**EUCIP**  
European Certification of  
Informatics Professionals

### ■ EUCIP

The EUCIP model identifies 21+1 professional profiles that can be grouped in 7 professional branches:

- IT Business Managers and Professionals
- Solution Consultants
- e-Business and Innovation Agents
- Software Designers
- Technical Advisers
- Operational Managers
- Service Support Specialists



## Some issues for CESE

- Deal with economic back-lash, unclear policies, demographic problems
- Support Education and Research
- Revise National Information Strategies - realistic action plans with timeframes, finances, entities in charge and deliverables
- Profit from web 2.0 technologies
- Develop content in national languages
- Encourage study of technical disciplines
- Invest in ICT skills of the population



## Final Word and Thanks

- Most of the countries in the region share a common ancestry, have similar issues to deal with and are on a comparable level of IS development. Therefore, it proves useful to consider various “regional pools” for joint-activities.
- IT STAR will continue to provide a forum for regional exchange of experience, interactions, joint initiatives and projects.