



The EU IT Framework *at work*: an assessment of the Knowledge Pillar on "security management"

■ Prof. Marco Ferretti

- University of Pavia, Italy, Dept. Industrial and ICT Engineering
- CINI, Consorzio Interuniversitario Nazionale per l'Informatica
- CFC lab (ICT Competences, Certification and Training)

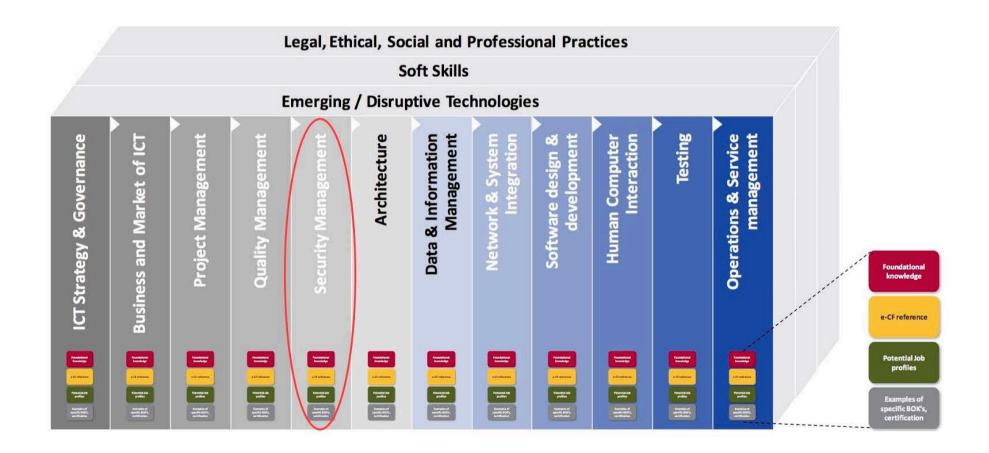
the help of Prof. R. De Nicola is gratefully acknowledged CINI Cybersecurity lab

M. Ferretti: IT Professionalism Conference – Bruxelles - 06-12-2016





12 EUBoK Knowledge Areas







- Existing tracks in ICT/Security in universities
 (bachelor 1, master 7, phd 1, post-degree 4)
 with "above minimum" number of credits on security
 10 strong (35% of total effort in security)
- Survey on EUBoK Security Management KA and eCF competences on:
 - soundness
 - usefulness for updating curricula
 - usefulness for designing curricula
- Stakeholders' roles in this endeavour
- Detailed analysis to follow





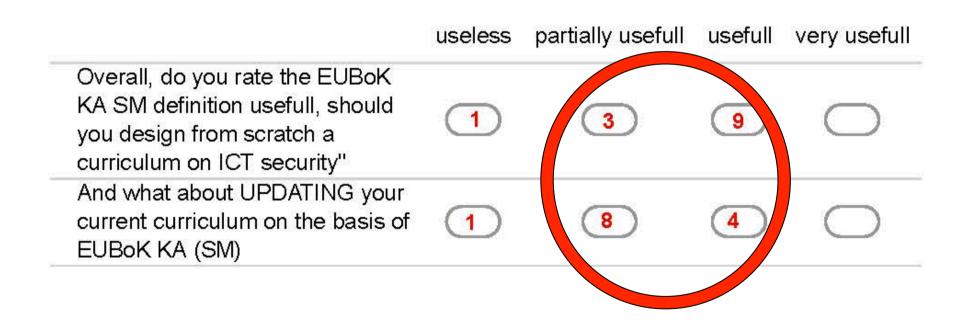
Foundational Knowledge Items

	No coverage	≤5 CFU	6 ÷ 15 CFU	>15 CFU
Introduction to security principles and concepts	1	6	5	1
IT Security controls, plans and procedures	1	6	6	
Computer security (firewalls, intrusion prevention systems, malicious software, cryptography)		4	4	5
Network security			8	1
Computer forensics	4	6	3	
Business continuity management (e.g. security audit)	5	7	1	
Human behaviour / psycholog	10	4		





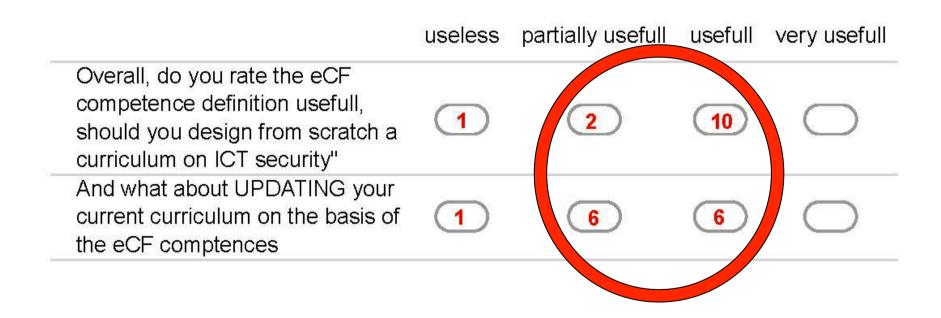
Curricula DESIGN and UPDATE through EUBoK







Curricula DESIGN and UPDATE through eCF







EUBoK vs eCF

- coarse granularity of knowledge items in both
- foundational specs should offer a reacher syllabus
- Deploying the EUBoK in formal education
- Business schools
 - a lot of work, since technology is "hard"
- ICT master-level degrees
 - ad-hoc design of mixed curricula
- ICT post master-level degrees
 - business-driven, ad hoc taylored for a well defined career path

M. Ferretti: IT Professionalism Conference – Bruxelles - 06-12-2016





Thank you!

you can contact me at

marco.ferretti@unipv.it