

# European Networking Portfolio of

First Name / *Nome* \_\_\_\_\_

Second Name / *Cognome* \_\_\_\_\_

# Personal booklet



## PERSONAL INFORMATION

Last name / *Cognome* \_\_\_\_\_

First name / *Nome* \_\_\_\_\_

Date and place of birth  
*Data e luogo di nascita* \_\_\_\_\_

Nationality / *Nazionalità* \_\_\_\_\_

Fiscal number / *Codice fiscale* \_\_\_\_\_

Date of issue \_\_\_\_\_ Signature \_\_\_\_\_

Trattamento dati personali. LEGGE 675/96 - Tutela rispetto al trattamento dei dati personali, informativa di cui all'art. 10. I dati personali indicati nella presente scheda saranno oggetto di trattamenti informatici o manuali come dall'art. 1, comma 2, lettera B, per finalità connesse all'invio di informazioni relative al progetto. Il trattamento dei dati verrà effettuato in modo da garantire la sicurezza e la riservatezza attraverso la registrazione nella nostra banca dati informatica. E' esclusa ogni forma di diffusione dei presenti dati a terzi. Il conferimento dei dati è facoltativo. I diritti dell'interessato inerenti al trattamento dei dati personali sono quelli previsti dall'art. 13 della citata legge. Per ulteriore comunicazione inerente la legge 675/96, inclusa l'informativa di cui all'art.13, si rimanda al sito web ELEA.

Il sottoscritto dichiara che Le informazioni su indicate corrispondono a verità e consente il trattamento, la comunicazione e la diffusione dei dati che lo riguardano, nei limiti indicati dall'informativa

I declare that included information is truthful and allow treatment, communication and diffusion of personal information according to the law in force.

Data \_\_\_\_\_ Firma \_\_\_\_\_

# Personal booklet

## ACADEMIC QUALIFICATIONS

ELEMENTARY CERTIFICATE / *LICENZA ELEMENTARE* year \_\_\_\_\_

MIDDLE SCHOOL DIPLOMA / *LICENZA MEDIA INFERIORE* year \_\_\_\_\_

HIGH SCHOOL DIPLOMA / *DIPLOMA MEDIA SUPERIORE* year \_\_\_\_\_ grade \_\_\_\_\_

Attended high school / *Tipo di scuola:* \_\_\_\_\_

1st level degree certificate / *Diploma universitario - Laurea 1° livello* year \_\_\_\_\_ grade \_\_\_\_\_

Faculty - Degree / *Facoltà - Disciplina di diploma:* \_\_\_\_\_

2nd level degree certificate / *Laurea 2° livello* year \_\_\_\_\_ grade \_\_\_\_\_

Faculty - Degree / *Facoltà - Disciplina di diploma:* \_\_\_\_\_

**A. Networking and data communications (Official assessment)**

A.1.1 Networking and data communications basics			Score	
Final assessment			<input type="checkbox"/>	Inadequate
			<input type="checkbox"/>	Elementary
			<input type="checkbox"/>	Intermediate
			<input type="checkbox"/>	Advanced
Year	Course type	Awarded by (Stamp and signs)		
.....	.....	.....		
<b>Detailed skills assessments</b>				
1. Insufficient      2. Sufficient      Other (note):				
<b>Activities Area</b>			<b>1</b>	<b>2</b>
1. know basic concepts on signals and safety rules for electrical devices				
2. understand the principles of data transmission and classify electronic transmission devices				
3. understand basic principles of logic, as well as the underlying principles of digital hardware				
<b>In detail the student demonstrated the following competencies:</b>				
<input type="checkbox"/> - distinguish various types of signals and noise			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - use proper measuring instruments			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - measure noise intensity, also with respect to the signal intensity			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - ensure safety of electrical devices and users who operate them			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - use numeric systems and perform conversion from/to different systems			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - distinguish circuits and gates, apply elementary logic concepts			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - represent simple procedures using flowcharts			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Using the algorithms to solve events sequences			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - use technical specifications and manuals (datasheets, specifications of components and devices)			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - digital to analog and analog to digital converters work and understand the main aspects of related specifications			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - identify the main characteristics of a communication system			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - identify interface circuit and understand data communication standards			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - distinguish connection devices according to transmission techniques and channel type			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - identify channel bandwidth according to the transmission technique and class of the device			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - identify main types and basic principles of satellite transmission			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - the PSTN works			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - identify advantages and drawbacks of the various network architectures			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - transmission standards have been defined			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - correctly associate transmission devices with transmission lines			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - telephone and data transmission networks have evolved over time			<input type="checkbox"/>	<input type="checkbox"/>

**A. Networking and data communications (Official assessment)**

A.2.1 LAN technology			Score	
Final assessment			<input type="checkbox"/>	Inadequate
			<input type="checkbox"/>	Elementary
			<input type="checkbox"/>	Intermediate
			<input type="checkbox"/>	Advanced
Year	Course type	Awarded by (Stamp and signs)		
.....	.....	.....		
<b>Detailed skills assessments</b>				
1. Insufficient      2. Sufficient      Other (note):				
<b>Activities Area</b>			<b>1</b>	<b>2</b>
1. know standards in the computer networks field				
2. be able to identify and use data transmission means				
3. be able to design the layout of LAN networks according to relevant standards (structured cabling and wireless LANs)				
<b>The student demonstrated the following competencies:</b>				
<input type="checkbox"/> - identify, recognize and classify various network topologies			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - the IEEE 802 project is structured			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - estimate network architecture typology and topology			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - the various standard operate			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - associate ISO/OSI layers with corresponding layers in the TCP/IP suite			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - associate each protocols with the proper OSI and TCP/IP layer a signal propagates in a coaxial cable, a twisted pair and an optic fibre			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - a signal propagates in ether			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - compare the performance of different transmission media and the principal characteristics of a channel			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - use datasheets to determine the main characteristics of a transmission media			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - identify the various types of connectors			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - identify and build cables and connections according to international standards			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - evaluate and characterized prospected network traffic			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - determine criticalities in network management			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - determine the requisites in network design and identify the LAN architecture and topologies that best suit actual needs			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - choose a proper physical layout for the LAN			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - the various network architectures work (medium access method)			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - data are transmitted and channel bandwidth is allocated			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - choose proper device to implement or interconnect LAN or LAN segments			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - interpret IP addresses and correctly assign addresses			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - remotely access a geographically distribute network			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - identify wired and wireless device needed to access the various kinds of WAN (PSTN, xDSL, ISDN, FR, ATM)			<input type="checkbox"/>	<input type="checkbox"/>

**A. Networking and data communications (Official assessment)**

A.3.1 WAN technology			Score	
Final assessment			<input type="checkbox"/>	Inadequate
Year	Course type	Awarded by (Stamp and signs)	<input type="checkbox"/>	Elementary
.....	.....	.....	<input type="checkbox"/>	Intermediate
			<input type="checkbox"/>	Advanced
<b>Detailed skills assessments</b>				
1. Insufficient      2. Sufficient      Other (note):				
<b>Activities Area</b>			<b>1</b>	<b>2</b>
1. know standards and architectures in the WAN networks field				
2. be able to identify and use WAN data transmission means				
3. be able to describe WAN technologies				
4. be able to design a WAN networks				
<b>The student demonstrated the following competencies:</b>				
<input type="checkbox"/> - describe about the several WANs architectures			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - know WANs standards			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - describe WAN technologies			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - identify services and applications			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - recognize the different protocols used about each WAN			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - know the PDUs for each protocol			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - use network analyzer			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - describe internet multimedia architecture and protocols			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - know operation of bridging and routing technologies			<input type="checkbox"/>	<input type="checkbox"/>

**A. Networking and data communications (Official assessment)**

A.4.1 Internetworking			Score	
Final assessment			<input type="checkbox"/>	Inadequate
Year	Course type	Awarded by (Stamp and signs)	<input type="checkbox"/>	Elementary
.....	.....	.....	<input type="checkbox"/>	Intermediate
			<input type="checkbox"/>	Advanced
<b>Detailed skills assessments</b>				
1. Insufficient      2. Sufficient      Other (note):				
<b>Activities Area</b>			<b>1</b>	<b>2</b>
1. be able to perform service administration in a LAN/WAN environments				
2. know and be able to manage networks addressing and protocols				
3. be able to perform network monitoring and troubleshooting				
<b>The student demonstrated the following competencies:</b>				
<input type="checkbox"/> - describe how bridging and routing fits in the OSI model			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - describe different types of bridge and their operation mode			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - describe the router functions			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - compare routing with bridging and switching			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - explain the importance of addressing			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - distinguish between routed and routing protocols			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - outline the characteristics of routing protocols			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - evaluate and compare different routing protocols			<input type="checkbox"/>	<input type="checkbox"/>

**A. Networking and data communications (Official assessment)**

A.5.1 Wireless inter-networking			Score	
Final assessment			<input type="checkbox"/>	Inadequate
			<input type="checkbox"/>	Elementary
			<input type="checkbox"/>	Intermediate
			<input type="checkbox"/>	Advanced
Year	Course type	Awarded by (Stamp and signs)		
.....	.....	.....		
<b>Detailed skills assessments</b>				
1. Insufficient      2. Sufficient      Other (note):				
<b>Activities Area</b>			<b>1</b>	<b>2</b>
1. understand the architectural and operating principles of wireless networking, particularly in a SOHO* environment. (*)Small Office Home Office (SOHO)				
2. know wireless network architectures				
3. know the protocols for wireless networking				
<b>The student demonstrated the following competencies:</b>				
<input type="checkbox"/> - Explain how the wireless networks have evolved in time			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Explain how the various component of a wireless network interact			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - To monitor performances of a wireless network			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - To detect collisions on a radio channel			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - To handle the use of mobile devices			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - To integrate wired and wireless LANs			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - To identify the fields of application and the main components of a wireless LAN such as a 802.11 LAN			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Telecommunication services over a WiFi network operate			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - To identify and define the main components of the GSM network GSM telecommunication services work			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - To identify and define the main components of the GPRS network GPRS telecommunication services work			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - To compare the GSM and GPRS networks			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Wireless LAN architectures			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - To know the 802.11 project and Bluetooth standards			<input type="checkbox"/>	<input type="checkbox"/>
Methods for automatic configuration of mobile IP addresses				

**B. Network operating system (Official assessment)**

B.1.1 Wireless inter-networking			Score	
Final assessment			<input type="checkbox"/>	Inadequate
			<input type="checkbox"/>	Elementary
			<input type="checkbox"/>	Intermediate
			<input type="checkbox"/>	Advanced
Year	Course type	Awarded by (Stamp and signs)		
.....	.....	.....		
<b>Detailed skills assessments</b>				
1. Insufficient      2. Sufficient      Other (note):				
<b>Activities Area</b>			<b>1</b>	<b>2</b>
1. acquire basic knowledge on operating systems				
2. be able to use, configure and maintain the operating system				
<b>The student demonstrated the following competencies:</b>				
<input type="checkbox"/> - Know basic knowledge on operating systems			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Know how the operating systems manages memory and other system resources			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Know how device drivers are configured and how they interface with the kernel			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Know how the file system is managed			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - To manage multimedia processes			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - To handle security issues			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Do the log in and the log off			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Navigate the environment file system			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Manipulate text files			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Create files and directories			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Change permissions of files and directories			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Identify and modify initialization files			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Use basic network CLI commands			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Use commands to search directories and files			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Systems Administration in a Networked Environment			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Add user accounts and grant access permissions to groups			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Administer users and groups			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Administer file resources and monitor access to it			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Administer printer resources			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Manage data storage			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Manage back up and restore files and folders			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Create and configure Internet zones			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Configure Internet client and server side services			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Maintain and troubleshoot Internet services;			<input type="checkbox"/>	<input type="checkbox"/>

**B. Network operating system (Official assessment)**

B.1.2 UNIX/LINUX			Score	
Final assessment			<input type="checkbox"/>	Inadequate
Year	Course type	Awarded by (Stamp and signs)	<input type="checkbox"/>	Elementary
.....	.....	.....	<input type="checkbox"/>	Intermediate
			<input type="checkbox"/>	Advanced
<b>Detailed skills assessments</b>				
1. Insufficient      2. Sufficient      Other (note):				
<b>Activities Area</b>			<b>1</b>	<b>2</b>
1. acquire basic knowledge on operating systems				
2. be able to use, configure and maintain the UNIX/LINUX operating system (study case)				
<b>The student demonstrated the following competencies:</b>				
<input type="checkbox"/> - To install the LINUX operating system and configure services for both client and servers			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Upgrade the system and tackle scalability issues			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Administer network resources and optimize performances			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Find upgrades and documentation			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Prepare documentation on the network in a efficace and efficient way			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Properly diagnose and solve network problems			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Identify critical points and manage network security			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Do the log in and the log out of UNIX and CDE systems			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Navigate the environment file system			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Manipulate text files			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Create files and directories			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Change permissions of files and directories			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Use the vi text editor			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Identify and modify initialization files			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Employ shell features to streamline command execution			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Use basic network commands			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Use commands to search directories and files			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Systems Administration in a Networked Environment			<input type="checkbox"/>	<input type="checkbox"/>

**B. Network operating system (Official assessment)**

B.1.3 WINDOWS NT/2000			Score	
Final assessment			<input type="checkbox"/>	Inadequate
Year	Course type	Awarded by (Stamp and signs)	<input type="checkbox"/>	Elementary
.....	.....	.....	<input type="checkbox"/>	Intermediate
			<input type="checkbox"/>	Advanced
<b>Detailed skills assessments</b>				
1. Insufficient      2. Sufficient      Other (note):				
<b>Activities Area</b>			<b>1</b>	<b>2</b>
1. acquire basic knowledge on operating systems				
2. be able to use, configure and maintain the Microsoft Windows NT/2000 operating system (case study)				
<b>The student demonstrated the following competencies:</b>				
<input type="checkbox"/> - Install the Windows 2000 operating system and configure services for both client and servers			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Upgrade the system and tackle scalability issues			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Administer network resources and optimize performances			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Find upgrades and documentation			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Prepare documentation on the network in a efficace and efficient way			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Properly diagnose and solve network problems			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Identify critical points and manage network security			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Add user accounts and grant access permissions to groups			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Administer users and groups, file resources, printer resources			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Manage data storage			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Monitor access to resources			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Audit access to resources			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Back up and restore files and folders			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Create zones and configure zones			<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> - Configure and manage DNS			<input type="checkbox"/>	<input type="checkbox"/>



● *Biography of competences*

Description of skills and professional resources<sup>1</sup>

<b>Skill</b>	<b>Acquisition modality</b>	<b>Assessment modality</b>	<b>Autentication</b> (signature and stamp)

Description of acquired competences and knowledge

<b>Knowledge</b>	<b>Technical skill</b>	<b>Tranversal skill</b>	<b>Autentication</b> (signature and stamp)

<sup>1</sup> Professional skills identified by means of a "guided" process, i.e. the "identification of competences" for the ICT area of interest.