CISO

Certified Information Security Officer in Small and Medium Enterprises

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TRANSFER OF INNOVATION, LEONARDO DA VINCI
LIFELONG LEARNING PROGRAMME
LLP-LDV-TOI-2013-1-PL1-LEO05-37738

Lifelong Learning Programme

CISO IN SMEs
Certified Information Security Officer in Small and Medium Enterprises

CONFORM

Quality Certificate
UNI EN ISO 9001:2008
Sectors EA35 and EA37

The learning environment

The learning environment, which is available in all partnership languages, provides authorized users with access to materials that have been organized in each teaching unit, each designed on the basis of the model devised by the European partnership, to address and provide the necessary support to develop skills relating to various information security issues.
The teaching units have been linked to the offices of a typical, virtual company (Back Office, Front Office, Information Security Room and Information Technology Room). Here, users can acquire knowledge and receive technical information by using the online media products developed on the basis of the model described below, and can also download documents, complete exercises and ask the expert questions.
Audio-visual support and self-assessment tests allow users to learn in a quick, flexible, intuitive and efficient way. All you need are access credentials (username and password) that CONFORM S.c.a.r.l. issues.

The Model

The learning environment created for the CISO project is a direct expression of the application of the **competence based** model, designed to facilitate and promote a system to manage and develop people based on “skills”, by identifying, maintaining and developing what people **know, what they know how to do and how they do it**.

The application of the competence based model allowed the partners to adapt the Competence Dictionary of the Security Manager to national reference contexts of the CISO project partnership and to respective linguistic terminology. The dictionary contains the names, e-competences, work processes, description and break down of knowledge, operational skills and behaviour, in order to govern the basic and specialist skills required to undertake business activities to expected performance levels.

The Competence Dictionary, which can be accessed from the Information Security Room of the CISO learning environment, constitutes a strategic map of the vocational skills of the Information Security Manager, divided into knowledge and skills.
The definition of their levels of exercise has been defined in line with those defined by the **European e-Competence Framework**, structured in four dimensions:

- **Dimension 1:** definition of the 5 areas of e-competence (Plan, Build, Run, Enable and Manage) that reflect the processes and main sub-processes of the ICT market.
- **Dimension 2:** identification and description of a set of reference e-competences

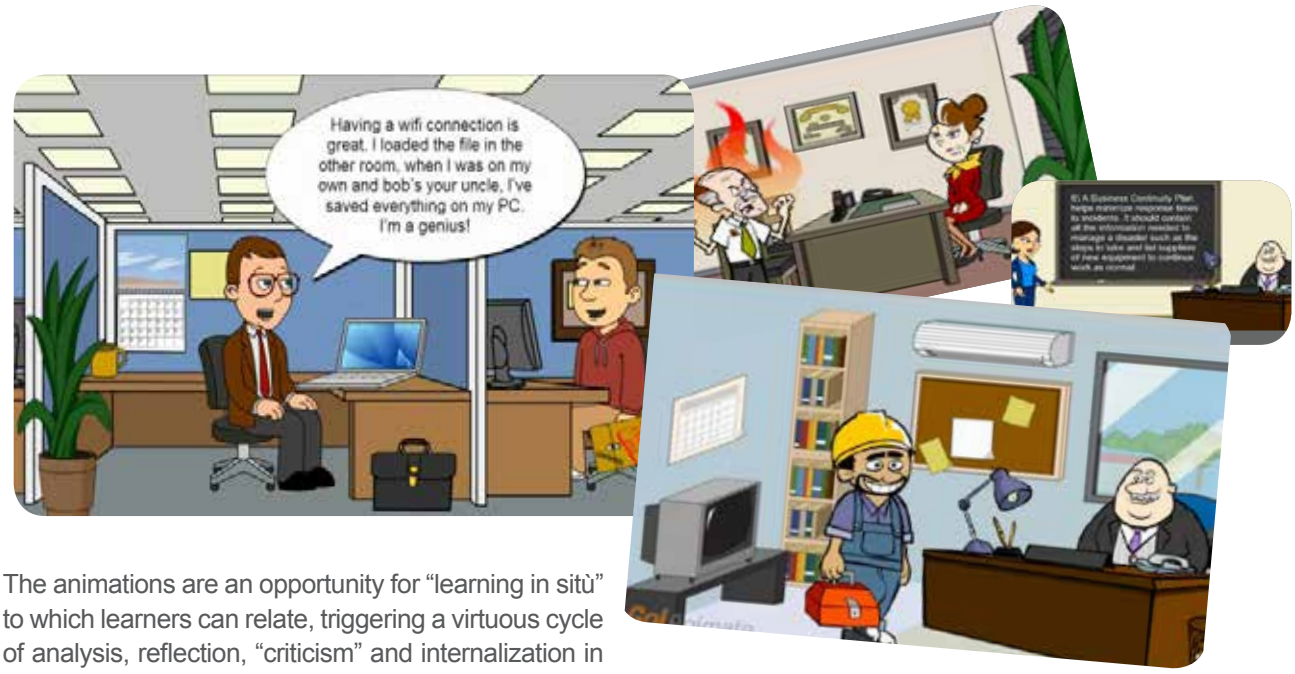
- **Dimension 3:** skills levels for each competence, articulated in levels of expertise from e-1 to e-5, in relation to the **EQF - European Qualifications Framework** levels 3 to 8, as shown in the following table:

e-CF Level	Correlated EQF Level*
e-5	8
e-4	7
e-3	6
e-2	4 e 5
e-1	3

* levels 1 and 2 of the EQF are not relevant in this context

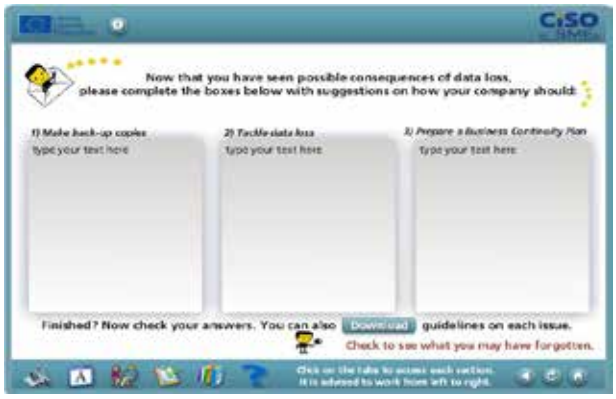
- **Dimension 4:** detailed examples of knowledge and fundamental abilities that refer to the contents of the e-Competence.

The dictionary has become the reference guide first for processing and after for delivery of the training course and, thus, the learning environment to increase the effectiveness of learning at individual and collective level, using the full potential of new technologies, to lead to teaching/learning processes with high levels of interactivity.
To promote the direct involvement of the direct target audience, animations were made and translated into the different partnership languages. These can be seen in the different teaching units.



The animations are an opportunity for "learning in situ" to which learners can relate, triggering a virtuous cycle of analysis, reflection, "criticism" and internalization in virtue of the lifelong e-learning model that promotes sedimented, conscious learning that can favour the systematic adoption for learners of the professional conduct and correlated procedural, operational and technical measures using an organizational, methodological and pedagogical rationale.

Each teaching unit also contains various opportunities for self-evaluation and assessment, where learners can test the skills they have acquired and reflect on the content and the information conveyed by animations.



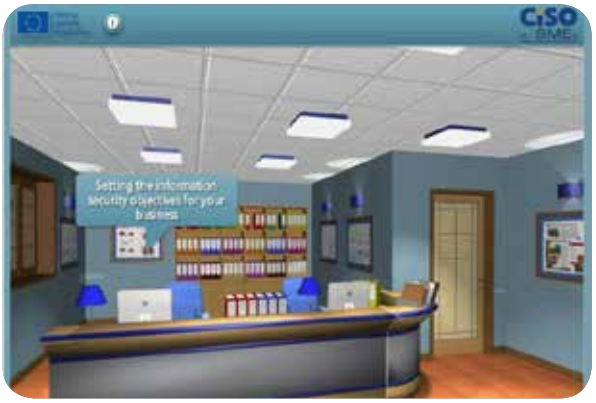
Front Office: Worksheet

IT Room: Test

In addition, the model particularly emphasis the development of the cognitive dimension of learning, offering users the possibility to access a variety of resources and educational tools (glossaries, guidelines, checklists, posters) that aim to develop, disseminate and maintain over time the key knowledge to perform well in the project target sector, standardize language, theoretical references, methodological principles, operational requirements, behavioural measures in a lifelong e-learning perspective.

The offices

The learning environment is divided into four virtual offices: **Front Office, Back Office, Information Security Office, Information Technology Room,** where authorised users can access materials containing further information and the teaching units, by clicking on sensitive objects (computers, shelves, folders, etc.).



Front Office

Back Office

IS Office (Information Security Office)

IT Room (Information Technology Room)

Here follows a short presentation of the contents of each room

The offices

Front Office

The Front Office provides an initial introduction to information security, its management and an overview of the measures to be taken to protect data: the aim is to raise awareness and stimulate interest in information security. Authorized users can consult a series of training materials and information about international rules on the matter and the aims of good information security policy.
The Front Office contains the first unit, which can be accessed from the home tab. Here users can access the following teaching and support materials:

- **Animations**

- **Security Incident:** what can happen in a company if you do not pay due attention to information security?

- **Too Late Show**: interview with an expert on information security, Mrs Safe, to understand just how important it is to protect company data.

- **Exercise**

Passing the floor to users: you will be asked to identify company guidelines on information security with particular reference to secure passwords, attacks from computer viruses and "clean desktop" policies.

- **Glossary**

List of key terms used in the teaching units. Users will be able to test and assess the definitions of individual terms by degree of complexity: beginner, intermediate, advanced.

- **Evaluation Tests**

Users can check the skills they have acquired by answering simple multiple choice questions:
Basic level: 15 questions
Intermediate level: 27 questions
Advanced Level: 30 questions

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The offices

Back Office

The **Back Office i**s dedicated to information security issues as regards human resources management as a risk factor, to training needs and opportunities, to planning of security manage strategies and risk analysis.
Authorized users can consult a series of training and information materials, including a useful checklist to be used for risk analysis and guidance on how to keep up-to-date in the field of data protection.
From the Back Office you can access the teaching units, within which enabled users can access the following teaching and support materials:

• Animations

- **Data protection - Part 1:** a security incident provides an opportunity to reflect on the policies to be applied for effective risk analysis.

- **Data protection - Part 2:** Mrs Safe, an information security expert describes the risks associated with the lack of data protection.

• Exercise

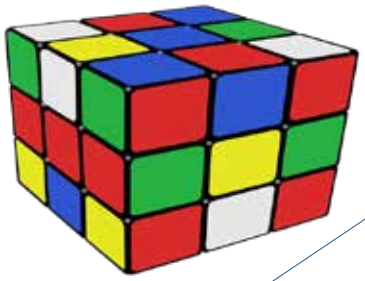
Passing the floor to users: Users will be asked to explain how they would act in the situation presented in the first animation. What measures would be adopted? In what way? And by whom?

• Poster

Activating an awareness campaign is proposed to stimulate interest and promote knowledge on information security. Posters can be used and downloaded from the environment.

• Game

A miniature **business game:** users are presented with a typical situation, with data and reference values and asked to test themselves in determining the value of a resource. At the end of the game a series of considerations are provided and they can see the "correct" solution.



The offices

Information Security Room

The **Information Security Room** is the Security Manager's Office, the head of security in the company and concerns information security strategies to define security policies and guidelines. In this section authorized users can access a set of training materials and information on the following topics:

- Control measures
- Company Security
- Monitoring
- Types of verification
- Updates

In the **Information Security Room** you can access the teaching units where enabled users can find the following teaching and support materials:

• Animations

- **Black Friday - A Black Friday:** what consequences could a company face if it does not have specific information security guidelines and policies? In this animation we will see an example.

- **Interview:** the company takes on Mrs Safe, an information security consultant, and asks her for a few tips for careful data protection management.

• Exercise

Passing the floor to users: users can explain how they would have behaved in a situation like the one shown in the first animation. What organizational measures should be taken? How should you involve staff? Which aspects should be tackled?

• Test

Users "participate" in a fun quiz show and can practice their new skills by answering simple multiple choice questions.

From the **Information Security Office** you can access the Information Security Manager Competency Dictionary

The offices

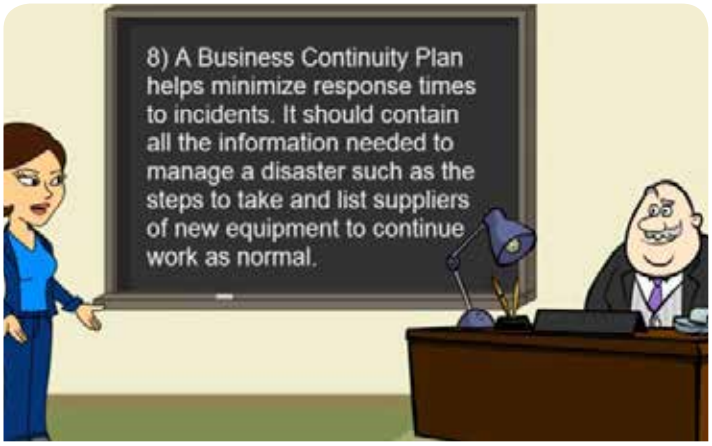
Information Technology Room

The **Information Technology Room** is the server room, where issues relating to information security within a company are tackled: the use of firewalls, antivirus, back-up systems, operating systems, etc. Authorised users can access documents on company measures at human and technical level. Inside the Information Technology Room, you can also access the teaching unit that allows you to see the following teaching and support materials:

• Animations

- **What a mess !:** once again, a security incident prompts users to reflect on the importance of creating back-up copies and defining emergency measures.

- **Copies of back-up:** Mrs Safe, the information security expert, explains the reasons that should prompt a company to implement protective measures and create



• Exercise

Passing the floor to users: users will be prompted to specify how a company should behave in making back-up copies, dealing with data loss and preparing a Business Continuity plan.

• Evaluation Test

Users can practice their new skills and consolidate the information received on “back-up copies” responding to twenty simple multiple choice questions.

• Glossary

List of key terms used in the teaching unit. Users will be able to test and verify the definitions of individual terms, arranged by degree of complexity: beginner, intermediate, advanced.

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