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SecureGas

D7.2 – TRAINING PACKAGE 1

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REVISION TABLE

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1.0	09/09/20	Final version

Disclaimer

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SecureGas – PUBLISHABLE EXTENDED ABSTRACT

SecureGas focuses on the 140.000 km of the European Gas network covering the entire value chain from Production to Distribution to the users, providing methodologies, tools and guidelines to secure existing and incoming installations and make them resilient to cyber-physical threats. Three business cases (BCs), addressing relevant issues for the Gas sector and beyond (e.g. oil), have been identified to ensure the delivery of solutions and services in line with clear needs and requirements, focused on: risk-based security asset management of gas transmission and distribution networks; impacts (economic, environmental and social) and cascading effects of cyber-physical attacks on interdependent and interconnected European Gas grids; integrity and security, through the operationalization of resilience guidelines, of strategic installations across the EU Gas network.

SecureGas tackles these issues by implementing, updating, and incrementally improving extended components, integrated and federated according to a High-Level Reference Architecture (HLRA) built upon the SecureGas Conceptual Model, a blue print on how to design, build, operate and maintain the EU gas network to make it secure and resilient against cyber-physical threats. The components are contextualized, customized, deployed, demonstrated and validated in each business case, according to the scenarios defined by the end-users. Related services provided by SecureGas will be offered to the end-users via a Platform as a Service (PaaS) that allows modularity, flexibility, cooperation and third-party interoperability, thus securing a long-lasting impact, supporting the project exploitation strategy. A multidisciplinary consortium (Gas operators, technology providers, research institutions, and sector-related associations), supports the project implementation across Construction, Demonstration and Validation phases, as well as a Stakeholder Platform ensures inputs, advice, and a wider Diffusion of the project outcome.

The objectives for WP7 objectives are:

- a) Definition of the Validation Strategy of the project to be taken into account in the deployment and demonstration of SecureGas reference architecture and components across the business cases (WP4-6);
- b) Preparation of Training Package (TP) to be used towards training the end-users during the deployment phase; D7.2 relates to this objective.
- c) Review and update existing crisis communication frameworks;
- d) Carry out an overall evaluation of the project outcomes, as collection and integration of specific evaluations related to the Business Cases (T4.5, 5.5, 6.5), e) deliver a “White paper” addressing recommendations for cyber-physical resilience of EU Gas CI.

On the basis of the definition of the TP process in Task 7.1, Task 7.2 will implement the material to be used for Training and Learning purposes within each business case during the deployment and evaluation phase. As such the content of the TP will be provided by WP2 and WP3, customized and contextualized to the Business Cases thanks to the information available by M15 in WP4-6.

The first release, TP v1 is at M15 and will be used for training the end-users during the deployment phase. This report reviews this first period, from M9 to M15.

TP v2 is due for release at end of M21; the outcome of TP will be used as input for the recommendations and guidelines to be issued by Task 7.3.

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ABBREVIATIONS AND ACRONYMS

BC	Business Case
CI	Critical Infrastructure
CM	Conceptual Model
DSO	Distribution System Operator
GUI	Graphical User Interface
HLRA	High Level Reference Architecture
IT	Information Technology
LNG	Liquid natural gas
MS	Microsoft
NG	Natural Gas
PaaS	Platform as a Service
POC	Point of Contact
PDF	Portable document format
PPT	MS PowerPoint
OEM	Original Equipment Manufacturer
OJT	On the Job Training
SCADA	Supervisory Control And Data Acquisition
RMG	Risk management
SCORM	Sharable Content Object Reference Model
SOPs	Standard Operating Procedures
SME	Subject Matter Expert
TLS	Training and Learning Solutions
TP	Training Package
TSO	Transmission System Operator
UAV	Unmanned Aerial Vehicle
WP	Work Package

EXECUTIVE SUMMARY

SecureGas focuses on the 140.000 km of the European Gas network covering the entire value chain from production to distribution to the users, providing methodologies, tools and guidelines to secure existing and incoming installations and make them resilient to cyber-physical threats. Three business cases, addressing relevant issues for the Gas sector and beyond (e.g. oil), have been identified so that to ensure the delivery of solutions and services in line with clear needs and requirements, focused on: risk-based security asset management of gas transmission and distribution networks; impacts (economic, environmental and social) and cascading effects of cyber-physical attacks on interdependent and interconnected European Gas grids; integrity and security, through the operationalization of resilience guidelines, of strategic installations across the EU Gas network. SecureGas tackles these issues by implementing, updating, and incrementally improving extended components, which are contextualized, customized, deployed, demonstrated and validated in each business case (BC), according to the scenarios defined by the end-users (D4.1, D5.1, D6.1).

In general, the project is structured in three phases: Construction, Demonstration and Validation & Diffuse. This last phase has twofold objectives: on one side to perform a cumulative and summative evaluation of SecureGas Conceptual Model (CM), High Level Reference Architecture (HLRA), components and their deployment into the BCs. On the other side to make sure that SecureGas outcomes and core principles are diffused beyond the consortium reaching a wider community of users.

This deliverable D7.2, follows on from T7.1 which defined the validation strategy to be considered in the deployment and demonstration of SecureGas reference architecture and components across the business cases (WP4-6). D7.2 describes the processes involved, and accomplishments this period in relation to the implementation of the material to be used for Training and Learning purposes within each business case during the deployment and evaluation phase.

1 INTRODUCTION

Task 7.2 will implement the material to be used for Training and Learning purposes within each Business Case (BC) during the deployment and evaluation phase. As such the content of the Training Package (TP) will be provided by Work Package (WP) 2 and WP3, customized and contextualized to the BCs thanks to the information available by M15 in WP4-6.

Two releases of the TP are planned for the project (see Figure 1.1 for timeline):

- TP v1: at M15 to be used for training the end-users during the deployment phase.
- TP v2: at M21 taking into account elements and findings available by that date (e.g. release of D4.2-4.3, D5.2-D5.3, and D6-2-D6.3).

Project Month	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Calendar month	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21
WP7		Start												
7.2 Training package 1		Start						End						
7.2 Training package 2									Start					End

Figure 1.1: D7.2 Timeline

The outcome of Task 7.2 will be used as input for the recommendations and guidelines to be issued by Task 7.3.

Rina Consulting Defence Ltd (RCD) (involved as Third Party of RINA-C) leads on this activity thanks to the expertise of the Training and Learning Solutions (TLS) team.

The materials that form SecureGas TP v1 and TP v2 are described in the Grant Agreement as “...*the material (in different form and formats, e.g. electronic, paper based) for Training and Learning purposes.*” and will be tailored to the users.

This progress report covers the period of TP v1, namely Months 9 to 15 of the SecureGas project.

1.1 GOAL AND KEY TASKS

The primary goal of TP v1, was to analyse the training requirements and design a storage and delivery solution to enable individual partners to store and deliver digital learning materials tailored for the appropriate audience. Details on the analysis phase can be found in Task 7.1; the *Validation Plan- Section 4 - Formulating the Learning Concept*.

Following on from the analysis the key objectives for this phase were:

- Coordinating partner engagement.
- Collecting and assimilating information on proposed training solutions.
- Devising a web-based solution to host and disseminate training materials.

2 FORMULATING THE LEARNING CONCEPT

2.1 TARGET AUDIENCES

2.1.1 Primary Audience

Within this section, groups are categorised by Organisations who have a direct interest in supporting Critical Infrastructure (CI) and/or the gas sector, such as end users or those directly involved in the project. The Organisations included in this group will receive specific familiarisation training to support particular technologies such as UAVs or SCADA systems. At the same time it is important that the training audience develops the requisite knowledge, skills and attitudes essential to operate, maintain, diagnosis and repair equipment pertinent to scenarios such as physical, cyber or geo-hazard security threats.

Table 2.1 Describes each Organisation that is considered part of the ‘Primary Audience’.

Table 2.1: Primary Target Audience

No.	Organisation/ Group	Locality	Description of Organisation	Link to SecureGas
1	DEPA	Greece	Main natural gas (NG) and liquefied natural gas (LNG) importer in Greece. Involved in the development of key cross border gas infrastructure projects, promoted by the European Commission as Projects of Common Interest (PCI), contributing to the enhancement of the regional energy security.	<ul style="list-style-type: none"> • Business Case 1 Owner. • End-user of SecureGas solution.
2	EDAA	Greece	Distribution System Operator (DSO) in Attiki, the most populated region in Greece. Supplying NG to more than 350,000 households, 6,500 small commercial customers and 200 large commercial and industrial customers.	<ul style="list-style-type: none"> • Business Case 1 testbed provider. • End-user of SecureGas solution.
3	AMBER	Lithuania	Transmission System Operator (TSO) responsible for the gas transmission infrastructure across the Baltic states.	<ul style="list-style-type: none"> • Business Case 2 Owner. • End-user of SecureGas solution.
4	ENI	Italy	Oil and Gas company providing gas production and transmission (both onshore and offshore) and asset integrity management.	<ul style="list-style-type: none"> • Business Case 3 Owner. • End-user of SecureGas solution.
5	Interdependent or other Gas CI owners and operators.	All Europe	Potential end users	The solutions developed by SecureGas in all business cases could benefit their daily operations and security as a whole.
6	Pipelines (Poseidon, East Med)	Greece and Italy	End user	Partially owned by DEPA who is involved in BC1.
7	Trans Adriatic Pipeline	Greece, Italy, Albania	Potential end user	Cross platform and original equipment manufacturer (OEM)CI Solution/s maybe applicable to Trans Adriatic Pipeline.

2.1.2 Secondary Audience

Within this section, Organisations are defined as not directly related to the gas sector, but they will have an interest in the development of technologies. This training will give an overview of the solutions and therefore enhance ‘first’ response in the case of a disaster event and/or provide valuable insight into the development of solutions to inform future CI projects. The analysis for this audience considered different factors, in particular the requirements imposed by the user, technical demands, the organisational role and national / international Regulation. Table 2.2 describes each Organisation that is considered part of the ‘Secondary Audience’.

Table 2.2: Secondary Target Audience

No.	Organisation/ Group	Locality	Description of Organisation	Link to SecureGas
1	First Responders	International	<ul style="list-style-type: none"> • Fire Fighters. • Police. • Paramedics. • Rescue services. • Civil Protection. 	Providing critical safety and potential hazard information will ensure first responders can deliver an effective service in the event of a physical threat, sabotage or natural catastrophe.
2	Other infrastructure managers. (e.g. water, transport etc.)	International	These organisations may deal with gas infrastructure companies and organisations in the course of their business.	<ul style="list-style-type: none"> • SecureGas solutions may help them understand how to assess their own operations. • They might use solutions such as vibrations and video analysis to protect their infrastructures.
3	Government and Environmental bodies	International	Organisations such as (but not limited to): <ul style="list-style-type: none"> • Energy Authorities. • Environmental Agencies. • Health & Safety bodies. • Infrastructure management organisations. 	<ul style="list-style-type: none"> • A knowledge of the SecureGas project can help them to develop regulation to enforce safety behaviours. • They have interest in preventing any kind of threat.
4	EU Bodies	EU	Parallel/future EU projects.	Results of this project may be taken into consideration for other types of projects, such as: security, terrorism, and cyber-attacks.
5	Local organisations	Regional and National	<ul style="list-style-type: none"> • Local communities. • Citizens groups. 	This project could be of particular interest to citizens who live near a strategic area such as compressor stations or exposed pipelines.
6	Security and Intelligence organisations.	International	Shared Information	Security and intelligence organisations play a peripheral role in monitoring the environment and share threat assessments and incidents reports to different countries in

No.	Organisation/ Group	Locality	Description of Organisation	Link to SecureGas
				order to reinforce security around strategic gas CI.
7	Consultants. Auditors/ Inspectors.	International	<ul style="list-style-type: none"> • Sub-contracting • Audits • Accreditations 	Companies use certifications/ accreditation in order to support procedures, best practices and professionalism.
8	Education: Science and Research	International	<ul style="list-style-type: none"> • Research centres • Academic institutions 	May use results from the project for future research or development in critical infrastructures.
9	Energy Providers	International	Consumers	Heavily reliant on the transportation of gas.

2.2 METHODS AND MEDIA METHODOLOGY

Learning is the process whereby individual(s) acquire relevant knowledge and improved skills and behaviours that increase their potential performance.

Learning is not an automatic consequence of teaching, reading, watching videos, participating in a training session etc., it involves a fundamental adaptation or shift in thinking and understanding. It is not just about taking in information; the learner must be engaged in the process. Key to this engagement is the appropriate selection of methods & media that support the business and training requirements.

RCD is working with the partners to facilitate the most appropriate methods and media to support TP v1 and TP v2.

2.2.1 Methods

These are the training strategies and techniques used to facilitate learning. Table 2.3 gives examples of methods that can be used and in many instances these can be adapted to work in both a face to face and digital environment.

Table 2.3: Examples of Methods

Method	Purpose	When to use
Role Playing	Help learners practice skills used in interactions.	<ul style="list-style-type: none"> • To practice newly acquired skills. • To experience what a particular situation feels like. • To provide feedback to learners about their behaviour.
Games	Provides non-threatening ways to present or review course material.	<ul style="list-style-type: none"> • To help grasp the bigger picture of the training. • To present 'dry' material in an interesting way. • To add a competitive element to the session.
Simulations	Recreates a process, event or set of circumstances, usually complex, so that learners can experience and manipulate the situation without risk and then analyse what happened.	<ul style="list-style-type: none"> • To integrate and apply a complex set of skills. • To provide a realistic, job related experience.
Observation	Certain learners act out or demonstrate behaviours, tasks or situations while others observe and give feedback.	<ul style="list-style-type: none"> • To show a group how to perform procedure or apply a behaviour. • To increase learners' observation, critiquing and feedback skills. • To demonstrate behaviour modelling.

Method	Purpose	When to use
Tests, questionnaires and quizzes	Provides feedback.	<ul style="list-style-type: none"> To identify areas for improvement.
Lectures/ presentations	Conveys information when interaction or discussion is not desired or not possible.	<ul style="list-style-type: none"> To convey information quickly within a short period of time To communicate same information to large numbers of people. To provide basic information to a group that has no prior knowledge of the topic.
Group Discussions	Offers opportunity for learners to express opinions, share ideas, solve problems and interact with each other.	<ul style="list-style-type: none"> To generate ideas. To find out what learners think about a particular subject. To increase participation. To encourage group interaction and build group cohesiveness.
Case Study	Allows learners to discover certain learning points themselves.	<ul style="list-style-type: none"> To apply new knowledge to a particular situation. To practice problem solving skills.
Demonstration	Demonstrating a specific task, process or actions and showing how the desired result can be achieved.	<ul style="list-style-type: none"> To show a group how to perform a procedure or apply a behaviour. To increase learners' observation, critiquing and feedback skills. To demonstrate behaviour modelling.
Task exercise or activity	Allows learners to work with the content.	<ul style="list-style-type: none"> To test learners' understanding of a concept or process. To increase learners' confidence in their ability to apply learning on the job. To promote group collaboration (if group activity)

Based on 'Instruction Methods' taken from 'The Trainer's Handbook' by Karen Lawson.

2.2.2 Media

Media are the tools used to apply the methods. The process of selecting training media requires a good understanding of the learning objectives and knowledge of the available resources. The main consideration in selecting appropriate media must always be its effectiveness in supporting learning. Often one medium is not enough for presenting the stimuli required and so a multimedia or 'blended learning' approach is required.

3 COORDINATING PARTNER ENGAGEMENT

3.1 SECUREGAS TASK 7.2 PARTNERS

The majority of partners involved in Task 7.2 identified in the Grant Agreement are actively engaged.

3.2 BUSINESS CASE 1: DEPA & EDAA (GREECE)

Table 3.1 shows proposed TP v1 training materials to be supplied by partners for BC1.

Table 3.1: BC1: Proposed Training

Partner	Training Title (Work in Progress)	Training content/Description (Work in Progress)	Media
DMAT	Crisis Communication: Basic Training for CI Operators	<ol style="list-style-type: none"> 1. Basic Information Crisis and Crisis Management 2. Basic Information on Crisis Communication 3. Proposed Training Methodology for Crisis Communication 4. SECURE GAS - Crisis communication training in BC 5. Business Cases 1 and Crisis Communication (Crisis Becomes Reality) 	PDF
GAP/EXUS	Risk and Resilience Management	<ul style="list-style-type: none"> - Explain principles of the Risk and Resilience management framework - Acquire knowledge on a concrete risk based methodological approach applied to foster the integrity and resilience of Critical Infrastructure networks. - Introduction of the joint cyber-physical risk and resilience concept, to enable the better understanding of the functionalities offered by the RMG technical component. 	PPT
GAP/EXUS	Risk and Resilience Management	<ul style="list-style-type: none"> - Explain principles of the Risk and Resilience management framework - Acquire knowledge on a concrete risk based methodological approach applied to foster the integrity and resilience of Critical Infrastructure networks. - Introduction of the joint cyber-physical risk and resilience concept, to enable the better understanding of the functionalities offered by the RMG technical component. 	PDF
GAP/EXUS	Risk-based analysis	<ul style="list-style-type: none"> - How to perform risk-based analysis through the standalone tool. - Provide additional information about the capabilities of feature “real time” of Risk management (RMG) 	PDF
GAP/EXUS	Risk Management (RMG) component	<ul style="list-style-type: none"> - Provide information to the target audience about characteristics of the RMG component. - Familiarise the target audience with the RMG component UI and providing an interactive way of learning. 	MP4
GAP/EXUS	Functionality	<p>The trainees will receive training on component functionality and learn how to:</p> <ul style="list-style-type: none"> - Interact with the component - navigate through its provided functionalities. 	F2F
INNOV	Risk Awareness	<p>How the information flows from the detection phase to the risk awareness of the population in order to have a global understanding of the way the component (Risk aware information to the population) works.</p> <p>How the initial information goes through the SecureGas system and travels all the way to the KEMEA coordination centre.</p>	PPT
GAP/INNOV	RAW Functionality	A printable manual with more details about each functionality of the component. This will be the reference manual for the users of the RAW component.	PDF
GAP/INNOV	RAW UI Functionality	A demo-like video explaining the interface and how it works for each kind of users. In the same video some scenario demonstrations can also be viewed. This will allow users to have a hands-on experience in the comfort of their office.	
GAP/INNOV	Training for end users	We can also propose a live interaction meeting at the operators’ premises in order to show how the system works and then create	F2F

Partner	Training Title (Work in Progress)	Training content/Description (Work in Progress)	Media
		the appropriate types of users in order to invite possible users to try it directly. The trainees (future users) will be invited to interact on the spot with the component in order to get familiar with the functionalities.	
IDMG	Core functionalities accessible via the GUI	Explanation of the core functionalities accessible via the GUI and how to: - verify that the system is running - monitor the generated output. - perform a basic function test in the case of problems	PDF
IDMG	Description of data-structure, API and analytic features	Description of data-structure, API and analytic features. - the data-model - the way data is transferred - basic performance values expected (this also includes accuracy level).	PDF
IDMG	Administrative guide and trouble shooting	Administrative guide and trouble shooting. Describes: - the internal architecture - communication channels and storage organization - procedure In case of a system failure In the case of system failure: - how to work with IDEMIA to identify and fix problems.	PDF
WINGS	Wings Platform User manual	The material will be a user manual with detailed instructions and explanations on navigating, using and understanding WINGS platform and its advanced analytics capabilities as customized for the needs of SecureGas	PDF

3.3 BUSINESS CASE 2: AMBERGRID (LITHUANIA)

Table 3.2 shows proposed TP v1 training materials to be supplied by partners for BC2.

Table 3.2: BC2: Proposed Training

Partner	Training Title (Work in Progress)	Training content/Description (Work in Progress)	Media
FHG	Manual for GasNetSim	1. The user interface and its elements 2. Main steps to build and analyse a topology 3. Sketching a topology using the topology toolbar 4. Modify components using the component toolbar 5. The Settings-Menu 6. Running the topology 7. The Topology.xlsx-file and its content 8. An example of how to use GasNetSim	PDF
FHG	Cyber-physical risk control and resilience approach.	Cyber-physical risk control and resilience approach. Including vulnerabilities of gas consumers and importance (or criticality) of pipelines in dependence of several disruption impact definitions. [In this context the open issue to work on is to find suitable impact definitions that can be formulated in terms of physical quantities that can obtain form the gas network simulation tool.]	PDF
GT	Utilising blockchain	Utilising blockchain technology to support data transmission and integrity verification mechanisms.	PDF
ELBIT	Elbit Scada Shield	Training on Cyber Security for IT and OT networks weakness.	PDF

3.4 BUSINESS CASE 3: ENI (ITALY)

Table 3.3 shows proposed TP v1 training materials to be supplied by partners for BC3.

Table 3.3: BC3: Proposed Training

Partner	Training Title (Work in Progress)	Training content/Description (Work in Progress)	Media
DMAT	Crisis Communication: Basic Training for CI Operators (Business Case 3)	1. Basic Information Crisis and Crisis Management 2. Basic Information on Crisis Communication 3. Proposed Training Methodology for Crisis Communication 4. SecureGas - Crisis communication training in BC 3	PDF
ADPM	GCS (ground control system) simulation	The remote operator can test any feature, mission, telemetry and so on, also on real map data. The system can also show a 3D view of the drone in real time using the Google Earth engine. It can be used also for testing the communication subsystems that will be developed/implemented in the SecureGas platform.	Bespoke
ADPM	GCS (ground control system) Tutorial	Mini tutorial for quick starting the simulator	PDF
ADPM	Hangar system	Operation manual for the Hangar: the new system being developed for SecureGas.	PDF
ADPM	ADPM Drone	Operation manual for the ADPM drone.	PDF
ADPM	GCS system	Possible on site trainer	F2F
LDO	Video 1: Scenario 1	Scenario 1	VIDEO
LDO	Video 2: Scenario 2	Scenario 2	VIDEO
LDO	Video 3: Scenario 3	Scenario 3	VIDEO
LDO	Training for end users	The trainees will receive training on how to: - perform their jobs on the actual work floor. - analyse the use case and find out all possible solutions provided by SecureGas. - make the best decisions when dealing with an incident.	F2F
LDO	Technical manual	To support the face to face training.	PDF
RINA-C	High-Level Reference Architecture	Technical information and details on the high-level correlation functionalities enable by the reference architecture	PDF / VIDEO
RINA-C	Distributed Acoustic System	Technical information to support the usability of the developed solution	PDF / VIDEO
RINA-C	Geo-hazards assessment	Technical information to support the usability of the developed solution	PDF / VIDEO

3.5 MATERIALS APPLICABLE ACROSS ALL BUSINESS CASES

Table 3.4 shows proposed TP1 training materials to be supplied by partners that is relevant to personnel in all BCs.

Table 3.4: Proposed Training Relevant to all Business Cases

Partner	Training Title	Training content/Description	Media
KEMEA	1. Theoretical background & Introduction	Definitions Critical Infrastructures Protection Operations of Gas CI Legislative/regulation framework and standards for Gas CI Gas CI security dimensions Stakeholders References	PPT
KEMEA	2. Critical assets, threats & vulnerabilities	Definitions Introduction Critical assets Threats Vulnerabilities References	PPT
KEMEA	3. Risk management in a Gas CI environment	Definitions Risk management Risk assessment References	PPT
KEMEA	4. Methodological framework for exercise planning and implementation in a Gas CI environment	Definitions Introduction 2.1 Exercises Objectives 2.2 Methods Methodological framework for exercise planning and implementation in a Gas CI environment 3.1 Set the context 3.2 Plan the exercise 3.3 Implement the exercise 3.4 Assess and report results References	PPT
KEMEA	5. Crisis management in a Gas CI environment	Definitions Crisis management process Preparedness Response Recovery Mitigation References	PPT
KEMEA	6. Business Continuity Management in a Gas CI environment	Definitions Introduction Business Continuity Management System (BCMS) Context of the organization Operation Performance evaluation Improvement References	PPT

4 WEB-BASED TP STORAGE SOLUTION

4.1 DESCRIPTION

There is a requirement to store the digital training materials securely, and give access and permissions to users based on their role. See Table 4.1 for an analysis of these requirements (work in progress).

Table 4.1: User Roles and Permissions

		Attached to Role						
ROLE:		EU Security level	IT System Security docs	IT Systems documentation	Management Information	Operational Instructions	General sensitive information	General non-sensitive information
			High level of sensitivity					Low level of Sensitivity
RinaCube Administration								
	Admin-level 1	No restrictions	x	x	x	x	x	x
	Admin-level 2	No restrictions		x	x	x	x	x
Original Equipment Manufacture								
	OEM systems engineer	No restrictions	x	x	x	x	x	x
	Content admin	No restrictions		x	x	x	x	x
	Onsite Trainer	No restrictions		x	x	x	x	x
Primary Audience								
	IT specialist	No restrictions		x	x	x	x	x
	Manager	No restrictions			x	x	x	x
	Operator	No restrictions				x	x	x
	General	No restrictions						x
Secondary Audience								
	Manager	No restrictions					x	x
	Operator	No restrictions					x	x
	General	No restrictions						x
Guest								
	Guest	No restrictions						x

4.2 DESIGN

The training material is currently stored in an MS TEAMS repository where SecureGas Consortium members (including SecureGas end-users – Primary Target Audience) have access rights. See Figure 4.1

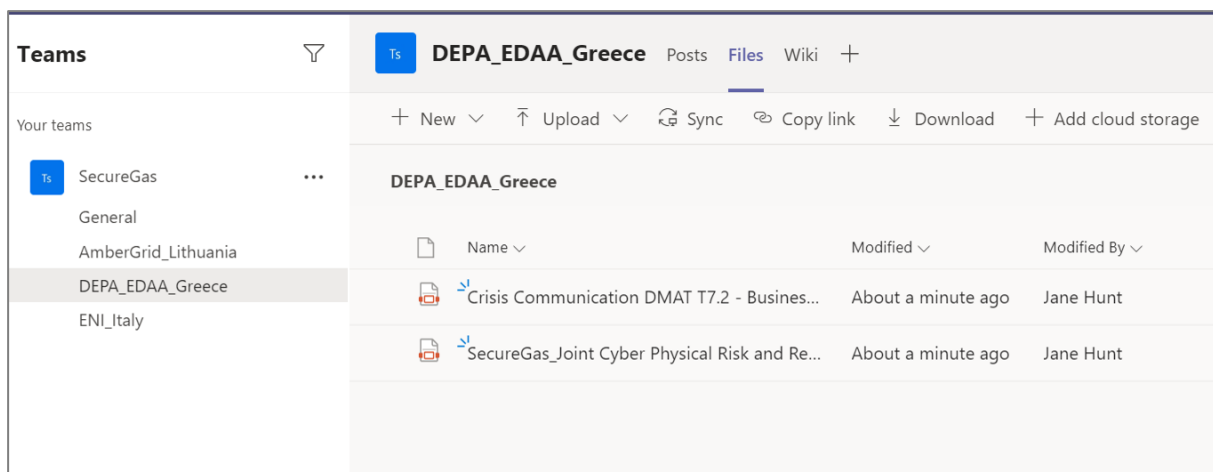


Figure 4.1: Microsoft Teams SecureGas TP

A web-based solution to host and disseminate training materials will be developed after the evaluation phase, and will include a landing page and permissioned access to the content. A mock-up of the homepage has been created using Balsamiq wireframe software: see Figure 4.2.

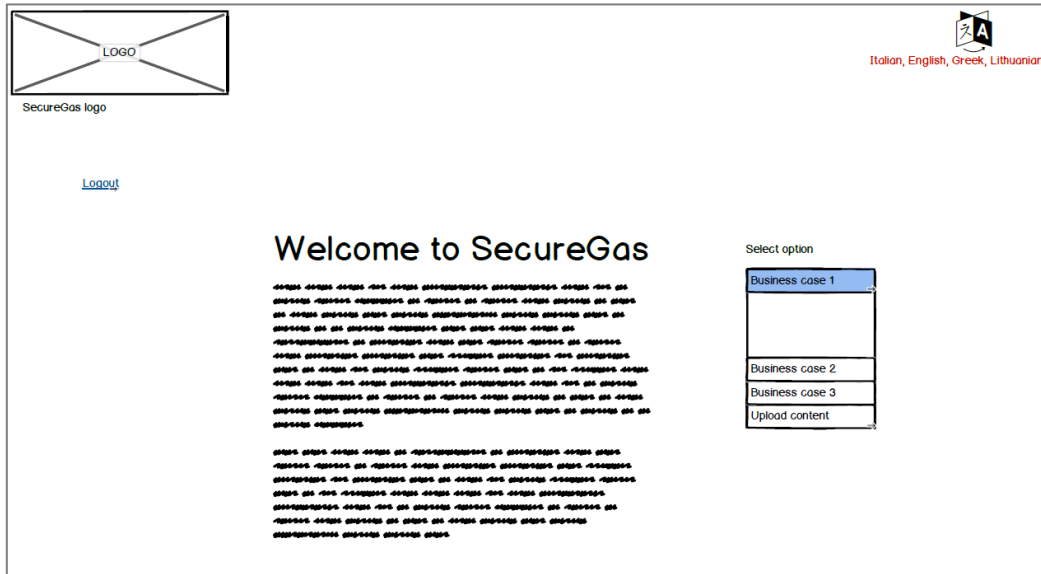


Figure 4.2: Wireframe of SecureGas TP Home Page



5 COORDINATION OF TP CONTENT

5.1 COORDINATING TP V1 CONTENT

5.1.1 Quality Assurance of TP v1 Training Materials

Part of the role of RCD, is to review the training materials and ensure they meet the requirements as outlined in the *Validation plan, Section 4 Formulating the Learning Concept*. This will include reviewing materials and offering advice and guidance as appropriate.

5.1.2 Creating Database Metadata

Once the training materials have been finalised, a set of metadata will need to be created for each item to ensure it can be effectively stored (and retrieved) from the database.

5.1.3 Localisation of Materials

Once the materials have been quality assured, there will be a requirement to create versions in the local languages required for each BC (namely Lithuanian, Italian and Greek).

5.1.4 Evaluation of TP v1

As part of the wider WP7 evaluation, there will be a requirement to conduct a Training evaluation exercises. This is described within the Grant Agreement as "*the learning concept for the provision of training to selected groups of users will also be defined. In this context, the most appropriate methods and media for the targeted audience(s) in the context of SecureGas will be investigated also encompassing the evaluation of the learning process.*"

5.2 COORDINATING TP V2 CONTENT

Following on from the WP7 evaluation, including the training evaluation, the TP v2 training materials are due to be delivered at the end of Month 21.

The project plan for this phase will mirror some of the activities in the TP v1 phase, however it is anticipated that the emphasis will be on:

- Reviewing evaluation data and feeding back to partners;
- Advising and supporting partners to implement changes to training materials;
- Quality Assurance of TP v2;
- Coordination of delivering and uploading TP v2 materials.



6 CONCLUSIONS

In this deliverable D7.2, the processes involved in relation to the implementation of the material to be used for Training and Learning purposes within each business case during the deployment and evaluation phase is described, and accomplishments made within this period has been reported, in order to achieve the T7.2 key objectives, i.e. coordinating partner engagement; collecting and assimilating information on proposed training solutions; devising a web-based solution to host and disseminate training materials. The training material will be released in a digital form and will be user (in this case CI operator) tailored. This will be included in the second volume of this deliverable (D7.3) in M21 after the completion of the integration of SecureGas technical components in the three BCs and relevant finalization of the respective training material by the technical providers.



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