

# **SecureGas: D7.2\_Training Package v1**

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***This is only the executive summary.  
The full deliverable will be available once approved by the EC/REA***



# SecureGas

## D7.2 – TRAINING PACKAGE 1

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## REVISION TABLE

Version	Date	Comments
0.1	03/09/20	Internal QA / Draft version
0.2	07/09/20	Revisions following QA
0.3	08/09/20	Revisions following QA
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

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