



SecureGas

Securing the European Gas Network



SecureGas project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 833017

SecureGas Technical Requirements



- Qualified partners bring their components (products and technologies) to the Securegas project
- These components will be extended to fit the gas pipeline domain, during the project
- The extended components will have to interoperate with each other in order to build an advanced and innovative solution aimed at improving the protection and resilience of the gas infrastructures

SecureGas Technical Requirements



We are going to see a selection of representative Technical Requirements of the extended components that we intend to develop during the project:

- meet the end user needs
- adopt the most innovative technological solutions
- face and solve the business cases scenarios proposed

without forgetting cost control, easy and scalable deployment



SecureGas ... a Storyboard ...



putting together *as_is* and *to_be*

1 LEGACY AND NEW TECHNOLOGY

SecureGas has to integrate the protection systems already operating in the gas infrastructure

why Securegas?

2 DECISION SUPPORT

SecureGas supports Users to make proper decisions through a workflow engine that reacts to each detected event

how?

3 INFORMATION PROCESSING AND MANAGEMENT

SecureGas processes heterogeneous data coming from physical and cyber probes in the field, in order to detect and predict cyber-physical threats

by leveraging

4 SCADA NETWORK SECURITY

"Intelligent probes" monitor the OT network in order to identify suspicious or malicious activities

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and

5

UNMANNED AERIAL VEHICLE (UAV) MONITORING

Securegas provides advanced monitoring capabilities through drones operated by a Smart Docking/Recharging system

and

6

GEOHAZARD ASSESSMENT

SecureGas operates a GIS based, near-real time model to assess slope stability and possible slope evolutions

and

7

VIDEO SURVEILLANCE ADVANCED FUNCTIONS

SecureGas provides a video analysis platform detecting faces, motions, vehicles etc., also at night light conditions

strengthened by

8

GAS NETWORK SIMULATION

Securegas strengthens decision support by providing predictive simulation of the attack vectors impact on the gas supply and the corresponding optimized response vectors

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accessible through a

9

USER FRIENDLY INTERFACE

Securegas Cockpit provides a high level Situation Awareness by displaying all the necessary and sufficient information via customized layouts

strongly
complemented by

10

RESILIENCE & RISK MODELING AND MANAGEMENT TOOL

SecureGas provides comprehensive information about the risk level of the various physical and cyber threats that could affect the integrity of the Gas CI network

without forgetting

11

DATA EXCHANGE INTEGRITY

SecureGas provides KSI Blockchain functionalities applied to data exchange integrity

12

RISK AWARE INFORMATION TO THE POPULATION

SecureGas provides the functionality to connect to the Public Warning Services managed by the competent public authorities in order to report incidents and events for the protection of the population

last but not least



indicates the technical **COMPONENT** to which the requirement refers

REQUIREMENTS DOMAIN	
REQUIREMENT TITLE	Unique_Code and Title of the requirement
REQUIREMENT DESCRIPTION	Brief requirement description
BUSINESS CASE AFFECTED	indicates the Business Case(s) in which the requirement will be tested and validated
END USER REQUIREMENTS	Reference to the main end-user requirements satisfied



www.securegas-project.eu



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