



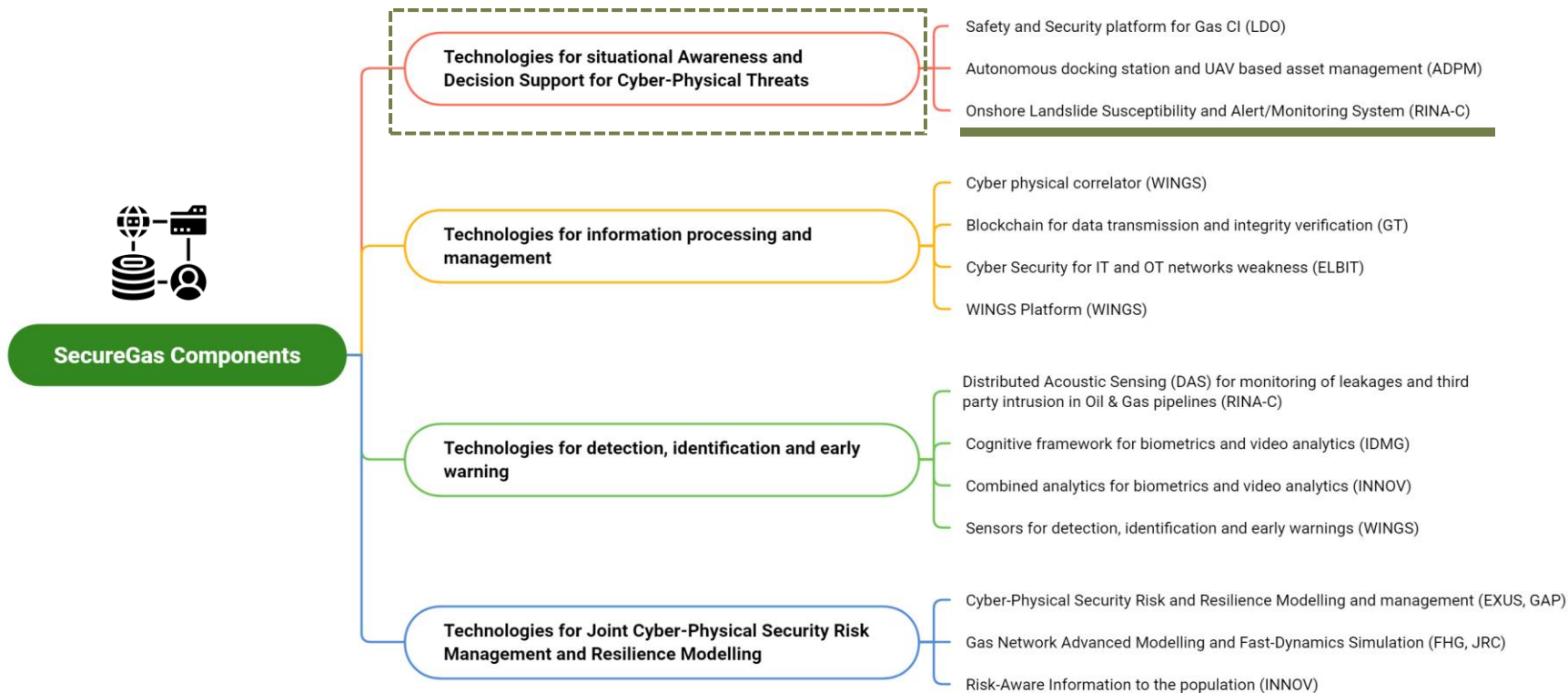
SecureGas

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 extended components



Onshore Landslide Susceptibility and Alert / Monitoring System

DESCRIPTION

Resorting to fast historical-statistical, engineering and GIS-supported risk parameterization a **geohazard assessment tool to assess landslide stability along pipeline routes is provided** with the following targets:

- a) definition of the key parameters governing slope stability along pipeline routes;
- b) identification of landslide prone areas along pipeline routes to guide monitoring/prevention requirements;
- c) evaluation of likely landslide impact scenarios and threshold levels;
- d) in case of an alert detected by the monitoring system, support of identification (i.e. landslide related or not) of cause of alert;
- e) allow for self-learning improvements.

This tool allows **giving alert in case of heavy rainfall** that could lead to landslides/debris flow. Alerts are based on weather forecast (e.g. public or asset specific) and they can include simplified or more detailed information, according to the landslide propagation scenario considered.

The tool **works in real time**; however, additional simulations can be activated in specific situations.

The **use** of this tool is specific **for mountainous areas** where landslides can be triggered by **rainfalls**.

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BENEFITS

The **MAIN INNOVATIVE ELEMENTS** are:

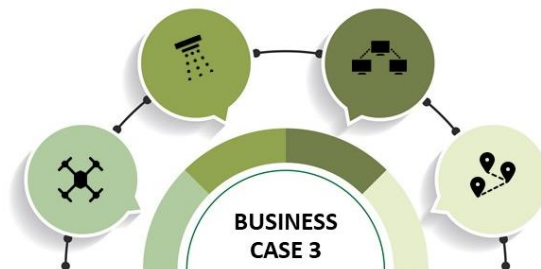


- (a) **Providing PaaS solution** for landslide stability evaluation along pipeline routes including spatial extension assessment;
- (b) **providing near-real-time assessments** in the case of pipeline failures using S&S environment data;
- (c) **improving the quality/quantity of inputs** available for planning and decision making

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APPLICATION CASE

- **Business Case 3**



TARGETS

- **Target End Users:** Highway and gas network operators
- **Target Assets:** Pipeline and any linear infrastructure (e.g. roads, railways and highways)



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