

# INFRASTRESS: A SITUATIONAL AWARENESS PLATFORM IN SERVICE OF COLLABORATIVE CRISIS MANAGEMENT

Davide Ottonello

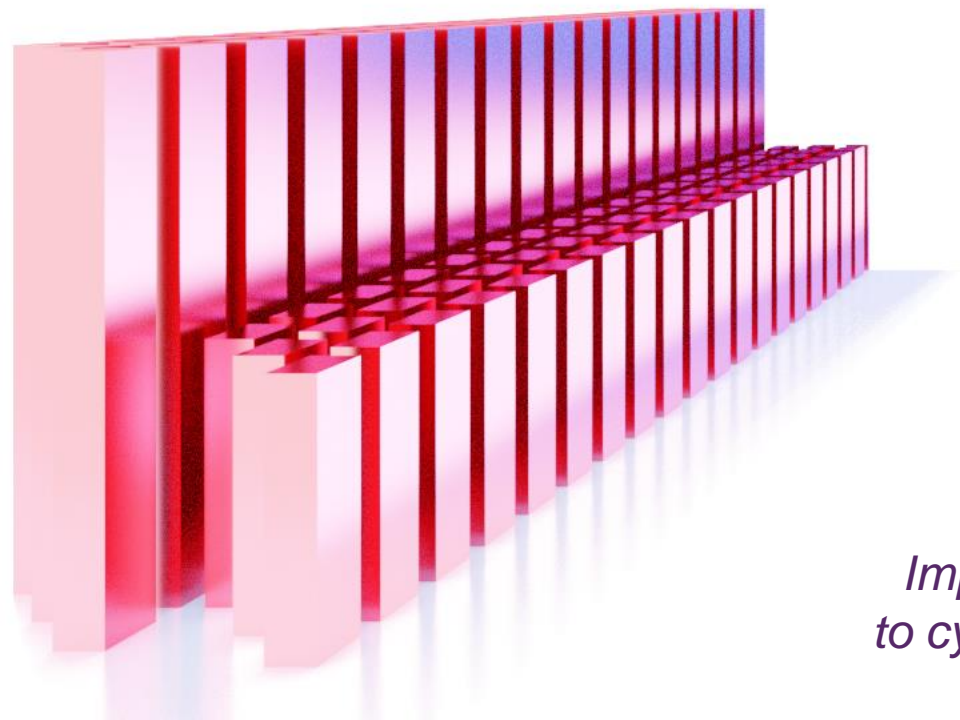
*Project Manager @ STAM S.r.l.*

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2022*



## INFRA STRESS

*Improving resilience of sensitive industrial plants & infrastructures exposed to cyber-physical threats by means of an open testbed stress-testing system*



# Overview of the Project

## INFRA STRESS

**Duration:** From 01/06/2019 to 31/09/2021  
**Consortium:** 27 partners from 11 countries  
**Budget:** 8M €

Protecting the infrastructure of Europe and the people in the European smart cities

(<https://www.infrastress.eu/>)

- Development of a **set of tools** dedicated to the protection of **Critical Infrastructure** of the industrial sector, in particular Seveso plants
- Increasing Industrial plants' capability to **prevent, detect and react** to cyber, physical and natural threats
- **Crisis Management** tools to facilitate communication between stakeholders and situational awareness

1. MOTOR OIL (GR) – Oil refinery



3. ATTILIO CARMAGNANI AC S.p.A. – chemical storage



4. SGL CARBON – Barreiro municipality



2. DEPUY SYNTHES (IR) – surgery devices production



4. PETROL + LUKA KOOPER – oil depot



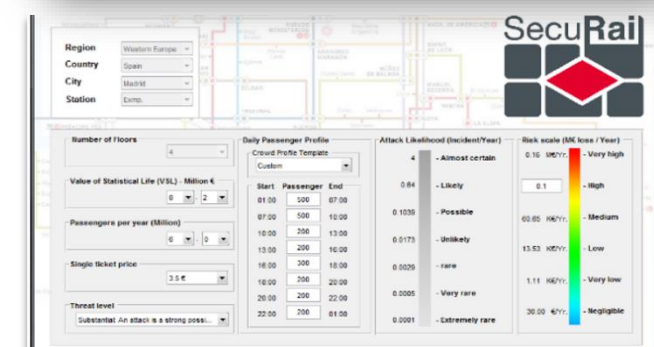
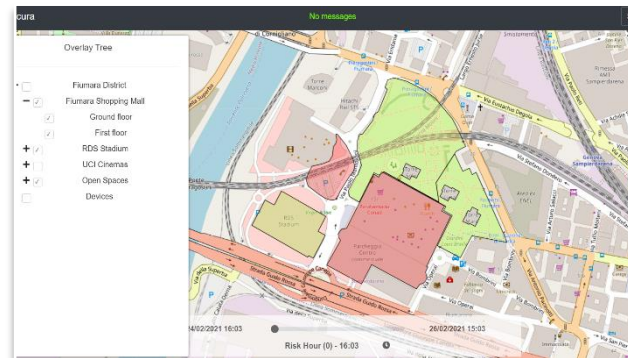
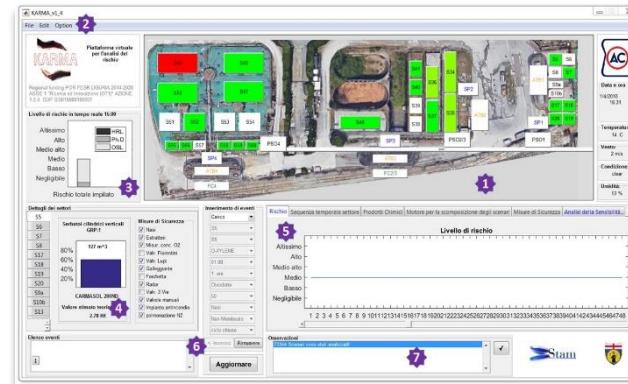
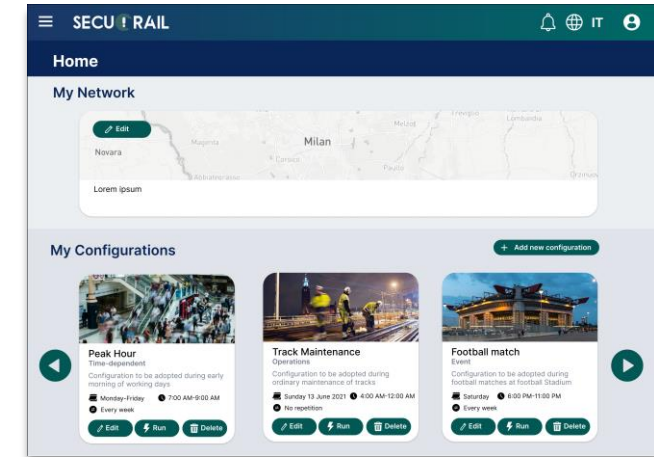
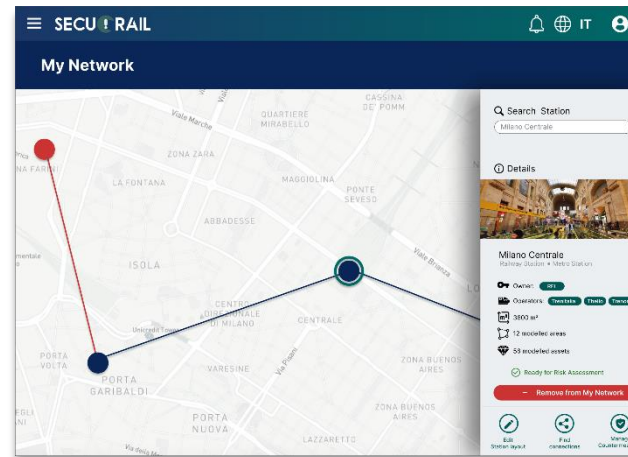
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 833088

## INFRA STRESS

# The Background

STAM is developing Risk Management applications in R&D and industrial projects since 2010. We have mainly delivered solutions in four domains:

- ❑ Industry
- ❑ Railways
- ❑ Airports
- ❑ Soft target (public spaces)



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# INFRA STRESS

# Risk Assessment tool requirements



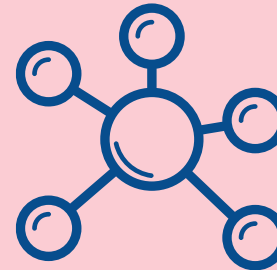
Tool capable to evaluate risk and vulnerability of industrial plants



Focus on physical attacks (terrorism/crimes)



Tool applicable and testable in different pilots with different peculiarities



Integration with other tools belonging to the InfraStress framework





# Main features

## WEB-BASED

To facilitate **continuous** delivery of **improved** versions without any installation required to the user



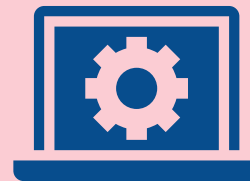
## CUSTOMIZABLE

To allow the user to model analyse **its own infrastructure**, as well as update it in case of modifications



## AUTOMATIC

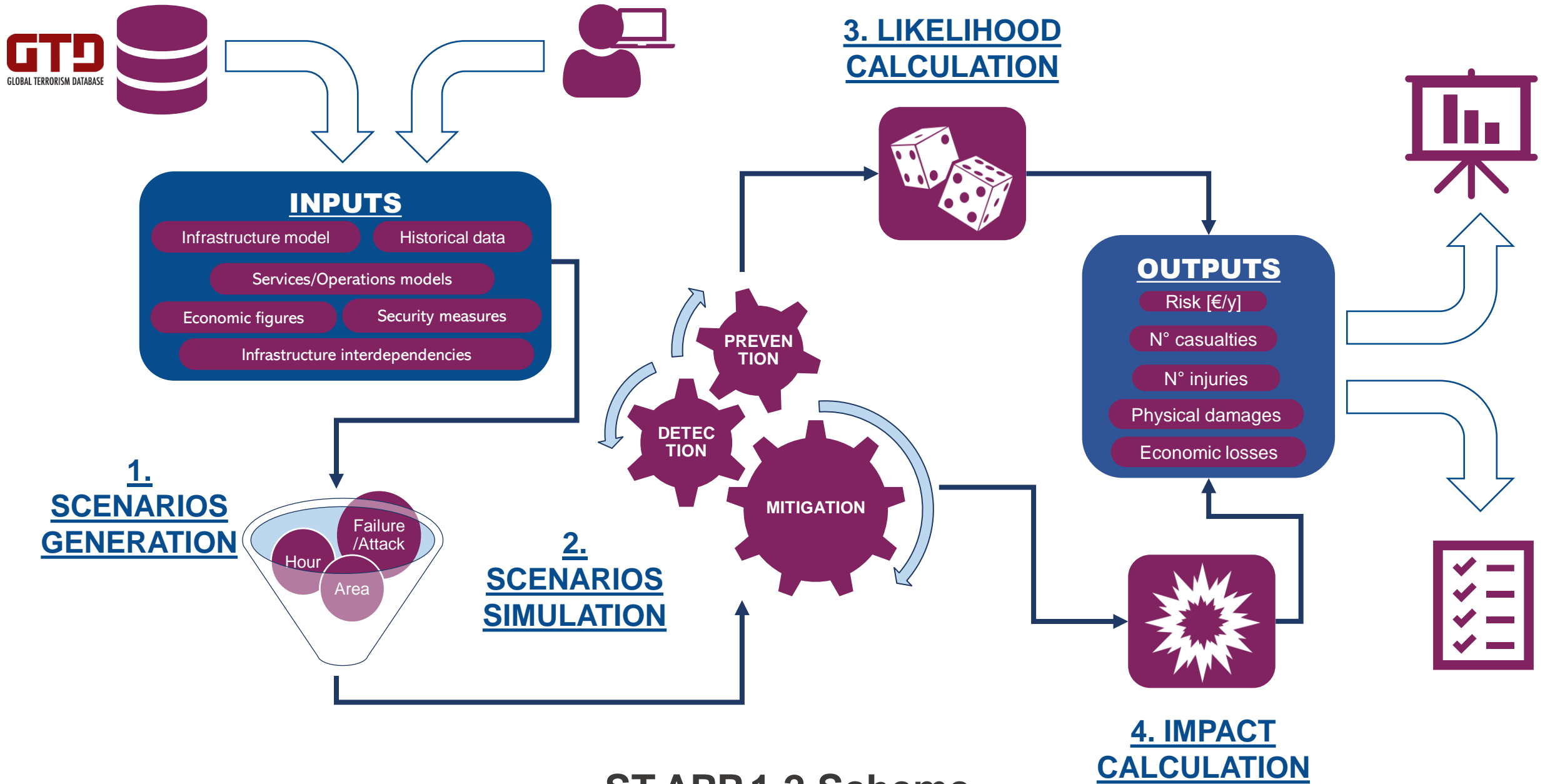
Once entered the input the user should **not intervene anymore** in the computation process



## QUANTITATIVE

Results of the risk analysis expressed as **numerical** and **quantifiable** outputs rather than words



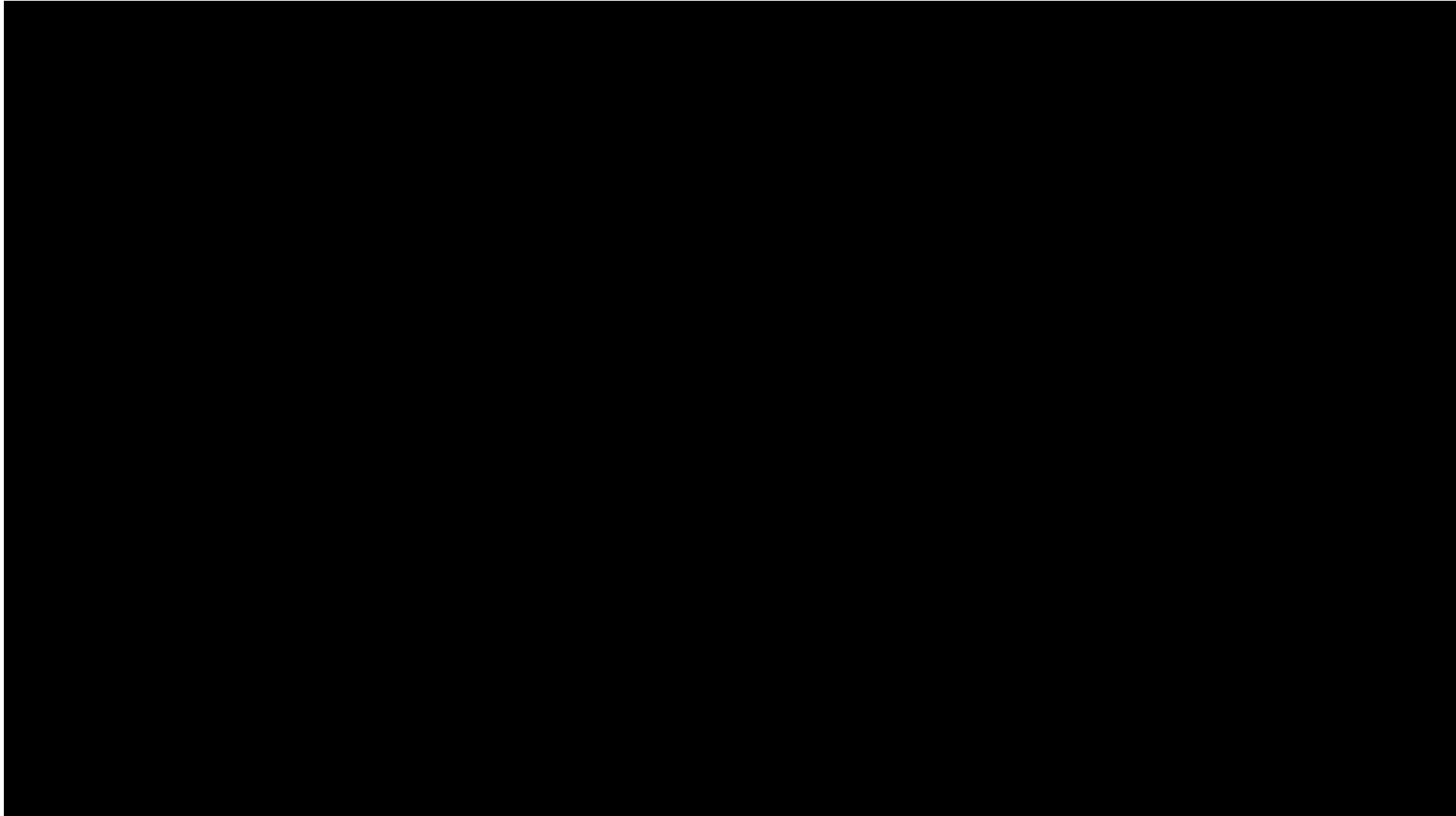


ST.APP.1.2 Scheme



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# Video demonstration



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**INFRA STRESS**

# What's next?

- ☐ Implement cost-benefit analysis based on risk assessment results
- ☐ Implement real-time automatic risk analysis based on feedback from sensors
- ☐ Extend tool capabilities to other sectors and critical infrastructures





# THANK YOU

For questions and further information feel  
free to write to:

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