SUNRISE Partner Countries

ISRAEL

IRELAND
UNITED KINGDOM
ESTONIA
GERMANY
BELGIUM
LUXEMBOURG
CZECH REPUBLIC
FRANCE
AUSTRIA
SLOVENIA
ITALY
SERBIA
SPAIN
CYPRUS

SUNRISE

Improving critical infrastructures through collaboration, strategy and technology

SUNRISE aims to ensure greater availability, reliability, and continuity of critical infrastructures including transport, energy, water, and healthcare to safeguard Europe's lifeline services in pandemics and other major threats.

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in SUNRISE Project

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▶ SUNRISE Project

03
Years Project Duration

41
partners across Europe

**€10m**
EU-funded Horizon Europe Project

SUNRISE

Strengthening critical infrastructures through collaboration, strategy and technology

During its lifetime, SUNRISE will bring together 18 critical infrastructure (CI) operators and authorities from across Europe to enable active collaboration across borders, sectors and public and private stakeholders. It will also develop a suite of technologies and strategic solutions to be better prepared and equipped to adequately manage future risks created by pandemics.
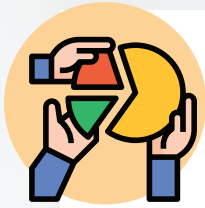
Collaboration

National Workshops: A series of national workshops will take place with critical infrastructure operators and authorities in Spain, Italy and Slovenia viewing CI resilience and continuity from a local, regional, national, and European level. By the end of the project, the workshops will transform and grow into a new stable working group on resilience to pandemics.
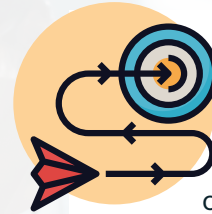
Strategy

The SUNRISE strategy will improve CI awareness and resilience and business continuity by building a precise model of pandemics and their common influences on CIs. It will also enable pandemic-specific risk assessment and mitigation. The basis for the SUNRISE strategy represents an epidemiological characterisation of pandemic risks and will consider new insights from the spreading of infectious diseases and climate change.

Technology

Tool for Risk-Based Access Control (RiBAC)

This tool will help ensure reduced risk for access to critical infrastructure in a scalable and privacy-preserving way.

Tool for Resource Demand Prediction Inspection

The development of a flexible CI-agnostic tool will ensure that changes in the demand of CI resources (both human and infrastructure) can be managed efficiently during emergency scenarios.

Tool for Increased Cyber-Physical Resilience

This tool will detect anomalies, raise alarms when incidents are materialized and response appropriately while performing a real-time risk assessment of the critical infrastructure. The tool will also be equipped with a suitable dashboard that will enable decision-making.

Tool for Remote Physical Infrastructure Inspection

This tool will deliver a solution for continuous, data-driven physical infrastructure inspection by means of satellite images, the use of UAVs with different sensors and the use of machine learning methods for anomaly detection.

PILOT DEMONSTRATIONS

The SUNRISE pilot studies play a key role in validating and demonstrating how the project's strategy and tools can ensure the continuity of lifeline services and improve the resilience of CIs across Europe in the face of pandemics and other major threats.

To maximise the impact of SUNRISE across European CI areas, the project team will demonstrate and validate the tools and strategy at a domestic and cross-border level with CI stakeholders and authorities in operational environments in:

— **Slovenia (national level)**
— **Italy (regional level)**
— **Spain (local level)**