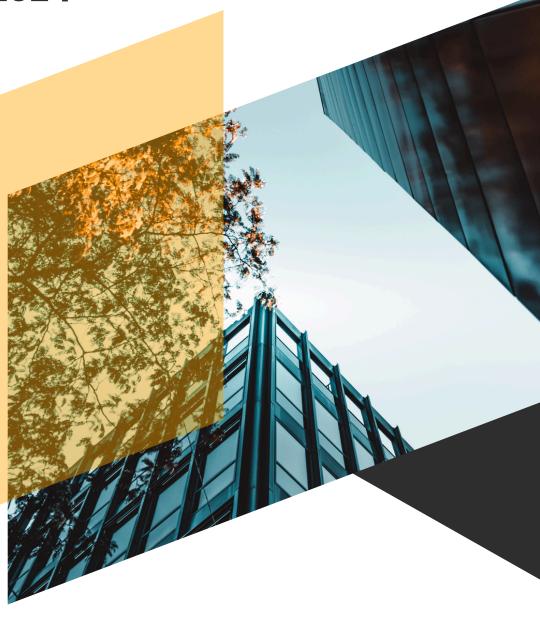
#### **DECEMBER 2024**



LIFE CET SRI CLUSTER

## ANNUAL REPORT









### **Table of Contents**

INTRODUCTION	02	WORKING GROUP 3	09
OVERVIEW OF WGs	03	WORKING GROUP 4	11
WORKING GROUP 1	04	SISTER PROJECTS	20
WORKING GROUP 2	07	CONTACT DETAILS	22





### The LIFE CET SRI cluster

THE REPORT OF THE PARTY OF THE

The LIFE CET SRI Cluster was established in November 2022 as a collaborative initiative between four LIFE Clean Energy Transition projects—EasySRI, Smart Square, SRI-ENACT, and SRI2MARKET—and the European Climate, Infrastructure, and Environment Executive Agency (CINEA).

Its mission is to create synergies between project developments and the Smart Readiness Indicator (SRI) policy implementation agenda. The Cluster's activities span three years, concluding in October 2025. The LIFE SRI projects aim to support Member States in successfully integrating the SRI into national regulations and markets. The Cluster fosters communication and alignment across projects, ensuring efficient and complementary outcomes that maximise impact. Through this collaboration, the projects provide policymakers with valuable insights and data, enabling informed decision-making and advancing smart building assessments across the European Union.

This report highlights the progress and achievements of the Cluster during 2024.



Each project of the LIFE CET SRI Cluster leads one working group (WG) dedicated to a specific topic.

01

SRI uptake in targeted countries and liaison with Authorities



02

Design and development of SRI tools



Led by

Led by

03

Improvement of the smart-ready service catalogue



Led by

04

Common communication and dissemination actions



Led by

# WG1: SRI UPTAKE IN TARGETED COUNTRIES AND LIAISON WITH AUTHORITIES



The objective of Working Group 1 is to coordinate the projects' support for national authorities in the target countries, assisting them in effectively planning the rollout of the Smart Readiness Indicator into their national regulations and markets. This includes encouraging authorities to initiate official national SRI testing phases.

WG1 is led by SRI2MARKET, ensuring that communication with national authorities in the target countries is seamlessly coordinated between the SRI projects and the SRI Platform.

#### **2024 Activities and Achievements**

During 2024, under WG1, the LIFE CET SRI projects, in collaboration with the SRI Platform developed under a European Commission service contract, established several contacts with Member States, particularly with national authorities involved in the four LIFE CET SRI projects. The aim was to support pilot phases, complement planned national activities, accelerate policy decisions, and initiate stakeholder dialogues while making a series of tools and use cases available.

Following best practices from previous years, in 2024, the SRI projects influenced the decision to launch the SRI test phase in Cyprus, Greece, and Portugal, increasing the total number of EU countries where the SRI is officially tested to 15: Austria, Belgium (Flanders), Bulgaria, Croatia, Cyprus, Czechia, Denmark, Finland, France, Germany, Greece, Poland, Portugal, Slovenia, and Spain. As shown in the table below, WG1 actions under the LIFE CET SRI projects are deeply involved in most of the pilot phases for these 15 front-running countries.

Member state	LIFE CET SRI projects	Status
Austria	SRI2MARKET easySRI (tunES)	The projects support national authorities to benchmark the SRI methodology against other methods developed in Austria with a focus on energy flexibility. A large number of different building typologies are examined and assessed based on detailed, documented buildings from Austrian regions or the federal government.
Bulgaria	SRI-ENACT SmartSquare	The test phase is supervised by the Ministry of Energy with the support of LIFE CET SRI projects. The SRI-ENACT project will provide the national adaptation of the SRI methodology, SRI assessment toolkit, SRI auditor training courses, and testing of 130 buildings. The SmartSquare project will support the assessment of the payback of the SRI improvement measures, capacity building, and dissemination of information.
Croatia	SRI2MARKET SRI- ENACT (tunES)	The test phase is conducted thanks to the LIFE CET SRI projects, exploring the potential and opportunities for SRI in the Croatian context and at contributing to the overall development and refinement of the SRI calculation methodology.

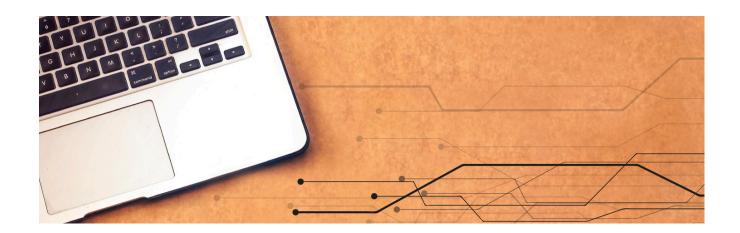
Cyprus	SRI2MARKET easySRI SmartSquare (SmarterEPC)	The SRI test phase in Cyprus is led by the Ministry of Energy, Commerce and Industry, while the technical work is undertaken by a cluster of four partners participating in LIFE projects.
Czechia	SRI-ENACT	During the test phase, the common SRI methodology is applied, and depending on the sensitivity of the results, some adaptations may be undertaken in a later phase.
France	SRI2MARKET (SmarterEPC)	The first French test phase was led by the Ministry for Ecological Transition with the support of CEREMA. A follow-up of the official test phase is conducted by the SRI2MARKET project with a target to assess 200 buildings (no certificates delivered).
Germany	SmartSquare	The test phase investigates the potential of the SRI and how the methodology should be adapted to the German real estate industry.
Greece	SRI2MARKET, easySRI, SRI- ENACT, SmartSquare (iEPB,tunES, SmarterEPC)	The Ministry of Environment and Energy launched a test phase with the support of the LIFE SRI projects, aiming to explore the application of the SRI methodology and to collect valuable insights on the practical implementation of the SRI in Greece. It will include the assessment of the SRI of diverse residential and non-residential buildings, executed by the projects SRI-ENACT, easy SRI and Smart Square.
Portugal	SRI2MARKET	The test phase is conducted by ADENE on behalf of the Energy Efficiency Division of the Directorate-General for Energy and Geology. It is supported by the SRI2MARKET project (in which ADENE is a partner) and makes use of the Portuguese version of the SRI2MARKET e-learning service and SRI evaluation tool.
Spain	SRI2MARKET, easySRI, SRI-ENACT (iEPB)	The SRI test phase is led by the Ministry for the Ecological Transition and the Demographic Challenge with the support of CENER - National Renewable Energy Centre within the context of the LIFE project SRI2MARKET. The test phase includes training sessions for EPC assessors to become SRI experts, based on the SRI2MARKET e-learning platform and training programme. SRI assessments will be conducted on a sample of at least 50 buildings across Spain.

## WG2: DESIGN AND DEVELOPMENT OF SRI TOOLS

The Working Group 2 focuses on collaborative efforts in designing and developing tools to facilitate the adoption of the Smart Readiness Indicator. The group aims for a seamless and efficient integration of SRI features into the market. To support this objective, real-world SRI use cases have been identified and analysed through collaboration with sister projects.

#### WG2's key initiatives include:

- 1.Identification of Common Use Cases: Collaborating with sister projects to analyse shared use cases for broader applicability and impact.
- 2. Development of an Open-Access Calculation Engine: A RESTful API interface was implemented to enable businesses to adopt and integrate SRI technology with ease and impartiality.
- 3.Standardisation and Dashboard Creation: Standardised data schemas and a secure dashboard for SRI assessment uploads were developed. This dashboard facilitates centralised validation, analysis, and reporting while promoting collaboration, ensuring data accuracy and consistency, and enhancing interoperability in line with industry best practices.



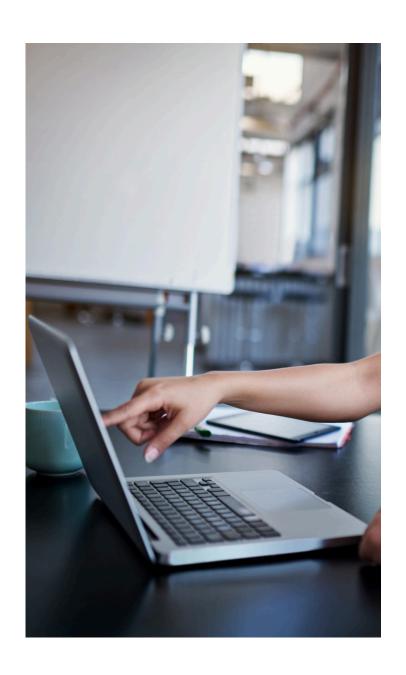


#### **2024 Activities and Achievements**

The most recent activities of the Working Group have focused on interoperability. The project teams collaborated to share and align various SRI data schemas (produced by each project), ensuring they were standardised and compatible across all initiatives. This effort facilitated seamless integration and improved the ability to work with diverse datasets.

A centralised dashboard has conceived been and is currently being developed to serve as a unified hub. It will enable teams to securely upload SRI assessments, access consolidated reports, and conduct thorough analyses. The platform will support validation, reporting, and visualisation, providing a clear overview of the assessment results.

This initiative aims to enhance collaboration, simplify data handling processes, and ensure the accuracy and consistency of SRI assessments across projects, while aligning with established best practices and objectives.



# WG3: IMPROVEMENT OF THE SMART-READY SERVICE CATALOGUE

The third Working Group (WG3), led by the Smart Square project, is dedicated to monitoring developments in the Smart Readiness Indicator methodology.

Its focus includes enhancing the smart-ready service catalogues across Member States and adapting new practices to support the broader adoption of SRI. Additionally, WG3 is tasked with monitoring and documenting activities related to the standardisation of SRI practices, ensuring consistency and alignment with evolving methodologies.

			%		9	6		%		
				Aggregat	ion per key fu	inctionality				
			performance peration	Responds to the needs of occupants			Energy flexibility			
		%	%	%	%	%	%	%		
			Aggregation per impact							
						<u> </u>		煮	•	
		Energy efficiency	Maintenance & fault protection	Comfort	Convenience	Health, well-being & accessibility	Info to occupants	Energy flexibility & storage		
<b>Limb</b> a	Heating	%	%	%	%	%	%	%	%	
*	Cooling	%	%	%	%	%	%	%	%	
1	Domestic hot water	%	%	%	%	%	%	%	%	main
	Ventilation	%	%	%	%	%	%	%	%	al do
\$	Lighting	%	%	%	%	%	%	%	%	chnic
	Dynamic building envelope	%	%	%	%	%	%	%	%	Aggregation per technical domain
4	Electricity	%	%	%	%	%	%	%	%	gatic
	Electric vehicle charging	%	%	%	%	%	%	%	%	Aggre
	Monitoring and control	%	%	%	%	%	%	%	%	



#### **2024 Activities and Achievements**

Within 2024, significant progress was achieved in the CEN Workshop on "Standardised On-site SRI Building Audits." Following three rounds of revisions with the involved parties, the report for this workshop is expected to be finalized and published in February 2025. This milestone constitutes the first standardization work specifically dedicated to the SRI. Led by the Smart Square project, this effort aims to create a unified framework for conducting on-site SRI building audits, supporting the broader adoption of SRI methodologies across Europe.





Concerning the SRI service catalogues, France successfully completed the testing stage in 2024 and has subsequently adapted its catalogue based on findings from this phase. The SRI2Market initiative has also played an important role in assisting national committees to advance through the testing stages of the SRI.

Looking ahead, WG3 will continue to oversee these developments and support Member States in adopting standardized practices that enhance the reliability and utility of the SRI framework. The completion of the CEN WS report in February 2025 will serve as a cornerstone for future standardization efforts.

### WG4: COMMON COMMUNICATION AND DISSEMINATION ACTIONS

The Dissemination Working Group 4 aligns all SRI Cluster projects to undertake joint efforts in disseminating and communicating crosscutting project results at both European and national levels. Key activities include organising SRI-focused workshops and events targeting key stakeholders, as well as promoting shared goals for testing and evaluating the SRI scheme across the EU.



The goal for 2024 was to strengthen and expand joint dissemination efforts, particularly at the national level. The WG focused on highlighting the complementarities and cumulative achievements of the four sister projects, ensuring a cohesive and impactful communication strategy that reaches a broader audience.



#### **2024 Activities and Achievements**

Several joint dissemination and communication activities were organised within 2024, including:

- SRI projects at the Sustainable Places Conference in Luxembourg
- SRI Days in conjunction with the SRI Platform plenary meeting in Brussels
- MIPIM 2024 conference SRI stand in Cannes
- SRI Support Team at EUSEW Energy Fair 2024
- Participation at Enlit Europe in Milan
- The 1st International SRI Conference in Karlsruhe

#### SRI Projects at Sustainable Places conference 2024

All four LIFE CET SRI cluster projects actively participated in Sustainable Places 2024, held in Luxembourg on September 24-25. This event brought together experts to discuss sustainable building practices, energy efficiency, and smart technologies.

The projects contributed to the "EPBD Implementation: Smartness for Energy Efficiency" workshop, where innovative tools for improving building performance through smart technologies were showcased. Attendees also engaged with the <u>Smart-Ready-Go</u> Tool, which demonstrated real-time SRI calculations.

By sharing insights and practical solutions, the SRI projects reinforced their commitment to advancing smart, energy-efficient buildings across Europe.







#### **SRI Support Team at EUSEW Energy Fair 2024**

From June 11-13, 2024, the SRI support team successfully participated in the EUSEW Energy Fair in Brussels, engaging with stakeholders and showcasing innovative solutions for smarter buildings. The event provided a valuable platform to discuss energy efficiency, digitalisation, and smart readiness in buildings.



At stand C-7, the SRI support team, alongside several EU-funded projects, presented tools and technologies designed to enhance building intelligence and support SRI implementation. In collaboration with Horizon Europe and LIFE projects—including SRI2MARKET, Smart Square, EasySRI, SRI-ENACT, SmarterEPC, tunES, iEPB, BuildON, Demo-BLog, and Smart2B—the team demonstrated practical applications of the Smart Readiness Indicator (SRI) and its role in improving building performance.



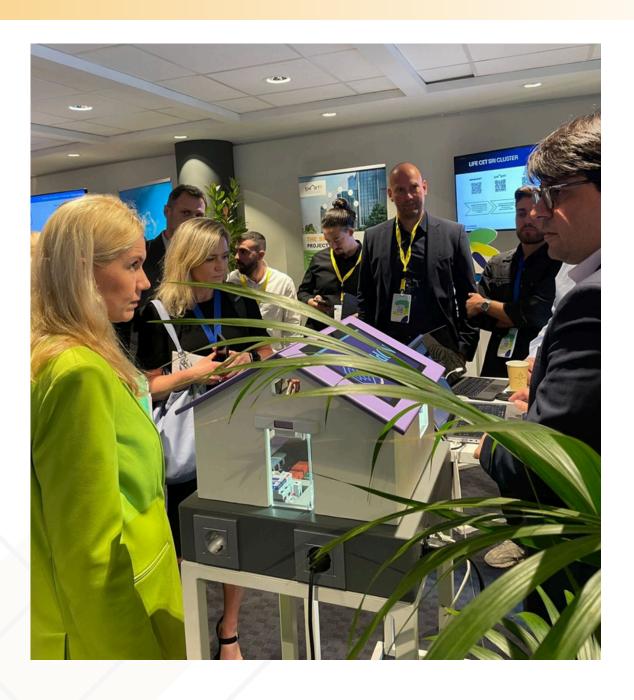


#### LIFE CET SRI CLUSTER REPORT



A key highlight was the exchange of insights with visitors, including Kadri Simson, the European Commissioner for Energy at the time, on how the SRI integrates with Energy Performance Certificates (EPCs) and contributes to accelerating energy-efficient renovations. Visitors explored hands-on demonstrations of digital tools developed through EU-funded research, reinforcing the importance of smart technologies in achieving climate and energy goals.

The SRI support team's presence at EUSEW 2024 strengthened collaborations within the energy community and underscored the growing role of smart buildings in Europe's sustainable future.





## SRI joint events in conjunction with the SRI Platform plenary meeting in Brussels

In 2024, two Smart Readiness Indicator joint events were held in Brussels. The first took place in March, hosted by the SmartSquare project, and the second in October, organised by the SRI2MARKET project. Both events featured comprehensive agendas, including the SRI Platform Plenary Meetings, led by the European Commission Directorate-General for Energy and the European Climate, Infrastructure and Environment Executive Agency (CINEA). The afternoons were dedicated to expert talks and panel discussions aimed at advancing the streamlining of SRI processes.







The plenary meetings gathered stakeholders and representatives from EU Member States, along with officials from the European Commission, to discuss the technical, regulatory, and implementation aspects of the SRI. Key highlights included updates on EU policies relating to the SRI, insights into the activities of the SRI support team, and progress reports from Member States on the testing and implementation of the SRI framework.



During the afternoon sessions, expert talks featured prominent speakers, including building professionals, asset managers, regulators, and assessors, who shared perspectives on enhancing building smartness. A subsequent panel discussion explored the technical frameworks and procedural intricacies of the SRI audit process.

Throughout both events, attendees had the opportunity to visit an exhibition showcasing SRI-related projects funded under the LIFE and Horizon programmes. The exhibition provided an interactive platform for sharing innovative approaches and practical applications of the SRI in various contexts.





The momentum of SRI activities continues, with the next major event scheduled for 7 May 2025, co-organised by the European Commission and the SRI-ENACT project. Further details and updates can be found on the project's LinkedIn channel.





#### **SRI stand at MIPIM 2024**

MIPIM is the flagship real estate event that brings together the most influential players from all sectors of the international property industry. It plays a vital role in accelerating the transformation of the built environment, fostering collaboration to create more sustainable, liveable, and prosperous communities.

In 2024, more than 20,000 delegates from 90 countries convened in Cannes from 12–15 March. Investors, political leaders, and the real estate community gathered to build relationships and address challenges facing the built environment.

Our four collaborative projects—easySRI, SRI2MARKET, SmartSquare, and SRI-ENACT—were featured at the 'European Commission, Smart Readiness Indicator (SRI)' stand. Representatives showcased the importance of rating the smartness of buildings to advance the green energy transition. They also engaged with participants to discuss how SRI adoption enhances energy efficiency, comfort, resource optimisation, data-driven decision-making, and resilience—factors that contribute to a more sustainable and comfortable future.

#### Watch the event aftermovie here.







#### **Smart Buildings at Enlit Europe 2024**

Enlit Europe 2024 in Milan provided a dynamic platform for discussions on how smart infrastructure is revolutionizing energy management. During our panel session, industry experts explored how digital solutions optimize building performance, reduce costs, and enhance both occupant comfort and environmental impact.

The session featured insightful contributions from distinguished speakers representing EU-funded projects:

- Vasso Kontou SRI-ENACT
- Dimitris Athanasiou SRI2MARKET
- Alexis Lekidis META BUILD (Horizon Europe)
- Konstantinos Kotsalos WeFormina
- Elisa Crocco EVELIXIA
- Alexandra Hedesiu ENERGATE





Discussions underscored that while the technology for smart buildings is ready, the next crucial steps involve scaling up commercialisation, effective communication. and financial investments. securing Addressing these challenges will be key to accelerating the adoption of smart infrastructure and unlocking its full potential for a more sustainable future.

Enlit Europe 2024 reaffirmed the vital role of smart building technologies in the energy transition, highlighting the need for collaboration between innovators, policymakers, and industry leaders to drive meaningful change.

#### The 1st International SRI Conference in Karlsruhe

The first International Smart Readiness Indicator Conference (iSRIc) united experts from academia, industry, and policy-making to exchange insights on energy efficiency and building digitalisation.

Held at the Karlsruhe Institute of Technology (KIT), the interdisciplinary event featured fourteen presentations over two days, each followed by a dynamic ten-minute Q&A, fostering open discussion and cross-sector understanding. Topics ranged from assessing SRI test phases to strategies for future implementation and optimisation. Presentations showcased cutting-edge research and addressed technical and regulatory challenges. With KIT's support and its experimental buildings (Energy Lab 2.0), the event inspired further research and collaboration, paving the way for broader SRI adoption.



Researchers and experts gathered at iSRIc 2024, with a visit to the Energy Lab 2.0 Source: https://smartreadinessindicator.com/isric

Building on this year's success, the next conference will explore emerging research, innovative applications, and strategies for smarter, more energy-efficient buildings. Those interested in presenting, collaborating, or assisting with event planning are encouraged to get in touch.

## Other sister projects

The SUSTAIN 1st Open Call has successfully awarded a total of 12 innovative projects, each addressing critical challenges in the smart building sector within the construction industry. These projects leverage cutting-edge IC Technologies, including Artificial Intelligence (AI), Augmented Reality (AR), and Building Information Modelling (BIM), to transform the way buildings are managed and optimized.



#### **ATMOS**

Leveraging IoT to Boost SRI in Building Management ATMOS is dedicated to enhance smart building management and SRI, by leveraging advanced IoT devices and a custom-built data analytics platform.

#### <u>IEM</u>

Unifying Building Certification Processes IEM is tackling a crucial gap in the Spanish housing sector: the disjointed evaluation processes for SRI and Energy Performance Certification (EPC).

#### **SRI-CHATPED**

Developing Innovative Energy-Saving Chatbot This chatbot aims to transform how users interact with building data, helping energy prosumers optimise their energy usage and improve the SRI rating of their buildings

#### **BRAINED**

Bridging Design and Operation for Smarter, Energy-Efficient Buildings BRAINED leverages real-time monitoring and advanced planning to improve buildings energy performance and ensure efficient operations.

#### **PREMISES**

AI-Driven HVAC Optimization to Enhance SRI and Sustainability PREMISES integrates Al-driven predictive maintenance into HVAC systems, with a strong focus on boosting SRI scores, to enhance building energy consumption.

#### **AIBEM**

Redefining Building Assessments for Energy Efficiency AIBEM develops a groundbreaking solution by leveraging Al-powered computer vision technology to estimate 3D measurements of building exteriors and roofs using only images.

#### srAI-BEMS

Revolutionizing Building Energy Management with Al for Enhanced SRI and Sustainability SrAI-BEMS integrates the Smart Readiness Indicator (SRI) framework within an AI-enhanced BEMS, offering a robust decision-support tool for energy monitoring and conservation.

#### **Smart BEAR**

Redefining Energy Efficiency in Construction By integrating SRI with VR and Building Information Modelling (BIM), Smart BEAR offers an interactive, efficient platform for visualising sustainable building upgrades.

#### **INSPIRE**

A Comprehensive Platform for Building Smartness and Efficiency INSPIRE introduces an integrated platform that supports the EU's Smart Readiness Indicator (SRI) scheme, measuring and promoting building intelligence

#### **INCISIONS**

From Drones to Data: INCISIONS experiment

INCISIONS addresses the challenge of estimating energy potential and optimizing the SRI score of buildings by utilizing drones to conduct aerial surveys of building assets, collecting thermal images and heat dissipation maps.

#### **EDIFICE**

Structural monitoring with Al integration

EDIFICE focuses on addressing critical challenges in civil infrastructure by utilizing Al-based methodologies for structural health monitoring and datadriven decision-making

#### **ECOSYNERGY**

Leading the future of dynamic Energy Performance Certification ECOSYNERGY introduces a disruptive methodology that replaces traditional, manually intensive approaches with a data-driven and scalable model to enhance building assessment and energy performance certification (EPC).



## WORKING TOGETHER FOR SUCCESSFUL SRI MARKET ADOPTION







EASYSRI
DIMOSTHENIS IOANNIDIS
DJOANNID@ITI.GR

CO-FUNDED BY THE EU UNDER GRANT NO. 101077169
PROJECT OFFICER: SYLVAIN ROBERT



SRI2MARKET
DIMITRIS ATHANASIOU
DIMITRIS@IEECP.ORG

CO-FUNDED BY THE EU UNDER GRANT NO. 101077280
PROJECT OFFICER: SYLVAIN ROBERT



SMART SQUARE
DR. PANAYIOTIS PHILIMIS
P.PHILIMIS@CYRIC.EU

CO-FUNDED BY THE EU UNDER GRANT NO. 101077241
PROJECT OFFICER: PIERRE-ANTOINE VERNON



SRI-ENACT STAMATIA RIZOU SRIZOU@SINGULARLOGIC.EU

CO-FUNDED BY THE EU UNDER GRANT NO. 101077201
PROJECT OFFICER: ULRIKE NUSCHELER