

# Exploring the scientific and societal reach of the ERIES project

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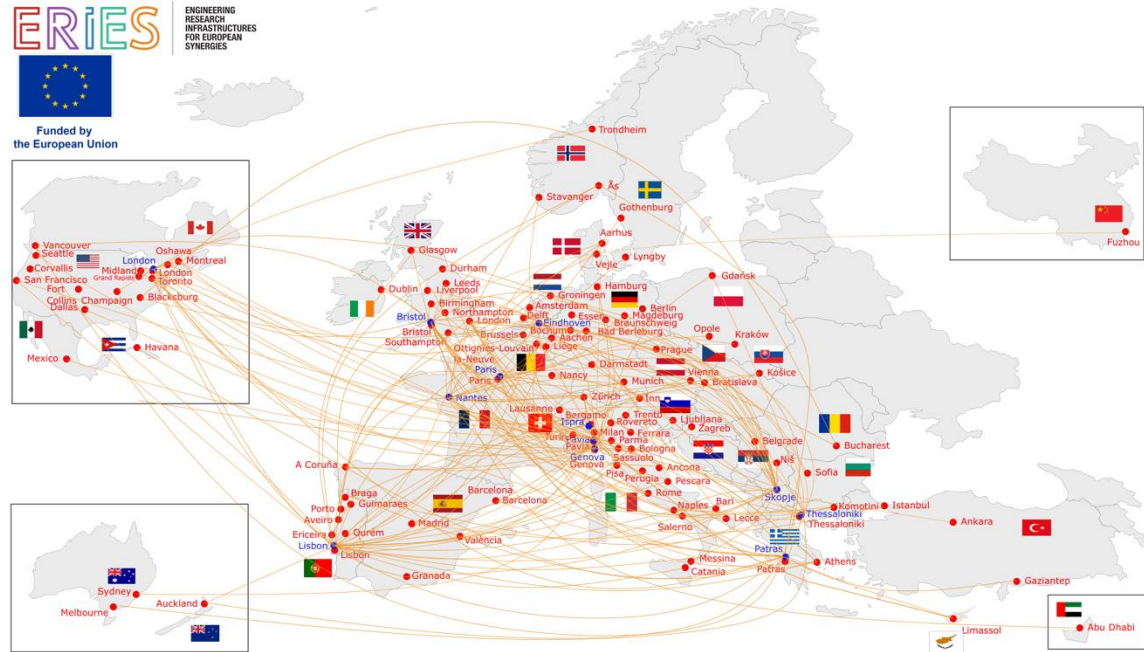
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# The ERIES project

ERIES (2022–2026) was a Horizon Europe project that provided **transnational access** to leading experimental facilities across Europe and North America, enabling **curiosity-driven research** to reduce the losses caused by natural hazards.

It built on three decades of EU transnational-access projects, spanning seismic, wind and geotechnical engineering and distributed hybrid simulation.

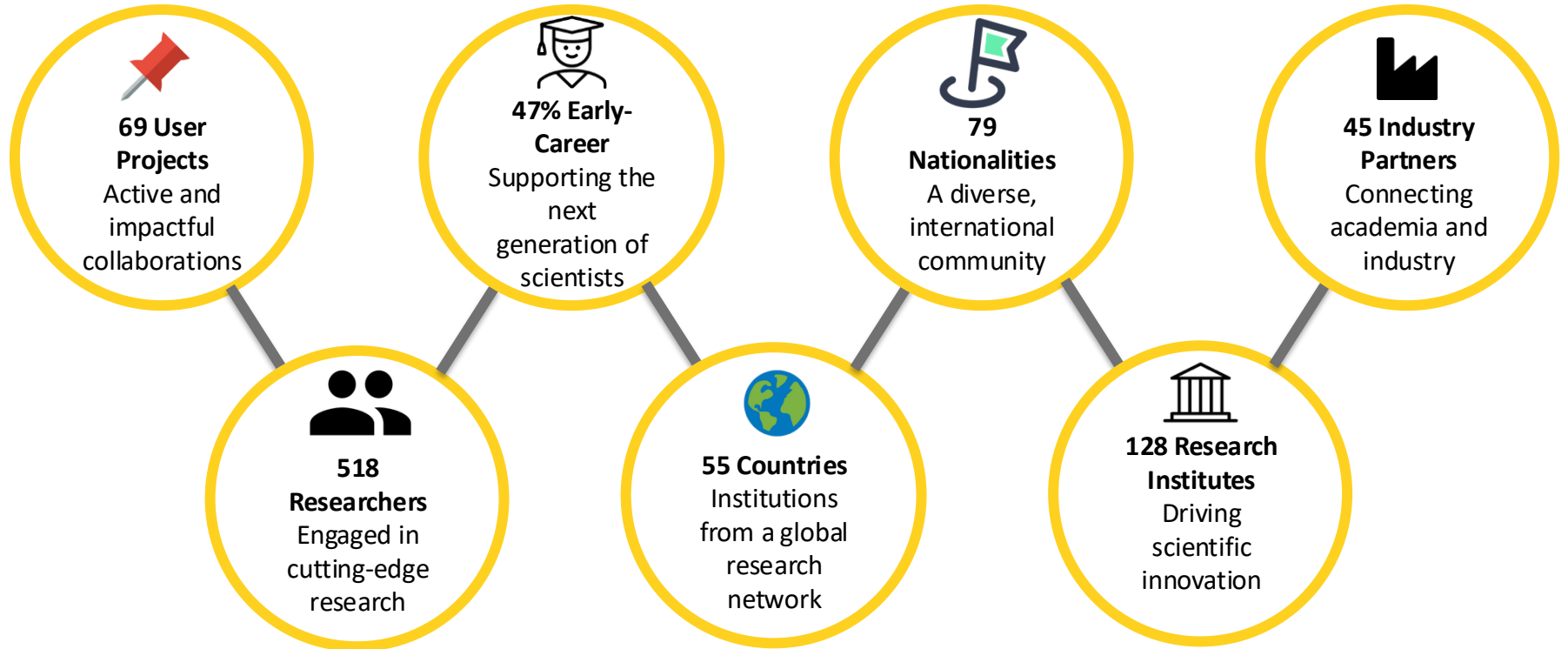
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*Each line is a transnational-access link between a user group and a host facility — European and worldwide connectivity enabled by EU funding.*

# Reach and engagement

Across 69 transnational user projects, ERIES mobilised a wide, international and multi-disciplinary community:



# Assessing impact: aim and method

## AIM

Assess the potential **scientific, societal and regulatory** impact of ERIES — a first step toward a community white paper.



Scientific



Societal



Regulatory · Eurocodes

## METHOD — two complementary surveys (2025 Workshop, Lisbon)



### Live Mentimeter poll

~60 user-group members — a quick, engaging read on attitudes, familiarity and expectations.



### Email (Google Form) survey

Reflective, written responses — time to find references and explain anticipated impact in their own words.

# The questions we asked

## Live poll — Mentimeter

Short, structured questions probing:

Familiarity with, and attitudes to, policy impact

Technology-readiness level of the project

Intended audiences and types of scientific impact

Societal areas affected and the nature of impact

Relevant policy area, level, actor and stage

Anticipated communication challenges and next steps

## Email survey — Google Form

Four reflective written prompts (2–3 lines each):

1

### Specific scientific impact

for peers working in your area

2

### General scientific impact

for the wider research field

3

### Societal impact

for a completely non-technical audience

4

### Guidelines impact

the exact code/section affected — e.g. Eurocode 8, Part 3

# What the live poll revealed (2025)



## Low familiarity with policy impact

Self-ratings clustered near the bottom of the scale.



## Impact seen as important — but distant

Relevant, yet removed from day-to-day research.



## Scientific impact expected via data

New experimental data and shared datasets the main route.



## Societal impact: safety first

Then infrastructure & urban development, and the environment.



## Policy: standards & EC, at EU level

Regulators and standards bodies seen as the key actors.



## Communication barriers anticipated

Technicality, translation, timing and finding the right contacts.

# Scientific impact, in plain terms

Beneath the technical detail, the impact the community expects falls into four accessible ideas:



## New benchmark data others can build on

First-of-their-kind tests — including the first shaking-table test of a 3D-printed building — become reference points for the whole field.



## Greener, safer ways to build

Validating recycled, bio-based and timber solutions, and low-cost devices that make earthquake protection affordable for ordinary buildings.



## Better defences against wind & quakes

Clearer understanding of how downbursts, tornadoes and earthquakes load real structures, so designs can be made safer.



## Open data for everyone

Results shared as FAIR, open datasets on the Data Access Portal — free for researchers worldwide to reuse.

*Specialist detail — impedance functions, fibre-reinforced isolators, aeroelastic testing — is documented in the project's papers and open datasets.*

# Societal impact: safety, resilience, sustainability



## Protecting life & safety

The most prevalent theme — fewer casualties in earthquakes and extreme weather.



## Cultural heritage

Safeguarding historic and monumental buildings.



## Economic resilience

Avoided losses, lower repair costs, continuity of services.



## Sustainability

Recycled & bio-based materials; SDGs 11, 12 and 13.



## Less disruption

Retrofit without relocating occupants; faster recovery.



## Democratising protection

Isolation & devices feasible for ordinary buildings.

# Guidelines impact: a clear line to the Eurocodes

## Eurocode 8 — dominant

**Part 1** general seismic design rules (many sections cited)

**Part 3** assessment & retrofitting of buildings

**Part 5** foundations & soil–structure interaction

**1st & 2nd generation**, incl. prEN 1998-3 — a chance to shape evolving provisions.

## Wind — EN 1991-1-4

Pressure-coefficient data and improved loading models

Gaps flagged for new annexes (e.g. wind-industry activities).

**Also targeted:** EN 15129 (anti-seismic devices), EC2, EC5, EC3, EC0, and national codes (NTC Italy, Turkish code, ACI). A minority were unsure, and several point toward entirely new standards or annexes.

# Interpreting the results

## Read with care



### An internal perspective

ERIES partners and users — the community's own view of its work.



### Perception, not realised impact

Expectations and intentions rather than measured uptake.



### Dissemination still maturing

The wider community is only beginning to engage with the outputs.

## So what next?

These findings show how the ERIES community sees its own work. To complete the picture, the project now seeks an **external, independent evaluation** of its impact.

# An internal view — now seeking an external one

We are aware that this assessment reflects an **internal view** — the perceptions of the ERIES community itself. To validate and enrich it, we warmly invite an **external, independent evaluation** of the project's impact.

Perspectives we would value:



Industry & SMEs



Code committees



Policymakers



The public



**Our goal: a white paper / general publication** — a practical, shareable resource for the community on how to capture and communicate the impact and legacy of successful research projects.

# Thank you

Questions & discussion welcome



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