

## The European Nuclear Education Network – ENEN

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# Outline

- What is the ENEN?
- Mission
- Members
- PhD event
- European MSc in Nuclear Engineering (EMSNE)
- Projects – ENEN2Plus















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## The ENEN's role in shaping the European nuclear education

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# ENEN Activities [www.enen.eu](http://www.enen.eu)

## STATUS:

The European Nuclear Education Network, ENEN, is an **international non-profit association** established in 2018

### PROJECTS:

- **26 completed** (FP6, FP7, H2020).
- **11 in progress** (H2020, Horizon Europe, INTPA).
- **4 new projects** (HE)
- Funded by the EC

### FIELDS OF EXPERTISE INCLUDE:

- nuclear energy, engineering, technology, safety, safeguards, management
- radiation protection,
- medical physics,
- nuclear chemistry,
- radioactive waste management...

### COMPETITIONS:

- **EU nuclear competitions for secondary school pupils** 120 pupils and 60 teachers.
- **PhD EVENT & PRIZE** 18 editions, more than **180 young graduates involved.**

- Coordination of projects, most of them being financed by the EU
- Organization of Education and Training courses
- Dissemination and Communication activities
- Support of mobility of students

## LOCATION:

**ENEN office in Brussels.**

27.11.2024



**EMSNE certification**  
**EU Master of Science in Nuclear Engineering**  
- 18 editions, more than **110 laureates.**



# ENEN Mission

The main objective is the **preservation** and further **development** of expertise in the nuclear fields by higher Education & Training:

- Promote and further develop the **collaboration** in nuclear education and training of students, researchers and professionals
- Ensure the **quality** of nuclear education and training
- Increase the **attractiveness** for engagement in the nuclear fields for students, researchers and professionals
- Promote **life-long learning** and **career development** at post-graduate or equivalent level

## ENEN Members :

### Full Members:

- 69 members (only EU)

### International members:

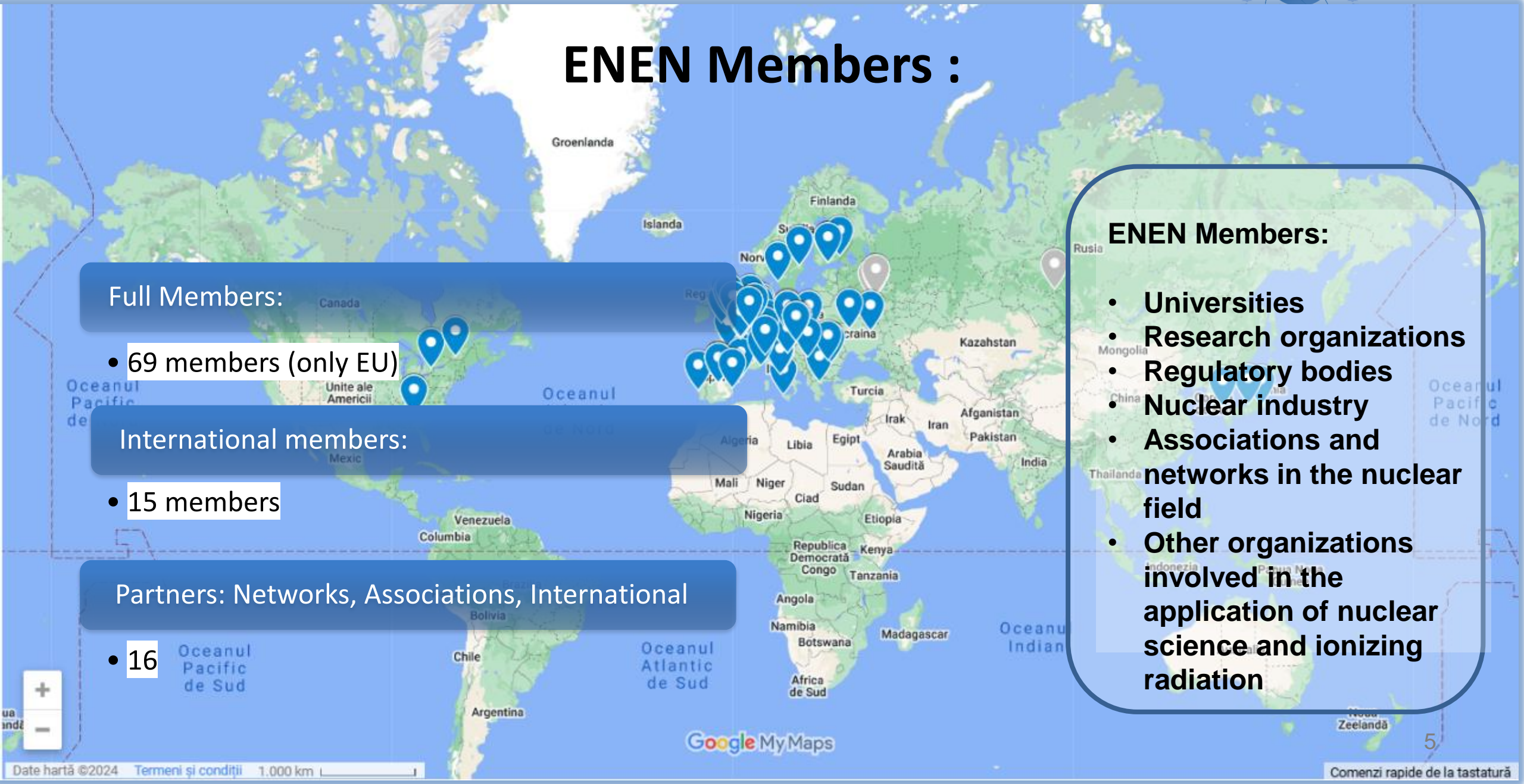
- 15 members

### Partners: Networks, Associations, International

- 16

### ENEN Members:

- Universities
- Research organizations
- Regulatory bodies
- Nuclear industry
- Associations and networks in the nuclear field
- Other organizations involved in the application of nuclear science and ionizing radiation



# EMSNE: European MSc in Nuclear Engineering

## OBJECTIVES:

- **Certify and secure the highest standards of Quality in the Nuclear Education in Europe**
- Ensure the highest Quality of **Training** provided to European Nuclear students
- Encourage and develop a **common Nuclear Safety Culture** throughout Europe,
- Foster the international exchanges to **create a network** of nuclear engineers and scientists of different nationalities, aiming to promote the contact and collaboration

# EMSNE: European MSc in Nuclear Engineering

- Requirements:
  - At least 5 years university education (3+2, 4+1, or 5).
  - Master thesis
  - At least 60 ECTS must be “purely nuclear”
  - 20 ECTS must be obtained from a “foreign” institution, member of the ENEN Association
- List of topics considered “purely nuclear”:
  - Reactor engineering, Reactor physics
  - Nuclear thermal hydraulics
  - Safety and security of nuclear facilities
  - Reactor engineering materials
  - Radiology and radiation protection
  - Nuclear fuel cycle and applied radiochemistry



The ENEN PhD Event & Prize is an action of the European Nuclear Education Network (ENEN) to **support the Research and Science in the Nuclear fields** promoting the works of the young scientists and researchers.

It is co-sponsored by ENEN, the European Commission Joint Research Centre (JRC), and the organizer of the international conference.

- **Nuclear engineering and safety**
- **Nuclear materials sciences**
- **Radiochemistry**
- **Waste & disposal and decommissioning**
- **Medical applications**
- **Radiation protection**
- **and other nuclear applications**



☼ Are a **PhD student** working on a topic in one of the domains listed **or you obtained your PhD after February 13st , 2023.**

☼ Are eager to **share your research** results with peers and professionals in a **multidisciplinary** environment.

☼ Want to have a **unique opportunity to network** and meet fellow students and nuclear professionals

☼ Want to take a chance to win **1000 euro** to attend a conference of your choice?

**Application form and more information:**



*Finalists will receive financial support to attend ECMP 2024 (to cover travel, accommodation & registration fee)*

- Application with abstract and motivation letter
- Preselection in each nuclear domain
- Selection of finalists by jury of experts
- Presentation of selected work at

26 March 2024      Deadline for application

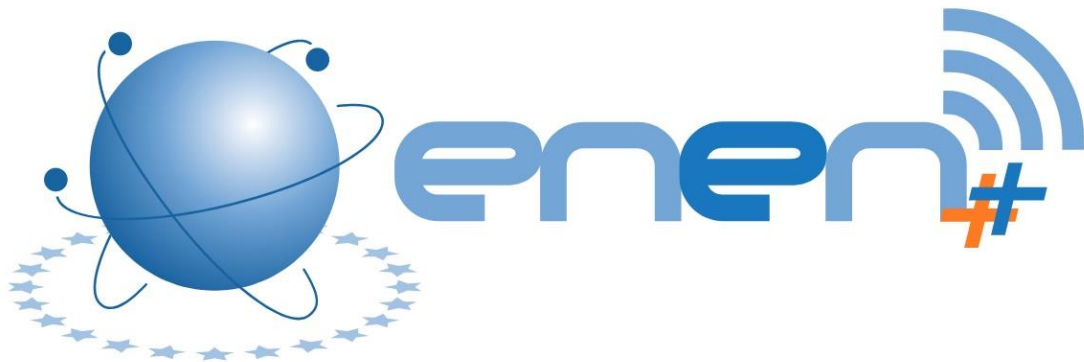
22 April 2024      Notification finalists

11 September 2024      ENEN PhD Event & Prize Award ceremony @ECMP, Munich, Germany



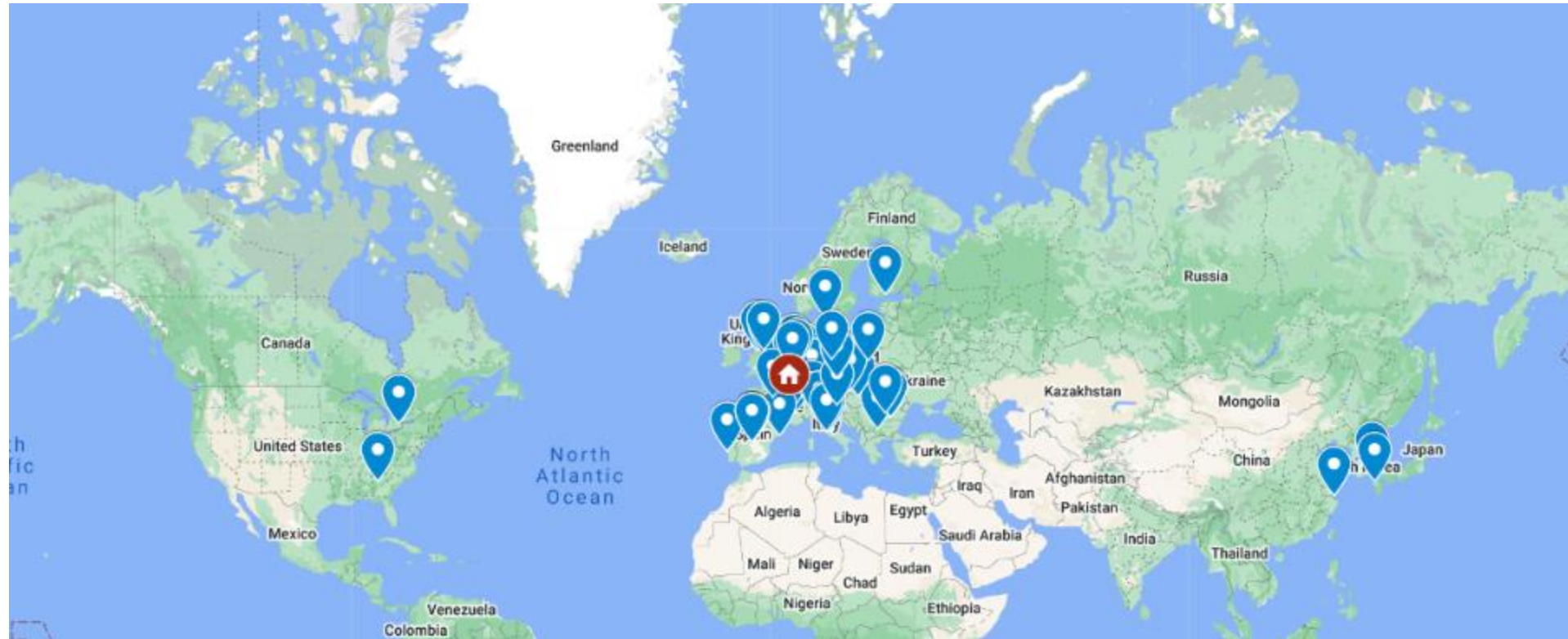


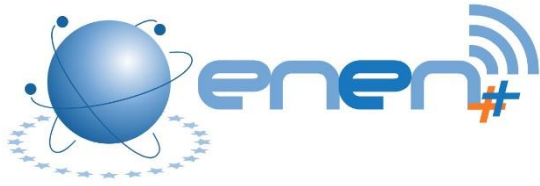
# ENEN2plus



- 51 Partners from 3 continents
- Targeting to strengthen the nuclear education at a whole
- Mobility fund of 2.5 Mil EUR
- Knowledge hub to be developed
- Develop VET programs

# ENEN2plus project: 51 partners - 3 Continents





# About

1/3



**ENEN2Plus** stands for the **largest and most integrative** nuclear Education and Training (E&T) efforts up to date.

**Attraction** of excellent new talents followed by **outstanding development** through E&T, cross-cultural and **cross-disciplinary activities** are the overarching objectives.

We build upon the achievements of [ANNETTE](#) & [ENENplus](#)



A **detailed insight** into the EU **supply and demand of nuclear human resources** for power and non-power applications will be developed. This will include **industries, academia, technical safety organizations and regulators**.

**Higher number of nuclear talents** will be achieved through dedicated career related events and competitions for high school **pupils and teachers**, students (**BSc, MSc, PhD**), **postdocs** and **lifelong learners**.

A **single hub** will be established to provide **information** on available educational, training and job opportunities.

A strong **mobility program** will support over **100 person-years** of nuclear career enhancing experience to about **1.000 learners** with over **2,5 million EUR**.

Cross-border and cross-disciplinary mobility within and beyond **EU** will be promoted in cooperation with **JRC**, **OECD/NEA** and partners from **USA**, **China**, **Canada**, **Korea** and **Japan**.

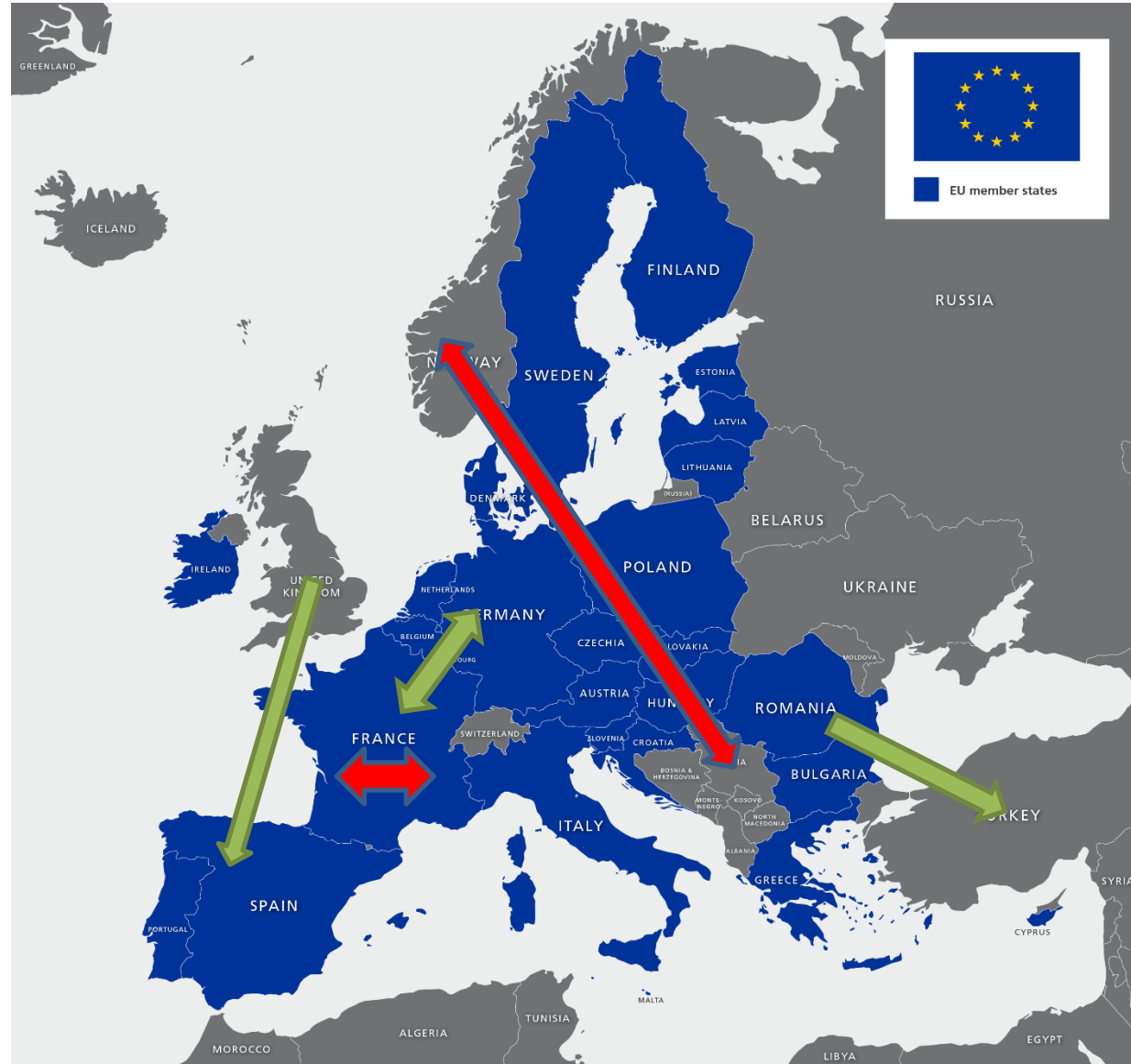
Connections facilitating **access to research infrastructures** will be maintained.

## Mobility Manual

- > support for attendees to participate to developed actions/experiments;
- > increased number of researchers;
- > increased number of experiments/E&T actions;
- > increased knowledge, skills and competences;
- > independent on geographical distribution of attendees;
- > EU participation is encouraged;
- > must respect Mobility Manual requirements.

# Mobility rules - 1

- **Mobilities**
- **Not mobilities**

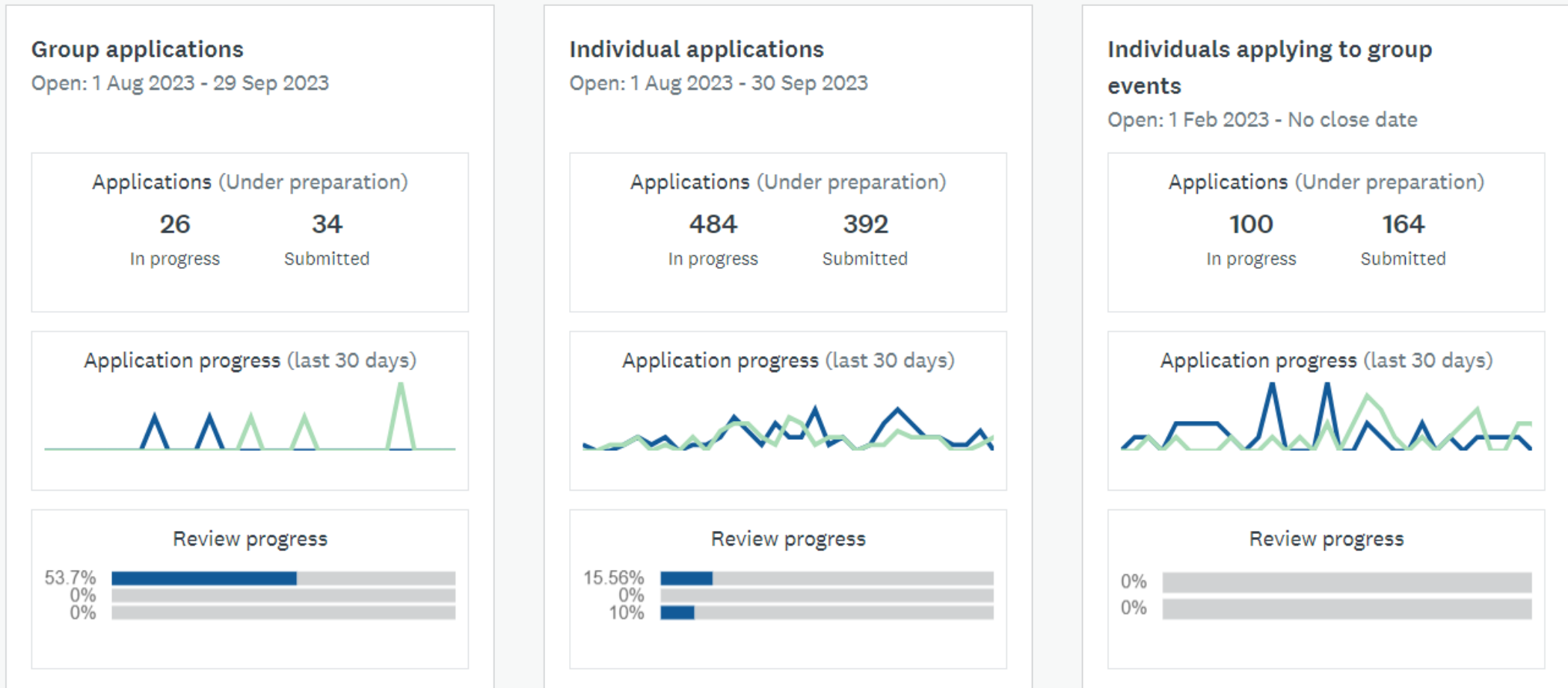


# Mobility rules – 2 (Groups of learners eligible to receive the ENEN# mobility grants)

Groups of mobility beneficiaries	Individual applications	Group applications
High-school pupils	No	Yes
High-school teachers	No	Yes
B.Sc. students (interested in pursuing a master education and/or a career in the nuclear fields)	Yes	Yes
M.Sc. students in nuclear interested in extracurricular experience and/or academic exchange such as the EMSNE certification by ENEN.	Yes	Yes
Ph.D. students in nuclear interested in academic and research exchange, access to research infrastructures and cooperation with Euratom research projects.	Yes	Yes
Post-docs in nuclear interested in academic and research exchange, access to research infrastructures and cooperation with Euratom research projects.	Yes	Yes <sup>3</sup>
Early career professionals (preferable up to 10 years of experience), interested in changing their careers to nuclear and/or building up their life-long learning on nuclear topics.	Yes	Yes <sup>3</sup>



# Project results on 12.09.2023

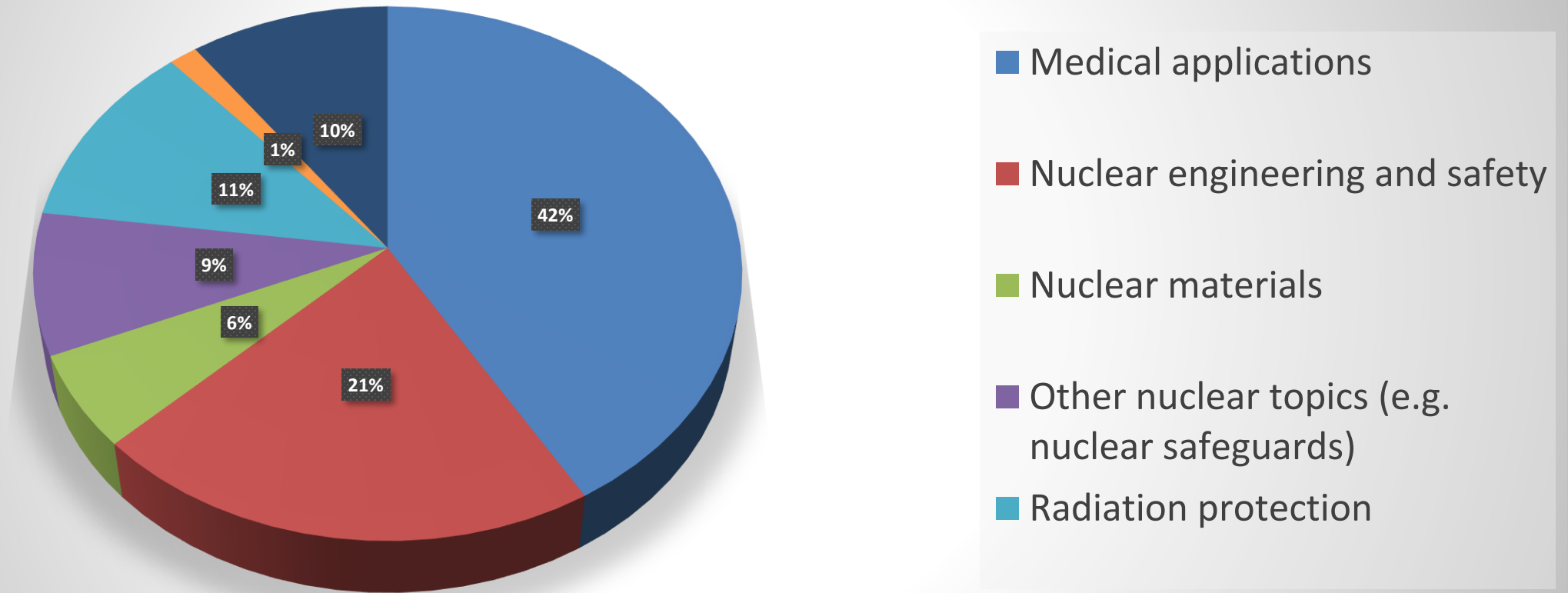


# Individual mobilities distributions



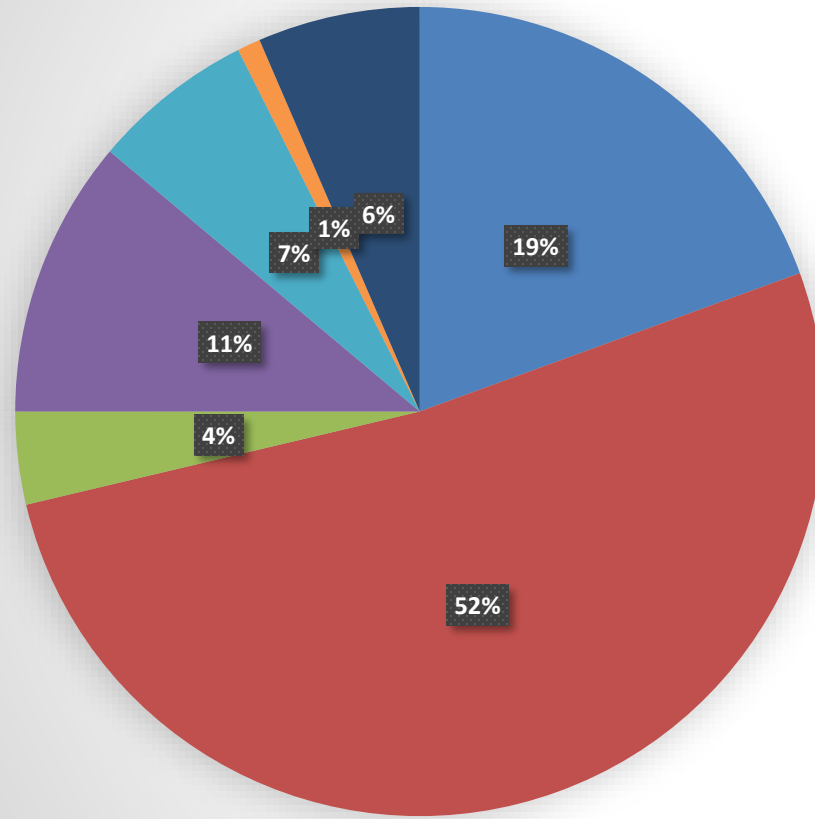
# Female funding distribution

Females in nuclear



# Male funding distribution

Males in nuclear



- Medical applications
- Nuclear engineering and safety
- Nuclear materials
- Other nuclear topics (e.g. nuclear safeguards)
- Radiation protection

# Schedule of rolling deadlines

(All deadlines at 23:59 CET)

Individual Application Batch	Submitted by	Decision by
1	30.11.2022	31.01.2023
2	31.01.2023	31.03.2023
3	31.03.2023	31.05.2023
4	31.05.2023	31.07.2023
5	31.07.2023	30.09.2023
6	30.09.2023	30.11.2023
7	30.11.2023	31.01.2024
8	31.01.2024	31.03.2024
9	31.03.2024	31.05.2024
10	31.05.2024	1.08.2024
11	1.08.2024	30.09.2024
12	30.09.2024	30.11.2024
13	30.11.2024	31.01.2025
14	31.01.2025	31.03.2025
15	31.03.2025	31.05.2025
16	31.05.2025	31.07.2025



## To sum-up

Check for updates here: [ENEN2plus Project – European Nuclear Education Network](#)

- The [Mobility platform](#) used for funding requests is operational
- The [Mobility handbook](#) used for mobility rules is public



Funded by  
the European Union

# Other Mobility funds

Dedicated funds to finance nuclear talents:

- Travel
- Accommodation
- Subsistence

Check the RULES !!!

- [FREDMANS](#)
- [OFFERR](#)



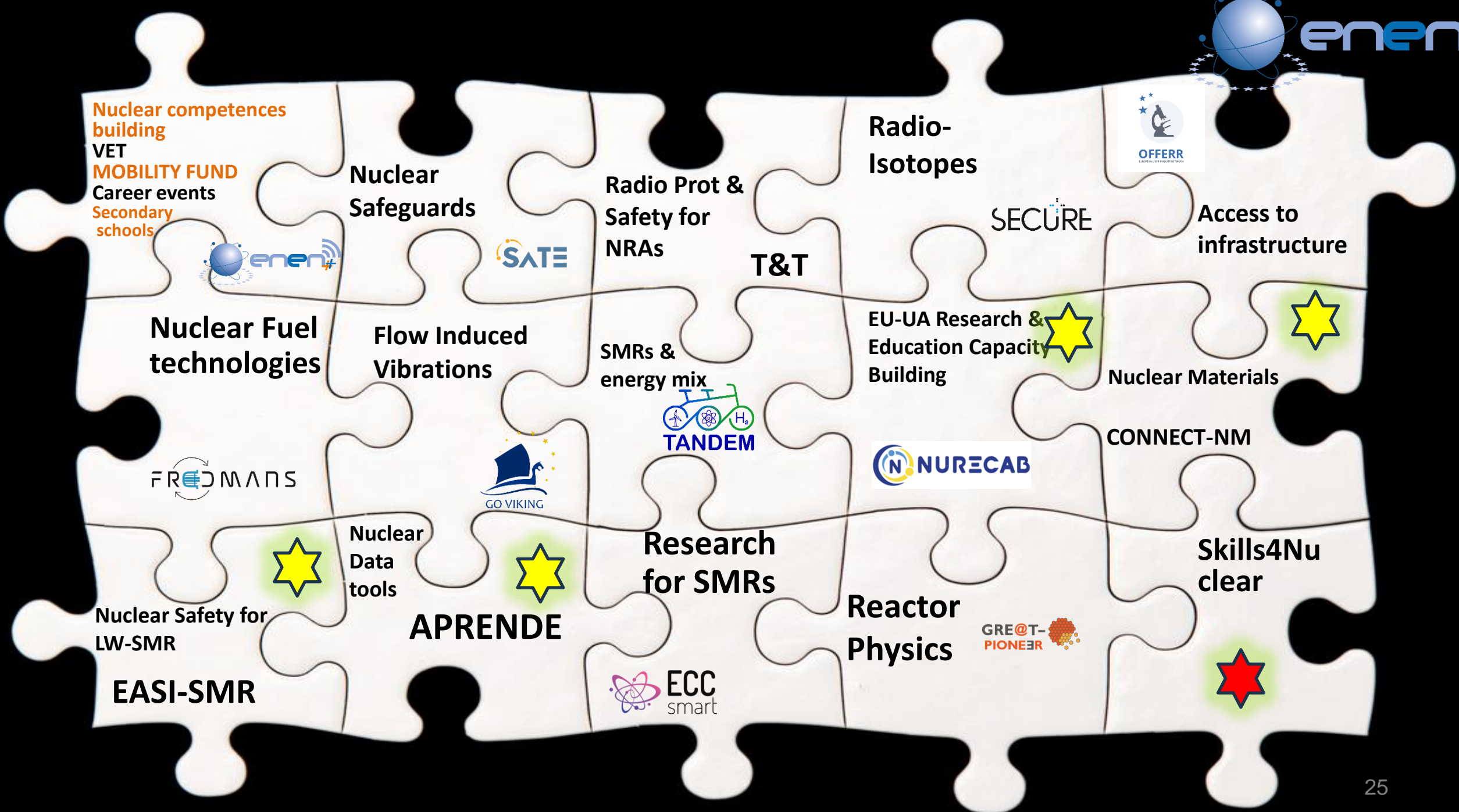
**OFFERR**  
EUROPEAN USER FACILITY NETWORK



**Dedicated calls**

## **Others ENEN projects**







Thank you for your attention

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