



Attract, Retain and Develop New Nuclear Talents Beyond Academic Curricula: the ENEN+ project

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The Future of Nuclear Energy: Engaging the Young Generation



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ENEN

The European Nuclear Education Network,
ENEN Association,
is an Association established as an
international non-profit association
under the French law of 1901,
on 22 September **2003**,
as a result of the “ENEN project” funded
by the European Commission.

OBJECTIVES of ENEN

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

European MSc in Nuclear Engineering

230+ certificates awarded since 2005

- Established under the European Commission since 2005
- Quality and mobility at international level
- Common reference curricula and mutual recognition among ENEN members
- Promotes and facilitates mobility of students and teachers



Certifications

European Master of Science in Nuclear Engineering (EMSNE) →
European Nuclear Education Network
September 2014 – Present



**European Master of
Science in Nuclear
Engineering**
ENEN Certification

Nuclear ETKM Communities

Cooperating with ENEN

- Nuclear engineering (ENEN)

- Radiation protection (UNECE/AS)

- Geological disposal of radioactive waste (EUCO)

- Nuclear security (ANNETTE)

- Fusion Engineering (ANNETTE)
- VVER community (CORONA)
- Medical Physics (ENEN+)
- Decommissioning (ELINDER)
- TSO (nuclear safety assessment, ENSTII)

Approaching ENEN

- GIF
- CERN International Forum

- EFPA-IPNM (joint programming nuclear materials)

- OECD NEA Nuclear Initiative

Beyond ENEN

- Nuclear regulators (WENRA, ENSREG...)
- ...

Attractivity or complexity?
Cooperation or competition?

Motivation for ENEN+ project

Remarkable results obtained since the launch of the EURATOM EFTS initiatives in early 2000s

It is recognized that the **enrolment of students** to nuclear disciplines **has not yet reached the desired level.**

ENEN+ proposes activities to substantially contribute to the revival of the interest of young generations in the careers in nuclear sector.

ENEN+ Objectives

- **Attract** new talents to careers in nuclear.
- **Develop** the attracted talents beyond academic curricula.
- Increase the **retention** of attracted talents in nuclear careers.
- **Involve** the nuclear stakeholders within EU and beyond.
- **Sustain** the revived interest for nuclear careers.

The ENEN+ focuses on the learners and careers in:

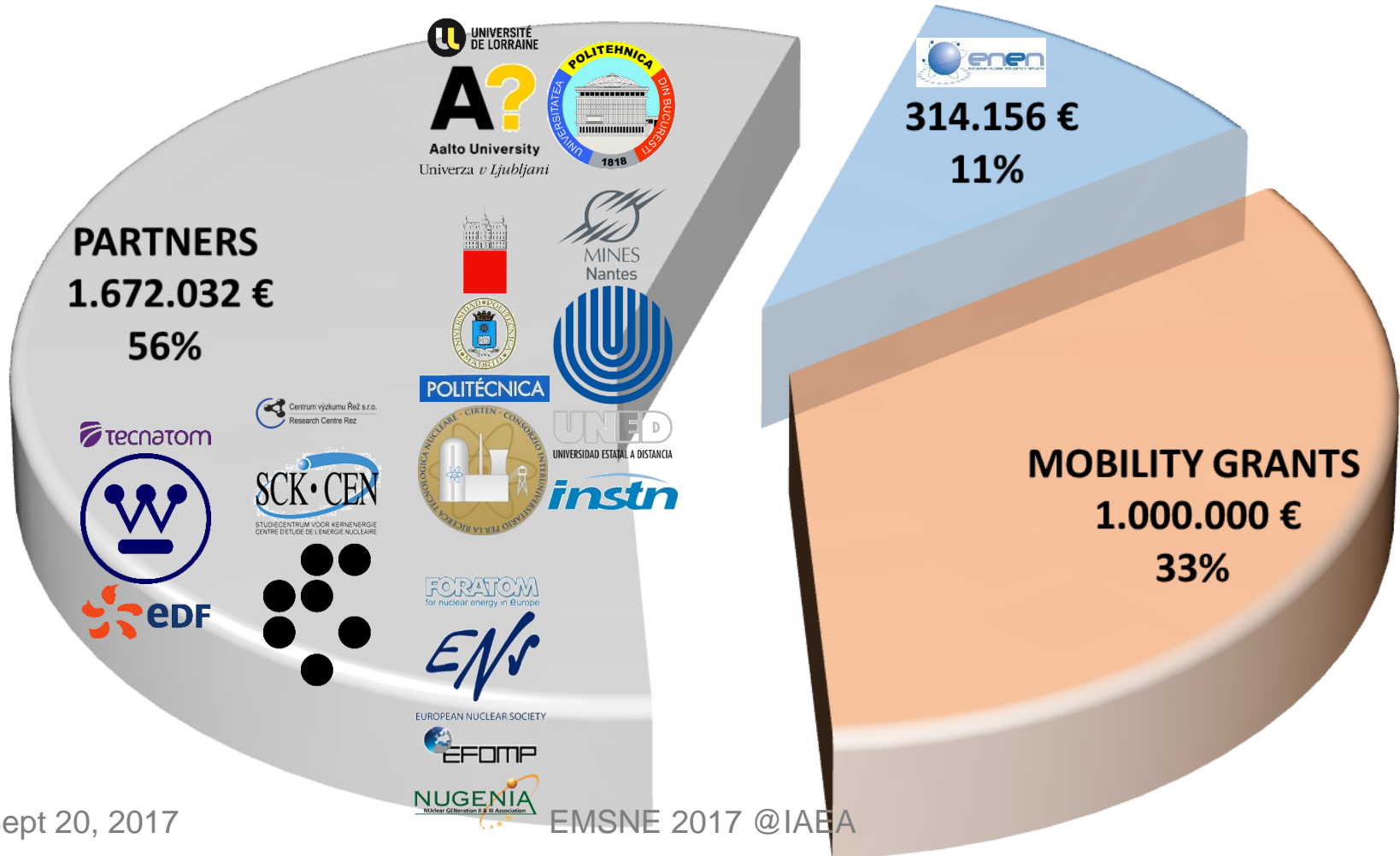
- Nuclear reactor engineering and safety,
- Waste management and geological disposal,
- Radiation protection and
- Medical applications.

Expected Key Contributions

- Attractive e-materials on nuclear profession
- EU wide competition for high school pupils
- Support for learners in all career phases:
 - Career guidance
 - Support for mobility (funding & access)
- Voluntary accreditation function (ECTS, ECVET)
- Sustainable mobility fund
- Improved communication with industry and decision makers
- EU wide nuclear ETKM strategy

Budget

Total costs: **3.2 €** EC Contribution: **2.9 M€**



Summary

Nuclear energy strives to the use of the **best available people**, science, knowledge, technologies and operational experience.

→ **attract, develop and retain** technical specialists for multidisciplinary and multicultural environment.

Improve balance between:

- Education **and** Training
 - Enhance academic curricula with hands-on experience
- Competition **and** Cooperation
 - Cooperate in competition for new talent with other industries
- Complexity **and** attraction
 - Are excellent curious talents attracted to nuclear complexity sufficient for sustainable development of nuclear?



Thank you for your attention

www.enen-assoc.org

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