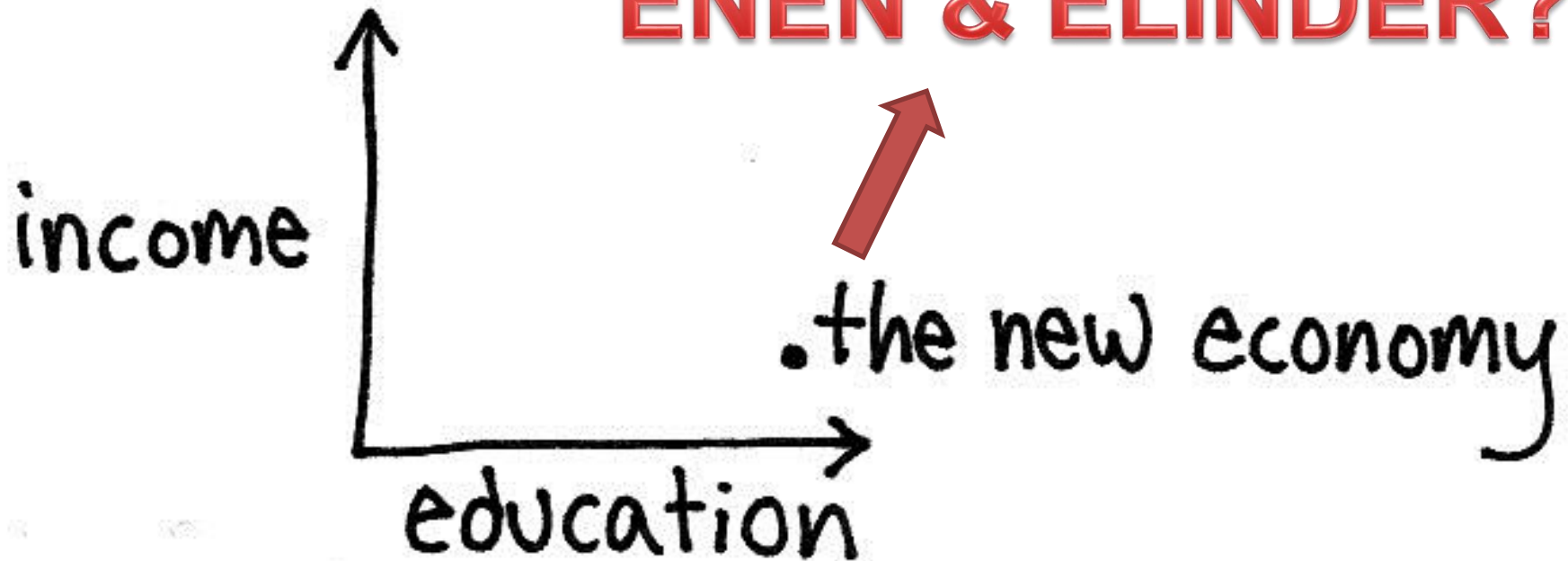




The Roles of ENEN and ELINDER in the European Nuclear Education, Training and Knowledge Management

Prof. Leon Cizelj
President
of the ENEN Association

Expected contributions by ENEN & ELINDER?

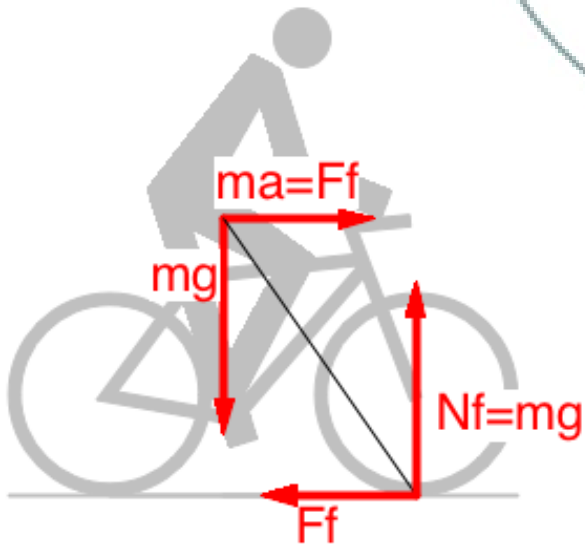
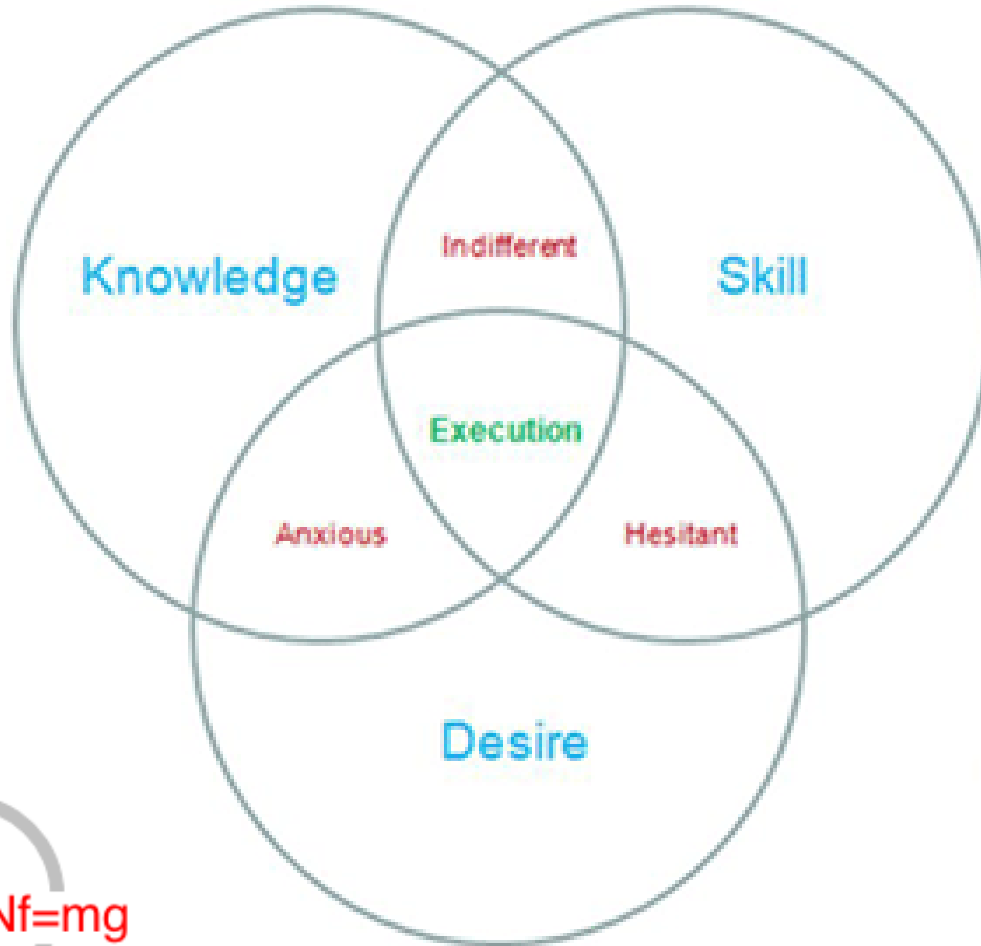


Jessica Hagy
<http://thisisindexed.com/>

Education vs. Training

Education
Why?
Knowledge
Research

Training
How?
Skills
Experience



http://stage-gate.com/newsletter/nl_feb_2012.htm

CREATION

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

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 Union Council

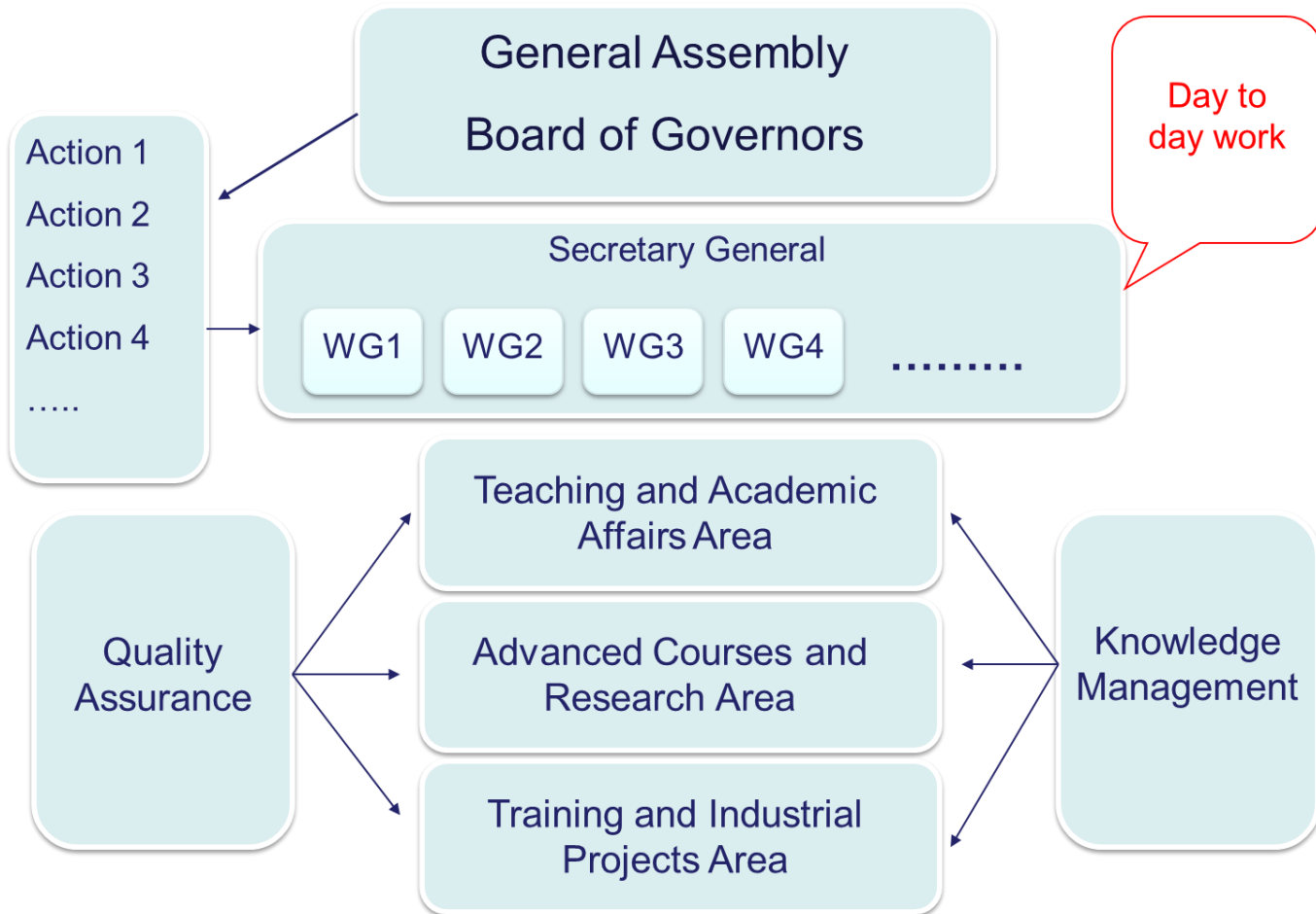
“The Council hopes that, with the help of the EU, **ENEN and its members will continue to develop the coordination of nuclear education and training in Europe.**

The Council welcomes the existence within the European Union of coordinated teaching and training leading to qualifications in the nuclear field, provided notably by the **ENEN**”.

December 1-2, 2008



ENEN Structure



ENEN Structure

Board of Governors for 2015-2016:

Jozef Stefan Institute, Slovenia

Aalto University, Finland

Université de Lorraine

Westinghouse, Belgium

CEA-INSTN, France

SCK-CEN, Belgium

Czech Technical University in Prague, Czech

Imperial College London, United Kingdom

Universidad Politécnica de Cataluña, Spain

Prof. Leon Cizelj

Prof. Filip Tuomisto

Prof. Behrooz Bazargan-Sabet

Ms. Veronique Decobert

Prof. Pascal Anzieu

Dr. Michèle Coeck

Dr. Martin Kropik

Dr. Matthew Eaton

Prof. Guillem Cortés

President

Vice President

Member of the Board

Member of the Board

Member of the Board

Member of the Board

Member of the Board

Member of the Board

Member of the Board

Secretariat of the Association:

Mr. Pedro Dieguez Porras

Secretary General

Mr. Thierry Desaleux

Treasurer

ENEN Members in March 2015

67 Members from 24 Countries:
6 Research Centers, 5 Companies, 50 Universities
and 6 international institutions



Cooperation Agreements

The following institutions from outside Europe are considered ENEN Member, without voting rights at the General Assembly, by concluding a Memorandum of Understanding:

55	Japan Atomic Energy Agency	JAEA	Tokai	Japan
56	Tokyo Institute of Technology	TokyoTech	Tokyo	Japan
57	University of Fukui	FUKUI	Fukui	Japan
58	Central Institute for Continuing Education and Training	CICET	Obninsk	Russia
59	Moscow Engineering Physics Institute (State University)	MEPhI	Moscow	Russia
60	North West University	NWU	Potchefstroom	South Africa
61	Odessa National Polytechnic University	ONPU	Odessa	Ukraine
62	V. N. Karazin Kharkiv National University	KKNU	Kharkiv	Ukraine

The following international institutions are considered ENEN Member, without voting rights at the General Assembly, by concluding a Memorandum of Understanding:

63	International Atomic Energy Agency	IAEA	Vienna	Austria
64	European Nuclear Society	ENS	Brussels	Belgium
65	University Network of Excellence in Nuclear Engineering	UNENE	Ontario	Canada
66	Joint Research Centre of the European Commission	JRC	Europe	Europe
67	World Nuclear University	WNU	London	United Kingdom
68	Fusenet	FUS	Europe	Europe
69	INBEx	INBEX	Uppsala	Sweden
70	World Federation of Science Journalists	WFSJ	Montréal	Canada

ENEN Communities 2016

- Nuclear engineering (ENEN)
- Radiation protection (ENETRAP)
- Geological disposal of radioactive waste (PETRUS)
- Nuclear security (ANNETTE)
- Fusion Engineering (ANNETTE)
- VVER community (CORONA)
- Medical Physics (ENEN+)
- Decommissioning (ELINDER)

Main Challenges:

Complexity of Nuclear

Balanced cooperation and

competition



ENEN ACTIONS

EMSNE Certification

European Master of Science in Nuclear Engineering
ENEN Certification

Nuclear Education by
the European Nuclear Education Network

Certifications

European Master of Science in Nuclear Engineering (EMSNE)

European Nuclear Education Network
September 2014 – Present

PhD Event & Prize

Competitive and friendly presentation of research in Nuclear fields.
12 Finalists, of which 3 winners



This year was held in ICAPP'2015

Signature of Practical Arrangements with IAEA



2009



2013
Networking
E & T
K. Mg.





ENEN PROJECTS

ENEN CURRENT/RECENT PROJECTS

- **NUSHARE: Coordinator: ENEN.**
 - ENEN's budget: 200,000 €. Project budget: 994,460 €
- **PETRUS III: Coordinator: Univ. Lorraine.**
 - ENEN's budget: 110,000 €. Project budget: 1,425,000 €
- **PELGRIMM: Coordinator: CEA.**
 - ENEN's budget: 150,000 €. Project budget: 2,999,999 €
- **ANNETTE: Coordinator: ENEN.**
 - ENEN's budget: 192,000 €. Project budget: 2,517,399 €
- **CORONA II: Coordinator Kozloduy NPP**
 - ENEN's budget: 96,952 €. Project budget: 1,017,605 €
- **ENEN-RU II: Coordinator: ENEN.**
 - ENEN's budget: 171,000 €. Project budget: 530,000 €
- **EUJEP-2: Coordinator: ENEN.**
 - Project budget: ~180,000 €

NUSHARE.EU (project)



Project proposed by:

- Commissioner for Research and Innovation
- Commissioner for Energy

after the Great East Japan Earthquake and Tsunami in 2011.

OBJECTIVE: to develop and implement Education, Training and Information programmes strengthening competences required for achieving excellence in Nuclear Safety Culture (decision & opinion makers).

ANNETTE

Advanced Networking for Nuclear Education and Training Transfer of Expertise

- **4 years action**
- **Started in February 2016**
- **2.5 million €**
- **25 partners**



ENEN+ proposal

Attract, develop and retain new nuclear talent

- Submitted in Oct 2016, in evaluation
- Coordinated by ENEN
- Partners include academia & JRC, industry (W, EDF, Technatom) and associations (ENS, FORATOM, NUGENIA), links to IAEA and OECD/NEA
- Budget ~3 MEUR: 1 MEUR dedicated to mobility
- Voluntary accreditation (ECTS, ECVET)
- Strategic support to nuclear ETKM in EU

EC projects beyond EU

- Coordination of **ENEN-RU II project** - Cooperation with Russian Federation in Nuclear Education, Training and Knowledge Management: focus on the mobility of teachers and students (July 2014 – July 2017)
- Coordination of **EUJEP-2 project** (Japan) - Foster, organize and implement exchanges of European and Japanese Master level students with mutual recognition of credits (October 2014 – October 2017)

OTHER PROJECTS INVOLVING ENEN

- ENEN III - Training schemes for Generation III and IV engineers. (2009 – 2013) – Use of ECVET system
- EUROTRANS Project EUROpean Research Programme for the TRANsmutation of High Level Nuclear Waste in an Accelerator Driven System (2005 – 2010)
- ENETRAP II - European Network on E&T in Radiological Protection: addressing mainly the nuclear safety authorities (2009 - 2012)
- FP7 CORONA Establishment of Regional Center of Competence for VVER Technology and Nuclear Applications (2011 – 2014)
- FP7 CINCH-II - Cooperation in education and training In Nuclear Chemistry: focus on the European master's degree in nuclear and radiochemistry (2013 – 2016)
- FP7 EUTEMPE-RX - EUropean Training and Education for Medical Physics Experts in Radiology: (2013 – 2016)
- FP7 GENTLE - Graduate and Executive Nuclear Training and Lifelong Education (2013 – 2017)

ENEN Database (opportunities)

www.enen-assoc.org



> European Nuclear Education Network



Home | About ENEN | E&T Projects | EMSNE Cert | PhD Event & Prize | International Coop. | Publications | Database

Home / ENEN Database

ENEN Database

ENEN DATABASE OF COURSES, MASTER PROGRAMS, PHD TOPICS AND OPPORTUNITIES

Choose your interest:



 [Go to calendar](#) 

 [Go to country](#) 

LOG IN/ACCOUNT SETTINGS

Login OK

[forgot your password?](#)

EDUCATION & TRAINING
COURSE



MASTER PROGRAM



PROPOSED PhD TOPIC



OPPORTUNITIES



The information of the database is provided by ENEN Members and partners, covering:

1. Education and Training courses
2. Master Programs
3. Proposed PhD Topics
4. Opportunities (Scholarship, Postdocs, Internship, Job opportunities)

The ENEN is operating the ENEN Database, however is not in the position to take any responsibility in terms of the contents of each data, it belongs to each posting organization. If you are interested in adding data from your organisation, please contact: sec.enen@cea.fr

ENEN RU DATABASE OF INFRASTRUCTURES

Summary

Nuclear energy should strive for the use of **the best available** people, science, knowledge, technologies and operational experience.

→ Balanced approach to education and training & cooperation between stakeholders and nuclear fields (Career guidance).



Thank you for your attention!

www.enen-assoc.org

Mr. Pedro Diéguez Porras, Secretary General

European Nuclear Education Network
INSTN, Centre CEA de Saclay, Bat. 395
91191 Gif-sur-Yvette Cedex, France

Telephone: +33 169 08 97 57

Email: sec.enen@cea.fr