



European Cooperation in Nuclear E&T in the era of global transformation

Pedro Diéguez Porras

Executive Director

European Nuclear Education Network

ENEN

European Nuclear Education Network

International non-profit association in Belgium, funded in 2003

Objective is the **preservation** and further **development** of expertise in the nuclear fields by higher Education & Training

77 institutional members: 52 Universities, 6 Research Centres, 10 Industry Companies, 9 International Institutions

Agreements with: IAEA, EC-JRC, OECD-NEA, ENS, WNU, I2EN, Fusenet



16 May 2019



ATOMEXPO 2019



ENEN Education & Training projects

- ENEN PLUS Attract, develop, retain, sustain talent - E&T Mobility Fund
- ANNETTE Coordination of European E&T, transfer of expertise
- ARIEL Nuclear data & infrastructures
- MEET CINCH RadioChemistry E&T
- ELINDER Decommissioning E&T

- ENEN-RU II Russian Federation and European Union bilateral collaboration
- EUJEP-2 Japan and European Union exchange programme
- NUSHARE Nuclear Safety Culture
- CORONA II VVER technology E&T
- PETRUS III Waste Management and Geological Disposal E&T
- ENETRAP Radiation Protection E&T

Challenges involving young personnel

Science, Technology, Engineering, Maths Young people are “Millennials”
 “Human”

<p>Nuclear competes for talent with other STEMs <i>Create an inspiring perception, to...</i> Attract talent</p>	<p>Socially connected & experience oriented youth <i>A career of experiences, to...</i> Retain talent</p>
<p>Collective perception</p>	<p>Individual perception</p>
<p>Nuclear Knowledge is complex</p>	<p>Always new technology trends</p>
<p>Complex and difficult knowledge requires effort <i>Professional opportunities, to...</i> Develop talent</p>	<p>Link with the fast pace of technology <i>A technological environment, to...</i> Sustain talent</p>

“Tech”

© Pedro Dieguez Porras

ENEN PLUS PROJECT

Attract, Retain, Develop, Involve, Sustain **TALENTS**

International mobility of students and researchers

Access to infrastructures, international research and
“Nuclearization” of professionals



1,000,000€ in mobility grants

Development of Education, Training and Knowledge
Management strategy

<https://plus.enen.eu>



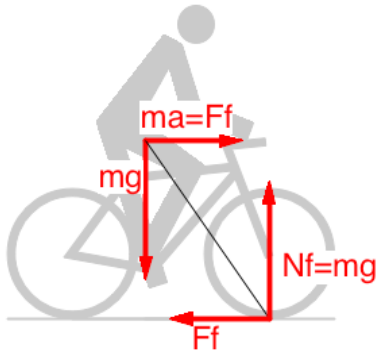
EU Mentorship program for BSc and MSc



First EU wide Nuclear
competition for school
students in July 2019

Education vs. Training

Know Why vs. Know How



Education

Why?

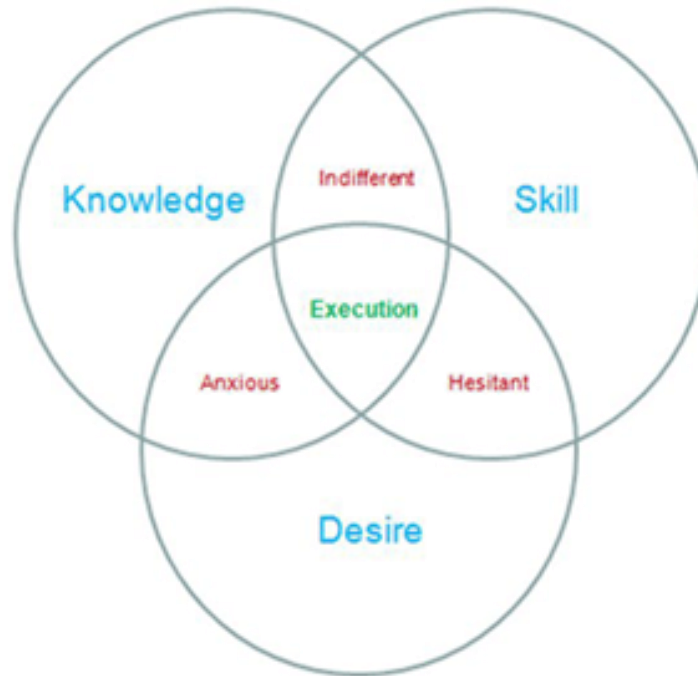
Knowledge

Research

Curiosity

Academia

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



Training
Knowledge mngt.

How?

Skills

Experience

Need

Industry

Knowledge communities

ENEN RU II PROJECT

Strengthening of Cooperation and Exchange for Nuclear Education and Training
between the European Union and the Russian Federation

First ENEN-RU
project (2011-2014)



ENEN-RU II project
(2014-2017)

ENEN RU
E&T
Forum



- European Nuclear Education Network (ENEN), France
- Belgian Nuclear Research Centre (SCK-CEN), Belgium
- Ceske Vysoke Uceni Techniske V Praze (CTU), Czech Republic
- Centrum Vyzkumu Rez S.R.O (CV REZ), Czech Republic
- Universität Stuttgart (IKE), Germany
- Technische Universitaet Muenchen (TUM), Germany
- CIRTEN, Italy
- University Politehnica Bucharest (UPB), Romania
- Slovenska Techniska Univerzita v Bratislave (STUB), Slovakia
- University of Manchester (UM), United Kingdom
- Tecnatom (TEC), Spain



- State Atomic Energy Corporation "Rosatom"
- Rosatom Technical Academy (ROSATOM-TECH)
- National Research Nuclear University "MEPhI" (NRNU MEPhI)
- Obninsk INPE NRNU MEPhI
- Federal State Unitary Enterprise "State Scientific Centre of the Russian Federation-Institute for Physics and Power Engineering named after A. I. Leypunsky" (FSUE "SSC RF – IPPE").
- Research Institute of Physics and Chemistry named after L.Ya. Karpov"
- Joint Stock Company «State Scientific Center – Research Institute of Atomic Reactors»

ENEN RU II PROJECT

Strengthening of Cooperation and Exchange for Nuclear Education and Training
between the European Union and the Russian Federation

Highlights:

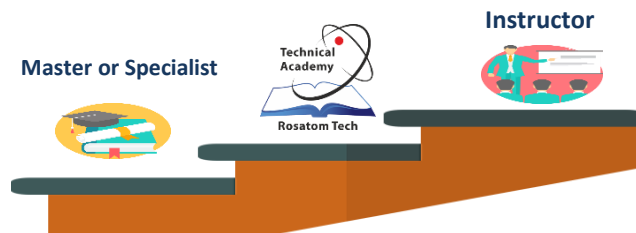
Basis criteria for mutual recognition of E&T
Web-database of facilities and laboratories



+ 70 participants in 8 Joint courses



Rosatom Tech and Tecnatom
collaboration in instructors development



Exchanges and stays of PhD
students between MEPHI and CTU,
UPB and STUBA

ANNETTE PROJECT

Advanced Networking for Nuclear Education and Training Transfer of Expertise

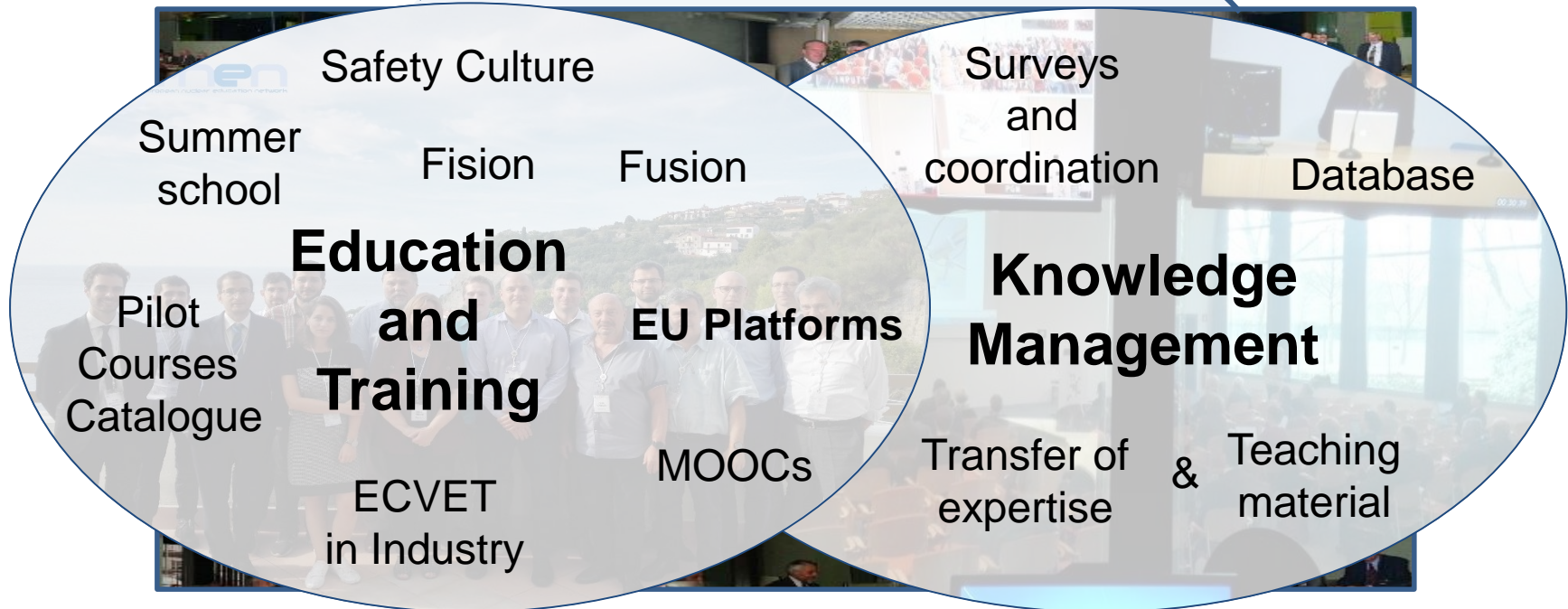
Total Budget 3 Million Euros

25 partners

To preserve and offer

the Nuclear Knowledge

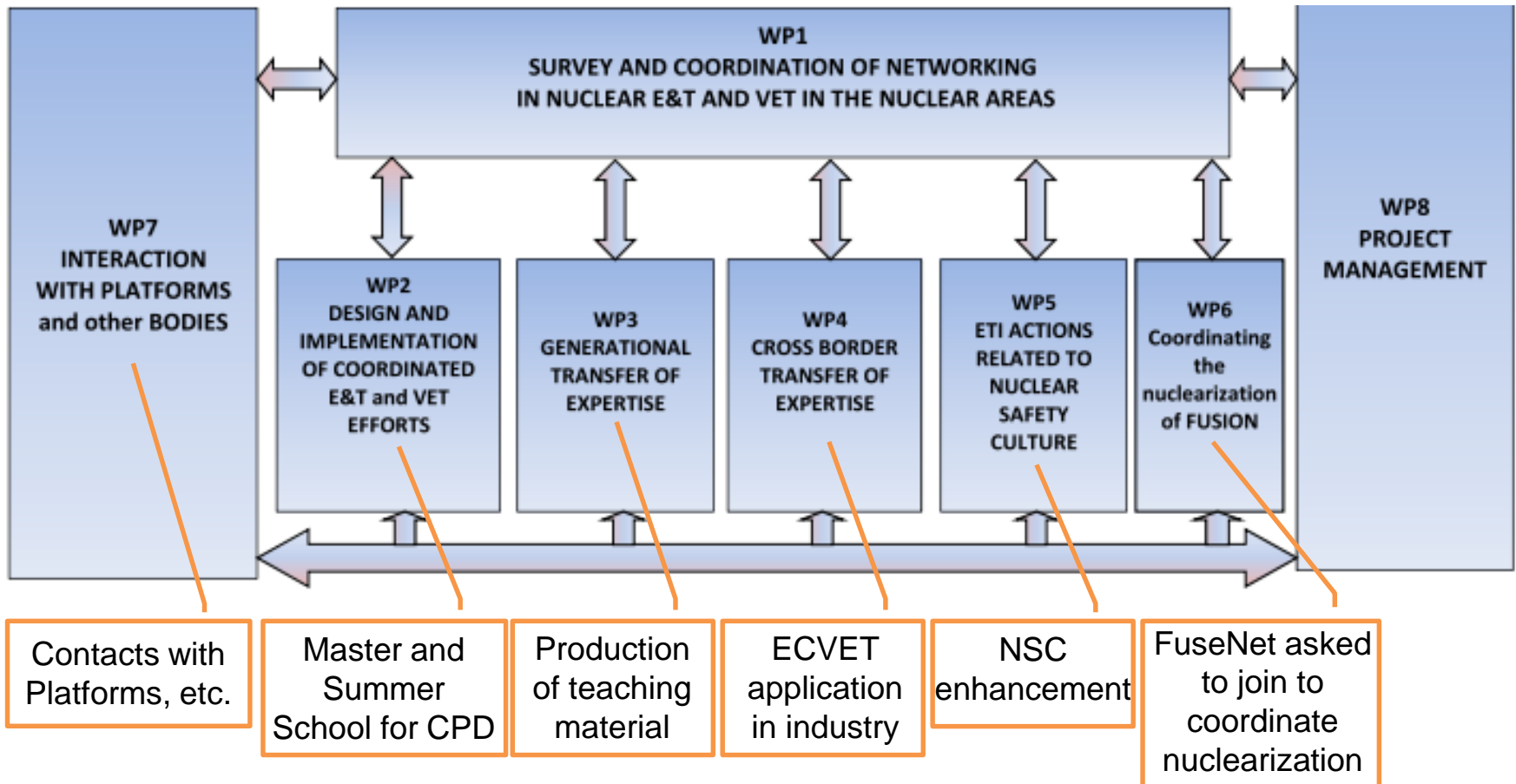
Networking



ANNETTE PROJECT

Advanced Networking for Nuclear Education and Training Transfer of Expertise

Functional sketch of the project



CORONA II

- Development of a state-of-the-art regional training network for VVER competence (CORONA Academy)
- Supporting transnational mobility and lifelong learning amongst VVER operating countries





Thank you for your attention

www.enen.eu

European Nuclear Education Network
Rue d'Egmont 11, 1000 Brussels, Belgium

pedro.dieguez@enen.eu