

Establishing a framework for exposure science certification:

*Enhancing professional competencies and
strengthening exposure science identity*

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<https://ises-europe.org/>

Overview

- Background
- 9 Domains of Expertise (DoE)
- Proposed certification approach
- Training repository
- Questions to the audience
- Next steps

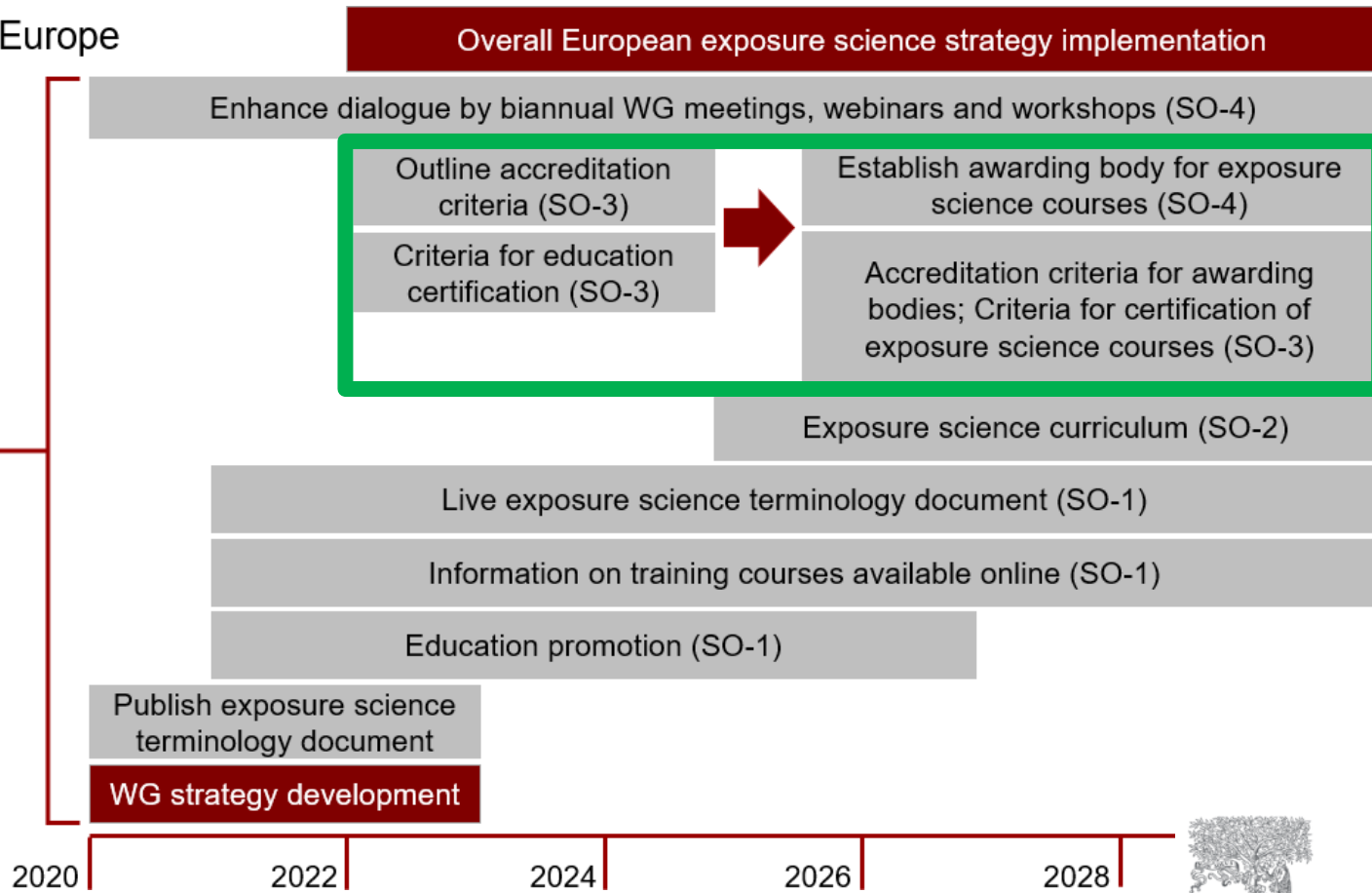


Why do we need a certification system

- Support awareness
- Support creation of an (ES) identity
- Establish a recognized profession
- Improve the competency of Exposure Scientists
- Introduce a quality control system



Working Group (WG) 'Education, Training & Communication'



Framework for developing an exposure science curriculum as part of the European Exposure Science Strategy 2020–2030

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Based on similar organisations

- International Board of Environmental Risk Assessors (IBERA)
- International Certificate in Occupational Hygiene (ICertOH)
- European Register of Toxicologists (ERT)
- and others...



9 Domains of Expertise (DoE)

Basic competency (Familiarity)	1	Basic concepts and principles in exposure science
	2	Fundamentals of environmental chemistry and (eco)toxicological
Core competency (Expertise)	3	Exposure modelling
	4	Exposure monitoring
	5	Exposure assessment and risk characterisation
	6	Risk management and sustainability assessment
Elective Competency (Specialisation)	7	Relevant legislative frameworks
	8	Risk communication and stakeholder engagement
	9	Statistics and epidemiology

Define the domain expertise for Exposure Science

Professional qualification program

*Establish a training repository
(self-study course)*

Professional portfolio

MCQ Exam

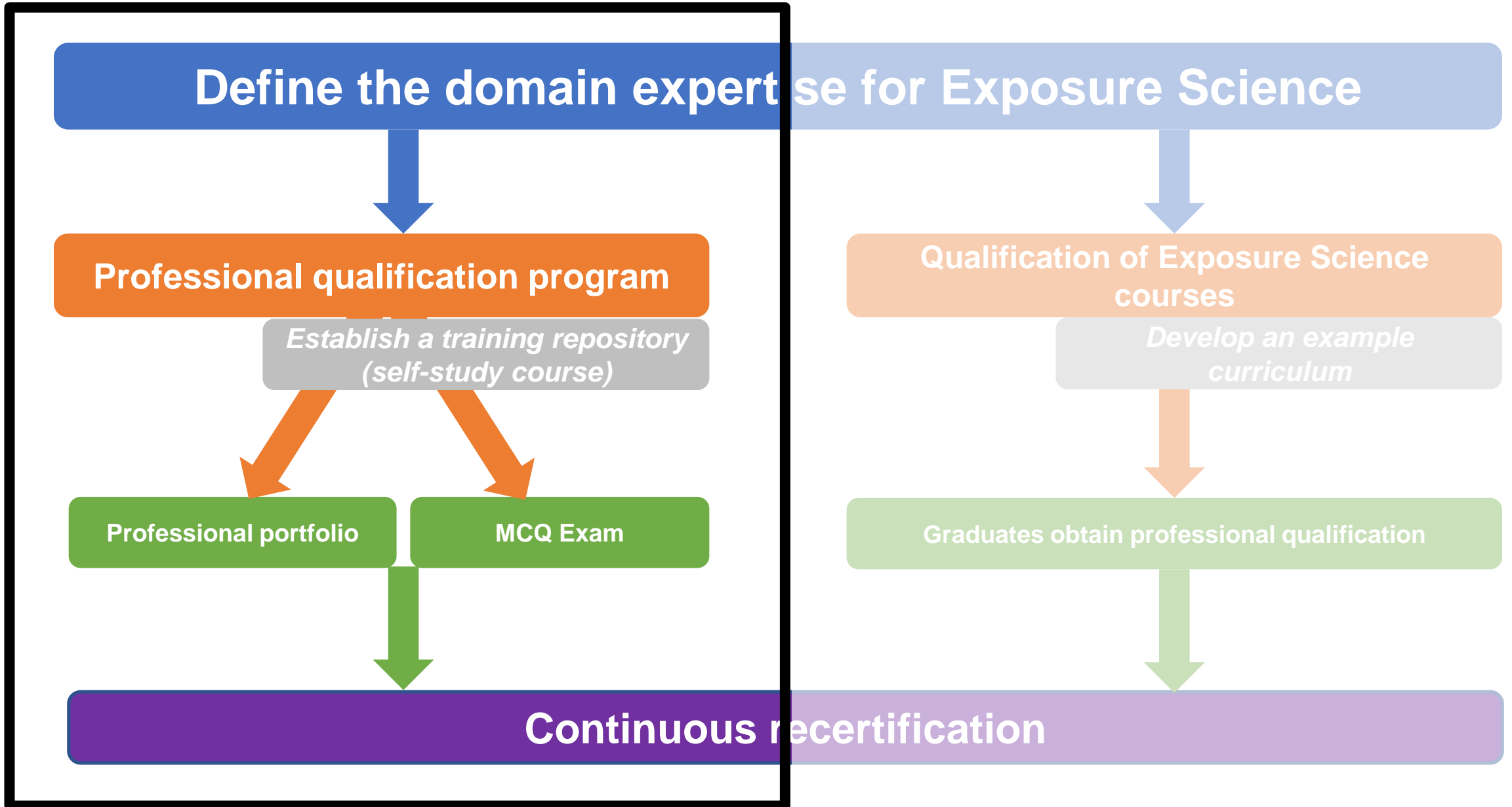
Qualification of Exposure Science courses

*Develop an example
curriculum*

Graduates obtain professional qualification

Continuous recertification

Current focus



Registry of certified Exposure Scientist

- Certified Exposure Scientist will be listed in ISES database
 - Publicly available*
 - 3rd party enquires*
- Certificate will be issued



*if approved by individual

Training repository

For each of the 9 Domains of Expertise (DoE)

- Expert/Domain Lead
- Introduction lecture created by ISES Europe (1-3 hours)
- Regular Q&A session
- Key literature (3-5 references)
- Syllabus
- Additional references
- Additional training material



Training repository

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**Basis for examining
practising Exposure
Scientists**

**Basis for Exposure
Science courses**



Mentimeter poll

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Use code: XX XX XX X



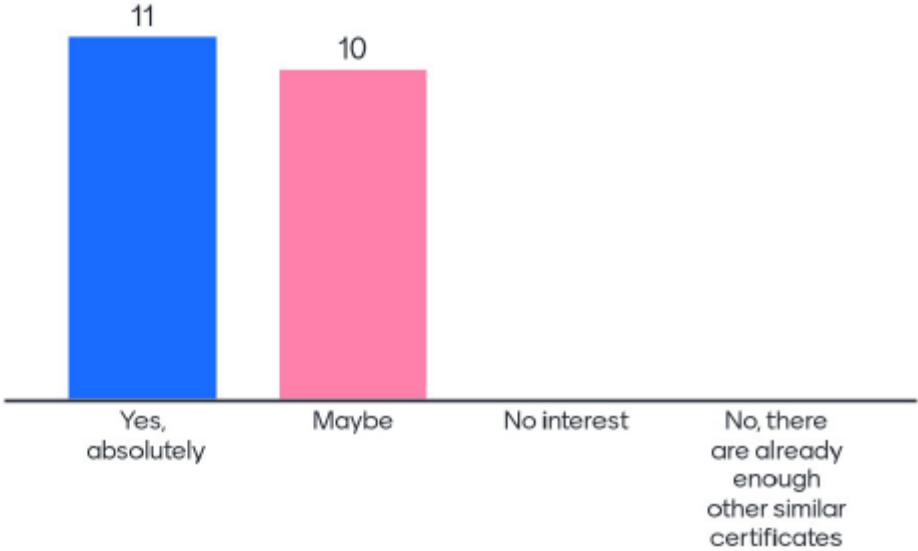
Question 1:

Do you think a certificate for Exposure Scientist is needed:

- 1) Yes, absolutely
- 2) Maybe
- 3) No interest
- 4) No, there are already enough other similar certificates



Do you think a certificate for Exposure Scientist is needed:



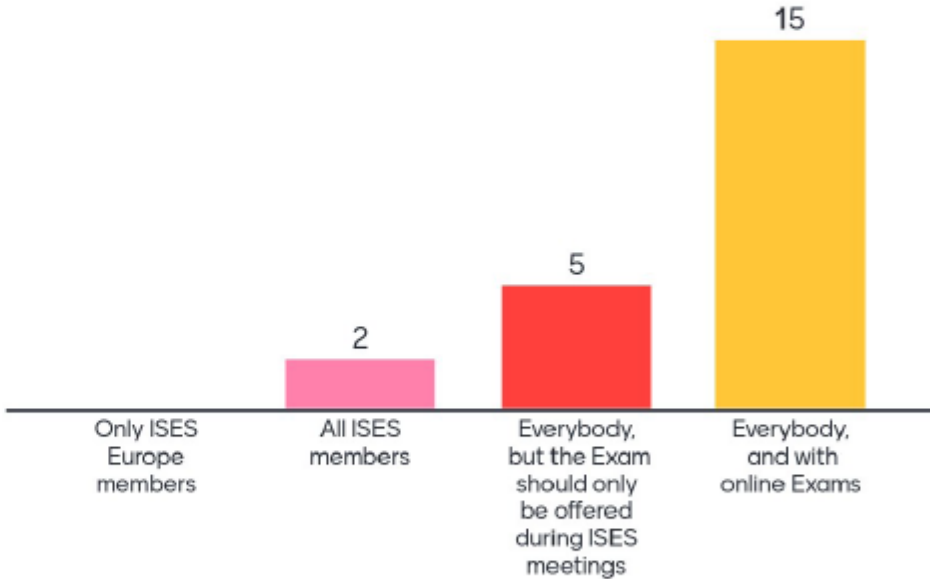
Question 2:

How accessible should such a training repository and certification scheme be:

- 1) Only ISES Europe members
- 2) All ISES members
- 3) Everybody, but the Exam should only be offered during ISES meetings
- 4) Everybody, and with online Exams



How accessible should such a training repository and certification scheme be:



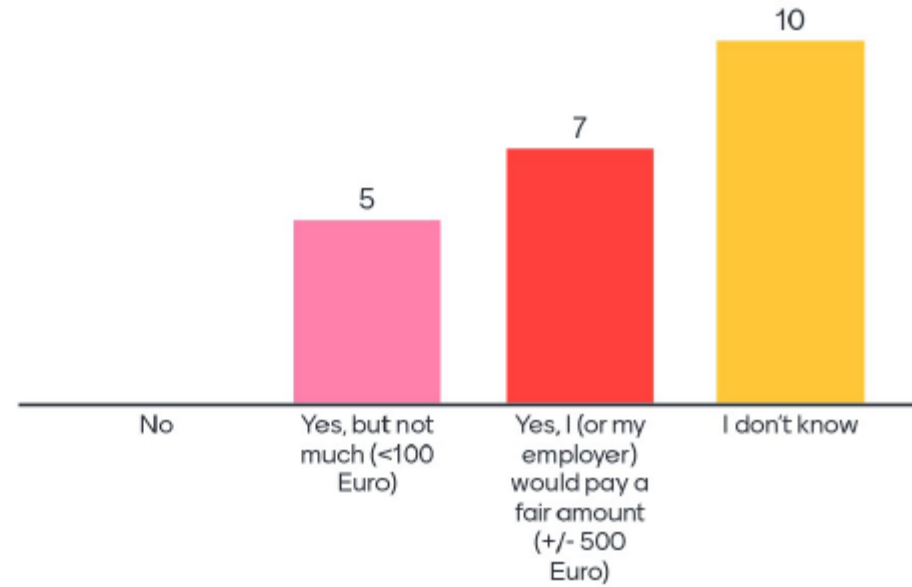
Question 3:

Would you (or your employer) pay for such an Exposure Science certificate:

- 1) No
- 2) Yes, but not much (<100 Euro)
- 3) Yes, I (or my employer) would pay a fair amount (+/- 500 Euro)
- 4) I don't know



Would you (or your employer) pay for such an Exposure Science certificate:



Next steps

- Define objectives and learning resources for each DoE
- Create introduction lecture for each DoE
- Finalise proposal for certification process (incl. recertification) for practising Exposure Scientists
- Set up a certification board
- Offer certification for practising Exposure Scientists



Looking for input and support

- New members to the working group are welcome
- Expert/Domain Lead for the 9 DoE
- Support creation of introduction lectures for each DoE
- Material for the training repository
- Or simply share your thoughts...



Thank you very much for your attention!

ISES Europe

- Gerald Bachler
- Alison Connolly
- Natalie von Goetz
- Steven Verpaele
- Maryam Zare Jeddi

ISES Global

- Elizabeth Marder

