



HERCA Workshop

Implementation
of Radiation Protection Expert
& Radiation Protection Officer

PARIS | 6-8 July 2015

IRPA

IRPA activities related to RPE/RPO

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The role of IRPA in education and training of radiation protection professionals

C. Wernli, D. Cancio and J. Valentin (2003)

- In 1991 and 1994 the IRPA EC evaluated the information collected from the Associate Societies on training and certification issues.
 - Large differences in formality, legal requirements, recognition and training methods illustrated the difficulties to overcome by trying to unify professional recognition on a world wide scale.
- In view of these results it did not seem practical for IRPA to immediately promote an internationally recognized or standardized certification process.
- IRPA Task Group on Education and Training

In 2008, the ILO included **Radiation Protection Expert in the International Standard Classification of Occupations (ISCO-08; 2263)**

- in the group of occupations covered by the definition of Environmental and occupational health and hygiene professionals.



Radiation Protection Expert (RPE)

IRPA definition (2008)

- **An RPE is a person having education and/or experience equivalent to a graduate or masters degree from an accredited college or university in radiation protection, radiation safety, biology, chemistry, engineering, physics or a closely related physical or biological science; and**
- **who has acquired competence in radiation protection, by virtue of special studies, training and practical experience. Such special studies and training must have been sufficient in the above sciences to provide the understanding, ability and competency to**
 - **anticipate and recognize the interactions of radiation with matter and to understand the effects of radiation on people, animals and the environment;**
 - **evaluate, on the basis of training and experience and with the aid of quantitative measurement techniques, the magnitude of radiological factors in terms of their ability to impair human health and well-being and damage to the environment;**
 - **develop and implement, on the basis of training and experience, methods to prevent, eliminate, control, or reduce radiation exposure to workers, patients, the public and the environment.**
- **In most countries the competence of radiation protection experts needs to be recognized by the competent authority in order for these professionals to be eligible to undertake certain defined radiation protection responsibilities. The process of recognition may involve formal certification, accreditation, registration, etc.**



IRPA STRATEGIC PLAN 2008-2020

MISSION

- IRPA is **the international voice of the radiation protection profession** that promotes excellence in national and regional associate societies and radiation protection professionals by providing benchmarks of good practice and **enhancing professional competence and networking.**

2020 VISION

- IRPA promotes excellence in national and regional associate societies and in radiation protection professionals by providing support, guidance, benchmarks of good practice, exchange of information, and by facilitating networking to ensure that the highest standards of professional conduct, skills and knowledge are applied for the benefit of society.
- IRPA is recognized by its members and stakeholders as the international voice of the radiation protection profession in the enhancement of radiation protection culture and practice worldwide.

GOALS - 2008-2012

- Promote excellence in national and regional associate societies.
- Promote **excellence in radiation protection professionals**
- IRPA is recognized by its members and stakeholders as the international voice of the radiation protection profession



IRPA STRATEGIC PLAN 2008-2020

- **IRPA Strategic Priorities for 2012 – 2016:**
 - “To embed the sharing of good practice and professionalism in Associate Societies and individual members through the development of Guiding Principles, **the support and coordination of education and training** and the convening of effective meetings and Congresses”
 - To increase the efforts of IRPA **to support young practitioners and scientists** in their work in radiation protection, **in their education and training**, and in their efforts to become members of the radiation protection community
- **Full support to the Education & Training Plan**
- **Task Group on Education & Training**
- **Task Group on Recognition of Professional Competence**



Education & Training Plan

- **Education and Training (E&T)**

- E&T is key to reach professional excellence, and its essential role has been recognized since the beginning of IRPA.

- IRPA should

- promote and support,
 - provide networking,
 - provide guidance

} to E&T activities of its affiliate societies individually or, preferably, in cooperation

- IRPA's AS should contribute to continuous professional development



Education & Training Plan

- Three main lines:
 - **Cooperation with international and regional organizations** dealing with E&T in Radiation Protection: IAEA, ETRAP conference, ENETRAP/EUTERP, AAHP
 - **E&T actions within IRPA:**
 - Refresher courses
 - Discussion forums during IRPA Congresses
 - Webpage: with announcements and resources database
 - **Support to E&T actions organized by Associate Societies:**
 - Share, Coordinate, Networking, Young generations



IRPA Task Group on E & T

- To develop ideas and establish priorities for the implementation of the IRPA E&T Plan
- To periodically review and update if necessary the IRPA E&T Plan
- Could be the seed for a new permanent IRPA Committee
- Incorporation on an open and voluntary basis
- Current membership:
 - Asia: Japan (JHPS), Korea (KARP)
 - South America (Argentina)
 - North America, HPS (USA)
 - Europe: UK (SRP); FS (German-Swiss); France (SFRP); Bulgaria
 - Africa: Nigeria
 - IRPA EC (Alfred Hefner and Eduardo Gallego)
- Work by e-mail



IRPA Task Group on Certification of RPE

Objective:

- To develop a document of guiding principles for the development and implementation of a certification process for Radiation Protection Expert that would be useful to IRPA Associate Societies that would like to initiate such a certification process or improve an existing process in their countries.
- **Co-chairs:** Kent Lambert, USA
Colin Partington, UK
- IRPA EC Liaison Member: Eduardo Gallego, Spain
- **Membership from:** Australia, Austria, Canada, China, Italy, Japan, The Netherlands, Saudi Arabia, Slovenia, South Africa, South Korea, Ukraine, Uruguay



IRPA Task Group on Certification of RPE

Working method:

- Review the various certification processes currently being used in the IRPA Associate Societies (and countries), through a representative sample of countries.
- Review the guidance documents with regard to existing Qualifications for RPE –such as those prepared by the AAHP– and summarize the findings relevant to certification.
- Analyze the strengths and weaknesses of the processes for certification and guidance on qualification reviewed and elaborate a draft document with conclusions relevant to the guiding principles for the development and implementation of a certification process.
- Discuss the draft document with the Associate Societies delegates at the IRPA Regional Congresses that will take place in 2014.
- After the Regional Congresses provide a final draft report to be discussed and approved at the IRPA Executive Council meeting in 2015.
- The final goal would be to have a document of guiding principles prepared for approval at the General Assembly of IRPA 14 in 2016.



Survey. IRPA Task Group on Certification of RPE

Survey held in winter/spring 2014

Not complete, but quite representative

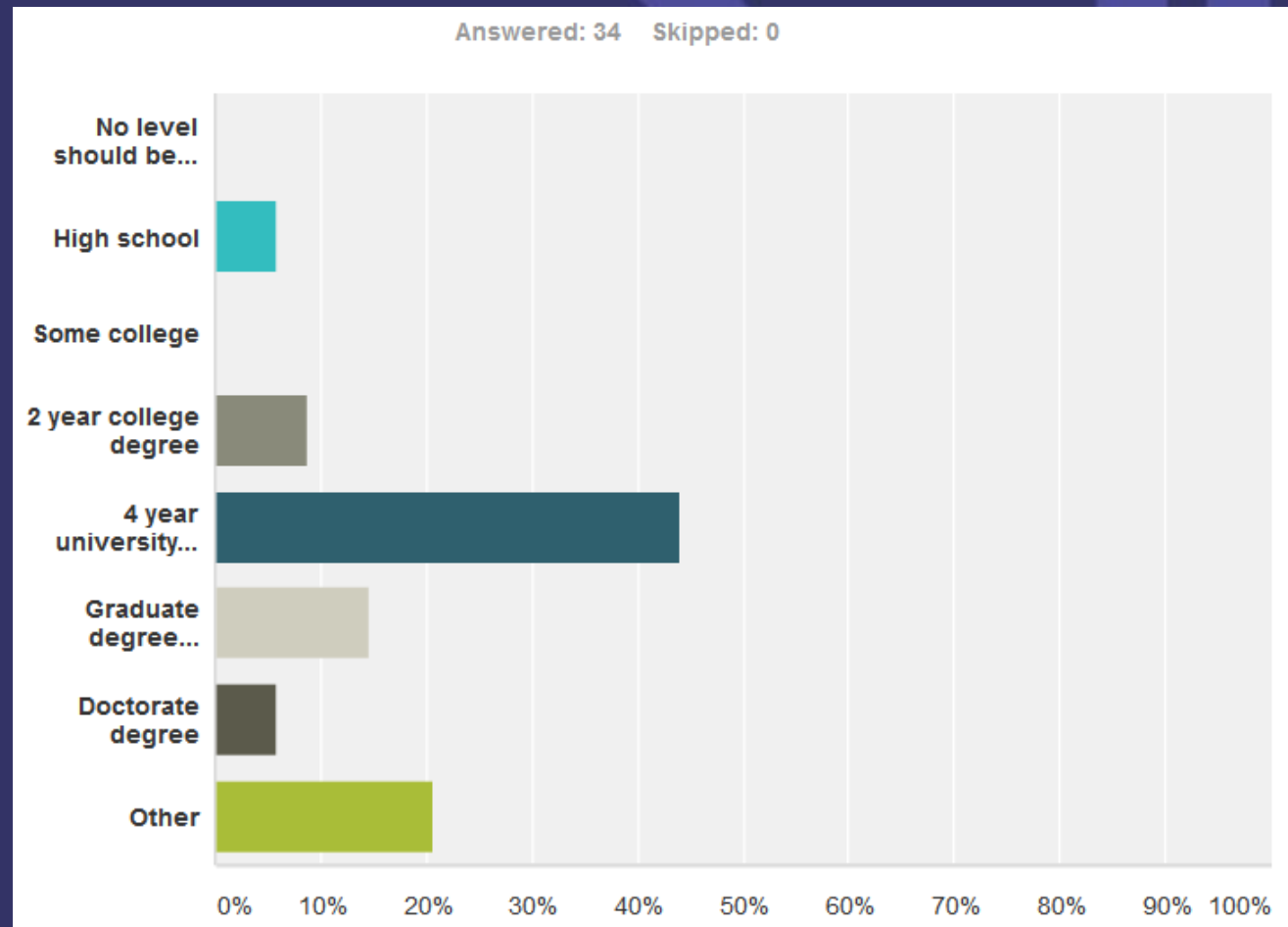
- [Survey](#)

Country IRPA society	replies	Country IRPA society	replies
Australia & New Zealand	1	Malaysia	2
Austria	1	Morocco	1
Belgium	2	The Netherlands	1
Brazil	1	Nordic (Denmark, Finland, Iceland, Norway, Sweden)	1
Cameroon	1	Peru	1
Canada	1	Russia	2
Croatia	1	Slovak Republic	1
Egypt	2	Southern Africa	1
German - Swiss	3	Spain	1
Hungary	2	United Kingdom	1
Italy	3	USA	1
Korea	2	TOTAL	33



Survey. IRPA Task Group on Certification of RPE

- **EDUCATION** - What **MINIMUM** level of education should be established for certification of radiation protection experts?





Survey. IRPA Task Group on Certification of RPE

- **EXPERIENCE** - What **MINIMUM** number of years of work experience in radiation protection is to be recommended in the **GUIDANCE**, how many years should it be?

Answer Choices	Responses	
None	3.03%	1
1	15.15%	5
2	12.12%	4
3	21.21%	7
4	9.09%	3
5	24.24%	8
6	3.03%	1
7	0.00%	0
8	0.00%	0
9	0.00%	0
10	12.12%	4
more than 10	0.00%	0
Total		33



Survey. IRPA Task Group on Certification of RPE

- **LEVELS OF CERTIFICATION** - Should there be grades of certification such as assistant (or junior) professional / specialist / expert? (Note: these are not proposed titles, they are examples only)

Answer Choices	Responses	
There should be ONLY one level of certification at the "expert" level.	45.45%	15
There should be two levels, one at a lower level than expert and one at expert.	42.42%	14
There should be three levels.	12.12%	4
Total		33

- **SPECIALTIES** - Should there be certification in sub-specialties such as medical radiation safety, nuclear power plant radiation safety, accelerator radiation safety and similar?

Answer Choices	Responses	
No. There should be a single comprehensive / general radiation protection certification only.	8.82%	3
Yes. Certification in sub-specialties should be offered.	91.18%	31
Total		34



Survey. IRPA Task Group on Certification of RPE

- **CURRENT STATUS - Does your country currently have or recognize a certification process for radiation protection experts?**
 - YES: 27 replies
 - NO: 6 replies
- **USEFULNESS - Which of the following is the most likely result of an IRPA guidance or standard document for establishing a certification process for radiation protection experts?**
 - We would likely initiate a certification process based on the document: 7 replies
 - We would likely substantially modify our certification process based on the document: 9 replies
 - We would likely make minor changes to our existing process where we felt appropriate: 10 replies
 - We would review the document but would likely NOT make substantive changes to our certification process: 7 replies



TG on Certification of RPE. Next steps and final remarks

- The TG is preparing a draft Guidance Document: should be ready next Autumn
- Comments from the TG members and the IRPA EC by the end of 2015
- Updated text to the Associate Societies in January
- Revised text incorporating comments in April 2016
- **Final presentation / discussion / review / in Cape Town at the IRPA 14 Congress (May 2016)**

With regard to the European Guidance:

- Good opportunity to harmonize / gain coherence: IRPA is open to collaborate with HERCA
- We share the view expressed in the ENETRAP Draft Guidance [RAPJES v0.9] :
 - It is a reasonable expectation that Assessors are members of national Radiation Protection Societies (where these exist) and, although not considered essential, there may be an advantage in Assessors being active in the international arena
- RP Societies could be assessing bodies, depending on the national circumstances

A graphic for the HERCA Workshop. It features three interlocking blue gears on the left. The top-left gear is labeled 'Euratom BSS', the top-right gear is labeled 'RPO', and the bottom gear is labeled 'RPE'. Curved arrows indicate a clockwise flow between the gears. To the right of the gears, the text 'HERCA Workshop' is displayed in white on a dark blue horizontal bar. Below this, the text 'Implementation of Radiation Protection Expert & Radiation Protection Officer' is shown in white on a dark blue background. At the bottom right, 'PARIS | 6-8 July 2015' is written in white.

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Many thanks for your attention!

More information at:

www.irpa.net