



RP Career Framework

8th EUTERP WORKSHOP
Optimization of training in radiation protection
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Why do we Need an RP Career Framework

- The number of students entering RP has been dropping for ~20 years
- The number of universities offering RP degrees has been dropping for ~20 years
- There widely held belief in government and industry that:
 - many highly-experienced RPs will retire within 5 yrs
 - it will be difficult to hire enough qualified RPs to fill needs over the coming years
 - New hires generally need training before they are functional





What is an RP Career Framework?

A mechanism to reduce the need for On-the-Job-Training

- Survey suggests:
 - 6 months to 3 years
 - 2000€ to 500,000€ (average 40,000€)

A recognised certification to facilitate mobility of RP experts to go where they are needed

A platform to better communicate the stimulating topics and lifetime career possibilities in RP





CRPPH 2017 Topical Session: Strategic Human Resource Management in Radiological Protection

International RP Career Path Framework

- Position-mobility (post-university work in research, industry, regulation and international organisations)
- Acceptance of foreign experts

This needs

- Recognition of standard-level qualification (IRPA),
- Career path framework communications strategy
- Web library of good training materials





Standard and Recognised Qualifications

- EC BSS Directive requires certain roles to be filled by a "Radiological Protection Expert (RPE)" or by a "Radiological Protection Officer (RPO)"
- The EC BSS directive does not define RPE or RPO qualifications – MUCH work done to address this
 - HERCA
 - Tried to agree on qualification criteria
 - Found wide variety of national approaches
 - Recommended that EC develop RPE/RPO criteria
 - EUTERP
 - Developed education and training criteria
 - IRPA
 - Tried to agree on a standard level of qualification.





Standard and Recognised Qualifications

Establish a "standard-level" qualification award With a Catchy Name

"Radiologically Apt Talent" RAT







Radiologically Apt Talent

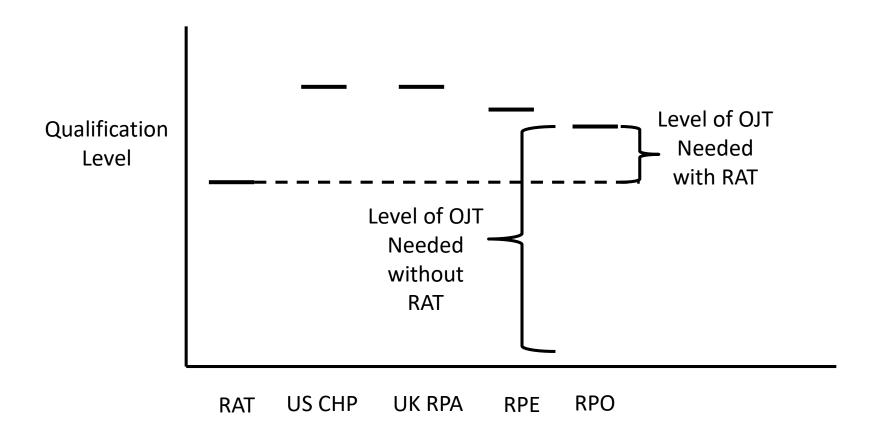
- Process to establish a RAT qualification award (IF NEEDED)
 - Review existing materials
 - Identify key RP knowledge and skills needed (see EUTERP) for an RP management role – to be a certified RAT
 - Characterise RAT qualifications with respect to existing certifications (e.g. in US CHP or UK RPA, etc.), existing job qualifications (e.g. RPO and RPE), other
 - Establish an RP network/database of on-line education materials and RP education institutions
- With IRPA, develop a process to certify RP professionals as being qualified RATs
- Encourage calibration of knowledge and skills needs with respect to the RAT certification level
- Develop an international instrument to establish a globally-recognised RAT qualification.





Standard and Recognised Qualifications?

Reduce need for On-the-Job-Training (OJT)

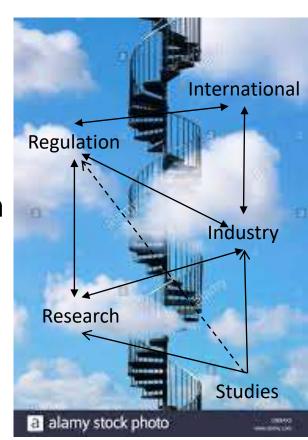






Career Framework

- Education and training are essential, but are only part of a career framework
- A clear career path is needed, and could (should) include:
 - Education
 - Post-grad university research
 - National laboratory / industrial research
 - Hands-on industrial work
 - Regulatory work
 - International organisation work
 - University teaching / research







Communications Strategy

- RP is a career with a clear future
 - Nuclear Power
 - Medical
 - Industry
 - Research
- There are many interesting challenges
 - Waste management
 - Low-dose effects
 - Protection of the environment
 - Stakeholder involvement
 - Etc.





Training in Stakeholder Interactions

- The public, elected officials, management, other stakeholders would generally prefer to speak with an expert rather than a communications officer
- But experts should be able to speak to any type of stakeholder in a language that THAT stakeholder can understand
- Training in such communications should become a standard part of university curricula





Conclusions

- There is a long-lasting need for RP expertise but not in huge numbers
- Radiological protection experts should be able to easily move to where they are needed
- A standard qualification level could facilitate mobility and reduce OJT time and cost
- A clear and "sexy" career path needs an international framework and an effective communications strategy
- Training in clear communications is needed





Concluding Thoughts

- Organisations in many countries are struggling to fill needs for radiation protection specialists.
 - The situation appears likely to get worse in the coming years.
- Despite the clear need for RPs, the job market is still very limited and is not likely to spur growth in academic programmes.
 - Construction of new plants and increased decommissioning activities could help change this in the future.
 - Retirement experienced staffs could also have an impact.
- Loss of experience through retirement will be increasing difficult to replace.





Next Steps

- The CRPPH is invited to consider the Secretariat paper, and send comments to Ted (<u>edward.lazo@oecd.org</u>)
- The CRPPH is invited to include in its comments whether further work on this topic is warranted
- The CRPPH is invited to mandate the Bureau to assess member comments (compiled by the Secretariat) and if comments suggest that further work is warranted to call for nominations for a scoping meeting to identify what the NEA could usefully add to this issue
- Coordination with relevant organisations will be essential





Thank you for your attention



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