The 5th meeting of the Radiological Protection Advisory Committee (RPAC) was held on Wednesday 20th September 2017 at the EPA Office of Radiological Protection, Clonskeagh Square, Clonskeagh, Dublin 14

Members present:	Micheál Lehane (Chair), Sheena Notley (on behalf of Darren Arkins, Anthony Bexon, Ray Ellard, Mary O'Mahony, Peter Mitchell
In attendance:	Lorraine Currivan, Stephen Fennell, Ciara McMahon, David Pollard
Apologies:	Sean Curran, Paul Dorfmann, Jean-Luc Godet, Fiona Lyng, Michael Rowan, Michael Sadlier,
Scientific Secretary:	Alison Dowdall

1. Introductory remarks and welcome

The Chairperson welcomed all to the EPA for the 5th meeting of the committee. He informed the group that since the last meeting the Office of Radiation Protection and Environmental Monitoring (ORM) has undergone some restructuring of Programme Managers following Barbara Rafferty's retirement. The Programme Managers are now:

- Stephen Fennell - Environmental Monitoring
- Ciara McMahon - Air Quality and Emergency Preparedness
- David Pollard - Radiation Protection and Business Support

The Chairperson informed the meeting that primary legislation regarding the transfer of the remaining radiological protection functions to the Department of Communications, Climate Change and Environment (DCCAE) is pending. It is expected be in place in the coming months as it is required to enact some provisions of the new BSS legislation.

An infographic and key statistics on the results of the 2015-16 radiation monitoring programme in Ireland were circulated to the group. The Chairperson commended the Radiation monitoring group on producing these informative leaflets. He explained that work on making radiation monitoring data available as open data is underway. It is envisaged that when open data is available online, it will be supported by more accessible items such as infographics.

2. Minutes of 4th meeting and matters arising

The minutes of the fourth meeting were agreed and there were no matters arising.

3. Update on transposition of the Basic Safety Standards

Mr David Pollard, Programme Manager, Radiation Protection and Business Support presented on the work towards transposition of the Basic Safety Standards Directive to date.

This item generated a number of comments including the significant reduction in the dose limit to the lens of the eye and the length of time taken for this reduction to be put in place. It was explained that the reduced eye dose limit takes into account new scientific research in this area as well as technological advances and operational practises in the field of interventional cardiology. The reduction in eye dose limit is most likely to impact on workers in this field. It was noted that there are only a small number of interventional cardiologists in Ireland and that they may require recategorization to Category A workers when the directive is transposed.

There was a query in relation to national risk assessment and emergency preparedness While the National Emergency Plan for nuclear accidents (NEPNA) will not require changes when the BSS is transposed, it will formalise arrangements already in place. The Chairperson informed the meeting that the NEPNA is currently being updated to reflect recent changes in government departments and responsibilities as these have an impact on the NEPNA sub plan and its regional components.

The committee discussed the splitting of functions between the Department of Health (DoH) and Department of Communications, Climate Action and Environment (DCCAE) with DoH responsible for the protection of the patient and DCCAE for workers and public. It was recognised that this may give rise to some duplication between the Departments and it was suggested that this could be reviewed in the future.

The roles of the Radiation Protection Advisor (RPA) and Radiation Protection Officer (RPO) were discussed. It was explained that the new legislation has scope to set out in guidance the situations where an RPA should be consulted or appointed. It was pointed out that the role of the RPA has been well established through the EPA's licensing system. The requirement to list the undertakings RPA on the license will remain. The change regarding consulting or appointing an RPA is likely to affect only a small number of high risk licensees.

With regard to the RPO role, the EPA will set out the requirements for this role. It was noted that the RPO will be an employee of the undertaking with day to day responsibility for radiation safety. The issue of training RPOs was raised as they may have no expertise in radiation safety and one suggestion was to use eLearning as a training tool.

4. Update on Graded Authorisation

Mr David Pollard, Programme Manager, Radiation & Nuclear Safety presented an update on the work towards graded authorisation. There were some queries regarding the move from licensing to registration. There was a query regarding the expiry date for registration

and it was noted that an authorised registration will remain in place until such time as it is revoked. Another query arose regarding regulatory oversight for registrants and it was suggested that a number of inspector days could be allocated to registered undertakings. This time could be used to raise awareness of registration guidelines. It was pointed out that the EPA need to be visible during the transition to graded authorisation. It was clarified that the EPA would have the power to prosecute registered undertakings who fail to comply with the schemes conditions.

The issue of practises that are not justified was discussed. The regulatory body can only authorise justified practises so any practises outside of this will be dealt with on a case by case basis. It was pointed out that this is an issue that requires government policy, rather than just EPA approval, as some scenarios such as drug smuggling or terrorist activities are national security issues. With regard to fees, it is likely that licensing will retain an annual fee whereas registration may incur a once off fee with a small recurring administration charge. There was a query about whether the register will be public. Currently there is no list of licensees publicly available as there is a security risk involved in making this information available. With the move to registration, it was suggested that a publicly available list could be considered.

A question was raised regarding the new ICRP dose conversion factors and difficulties that may arise for the implementation of the new radon in workplaces regulation. It was noted that until the European Commission issue guidance on new dose conversion factors, the existing ones will be used.

There was a question on the provision for natural ionizing radiation in building materials. A research project investigating natural radioactivity in building materials will be included in the next EPA research call.

The delay between the BSS coming into force and its implementation was raised particularly where new scientific studies of relevance come to light in the intervening periods. A recently published paper by Richardson et al (2015) looking at the risk of cancer from occupational exposure to ionising radiation was referred to and the link to this paper is circulated for information purposes:
http://www.bmj.com/content/351/bmj.h5359

It was pointed out that scope does exist to accommodate new findings or situations. For example, the legislation will set out that the EPA shall establish reference levels and this allows for adjustment in the certain cases such as emergencies.

5. Developing and supporting the next generation of radiation protection professionals in Ireland

Ms. Lorraine Currivan, Senior Scientific Officer, Radiation Monitoring and Research gave a presentation on Developing and supporting the next generation of radiation protection professionals in Ireland and in supporting the development of national capacity for radiation research in Ireland. It was pointed out that such capacity is needed to be able to undertake research to fill knowledge gaps, particularly in the context of the New Basic

Safety Standards Directive. The committee were then asked to consider a series of questions on issues raised during the presentation. Following a comprehensive discussion, the following suggestions were noted:

- Maintaining links with third level institutes is important both from a recruitment and research perspective.

- Collaboration should not be limited to physics or science departments as faculties such as maths and civil engineering have had an interest in and been successful in, previous radiation research calls.

- Providing guest lectures by EPA staff and offering final year undergraduate projects would strengthen links with third level institutes and make EPA more visible as a career path for physicists.

- An infographic promoting the work of ORM could be designed and used to raise external awareness of our role within the EPA.

- Given that physics undergraduates have a good basis in radiation detection and measurement, they were acknowledged as being well placed for a career - radiation protection. Their radiation detection and measurement skills could be developed through an in-house training programme which should include radiation protection training.

- Any syllabus for a taught masters programme should have a wider scope than radiation protection. A radiological sciences syllabus covering for example, radioecology, radiometric techniques and radiation protection was suggested. It was also suggested that it might be worth looking at the European Masters in Radiation Protection that moves around various universities in Europe.

- With regard to research, the importance of acquiring a sustainable source of research money through European initiatives such as the joint programming initiative, CONCERT was acknowledged. This would provide opportunities for collaboration and potential access to EU funding for Irish universities.

6. Date of next meeting

Two dates were proposed dates for the next meeting: 21st March 2018 or 28th March 2018