

The UK's experience of setting up a recognition system for Qualified Experts

P. W. Dickenson, J. Lumb and L. F. Evans

*Nuclear international and radiation protection policy, Health and Safety Executive,
United Kingdom*

Abstract

The Basic Safety Standards Directive (96/29/Euratom) [1] requires Member States to recognise Qualified Experts in their 'capacity to act' in specified tasks relevant to working with ionising radiations. In the UK, the Qualified Expert in relation to occupational radiation protection is the Radiation Protection Adviser (RPA) defined in the Ionising Radiations Regulations 1999 (IRR99) [2].

In order to meet the requirements for experts of the BSS Directive, the UK introduced a new recognition system for RPAs in 2000 to give employers confidence that anyone meeting the IRR99 definition of an RPA has core competence in giving advice on radiation protection and on compliance with the IRR99. The Health and Safety Executive (HSE) has drawn up Criteria of Core Competence for RPAs, which individuals must meet before being able to practice as RPAs in the UK. Employers can then select from a pool of 'core competent' RPAs an RPA who has the necessary knowledge and experience to make them 'suitable' to give advice in relation to that employer's particular line of work.

This paper describes how HSE successfully implemented its new recognition system which has recognised over 400 RPAs in the UK, the difficulties that were encountered and future developments to improve the UK's RPA recognition system.

1. Introduction

Under the Ionising Radiations Regulations 1985 (IRR85) [3], which implemented the 1980 BSS Directive 80/836/Euratom [4], employers had to notify HSE before appointing a Radiation Protection Adviser (RPA). This notification had to include the qualifications and experience of the RPA the employer wished to appoint and also the scope of advice required. The employer then had to await acknowledgement from HSE before confirming the appointment. IRR85 therefore placed all the responsibility on the employer to secure the services of a suitably qualified and experienced RPA.

The requirement for Member States to recognise Qualified Experts in their 'capacity to act' in specified tasks relevant to working with ionising radiations was carried over into the current 1996 BSS Directive (96/29/Euratom). In implementing the 1996 BSS Directive, HSE took the opportunity to fundamentally revise the UK's recognition system for RPAs. The reasons for this were twofold:

Firstly, the world had moved on since the 1980s in its expectations about formal means to recognise competence. HSE had consulted external stakeholders during the 1990s on three possible options which were to 1) leave the IRR85 position unchanged, 2) define a minimum qualification to be directly demonstrated to the satisfaction of the regulatory authority, or 3) specify that a qualification should be demonstrated to the satisfaction of a recognised professional body or bodies. Consultation showed that there was a desire for a more positive recognition system that provided a formal means to recognise competence, with the third option above clearly preferred.

Secondly, HSE wished to reduce the burden on employers by requiring RPAs to demonstrate that they meet set criteria of core competence. This would then limit the employer's responsibility to selecting from this group of competent RPAs someone who has suitable knowledge and experience of the employer's type of work.

The Ionising Radiations Regulations 1999 (IRR99) implement the 1996 BSS Directive and, in view of the above, brought about a recognition system for RPAs in the UK. This recognition system is described in sections 2 and 3 of this paper.

2. The UK's recognition system for RPAs – overview

IRR99 changed the UK's recognition system for RPAs by separating 'core competence' from suitability. Core competence is addressed in regulation 2 of IRR99, which defines an RPA as 'an individual who, or a body which, meets such criteria of competence as may from time to time be specified in writing by the Health and Safety Executive.' IRR99 requires employers who work with ionising radiation to consult a suitable RPA for advice on radiation protection best practice in specific circumstances.

Under IRR99, HSE has set out the 'Criteria of Core Competence' for individuals and bodies (called RPA Bodies) intending to give advice as RPAs in the [HSE Statement on Radiation Protection Advisers](#) [5]. HSE's Statement also sets up a structure where HSE recognises organisations as Assessing Bodies. The key role of Assessing Bodies is to assess individuals wishing to become RPAs under IRR99 against HSE's Criteria of Core Competence. If satisfied, the Assessing Body issues an RPA certificate to the individual that demonstrates that this person has achieved core competence to be an RPA. It is then up to the employer to select from a pool of core competent RPAs a suitable RPA for their type of work.

3. The HSE Statement on Radiation Protection Advisers

The HSE Statement is the core document which sets out in detail the recognition system under IRR99 for Radiation Protection Advisers in the UK. The Statement addresses three issues: a) Criteria of Core Competence for individual RPAs, b) Criteria of Core Competence for RPA Bodies, and c) HSE's requirements for Assessing Bodies. These criteria are to be found in the annexes to the HSE Statement and are discussed below:

a) Criteria of Core Competence for individual RPAs

Annex 1, Part 1 of the HSE Statement sets out HSE's Criteria of Core Competence for individual RPAs and is based on the basic syllabus for Qualified Experts in Annex 1 of the Official Journal C133 [6]. Individuals wishing to become an RPA under IRR99 for the first time must either a) hold a valid certificate of core competence from an Assessing Body or b) hold a Radiation Protection Level 4 National or Scottish Vocational Qualification (N/SVQ) issued less than five years previously.

To obtain a certificate of core competence from an Assessing Body, individuals must demonstrate that they have:

- a) sufficient evidence from education, training and/or experience, to demonstrate:
 - Knowledge and understanding of the basic syllabus in Annex 3 of the HSE Statement (taken from the basic syllabus for the Qualified Expert set out in paragraph 2 Annex 1 of the Official Journal C133);
 - A detailed understanding of IRR99 and its related Approved Code of Practice and guidance;
 - Practical radiation protection experience;
- b) sound knowledge of the general methods which might be typically used to deal with operational problems; and
- c) the ability to advise management effectively on the implementation of relevant regulatory requirements and radiation protection practices for work involving potential for significant exposure to radiation.

Certification of individual RPAs is valid for a maximum of 5 years. By the end of this period, individuals must obtain a fresh certificate of core competence from an Assessing Body if they wish to continue acting as RPAs. The individual will need to provide suitable evidence that they have kept up to date their knowledge and experience of radiation protection legislation and awareness of technological advances relevant to radiation protection practice. Individuals who hold a Radiation Protection Level 4 N/SVQ issued more than five years previously also need to apply to an Assessing Body for certification and likewise provide suitable evidence to meet the above.

As stated above, Annex 3 provides advice on the extent of knowledge and training, in respect of the Official Journal basic syllabus, required by an RPA under IRR99. It also indicates the depth of knowledge required for each topic within the basic syllabus, either general awareness, basic understanding or detailed understanding.

b) Criteria of Core Competence for RPA Bodies

Annex 1, Part II of the HSE Statement sets out HSE's Criteria of Core Competence for organisations that wish to give RPA advice, these organisations are called RPA Bodies. To become an RPA Body, an organisation must demonstrate to HSE that it:

- a) is constituted as, or comprises an identifiable part of, a legal entity or partnership or other grouping that is capable of being recognised;
- b) has personnel who include a sufficient number of persons who satisfy HSE's Criteria of Core Competence for individual RPAs; and
- c) has management systems and written quality assurance procedures so that any advice is traceable to one or more individual RPAs certificated as core competent.

HSE recognition of RPA Bodies is valid for no more than 5 years and may be withdrawn at any time following an investigation into situations which come to HSE's attention. RPA Bodies seeking renewal of their recognition should apply to HSE no less than 3 months before their recognition expires. HSE's arrangements for dealing with applications for further recognition will be similar to those for initial applications.

c) Requirements for Assessing Bodies

Annex 2 of the HSE Statement lays down HSE's requirements for Assessing Bodies. Assessing Bodies assess individuals wishing to become RPAs and determine whether these individuals meet HSE's Criteria of Core Competence for individual RPAs. To be recognised as an Assessing Body, an organisation must demonstrate to HSE that it:

- a) is constituted as, or comprises an identifiable part of, a legal entity or partnership or other grouping that is capable of being recognised;
- b) has in place formal schemes which meet the requirements for:
 - coverage of certificates (sufficient expertise)
 - application process (information from applicants)
 - assessment procedures
 - proof of assessed competence (certification)
 - appeal and complaint procedures
 - reporting to HSE annually.
- c) has an organisational structure and arrangements capable of ensuring that these formal schemes are not open to arbitrary change and will continue to meet those requirements, eg changes to the formal schemes have to be agreed by a Board, Governing Body or equivalent.

HSE recognition of Assessing Bodies is subject to conditions and will be reviewed after 3-4 years (this will soon change to 5 years). HSE recognition may be withdrawn at any time following an investigation into situations which come to HSE's attention. Should recognition be withdrawn by HSE, any certificates of core competence issued to individual RPAs prior to the withdrawal would remain valid.

4. How has the HSE Statement worked in practice?

The UK's RPA recognition system has now been operating for over 5 years and the current HSE Statement has been in place for nearly 4 years. Over 400 individuals have obtained RPA certificates of Core Competence and HSE has recognised 10 organisations as RPA Bodies. Three organisations have been recognised as Assessing Bodies, the British Institute of Non-Destructive Testing (BINDT), British Nuclear Fuels Limited (BNFL) and RPA 2000. Employers have been largely satisfied with the new system as it has ensured that they have a pool of core competent RPAs to choose from. There have also been no complaints from employers in relation to difficulties finding a suitable RPA: this would suggest that there are a sufficient number of individual RPAs and RPA Bodies across the UK to cater for employers' needs.

It can therefore be said that as a whole, the UK's RPA recognition system is working well. There have however been some difficulties over the last five years. For instance, despite attempts by HSE and others to establish the Radiation Protection Level 4 N/SVQ as an alternative route to certification by Assessing Bodies, take up of the N/SVQ qualification has been very poor and HSE is considering closing off this option in the future. In addition, for most of the last five years, there have only been two Assessing Bodies, RPA 2000 and BNFL (BINDT, having recently been recognised, have now decided to withdraw due to commercial considerations). Of the two Assessing Bodies that are

currently operating, BNFL only process applications from its internal employees which leaves RPA 2000 as the sole Assessing Body that assesses applications for RPA core competence from external applicants.

HSE's experience over the last 5 years has flagged up issues. The HSE Statement, similarly to the 1996 BSS Directive and Annex 1 of the Official Journal C133, did not define precisely what was meant by the term 'practical radiation protection experience': though HSE had indicated the level of knowledge required for each topic within the basic syllabus, no clarification was given to indicate which of those topics required practical radiation protection experience. This resulted in Assessing Bodies being unclear as to what were HSE's requirements in this area: Assessing Bodies therefore developed their own standards and criteria for assessment of applicants.

In 2003, HSE became increasingly aware that further clarification of the HSE Statement was required in relation to HSE's Criteria of Core Competence for renewal of individual RPA recognition. HSE's view is that the recertification process for individual RPAs should not be onerous and that as a regulator, HSE should adopt a 'light touch' approach: that is, individual RPAs should not be required to fully demonstrate once more their core competence when seeking to renew their RPA certificate, but instead should only be asked to provide suitable evidence that they have kept their knowledge and experience of radiation protection legislation and awareness of technological advances relevant to radiation protection practice up to date. HSE produced additional guidance in 2003 to the Assessing Bodies to enable them to draw up standards and criteria for assessing renewal applications. RPA 2000 submitted to HSE its standards and criteria for assessing renewal applications for approval and HSE approved these standards and criteria in 2004.

5. Current and future developments

The current HSE Statement (with a minor revision in November 2004) has been in place since December 2001. In view of this and the issues that HSE experienced above, HSE decided in 2005 that it was time to carry out a comprehensive review in order to address the following:

- a) to clarify the wording in the Statement where it is currently ambiguous (eg in relation to terms such as 'practical radiation protection experience' and 'core competence');
- b) to correct administrative details that have changed since the Statement was issued back in December 2001;
- c) to remove unnecessary barriers to the smooth operation of procedures using the experience gained since 2001; and
- d) to address the potential to remove unnecessary requirements placed on RPAs.

HSE hopes following this review to have a new HSE Statement in place by the end of this year that will be:

- a) clearer and meet the future requirements of IRR99 and industry;
- b) consistent with the current requirements in the 1996 BSS Directive; and
- c) providing revised guidance on some of the areas where there is currently uncertainty (eg what is 'practical radiation protection experience' and what constitutes 'core competence').

In June 2005, HSE launched a formal consultation with its external stakeholders, proposing draft amendments to the HSE Statement and seeking views from consultees on these. The consultation period closed on 22 September and at the time of writing this paper, HSE has begun collating and analysing responses.

Once HSE has fully analysed all the comments that it has received, HSE will make final decisions on all the issues arising out of the consultation and produce a revised HSE Statement.

6. Conclusion

HSE believes that the UK's recognition system for RPAs is working well. HSE's partnership with Assessing Bodies has proved invaluable as Assessing Bodies have taken on the work of processing over 400 applications for individual RPA certification which has ensured that there are sufficient RPAs to meet employers' needs across the UK.

HSE's experience over the last 5 years has shown that it is important to precisely define terms when laying down criteria for RPA core competence: this also applies to Qualified Experts across the EU. Over the last couple of years, HSE has had to give careful thought when defining its criteria of core competence for individual RPAs and other regulators, should they adopt a system similar to the recognition system in the UK, will need to do the same in relation to their Qualified Experts.

The importance of precisely defining terms has been clearly borne out by difficulties surrounding the term 'practical radiation protection experience.' HSE is attempting to address this by indicating in the basic syllabus which topics must require practical experience and those topics where practical experience is optional.

It should be pointed out however that precisely defining terms when devising criteria of core competence is insufficient on its own: thought has to be paid to developing robust standards and criteria for assessment to enable Assessing Bodies to consistently assess individuals to determine whether they meet the criteria of core competence laid down by the regulator. HSE has been fortunate that the Assessing Bodies have undertaken much work in this area.

Finally, it is important to note that the UK's RPA recognition system is based on a partnership approach: suitable partners to process applications for RPA certificates of core competence or to award Radiation Protection Level 4 N/SVQs had to be found to make the system work. As HSE experienced in relation to the N/SVQ recognition route, there seems little point in establishing a particular recognition route if no partners can be found to process and determine applications. Other regulators, should they decide to set up similar recognition systems for Qualified Experts, will therefore need to ensure that suitable partners are available before implementing such systems.

References

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It should be noted that this paper has been submitted by the three authors above. It does not represent the views of the UK Health and Safety Executive as a whole.

Corresponding Author:

Laurence Evans
Health and Safety Executive
Policy Group
Rose Court, 2 Southwark Bridge
SE1 9HS London
United Kingdom
T: +44 20 77176854
F:
e-mail: laurence.evans@hse.gsi.gov.uk