

# HSE statement on radiation protection advisers

The requirements of this Statement came into effect on 31 March 2007

- **Purpose**
- **Introduction**
- **Criteria of core competence**
- **Assessing bodies**
- **Suitable RPA's**
- **Annex 1: Criteria of core competence for radiation protection advisers**
- **Annex 2: Requirements for RPA assessing bodies**
- **Annex 3: Basic underpinning knowledge for radiation protection advisers**
- **Annex 4: Glossary of terms and definitions**

## Purpose

1. This document, published by the Health and Safety Executive (HSE), specifies HSE's Criteria of Core Competence for radiation protection advisers (RPAs). The criteria cover both individuals and Bodies that wish to give advice as RPAs. The Statement also includes the specific requirements that Assessing Bodies have to meet to be recognised by HSE for the purpose of assessing the competence of individuals to act as RPAs.

2. This Statement has been published following a comprehensive review and external consultation that took place during 2005. In addition to correcting administrative details and removing unnecessary barriers to the smooth operation of procedures, this latest version addresses issues raised during the external consultation, in particular clarifying the role of the RPA, requirements in relation to 'practical experience' and what constitutes 'core competence'. HSE understands from its discussions with a broad range of stakeholders that these changes are broadly welcomed across the Radiation Protection community. HSE is grateful for the number of comments received during the review.

## Introduction

3. The Euratom Basic Safety Standards Directive (96/29/Euratom) requires 'qualified experts' to be involved in specified tasks and additionally requires Member States to recognise the 'capacity to act' of such experts.

4. In Britain, the qualified expert in relation to occupational radiation protection is the radiation protection adviser (RPA) in the Ionising Radiations Regulations 1999 (IRR99). All other qualified experts, for example those qualified experts in waste minimisation and monitoring under the Radioactive Substances Act 1993 (RSA93), fall outside the scope of this Statement. The role of an RPA is set out in regulation 13(1) and Schedule 5 to the IRR99. Broadly, it is to advise an employer on compliance with IRR99 in work related situations. This includes those radiation protection matters necessary to comply with the Regulations.

5. The purpose of the recognition procedure described in this Statement is to meet European recognition obligations and to give employers confidence that any person or body recognised as an RPA has core competence in giving advice on compliance with IRR99. An employer who works with ionising radiations is required to appoint and consult an RPA on the matters set out in Schedule 5 of IRR99. In addition, an employer should also consult an RPA on (other matters where advice is needed to comply with IRR99. Those matters are listed in ACoP paragraph 217 (employers should note that the status of an ACoP, unlike regulations, does not require them to follow its advice so long they can demonstrate that adequate compliance has been achieved by alternative means). The employer must select an RPA who, or an RPA body which, has the necessary knowledge and experience to make them suitable to give advice in relation to the employer's particular line of work and the particular compliance questions to which they require an answer.

6. Regulation 2 of IRR99 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 Executive". An individual awarded a Certificate of Core Competence from an HSE RPA Assessing Body or holding a Radiological Protection Level 4 National or Scottish Vocational Qualification (N/SVQ) is recognised by HSE as an RPA. The Criteria of Core Competence for an individual RPA are outlined in Part I of Annex 1 of this Statement. A body which meets the Criteria of Core Competence is known as an RPA Body. The Criteria of Core Competence for an RPA Body are outlined in Part II of Annex 1 of this Statement.

7. This Statement establishes the written criteria of competence referred to in Regulation 2 and contains the following :

- the HSE Criteria of Core Competence for individuals and bodies intending to give advice as RPAs;
- the HSE requirements for organisations which undertake the task of assessing individuals against the relevant Criteria of Core Competence (these organisations are referred to in this document as Assessing Bodies).

Key definitions and terms used within the Statement are included at Annex 4.

## Criteria of Core Competence

8. The HSE Criteria of Core Competence for individuals who wish to act as RPAs are set out in Part I of Annex 1. These Criteria of Core Competence are appropriate for work in all sectors. Applications for recognition by individuals who do not hold a valid N/SVQ should be made to an Assessing Body recognised by HSE for this purpose, not to HSE. Any certificate awarded by an Assessing Body will be valid for no more than 5 years from the date that the certificate is issued, unless an extension to an Assessing Body's certificates has been agreed by HSE or under the special circumstances in paragraph 12 of Annex 2.

9. The HSE Criteria of Competence and other requirements for RPA Bodies are set out in Part II of Annex 1. HSE statements of recognition of RPA Bodies will be valid for no more than 5 years from the date of issue unless an extension has been agreed by HSE. Any organisation wishing to act as an RPA Body should apply to

HSE with sufficient information to show that it meets these requirements. (Details on how to apply can be found in HSE's guidance on the Criteria of Core Competence and other requirements for RPA Bodies) Arrangements for HSE assessment of applications for recognition (and renewal of recognition) are set out in Part II of Annex 1. HSE will maintain a publicly available list of all organisations which it has recognised as RPA Bodies, together with contact details. This information, and further guidance on the Criteria of Core Competence for RPA Bodies, may be found on HSE's website (see [www.hse.gov.uk/radiation/ionising/index.htm](http://www.hse.gov.uk/radiation/ionising/index.htm)<sup>[1]</sup>).

10. HSE and Assessing Bodies recognised by HSE will have regard for the principles and approach set out in the Health & Safety Commission's Enforcement Policy Statement when assessing a person or organisation for recognition as an RPA. HSE will also apply these principles in assessing an organisation's suitability to be an Assessing Body. In particular, assessment processes and procedures will be proportionate and consistent, HSE and Assessing Bodies will help applicants understand what is expected of them and what they should expect from the HSE or Assessing Body, and there will be effective arrangements for handling complaints.

## Assessing Bodies

11. The purpose of an Assessing Body is to certificate individuals who wish to become or continue to be RPAs under IRR99. An organisation that wishes to be recognised by HSE as an Assessing Body must be able to demonstrate to HSE that it has:

- schemes in place which meet the requirements set out in Annex 2; and
- an organisational structure and arrangements capable of ensuring that these schemes continue to meet the requirements.

12. Organisations wishing to become Assessing Bodies should apply to HSE with sufficient information to show that they meet the requirements set out in Annex 2. HSE will maintain a publicly available list of all organisations it recognises as Assessing Bodies, together with contact details. Arrangements for HSE assessment of applications for recognition as an Assessing Body, and renewal of recognition, are set out in Annex 2. HSE recognition of an Assessing Body will usually be reviewed after 5 years. However, if HSE receives a complaint / allegation about the operation of an Assessing Body this requirement for review may be brought forward.

13. HSE recognition of organisations as Assessing Bodies will be restricted to the purpose of establishing the RPA core competence requirements for individuals. Assessing Bodies must recognise the certificates of other Assessing Bodies.

## Suitable RPAs

14. Holding a certificate from an Assessing Body (or possessing an appropriate National or Scottish Vocational Qualification) does not, of itself, make the holder a suitable RPA for a particular employer to consult, as required by regulation 13(1), IRR99. It is only recognition of core competence to give advice on compliance with IRR99 including those radiation protection matters necessary to comply with the Regulations. Similarly, a written statement of HSE recognition held by an RPA Body

only relates to that organisation's Core Competence to give advice as an RPA. Employers will need to satisfy themselves that the individual RPA (or RPA body) they appoint also possesses the specific knowledge and experience required for giving advice on their particular working conditions or circumstances, in order to satisfy the test of suitability in regulation 13(1) IRR99. Judgements about such knowledge and experience (and thus suitability) do not form part of the HSE Criteria of Core Competence.

Peter Baker  
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Health & Safety Executive  
5th June 2007

## **Annex 1: Criteria of core competence for radiation protection advisers**

### **Introduction**

1. This annex is in two Parts covering the separate circumstances of individuals wishing to be recognised as RPAs and organisations seeking recognition as RPA Bodies. Both parts are concerned with RPA core competence issues.

### **Part I - Individual RPAs**

#### **HSE Criteria of Core Competence for first time recognition**

2. Individuals wishing to demonstrate for the first time that they satisfy the definition of an RPA in IRR99 must, either:

- obtain a valid certificate of core competence from an organisation recognised as an Assessing Body by HSE for this purpose; or
- obtain a Radiation Protection Level 4 National or Scottish Vocational Qualification (N/SVQ).

3. To obtain a certificate from an Assessing Body, individuals must provide evidence from education, training and/or experience that is sufficient to satisfy that Body that the individuals have:

- a knowledge and understanding that meet the level stated for each topic referred to in Annex 3 of this Statement;
- a detailed understanding of IRR99 and its ACoP, together with a knowledge of non-statutory HSE guidance in 'Work with Ionising Radiation' (HSE Books L121);
- knowledge of operational radiation protection methods, especially:
  - interpretation and application of radiation protection data;
  - work supervision; radiological measurements;

- control procedures for work involving the potential for significant radiation exposure; and
- The ability to give adequate advice to duty holders and employers on compliance with IRR99.

4. Though it is possible for an individual to demonstrate most aspects of their core competence through education only or training only, HSE requires candidates to have practical experience as well for the five elements of the basic syllabus in Annex 3 where the definition of core competence calls for detailed understanding (DU). This practical experience will primarily be based on the individual's workplace experience, although evidence derived from simulation exercises may also be acceptable. The evidence required should be proportionate, and take into account the candidate's qualifications, training and experience (see Annex 3).

5. Certificates awarded by Assessing Bodies may be withdrawn at any time subject to the provisions in Annex 2 paragraphs 16-20.

6. Many individuals develop their capability to act as RPAs through working in one of the main industry or service sectors characterised by significant use of ionising radiations. However, recognition of individuals as RPAs for the purpose of regulation 2 of the IRR99 is only concerned with RPA core competence and is not related to particular sectors.

### **HSE Criteria of Competence for renewal of recognition**

7. Certification by an Assessing Body will be valid for no more than five years. By the end of this period, individuals will need to obtain a fresh certificate of core competence from an Assessing Body if they wish to continue acting as RPAs. To do this, they need to reapply to the Assessing Body that awarded the certificate, or apply to another recognised Assessing Body, providing suitable evidence that they have kept their knowledge of radiation protection legislation and developments of radiation protection practice up to date.

8. Individuals who hold a relevant level 4 N/SVQ issued more than five years previously will need to apply to an Assessing Body for certification, providing suitable evidence that they have kept their knowledge of radiation protection legislation and developments of radiation protection practice up to date.

9. In either case, as well as work examples, acceptable evidence may include keeping up to date on the application of the IRR99, reading relevant scientific or other journals, taking part in appropriate discussion groups and private study, as well as attendance at courses, RPA update meetings, scientific seminars, etc. Acceptable evidence may also be derived from membership of a recognized and appropriate Continuing Professional Development (CPD) scheme.

## Part II - RPA Bodies

### Criteria of Core Competence and other requirements

10. For a body to meet the definition of an RPA in IRR99 it must demonstrate to HSE that it:

- is constituted as, or comprises an identifiable part of, a legal entity or partnership or other grouping that is capable of being recognised;
- has personnel who include a sufficient number of persons who satisfy the Criteria of Core Competence for individual RPAs, either by holding relevant level 4 N/SVQs issued no more than five years previously or valid certificates from an Assessing Body to act as an individual RPA; and
- has management systems and written quality assurance procedures, such that any radiation protection advice given either internally to other parts of the organisation or externally on behalf of the organisation is consistent and traceable, as appropriate, to one or more individuals holding valid qualifications or certificates as provided by Part 1 of these HSE Criteria of Core Competence. (The requirement for management systems and written quality assurance procedures only applies where an RPA Body includes personnel other than RPAs).

11. The number of personnel required to hold a certificate in order to satisfy paragraph 10(b) will depend on the systems and procedures provided to ensure that any advice is traceable to generic or site specific guidance from an individual recognised as an RPA.

12. Any organisation wishing to be recognised as an RPA Body should apply to HSE with sufficient information to show that it satisfies the requirements in paragraph 10. HSE may withdraw an RPA Body's recognition at any time following an investigation that confirms that these requirements are no longer met (see paragraphs 17-21 below).

### HSE arrangements for assessing applications

13. HSE will acknowledge all such applications promptly and indicate when the applicant will receive a response. Applications for recognition will be considered by a panel that includes radiation specialist referees. There will be adequate opportunity for an exchange of views and HSE may ask:

- for better evidence in support of the application; and
- that representatives attend a meeting at a suitable HSE office to clarify any points which are unclear in the information provided.

In exceptional circumstances, an HSE referee may arrange to visit the organisation to help determine whether that organisation is fit to be recognised as an RPA Body.

14. Where a body satisfies HSE that it meets the Criteria of Core Competence and other requirements, HSE will provide a written statement of recognition for the

purposes of the definition of a radiation protection adviser in IRR99. That statement will specify the period, not exceeding five years, over which this recognition will be valid and any conditions which must be fulfilled. By the end of that period a body will need to obtain a further statement of recognition from HSE in order to continue acting as an RPA Body.

15. Arrangements for dealing with applications for further recognition will be similar to those outlined in paragraph 13. Applications should be made no less than three months before the end of the formal period of recognition. If an application is received after that period HSE cannot ensure it will be processed in time and the body may have to cease acting as an RPA Body. In exceptional circumstances, for example, where applications are received on time but there are administrative difficulties in issuing a further statement before a current one expires, HSE may formally extend the original statement of recognition and will confirm this in writing to the applicant.

### **Refusal of HSE to recognise an organisation as an RPA Body**

16. If HSE intends to refuse an application for recognition as an RPA Body the organisation will be given reasons in writing why this action is being considered. The organisation will be given at least two weeks to make further representations, which will be considered by HSE's Recognition Panel who will decide on the appropriate action to take. (Details of HSE's administrative processes when considering RPA Body applications, including the appeals procedure, can be found in HSE's guidance on the Criteria of Core Competence and other requirements for RPA Bodies). Final decisions will be confirmed in writing and, where necessary, will include information on how to appeal and to whom.

### **Investigation and withdrawal of recognition**

17. HSE will investigate situations which come to its attention, for instance through a complaint, where it appears that an RPA Body that has been recognised by HSE does not meet the requirements in this Annex. Where the investigation confirms this to be the case, HSE will instigate a review process and may subsequently withdraw recognition.

18. Where HSE has concerns regarding an RPA body it will first write to the RPA body explaining the concerns and asking the RPA Body to conduct an initial enquiry, reporting back to HSE within an agreed timescale. HSE will only proceed with the investigation where it is not satisfied that all matters of concern have been satisfactorily resolved by the RPA Body's response. Where HSE considers it necessary to proceed with the investigation, HSE's published Complaints and Investigations Procedures will be followed.

19. If HSE intends to withdraw recognition from an RPA Body the Body will be given reasons in writing why this action is being considered. The RPA Body will be given at least two weeks to make further representations, which will be considered by HSE's Recognition Panel who will decide on the appropriate action to take. Final decisions will be confirmed in writing, where necessary giving information on how to appeal and to whom.



20. HSE will provide each RPA Body from which it has withdrawn recognition a written explanation as to why it is considered not to meet the requirements in this Annex. HSE will also remind the RPA Body that it should inform employers for whom it is acting as an RPA that its recognition has been withdrawn. HSE will also explain how the RPA Body can appeal against the decision.

21. HSE will give prompt notification of the outcome of the appeal to any appellant.

## **Annex 2: Requirements for RPA assessing bodies**

### **Requirements to be met by organisations assessing individuals against the HSE Criteria of Core Competence to act as radiation protection advisers (RPAs) under the Ionising Radiations Regulations 1999 (IRR99)**

#### **HSE Recognition**

1. Organisations acting as Assessing Bodies for certificating individuals who wish to become or continue to be RPAs under IRR99 need formal recognition from HSE. That recognition can be withdrawn by HSE as explained in paragraph 21, though any certificates of core competence issued to individuals would remain valid for the period of their currency. To gain recognition, an organisation must be able to demonstrate to HSE that it:

- is constituted as, or comprises an identifiable part of, a legal entity or partnership or other grouping that is capable of being recognised;
- has in place formal schemes which meet the requirements set out in the this annex below; and
- has an organisational structure and management arrangements to ensure that these formal schemes are (i) subject to review and continuous improvement and in particular are not open to arbitrary change and will continue to meet those requirements (e.g. changes to the schemes have to be agreed by a Board, Governing Body or equivalent); and (ii) reflect the principles of the HSC's Enforcement Policy Statement .

2. An organisation wishing to be recognised as an Assessing Body for the purpose of certificating individuals as radiation protection advisers in accordance with the criteria in this statement should apply to HSE with sufficient information to show that it satisfies the requirements in this Annex. HSE will acknowledge all such applications promptly and indicate when the applicant will receive a response. Applications for recognition will be considered by a panel that includes radiation specialist referees. HSE may ask, after any necessary discussion:

- for better evidence in support of the application; and
- that representatives attend a meeting at a suitable HSE office to clarify any points which are unclear in the information provided.



In special circumstances, an HSE referee may arrange to visit the organisation to help determine whether that organisation is fit to be recognised as an Assessing Body.

3. HSE requires those seeking to be assessing bodies to supply, as a minimum, the following documentation:

- The procedures for assessing applicants (see paragraphs 13-14)
- Any guidance on making applications.
- Any guidance given to assessors
- The procedures for dealing with appeals and complaints
- Details of the management and administration of the organisation.

4. HSE recognition of Assessing Bodies will be subject to conditions and will usually be reviewed after 5 years. HSE will consider whether the organisation continues to satisfy the requirements in this Annex and remains fit to be recognised as an Assessing Body. Arrangements for dealing with reviews will be similar to those in paragraph 2, except that the Assessing Body will not be required to make a fresh application.

5. Conditions of recognition will include the maintenance of arrangements to satisfy the HSE requirements and a requirement to notify HSE of any material changes to the Assessing Body's formal procedures, guidance or management systems that will have a significant effect on these arrangements.

6. Assessing Bodies must publicise the procedures for assessing individual applicants, including the standards of evidence required for recognition, details of the charges made and time scales for processing applications for certification and renewal of certificates.

7. For verification purposes, Assessing Bodies will be expected to provide enquirers with a list of all individuals holding a valid certificate awarded by that organisation (this list to include, as a minimum, details of an individual RPA's name and validity of their certificate, including date of issue and expiry of that certificate).

8. HSE recognition of organisations as Assessing Bodies will be restricted to the purpose of establishing the RPA core competence requirements for individuals. Assessing Bodies must recognise the certificates of other Assessing Bodies.

### **Refusal of HSE to recognise an organisation as an Assessing Body**

9. If HSE intends to refuse an application for recognition as an Assessing Body, the organisation will be given reasons in writing why this action is being considered. The organisation will be given at least two weeks to make further representations, which will be considered by HSE's RPA Recognition Panel who will decide on the appropriate action to take. Final decisions will be confirmed in writing, where necessary giving information on how to appeal and to whom.

### **Coverage of certificates**

10. The Assessing Body must be able to offer a certification service that provides assessment against all the Criteria of Core Competence specified by HSE in paragraphs 2 and 3 of Part I, Annex 1. HSE may, on request, agree to an Assessing Body limiting its service to stated groups (e.g. their own employees), but it cannot restrict any certificate of core competence awarded to work in a particular sector.

### **Application process**

11. The Assessing Body must require applicants to:

- provide sufficient personal identification information;
- indicate whether it is a new application or a renewal;
- provide sufficient information and evidence, appropriate to the type of their application, to demonstrate that they meet, or continue to meet, the HSE Criteria of Core Competence for individuals as set out in paragraphs 2 and 3 (first time recognition) or paragraph 7 (renewal of recognition) of Part I of Annex 1.

12. In exceptional circumstances, where there are administrative difficulties in issuing a renewal before a current certificate expires, the Assessing Body may write to the applicant formally extending the original certificate by no more than 6 months, subject to any ongoing investigation.

### **Assessment procedures**

13. The Assessing Body must have written procedures by which to assess individual applicants against HSE's Criteria of Core Competence.

14. These procedures must:

- include a process of assessment by peer review of the information and evidence provided by each applicant, using standards and criteria established by the Assessing Body;
- differentiate between new applications and renewals;
- involve, for each application, at least two certificated RPAs (the assessors);
- allow for assessors to seek additional relevant information or evidence to meet the requirements in paragraph 11 (c) above from the applicant, where this seems necessary to them;
- provide for assessors making a formal record of their decisions on each applicant and the retaining of these records by the Assessing Body for 11 years; and
- provide for the recording and retaining, for as long as is necessary, of such information as may be relevant to any appeal.

### **Proof of assessed competence**

15. The Assessing Body must provide every applicant who meets HSE's Criteria of Core Competence with a certificate which:

- identifies to whom it applies and states that, by virtue of the certificate, that person meets the requirements in paragraph 11 (c) above for the purposes of the definition of a radiation protection adviser in IRR99, without reservation;
- states when it was issued and the period for which it is valid, which shall not in any case exceed five years; and
- is signed by a person or persons who have been authorised by the Assessing Body for this purpose.

The certificate should only contain the information above, subject to the agreement of HSE.

### **Assessing Body's appeal and complaint procedures**

16. The Assessing Body must have an adequate appeal procedure open to each applicant who is deemed not to have met the HSE's Criteria of Core Competence, and to each individual who has had a certificate withdrawn.

17. The Assessing Body must provide to each such unsuccessful applicant a written explanation as to why that individual is considered not to have met the required standards of competence. It must also explain how the applicant can appeal against the decision.

18. The Assessing Body must investigate complaints which come to its attention. This might include complaints where it appears that an individual who holds a current certificate which the Assessing Body has issued does not meet the necessary standards of competence. Where investigation confirms this to be the case, then it must withdraw recognition, subject to the outcome of any appeal.

19. The Assessing Body must provide each individual from whom they have withdrawn a certificate a written explanation as to why that person is considered not to meet the required standards of competence, and about how that person can appeal against the decision. When withdrawing a certificate, the Assessing Body must also remind the individual RPA that they should inform employers for whom they are acting as an RPA that their recognition has been withdrawn.

20. Each such applicant and individual must be notified promptly of the outcome of the appeal.

### **Reporting to HSE**

21. The HSE requires the Assessing Body to report to HSE on an annual basis. The information required is:

- the number of certificates issued to successful applicants;
- the number of unsuccessful applications;
- the number of certificates withdrawn;
- the number of certificates not renewed;
- the number of appeals processed;

- the number of applications and appeals outstanding at the end of the reporting period.

In addition, the Assessing Body should inform HSE immediately of any significant problems that arise from the operation of its systems and/or procedures.

### **Investigation and withdrawal of recognition as an Assessing Body**

22. HSE will investigate situations which come to its attention, for instance through a complaint, where it appears that an Assessing Body recognised by HSE no longer meets the requirements in this Annex.

23. Where HSE has concerns regarding an Assessing body it will first write to the Assessing Body explaining the concerns and asking the Assessing Body to conduct an initial enquiry, reporting back to HSE within an agreed timescale. HSE will only proceed with the investigation where it is not satisfied that all matters of concern have been satisfactorily resolved by the Assessing Body's response. Where HSE considers it necessary to proceed with the investigation, HSE's published Complaints and Investigations Procedures will be followed.

24. Where the decision of the Panel is to consider withdrawal of recognition written notice bringing forward the review process and explaining the reasons for this decision will be given to the Assessing Body. Following an exchange of views the Assessing Body will be given two weeks to make further representations to the HSE Recognition Panel who will then decide on the appropriate action to take. Final decisions will be confirmed in writing.

25. HSE will provide the Assessing Body from which it has withdrawn recognition a written explanation as to why it does not meet the required standards. HSE will also explain how it can appeal against the decision and HSE will give prompt notification of the outcome of any appeal to the appellant.

## Annex 3: Basic underpinning knowledge for radiation protection advisers

### Introduction

The purpose of this Annex is to provide advice on the extent of the knowledge and training, in respect of the basic syllabus, required by a radiation protection adviser under IRR99 (the main equivalent of the 'qualified expert' defined in Article 1 of the Basic Safety Standards Directive 96/29/Euratom) (para 3(a) of Annex I Part 1 refers).

Previous education and training will usually have covered part or all of this syllabus, particularly those elements requiring Basic Understanding.

The evidence required by the assessing body should be proportionate and can include a detailed job description and evidence of work history. The portfolio of evidence required of a candidate will vary according to that person's qualifications, training and experience. For instance HSE does not expect that a candidate with many years experience of radiation protection and application of IRR99 will need to submit the same quantity of evidence as a new graduate or someone new to this area of expertise. For further information and examples of acceptable evidence, see HSE's guidance on the Criteria of Core Competence.

It will usually be sufficient for an applicant to provide just one good example under each of the topics of the basic syllabus. In some circumstances one example may cover several of the topics.

Candidates will need to supply evidence that they have the ability to give adequate advice to duty holders and employers on compliance with IRR99. However, evidence that a duty holder has heeded that advice is not usually necessary.

### Key:

**GA** - General Awareness: knows that the topic exists and aware of its significance to work activities in context. Also knows how and where to obtain help on the topic if needed.

**BU** - Basic Understanding: has a basic understanding of the topic with a level of detail that allows the RPA to apply it to familiar work activities in context. If necessary, can research further knowledge using readily available sources and apply it in less familiar circumstances.

**DU** - Detailed Understanding: has a good understanding of the topic and the underlying principles and can apply the knowledge in appropriate contexts. Can apply the knowledge working from basic principles to deal with situations in new or unfamiliar areas and can identify and influence the peripheral and long term issues arising from its application.

Depth of knowledge required	Basic syllabus for the RPA
BU	<b>Basic atomic and nuclear physics</b>
BU	<b>Basic biology</b>
BU	<b>Interaction of radiation with matter</b>
BU	<b>Biological effects of radiation</b>
BU	<b>Detection and measurement methods</b> (including uncertainties and limits of detection)
BU	<b>Quantities and units</b> (including dosimetry underlying regulatory quantities)
BU	<b>Basis of radiation protection standards</b> (e.g. epidemiology, linear hypothesis for stochastic effects, deterministic effects)
	<b>ICRP principles:</b>
BU	justification;
BU	optimisation;
BU	dose limitation
BU	<b>Practices and interventions</b> (including natural radiation especially radon)
	<b>Legal and regulatory basis:</b>
GA	international recommendations/conventions;
GA	European Union legislation;
	national legislation (including competent authorities):-
DU	(a). IRR99
BU	(b). other relevant legislation
	<b>Operational radiation protection:</b>
BU	types of sources (sealed, unsealed, x-ray units, accelerators);
DU	hazard and risk assessment (excluding environmental impact);
DU	minimisation of risk (including ALARP);
BU	control of releases;
DU	monitoring: area, personal dosimetry (external, real time and internal), biological;
GA	critical dose concept/dose calculation for critical group
GA	ergonomics (e.g. user-friendly design and layout of instrumentation);
BU	operating rules and contingency planning;
BU	emergency procedures
BU	remedial action/decontamination;
GA	analysis of past incidents including experience feedback
	<b>Organisation of radiation protection:</b>

BU	role of qualified experts;
BU	safety culture (importance of human behaviour);
BU	communication skills (skills and ability to instil safety culture into others);
BU	record keeping (sources, doses, unusual occurrences, etc.);
BU	permits to work and other authorisations;
DU	designation of areas and classification of workers;
BU	quality control/auditing;
GA	dealing with contractors
	<b>Waste management:</b>
GA	principles of management;
GA	principles of disposal
GA	<b>Transport</b>

## Annex 4: Glossary of terms and definitions

### Qualified Expert

Article 1 of the Euratom Basic Safety Standards Directive (96/29/Euratom) defines qualified experts as “persons having the knowledge and training to carry out physical, technical or radiochemical tests enabling doses to be assessed, and to give advice in order to enable effective protection of individuals and the correct operation of protection equipment, whose capacity to act as a qualified expert is recognised by the competent authorities. A qualified expert may be assigned the technical responsibility for the tasks of radiation protection of workers and members of the public.” NOTE: In Britain, the qualified expert in relation to occupational radiation protection is the Radiation Protection Adviser (RPA) in the Ionising Radiations Regulations 1999 (IRR99). Other qualified experts, for instance in waste management under the Radioactive Substances Act (RSA93), transport or for handling emergencies under REPPiR, fall outside the scope of this Statement.

### Radiation Protection Adviser

A Radiation Protection Adviser (RPA) is an individual who, or RPA Body which, meets HSE’s Criteria of Core Competence in this Statement. The Criteria of Core Competence for individual RPAs and RPA Bodies are laid down in this statement.

### Role of the RPA

The role of the RPA is set out in regulation 13(1) and Schedule 5 to the IRR99. Broadly, it is to advise an employer on compliance with IRR99 in work related situations. This includes those radiation protection matters necessary to comply with the Regulations. The RPA’s role is to advise an employer; therefore whilst an RPA



may be an employee, their advice should be independent from production and operational management.

## **Core Competence**

An individual has achieved RPA core competence when they have obtained either 1) a Radiation Protection Level 4 National or Scottish Vocational Qualification (N/SVQ) or 2) a certificate of RPA core competence from an Assessing Body, by providing evidence from education, training and/or experience that is sufficient to satisfy that Body that they meet all the requirements laid down in the Statement. At the point of obtaining either a N/SVQ or a certificate of RPA core competence, an individual satisfies for the first time the definition of an RPA in regulation 2 of IRR99 and are thus legally recognised as an individual RPA.

## **Suitable RPA**

An individual RPA or RPA Body has achieved 'Core Competence' when they have met HSE's Criteria of Core Competence contained in this Statement (see definition of an RPA above). However, it is then for the employer to select an RPA who, or an RPA Body which, has the necessary knowledge and experience to make them 'suitable' to give advice in relation to the employer's particular line of work. A 'suitable' RPA or RPA Body should possess the requisite knowledge and experience relevant to the employer's type of work. In relation to an individual RPA, the judgment about suitability would principally be derived from the appropriateness of the RPA's working history. In relation to an RPA Body, the judgements would be principally derived from the RPA Body's statement that should be made available to potential clients. This statement will include the scope of advice that the RPA Body is able to provide and the experience and qualifications of the individual RPAs employed within that Body.

## **RPA Body**

Is an organisation recognised by HSE that can act as a Radiation Protection Adviser having met HSE's Criteria of Core Competence for RPA.

## **Assessing Body**

Is an organisation recognised by HSE that assesses individuals against HSE's Criteria of Core Competence to act as Radiation Protection Advisers (RPAs) under the Ionising Radiations Regulations 1999 (IRR99). An Assessing Body must meet the requirements for Assessing Bodies in Annex 2 of this Statement.

## **Link URLs in this page**

1. [www.hse.gov.uk/radiation/rpnews/statementrpa.htm](http://www.hse.gov.uk/radiation/rpnews/statementrpa.htm)