

**RISK ASSESSMENT:
WHO IS COMPETENT
AND
WHAT IS SUITABLE AND SUFFICIENT?**

The contents of this paper are not intended to reflect the views of the Institution of Fire Engineers or the Institution's South West Branch. The scope of this paper is restricted solely to England and Wales. It does not relate to fire safety legislation in Scotland or Northern Ireland, nor to guidance thereon or enforcement thereof.

Fire Risk Assessment as the underpinning for fire precautions in buildings

Whether one applauds or abhors the new legislative regime in England and Wales, and fire risk assessment as the foundation on which fire precautions must be constructed (and both views abound), the safety of occupants in virtually all non-domestic premises now depends critically on the validity of the fire risk assessment carried out by the relevant dutyholder. The rationalization and simplification of fire safety legislation recommended by the Government's 'Interdepartmental Scrutiny' in 1994 has not simply brought administrative change in the legislative framework and enforcement; it has (arguably rightly) shifted the burden for formulation of the correct recipe of fire precautions from the enforcing authority to those who create the potential risk from fire by employing people to work in their premises, or otherwise occupy premises, managing premises or, possibly, maintaining premises and fire precautions therein. There is a certain moral elegance and logic in such a concept.

Moreover, it is inherent within the concept of fire risk assessment that these changes represent a major shift away from the constraints of so-called prescriptive codes of practice to published 'guidance' and 'benchmarks', within which the apparent paranoia associated with prescription is evidenced by protestations that anything that might be regarded as definitive is not to be interpreted as such. Indeed, the very term 'prescriptive' now appears to have a pejorative connotation.

Again, the flexibility now afforded by the principle of risk-based fire precautions, comprising measures proportionate to the risk, has much to commend it. It enables a more holistic approach to fire safety, in which prevention of fire and management of fire safety are not merely taken into account, but must, as a requirement, be of an appropriate standard; this contrasts with the scant attention to such matters within traditional legislation, such as the Fire Precautions Act 1971. It avoids unnecessary expenditure on measures that may not be necessary, while recognizing that the principles of fire safety (or even fire safety engineering) can be used with flair to develop alternative solutions to the achievement of the requisite standard of fire safety. These positive aspects of the new legislation should, in theory, enable enforcement consistent with several of the principles enshrined in the Cabinet Office's Enforcement Concordat.

The Imponderables of the New Regime

Unfortunately, the new regime brings with it many imponderables. To some extent, these are inherent to the concept of fire risk assessment. For those who wish 100% certainty and consistency (which is far more dutyholders than the Government appear prepared to acknowledge), it is simple to afford; it can be afforded simply by reverting to prescription of the most extreme nature, in which codes of practice become 'rules'. But somewhat analogous to the Heisenberg Uncertainty Principle, 100% certainty and consistency involve, by definition, 0% flexibility, the corollary to which is that 100% flexibility must mean 0% certainty or consistency.

Equally, the Government lit the touchpaper of a major explosive restructuring of fire safety legislation and its enforcement, while, in England and Wales, the Department responsible for the ignition, now conveniently look in another direction, while the world of fire safety is showered with the rubble of the fall out which, in the uncertain world in which we live, can be regarded as either the settling dust prior to a new dawn, or a warning of imminent structural failure.

These imponderables are not new; fire safety practitioners have lived with them since 1st December 1997, when the fire safety requirements of the Framework Directive and the Workplace Directive were first implemented in Great Britain, via the Workplace Fire Precautions Legislation. It was from that date that the two imponderables I am tasked to address in this paper existed, namely who is competent to carry out the fire risk assessment now required by Article 9 of the Regulatory Reform (Fire Safety) Order 2005 (but previously required by Regulation 3 of the Management of Health and Safety at Work Regulations), and what constitutes the required suitable and sufficient assessment of the risks to which relevant persons are exposed. However, I would note in passing that these are merely two of many imponderables that exist and in respect of which the CLG have abdicated responsibility, leaving it for others, arguably less well-placed or appropriate, to determine. Other imponderables will, no doubt, be considered by other speakers.

The Need for Competence

The two issues, competence of the fire risk assessor and the suitability of the fire risk assessment, are clearly inextricably linked. A competent fire risk assessor will produce a suitable and sufficient fire risk assessment, although its recognition as such by the enforcing authority will rely on the training of the inspecting officer; this may be a further unfortunate variable with which the dutyholder may need to contend.

However, contrary to a popular misconception, the Fire Safety Order does not require that a fire risk assessment be carried out by a competent person. There is a requirement that the Responsible Person (and, hence, also any other person having control of the premises in the context of the Order) has

access to competent assistance to enable him to comply with the Fire Safety Order.

However, the 'competent assistant' to which the Order makes reference may, or may not be the person who carries out the fire risk assessment. In a small business, an employee (or the owner of the business) may constitute the competent assistant and may carry out the fire risk assessment. In a small or medium sized enterprise with a limited number of premises, but an in-house health and safety adviser with suitable underpinning knowledge in the principles of fire safety, it may well be the competent assistant who carries out fire (and health and safety) risk assessments of the company's premises. In medium to large firms, the number of premises is likely to be such that the fire risk assessments will need to be carried out by a team of internal specialists, by external consultants or by a combination of the two.

Equally, in any of the above examples, an in-house competent assistant might choose to engage external consultants to carry out the fire risk assessments. In this connection, the Approved Code of Practice (ACOP) on the Management of Health and Safety at Work Regulations 1999 (from where Article 22 of the Fire Safety Order, which requires competent assistance for the Responsible Person, was directly extracted) advises that competence includes a recognition of a person's own limitations and a willingness to supplement his knowledge and experience, where necessary, by external advice. In yet further cases, the competent assistance and the fire risk assessments may both be provided by external consultants (though only if there is no source of competent assistance within the employer's undertaking).

The omission of any requirement for the fire risk assessor to be competent is not an oversight on behalf of those who drafted the Fire Safety Order. It was considered by the regulators (again, arguably correctly) that to make such a requirement would necessitate, or at least imply, that the fire risk assessment should be carried out by a specialist, such as an external consultant. It was argued that this would then be contrary to Government policy of easing, rather than adding to, legislative burdens. However, the Government's sector-specific guides acknowledge that the role of the guides is to help the Responsible Person carry out a fire risk assessment in less complex premises.

It is further acknowledged, lest blame be directed towards the Government when lives are lost as a result of the Responsible Person's lack of competence, that, if the Responsible Person feels unable to apply the guidance (which faced with a guide of around 140 pages is not unlikely), he should seek *expert* advice from a *competent* person (my italics). For what the guides described as more complex premises, guidance is that they will probably need to be assessed by a person who has comprehensive training or experience in fire risk assessment.

Thus, it is not so much that a fire risk assessment can readily be carried out by an 'incompetent' person, but that the level of competence will vary with the

nature and complexity of the premises, so that specialist skills are not necessarily required of small, simple and straightforward premises. Certainly, external consultants are not the panacea for fire safety solutions in all premises. Even if in-house personnel have no specialist knowledge, they are, in contrast, advantaged by their knowledge of the business, the premises, the activities carried out, the managerial arrangements, etc.

Moreover, by carrying out the fire risk assessment, employees of the Responsible Person will better understand, and be better able to manage, the fire risks to which relevant persons are exposed. Inevitably, they will overlook the finer points of detail that a fire safety specialist would consider. However, if the Responsible Person approaches fire risk assessment with reasonable commitment, it is unlikely that those matters overlooked will result in significant risk to relevant persons; they may not, therefore, expose him to potential prosecution in criminal law.

As compensation for minor shortcomings in the fire risk assessment, resulting from lack of skill, it might be argued that 'ownership' of the fire risk assessment creates better long term commitment to the action plan, and better long term commitment to fire safety in the premises. In contrast, if the fire risk assessment undertaken by a third party were regarded as an end in itself, as was often the attitude adopted towards fire certificates, the action plan may not even be addressed, exposing relevant persons to long term risk to which they would not ever have been exposed in the case of certificated premises.

The Competent Fire Risk Assessor

While the Fire Safety Order does not require that the fire risk assessment be carried out by a competent person, as noted above, the CLG guides accept that the services of a competent specialist may be necessary. Indeed, for a humble five-storey, two stairway office building, the Responsible Person will have read more than half way through the CLG guide before learning that he will, in any case, need to seek the advice of a competent person (What price, then, reduction in burdens on business?). This, of course, begs the question as to what guidance (if any) the competent person is to use as a benchmark for the advice given. (It is interesting to note that the CLG guide on offices and shops makes reference to the term competent person - in respect of various different persons - no less than 72 times, whereas the term does not even appear in the equivalent Scottish guidance, the latter of which also makes no restriction on the scope of the guidance in relation to offices.)

What then might reasonably be expected in terms of competence? The sector-specific guides tell us that a competent person is:

'A person with enough training and experience or knowledge and other qualities to enable them properly to assist in undertaking the preventive and protective measures.'

In considering the issue of competence in fire risk assessment, we should firstly note that fire risk assessment is not a brand new discipline, science or

something completely different to traditional application of the principles of fire safety. Indeed, it might be argued that there should always have been, at least, an element of fire risk assessment within the application of traditional prescriptive legislation and codes of practice. Equally, it is arguable that it was insufficient consideration of fire risk, resulting in measures that were not risk proportionate, that was the catalyst for the swing of the pendulum from prescription to risk assessment.

The stated view of the IFE is that fire risk assessment normally involves merely a minor cultural shift from the traditional approach to fire safety. If this is correct, it follows that, in the context of the fire risk assessor, competence requires a sound underpinning knowledge of the principles of fire safety, as practised traditionally, a fundamental knowledge of the causes of fire, a knowledge of the design of fire protection measures, an understanding of the behaviour of fire in buildings, and an understanding of the behaviour of people in fire.

In the opinion of the IFE, there is no single prescription for the route that should have been followed by the competent fire risk assessor to assimilate this knowledge. However, it will arise from an appropriate recipe of education, training and experience. Thus, competence does not necessarily depend on the possession of specific qualifications, although such qualifications might contribute to the demonstration of competence. The education of the fire risk assessor might involve formal education of a relatively academic nature, culminating in a qualification. Training of a fire risk assessor in the practise of fire safety may have comprised one or more short courses, often with practical 'on the job' elements.

Education, training and experience in the principles of fire safety need not each be extensive; the objective of the blend of learning is that it should culminate in an adequate level of knowledge. A high level in respect of one of the three may well compensate for a lower level in another. This principle is shown in Figure 1, which has been incorporated in the BSI publication PAS 79¹ and is used as a simple guideline for assessment of applicants to the IFE Register of Fire Risk Assessors and Auditors.

However, competence in fire risk assessment also necessitates that the 'minor cultural shift' from traditional prescription has been embraced by the fire risk assessor. This is likely to necessitate:

- Greater consideration of measures to prevent the occurrence of fire.
- Greater consideration of 'soft' issues, relating to the management of fire safety.
- Recognition that codes of practice and guidance merely constitute a 'benchmark' for the assessment of measures, and do not constitute 'rules', albeit also recognizing that fire risk assessment should not be used as a

¹ PAS 79: 2007. *Fire risk assessment - Guidance and a recommended methodology.*

tool to circumvent practices that are universally accepted within the profession as appropriate.

- Recognition of the holistic nature of fire risk assessment, so that fire precautions are regarded as an integrated package, rather than a series of independent measures.

The Suitable and Sufficient Fire Risk Assessment

There are probably four sources to which we may turn for assistance with the scope of, content of and approach to, a suitable fire risk assessment:

- The Fire Safety Order itself.
- The sector-specific CLG guides.
- The ACOP that supports the Management Regulations.
- Guidance published by BSI in the form of PAS 79.

In an endeavour to determine the pre-requisites for a 'suitable and sufficient' fire risk assessment, as required by Article 9 of the Fire Safety Order, the first point of reference might reasonably be the Order itself. Little assistance will emanate from such an exercise, but the Order does require that certain matters should be addressed, namely:

- General fire precautions required for the purpose of compliance with the Order. The term general fire precautions is defined within the Order.
- Various matters in relation to dangerous substances (mostly of a special, technical or organizational measures, albeit that such measures are, according to Article 4, outside the scope of the general fire precautions that are the subject of the Order).
- Various matters in relation to young persons.

We also glean from the Order that, under most circumstances, prescribed information must be recorded. This information includes the significant findings of the assessment and any group of persons especially at risk. This, therefore, adds a further two matters that must be considered in the fire risk assessment. Clearly, the suitable and sufficient fire risk assessment must consider those specially at risk (e.g. disabled people), and must consider certain significant findings.

What are these significant findings? The Order only advises that they include (but are, therefore, presumably not restricted to) the measures which *have been* or *'will be'* taken by the responsible person pursuant to the Order (my italics). The Order also requires that the fire risk assessment be reviewed, inter alia, 'regularly'.

Already, this begins to, at least, suggest various forms of fire risk assessment that are not suitable and sufficient, the most common probably being:

- one that only addresses the four fire protection measures that previously constituted the pre-requisites for certification under the Fire Precautions Act 1971.

- one that is simply a defect action list emanating from what, more properly, might be described as a housekeeping and maintenance report.

The next source of reference might be the sector-specific guides. While the guides are a useful source of technical guidance on fire precautions and their assessment, their approach to fire risk assessment is quasi-academic and of limited assistance in determining the meaning of suitable and sufficient. Rigid adherence to the 'five steps to risk assessment', to which health and safety practitioners have traditionally referred, has led to an approach that lacks practicality. Worryingly, even the concept of risk, as defined in the CLG guides, is totally inconsistent with the definition adopted in the health and safety profession, promulgated in British Standards (and defined in Scottish Government guides on equivalent legislation in Scotland.) If there is no universal understanding of the concept of risk, little wonder there is little uniformity of opinion on what constitutes a suitable and sufficient assessment of fire risk.

The five steps that each of the guides advocates comprise the following:

1. Identify fire hazards

Identify:

Sources of ignition.
Sources of fuel.
Sources of oxygen.

2. Identify people at risk

Identify:

People in and around the premises.
People especially at risk.

3. Evaluate, remove, reduce and protect from risk

Evaluate the risk of a fire occurring.
Evaluate the risk to people from fire.
Remove or reduce fire hazards.
Remove or reduce the risk to people:

- Detection and warning.
- Fire-fighting.
- Escape routes.
- Lighting.
- Signs and notices.
- Maintenance.

4. Record, plan, inform, instruct and train

Record significant findings and action taken.
Prepare an emergency plan.
Inform and instruct relevant people; co-operate and co-ordinate with others.
Provide training.

5. Review:

Keep assessment under review.
Revise where necessary.

It is clear that a number of the defined steps incorporate quasi-academic components, but several of the 'steps', are in fact, complex multiple steps. More significantly, a fire risk assessment does not involve staff training; such training should already be in place and this should be subject to verification in the fire risk assessment. Further trivialization of the fire risk assessment process can be found on the CLG website, on which can be found a simple pro-forma for recording of the significant findings, which would, almost certainly, fail to satisfy a reasonable inspecting officer of a fire and rescue authority.

In our quest for the holy grail of the suitable and sufficient fire risk assessment, perhaps in little less than desperation, we could make cautious reference to the Approved Code of Practice and Guidance produced by the Health and Safety Commission in support of the Management of Health and Safety at Work Regulations 1999, from whence came the requirement for the risk assessment. Caution is necessary because, strictly, the ACOP does not now apply to fire safety legislation. Moreover, it is written largely around work activities.

Nevertheless, we would find some philosophical guidance on the principles of risk assessment. For example:

- The level of detail should be proportionate to the risk.
- Insignificant risks can usually be ignored.
- For small businesses, the process can be based on informed judgement and reference to appropriate guidance.
- The risk assessment should identify the period of time for which it is likely to remain valid.
- The significant findings include a record of the preventive and protective measures *in place* (my italics).
- The significant findings should include proof that a suitable and sufficient assessment has been made.

Finally, we may turn to PAS 79, published by BSI (and drafted by the author of this paper). This (non-prescriptive) guidance, which was produced with support and encouragement of the IFE, sets out a 9 step process, with

practical guidance on each step. The stated policy of the Chief Fire Officers' Association (CFOA) is that PAS 79 amplifies, but does not conflict with, the CLG's five steps.

The nine steps of PAS 79 are as follows:

1. Obtain relevant information on building, processes and people.
2. Identify the hazards and controls.
3. Assess likelihood of fire.
4. Determine fire protection measures.
5. Assess fire safety management.
6. Assess likely consequences of fire.
7. Assess fire risk.
8. Formulate action plan.
9. Review fire risk assessment periodically.

The end product of the fire risk assessment process is normally the record of the significant findings. This is the evidence on which the enforcing authority will rely to make their initial judgement as to whether a suitable and sufficient fire risk assessment has been carried out.

Can we then define, in any meaningful way, for the Responsible Person, the scope, nature and format of this evidence? As in the case of interpretation of the legislation itself, and many of its technical requirements, the answer is alas not. In England and Wales, this will potentially depend upon a series of linked variables, namely:

- The postcode of the premises.
- The whim of the enforcing authority.
- The whim of the inspecting officer.

The Government has created a Schrödinger's Cat², for businesses that operate on a national basis, in which their fire risk assessments are neither universally accepted as suitable and sufficient, nor universally accepted as unsuitable and insufficient, but both at the same time, simply with different probabilities. Only, as in the case of the cat, when inspection is made, will the matter be *prima facie* determined. While the uncertainty in relation to the cat obeys the laws of quantum physics, the uncertainty as to the suitability and sufficiency of a fire risk assessment hardly obeys the dictum of the Enforcement Concordat for *clear standards* and *consistent enforcement practice*, nor its demands for *openness* and *helpfulness*.

² Schrödinger's cat is an illustration or 'thought experiment' of a principle in quantum physics (quantum indeterminacy) that creates a paradox. The state of a sub-atomic particle is not definitive, but more than one state exists. The state only becomes definite at the point of measurement. Schrödinger proposed a scenario whereby the life or death of a cat in a sealed box depends on the state of a sub-atomic particle. Thus, the cat will, therefore be both alive and dead at the same time, and it is only the action of looking into the box that makes its condition definitive.

In the meantime, the Responsible Person, and other dutyholders under the legislation, are vulnerable to the censure of the Courts if matters go awry. If the extent to which they do so is sufficient, a public inquiry might look more fundamentally in terms of blame, with consideration as to whether the Responsible Person has been competently and properly served by those who created the duties with which he struggled to comply.

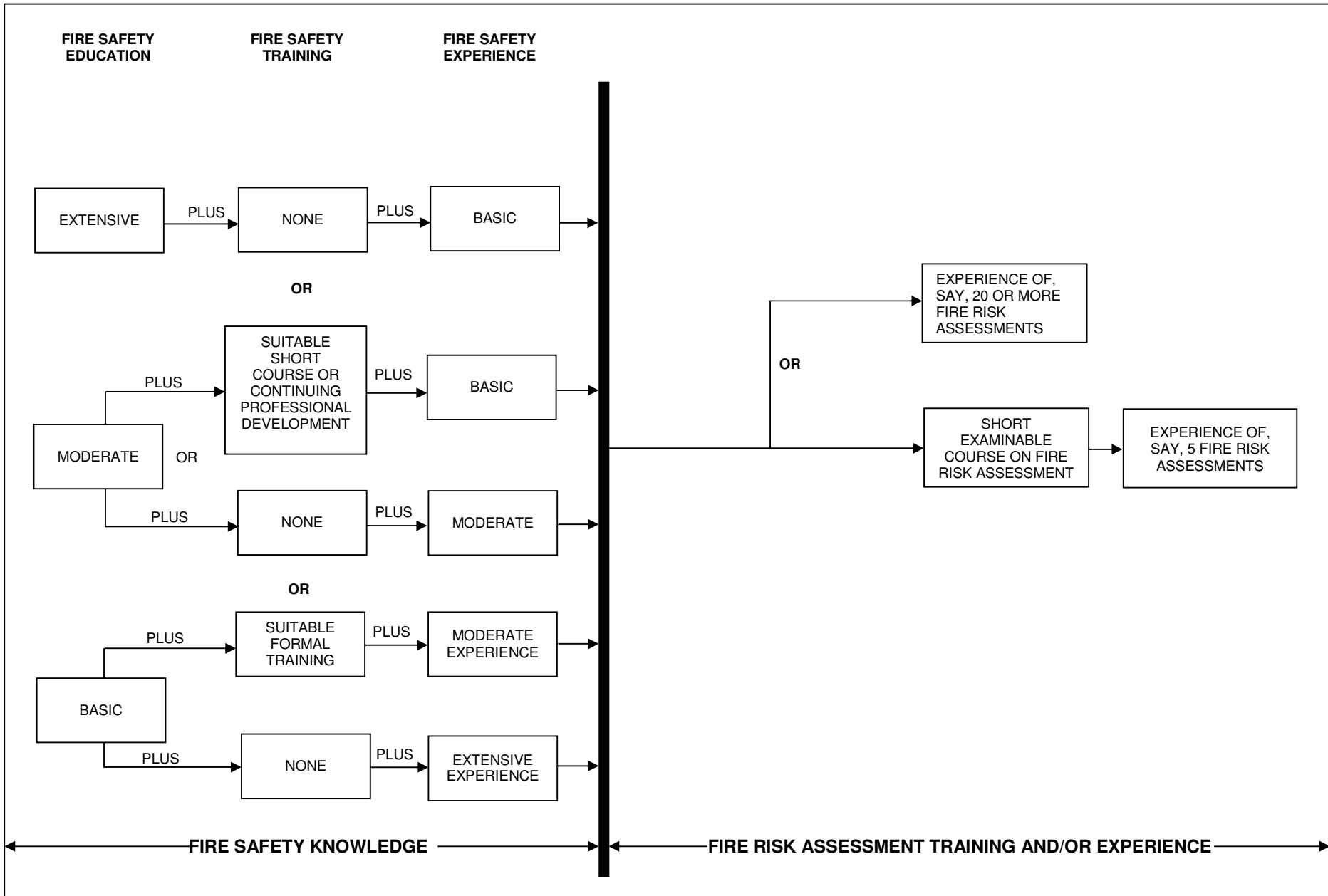


Figure 1 - Schematic example of appropriate education, training and experience of fire risk assessors