

Article 7/10 Advisory Group – Working Group 2 Draft Briefing Paper – Options for Certification, Quality Assurance and PII

1. Introduction

Directive 2002/91/EC of the European Parliament and the Council on the energy performance of buildings was published on 16 December 2002 and is intended to come into force in the UK in January 2006.

ODPM have been charged with implementing this Directive in England and Wales (in collaboration with Scotland and N Ireland). They have set up an Advisory Group to make recommendations on the certification and qualification of independent experts as required under Articles 7 and 10 of the EPBD. This paper has been prepared for the Advisory Group – Working Group 2 and summarises the key requirements of the Directive and sets out options for:

- certification of the energy performance
- helping to ensure the quality of the advice provided.

It is important to recognise that the introduction of energy efficiency measures to buildings is not without risk. Apart from the commercial risk of measures failing to perform as predicted, inappropriate or incorrect use of insulation, draught proofing, energy management systems, renewables and other energy efficiency measures could contravene or conflict with building regulations or affect fire protection or the health and safety of the occupants. These aspects are not considered in detail in this paper but should be in defining the standard for competent persons and any standard computer models offering advice.

Clearly there are many interested parties who see major commercial opportunities in training, certification and provision of energy efficiency measures. Great care needs to be taken to ensure that the implementation produces net benefit to the UK plc in terms of economic, environmental and social sustainability rather than adding a cost.

2. Requirements of the Directive

Article 7 of the EPBD requires that an energy performance certificate is made available when a building is constructed, sold or rented out and that the certificate is not valid for more than 10 years. The certificate should be accompanied by “reference” values and recommendations on cost effective improvements.

Articles 8 and 9 of the EPBD require inspection of boilers and air conditioning systems and advice on energy efficiency improvement or replacement.

Article 10 requires that the certification, inspection and advice work is carried out in an independent manner by qualified and/or accredited experts.

3. Suggested framework for certification.

Clearly there are a number of ways in which the Directive could be interpreted and implemented but if the Directive is to succeed then there needs to be a consistent framework which manages the risks. In formulating the options for certification the following guidelines have been considered:

- 3.1 Certification must meet the requirements of the Directive – in particular the work must be carried out competently and sufficiently independently. .
- 3.2 To facilitate consistency in data collection and interpretation certification procedures should be simple and scalable from small business premises at its simplest, through to more complex buildings such as leisure centres, hospitals etc.
- 3.3 Advice given must not be contrary to other related regulatory requirements – for example building regulations, fire risk assessments and health and safety risk assessments
- 3.4 Where larger organisations wish to self-certify, their energy surveying staff must be appropriately qualified and there must be an independent auditing system. Certification services should be open to competition in order to keep the price down and to avoid monopolies
- 3.5 Certification and advice must be consistent between service providers i.e. cutting corners to keep the price down should not be possible
- 3.6 Building energy surveyors may require different levels of expertise and competence for different types of buildings e.g. assessment of air conditioned buildings may require different levels of expertise from assessment of naturally ventilated buildings. This will need to be addressed as part of the technical standard.
- 3.7 Data from energy surveys should be made available in a particular set format and units. This would facilitate its use in initial certificates, in subsequent surveys of operational performance in national data collection systems if these prove possible. (The latter would help with informing policy or benchmarking e.g. calculations of energy performance of building stock; comparisons between buildings and building types etc. but issues of cost, technical validity and confidentiality would need to be resolved)
- 3.8 Periodic checks on building energy survey service companies and their surveyors would be needed to ensure that the work is carried out by competent people, that the surveys are being carried out consistently, that appropriate reference values are being cited and that the recommendations are technically sound and cost effective.
- 3.10 The standard and regime for control of certification activities [should be proportional to the risk and not impose unnecessary burdens on surveyors or their clients.

4. **Options for certification**

Clearly there are a wide range of ways in which the energy certification of buildings can be achieved. The following three options (A, B and C) could meet the requirements of the Directive.

In all cases there will be a need to define a standard for competence of the individual and for all but the first option it will be important to involve experts in certification in defining that standard in order to ensure that competence can be properly assessed.

The options given are not intended to be exhaustive and variants between the models could be produced.

4.1 Self-certification by qualified person (Option A)

Any person deemed to be competent by virtue of existing qualification (e.g. Chartered Engineer, Chartered Surveyor, etc.) or attendance at a training course or passing an examination (VRQ's) could be allowed to issue energy performance of buildings certificates.

FOR	AGAINST
Practically no cost to service providers	High potential for inaccurate assessments and poor quality or wrong advice
Lots of competition	Multiple formatting of data
Highly scalable	Fraud is likely to be commonplace
Quick to implement	Inconsistent assessments
Builds on existing infra-structure service providers e.g. ABE, RICS, NICEIC, CIBSE, CIOB, ECA, CORGI, HVCA, Building control etc	Little consumer protection
Would enable larger building owners to self –certify with own staff	Article 10 requirements of Directive (for independence) would not be met (unless some form of auditing were introduced to accompany –see Option B below).
	PI cover may be difficult to obtain
	No checks on quality of advice
	Possibility of non-independent certifiers entering market place to promote inappropriate technologies or solutions.

4.2 Self-certification through accredited certification of personnel and company (Option B)

In this model, a standard for personnel and company/management system would be defined. Suitably qualified certification bodies would be approved to assess the competence of companies and individuals to survey and issue certificates under licence. The licence would be dependent on satisfactory performance during periodic audit of both individual and company. This process would/could be accredited by UKAS.

FOR	AGAINST
Relatively inexpensive to service providers	Need to define standard for company or sole trader
Helps ensure accurate assessments and good quality advice	UKAS may not have the competence to accredit completely consistently
Meets requirements of Directive	May not provide sufficient data for fiscal purposes (cf – carbon trading).
Enables consistent data collection (enforced via Certification Body/UKAS)	
Good consumer protection	
Reduced potential for fraud	
Easy roll out of changes in legislation or new knowledge via certification bodies	
Builds on existing infra-structure service providers e.g. ABE, RICS, NICEIC, CIBSE, ECA, CORGI, HVCA, Building control etc	

Highly scaleable	
Provides competition between service providers	
PI cover should be easy to obtain Would enable larger building owners to self-certify with own staff	

4.3 Third party certification (Option C)

Only accredited certification bodies allowed to issue EPBD certificates and advice

FOR	AGAINST
Helps ensure accurate assessments and good quality advice	High cost
Meets (and possibly exceeds) requirements of Directive	Long time to implement – need to create completely new infra-structure of EPBD certification professionals
Enables consistent data collection (enforced via UKAS)	UKAS may not have the competence to accredit completely consistently
Good consumer protection	Need to define standard for company or sole trader
Reduced potential for fraud	PI cover may be more difficult due to lack of experience in this type of infra-structure?
Easy roll out of changes in legislation or new knowledge via certification bodies	Not easily scaleable
Future proof – likely to be readily modified for fiscal purposes (cf carbon trading requirements)	

5. Comments

Before selecting or modifying any of the above options the Working Group firstly needs to assess the risks and to define the framework.

If the emphasis is only on independent, competent persons providing certificates and advice then it may well be that a variant based on Option A is acceptable. However, with the exception of certain classes of Chartered Engineers, it is unlikely that the suggested service providers would be able to do so without training. In addition, given the rapid changes in technology, construction methods and legislation, unless there is some means of updating and verifying knowledge, there is a serious risk of incorrect assessments and misleading or inaccurate advice being given. This approach is also likely to facilitate fraud. It is our understanding that the simple qualification arrangement has already been rejected for energy performance certification of housing. Given that the complexities of commercial buildings are much greater than housing, Option A may similarly be unacceptable.

Option B has many advantages including that it is relatively low cost, relatively easy to introduce, will provide a good level of competition and consumer protection. It addresses most of the issues identified in the proposed framework but for a small group of energy efficiency professionals (perhaps practising Chartered Building Services Engineers with relevant skills/experience) an ongoing audit requirement

may be disproportionate to the risk and this should be considered if this option is selected.

Option C could be the most robust model technically but would require setting up a whole new industry of expert assessors. This would take a considerable time, would be very costly and for this reason is unlikely to introduce much competition. Given the strong time pressures on implementation of the Directive it is our view that in practice, as with ISO 14000, certification providers and their customers would probably spend a lot of effort trying to “get round” the standard and Directive rather than implementing it sensibly (See ENDS report of June 2004). Given the recent strong criticism from industry of over complicated introduction of environmental legislation this option would need to be introduced very carefully.

To ensure that the scheme is cost effective, for both Option B and Option C it is very important that certification expertise is employed in defining the technical standards.

Finally, in considering the options it is worth pointing out that whilst third party certification can only sample a small proportion of certificates and advice, it does provide an effective mechanism for identifying and correcting faulty work and for raising standards.