## EXPLANATORY MEMORANDUM TO THE

## **BUILDING AND APPROVED INSPECTORS (AMENDMENT) REGULATIONS 2006**

#### 2006 No.652

1. This explanatory memorandum has been prepared by the Office of the Deputy Prime Minister and is laid before Parliament by Command of Her Majesty.

This memorandum contains information for the Joint Committee on Statutory Instruments.

# 2. Description

- 2.1 These Regulations amend the Building Regulations 2000 ("the Building Regulations") and the Building (Approved Inspectors etc) Regulations 2000 ("the Approved Inspectors Regulations). In particular:
  - a. they implement articles 3 to 6 of the Energy Performance of Buildings Directive ("the Directive"); and
  - b. they make various unrelated amendments to the Building Regulations and Approved Inspectors Regulations.

## 3. Matters of special interest to the Joint Committee on Statutory Instruments

3.1 With the exception of regulation 28, these Regulations have been made using the various powers conferred by the Building Act 1984 as amended. Regulation 28 applies those regulations that implement the Directive to buildings which are normally exempt from building regulations, and has been made using the powers conferred by section 2(2) of the European Communities Act 1972.

# 4. Legislative Background

- 4.2 Section 1 of the Building Act 1984, as amended by the Sustainable and Secure Buildings Act 2004, enables building regulations to be made for the purposes of:
  - a. securing the health, safety and welfare of persons in and about buildings;
  - b. furthering the conservation of fuel and power;
  - c. furthering the protection or enhancement of the environment; and
  - d. facilitating sustainable development,

and other purposes not relevant to this Memorandum.

- 4.3 Building regulations may be made with respect to the design and construction of buildings and the services, fittings and equipment provided in buildings, and the various specific matters set out in Part 1 of and Schedule 1 to the Act. The Building Regulations and the Approved Inspectors Regulations have been made pursuant to these powers.
- 4.4 The Building Regulations impose general functional requirements for building work carried out in England and Wales. They are supported by technical guidance

- in the form of Approved Documents, which set out detailed practical guidance on ways of complying with the Building Regulations.
- 4.5 The Approved Inspectors Regulations set up a private sector building control system as an alternative to that offered by local authorities.
- 4.6 The Energy Performance of Buildings Directive promotes the improvement of the energy performance of buildings within the Community, and, relevantly, requires Member States to:
  - a. set a methodology for the calculation of the energy performance of buildings;
  - b. set energy performance standards for buildings using the methodology; and
  - c. apply those standards to new buildings and to large buildings undergoing major renovation.
- 4.7 The Directive was to be implemented by 4th January 2006, subject to deferral options that apply to articles 7 to 10 of the Directive (which are not transposed in these regulations). These regulations, that will fully implement articles 3 to 6 of the Directive, come into force on 6th April 2006 subject to transitional provisions. Articles 3 to 6 are being implemented 3 months later than the Directive required in order to give industry more time to prepare. Our assessment in September 2005 was that the building industry was not yet in any position to implement the new provisions, that to go ahead would be counter-productive in achieving the end result and that a short delay and further dissemination would produce a better overall outcome. In addition the short delay also allowed for the comprehensive training and dissemination programme, mostly aimed at the building control sector, to take effect. It is expected that this will result in improved compliance with the new requirements. The policy background at section 7 below describes why the implementation of Articles 3 to 6 have been tied to the review of Part L. In the normal course of events the review to Part L would not have been completed until 2007 but the Energy White Paper foreshortened this programme.
- 4.8 The amendments to the Building Regulations fall within the following categories:
  - a. Amendment and expansion of the existing energy performance requirements. In relation to some amendments, the power conferred by section 2A of the Building Act 1984 (continuing requirements in relation to fuel, power and emissions) has been used for the first time. Section 2A was inserted by the Sustainable and Secure Buildings Act 2004.
  - b. Amendments to the categories of buildings that are exempt from the building regulations. These amendments have been made to ensure full compliance with the Directive requirements
  - c. Amendments to the health and safety requirements relating to electrical installation work in dwellings have been amended for clarification purposes only.
  - d. Correction of a minor error in the amendments to the Building Regulations made by the Regulatory Reform (Fire Safety) Order 2005.

- e. Amendments to ensure persons carrying out emergency repairs to equipment such as boilers do not have to notify their local authority before commencing the work, and expansion of the types of work which do not have to be notified to the local authority at all.
- f. Expansion of the self-certification competent persons schemes, under which registered persons can carry out building work without notifying the local authority.
- 4.9 The Approved Inspectors Regulations have been amended for related purposes:
  - a. The self-certification competent persons schemes have been extended to apply where approved inspectors are the chosen building control body. Approved inspectors are a privatised form of building control as an alternative to using local authority building control officers. This is the first time the power conferred by section 47 of the Building Act 1984 (as amended by the Sustainable and Secure Buildings Act 2004) has been used.
  - b. The energy performance-related procedural amendments in the Building Regulations have been mirrored where appropriate.
- 4.10 The Regulations also include a new regulation (regulation 28) which applies those requirements of the Building Regulations that implement the Directive to various education buildings and buildings of statutory undertakers, to which the Building Regulations would otherwise not apply by virtue of section 4 of the Building Act 1984. Section 4 has been repealed by the Sustainable and Secure Buildings Act 2004, however that provision has not yet been commenced. This new requirement is a temporary provision made to ensure proper implementation of the Directive, and will be revoked once the repeal of section 4 has been effected after the appropriate consultation. This regulation has been made using section 2(2) of the European Communities Act 1972.
- 4.11 A transposition note is attached.
- 4.12 The draft Directive was first considered by the Select Committee on European Scrutiny on 16 January 2002 (12th Report of Session 2001-02) and cleared on 23 January 2002 (14th Report of Session 2001-02). The amended draft Directive was cleared without a substantive report to the House on 22 May 2002 (31st Report of Session 2001-02).

#### 5. Extent

5.1 This instrument extends to England and Wales.

# 6. European Convention on Human Rights

As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

# 7. Policy background

- 7.1 These Regulations principally implement part of the Energy Performance of Buildings Directive (EPBD) and revise Part L of Schedule 1 to the Building Regulations, which contains the existing requirements relating to the conservation of fuel and power in buildings. The objective was to improve the energy efficiency of buildings subject to the building regulations by up to 25%.
- 7.2 This revision of Part L forms part of the implementation of the Government's commitments in the Energy White Paper (EWP) and in the Action Plan for Energy efficiency which were published in February 2003 and April 2004 respectively (see in particular Chapter 3 of the EWP, paragraphs 3.13, 3.14 & 3.16).
- 7.3 The EWP indicated that the EPBD technical provisions, in effect Articles 3, 4, 5 & 6, should be implemented through the Building Regulations.
- 7.4 Proposals for amending Part L and implementing the EPBD were prepared throughout 2003 and early 2004 involving two Industry Advisory Groups (one each for domestic and commercial buildings) and working parties involving a good cross section of representatives from the construction and building services industry.
- 7.5 The Building Regulations Advisory Committee (BRAC) is a statutory committee appointed pursuant to section 14 of the Building Act 1984. The Act requires that BRAC be consulted before making any building regulations containing substantive requirements. BRAC set up a technical working party to oversee the Part L review, and received regular reports from the working party. BRAC signalled their agreement to recommendations made to ministers at the main stages, i.e. prior to consultation and prior to the announcement of the results of consultation. There has been an ongoing dialogue with BRAC throughout.
- 7.6 Ministerial approval to public consultation was announced on 21 July 2004. A comprehensive consultation took place between July and October 2004 with over 400 separate responses being received.
- 7.7 Between October 2004 and June 2005 the consultation responses were reviewed and consolidated. During this period we analysed the comments received and adopted those suggestions which helped promote policy or ease the burden of implementation. A summary of the analysis can be seen in the final Regulatory Impact Assessment attached to this memorandum. The collation of issues raised by consultees including numerical analysis can be seen at: http://www.diag.org.uk/pdf/Collation\_of\_Consultation\_Responses.pdf.
- 7.8 Following formal consultation, industry continued to provide inputs into the further development of the detailed provisions and participated in two audit workshops in summer 2005 where the aim was to ensure that the provisions are practical.
- 7.9 A ministerial announcement on the way forward with Part L and Articles 3 to 6 of the EPBD was made on 13 September 2005.
- 7.10 A number of different stakeholder groups have an interest in these revisions, namely homeowners/building owners, building control officers, local authorities and

approved inspectors, builders and material and product suppliers and their relevant institutions and representative bodies, building managers and environmental lobbyists.

7.11 These revisions will apply to some 170,000 new dwellings, 40,000 new commercial buildings, 230,000 alterations to commercial type buildings and the replacement of 1.2 million domestic boilers per annum. There is no estimate of alterations to dwellings available.

## 8. Impact

- 8.1 A Regulatory Impact Assessment (RIA) has been prepared, but due to its size is not attached to this memorandum. A copy is available on the ODPM website at www.odpm.gov.uk. Copies may also be obtained from Buildings Division, ODPM (Tel: 020 7944 5755; Fax: 020 7944 5719; email: enquiries.br@odpm.gsi.gov.uk.).
- 8.2 The impact on the public sector is expected to be neutral. Increased costs of construction resulting from the implementation of Part L (see RIA) will be around 2% but this will be offset by energy efficiency savings made during the life of the building.
- 8.3 Paragraphs 90 92 of the RIA discuss the impact on Building Control Bodies (BCBs). It is not expected, save for initial extra training, that costs for BCBs should increase. The Office has worked closely with a BCB umbrella group to develop a comprehensive training and dissemination programme which will, to a large extent, satisfy initial training needs.

## 9. Contact

Simon Barnes at the Office of the Deputy Prime Minister Tel: 0207 944 5709 or e-mail: simon.barnes@odpm.gsi.gov.uk can answer any queries regarding the instrument.

# TRANSPOSITION NOTE FOR EUROPEAN PARLIAMENT AND COUNCIL DIRECTIVE 2002/91/EC OF 16 DECEMBER 2002 ON THE ENERGY PERFORMANCE OF BUILDINGS

This transposition note sets out the way in which Articles 3-6 of the Directive are to be implemented through the Building and Approved Inspectors (Amendment) Regulations 2006 in England and Wales only. Scotland, Northern Ireland and Gibraltar are implementing separately.

These regulations do more than is necessary to implement the Directive (EPBD). This is because these regulations also implement a revision to Part L (conservation of fuel and power) of Schedule 1 to the Building Regulations. This revision follows the announcement made in the Energy White Paper (EWP) 2003 to review Part L. The EWP also announced that implementation of the EPBD would run alongside this review because of the beneficial synergies. Articles 3 and 4 are implemented at the minimum requirement set out in the Directive.

Article 5 requires that Low and Zero carbon (LZC) solutions are considered for new buildings of useful floor area over 1,000m2. In implementation the requirement to consider LZC solutions applies to all new buildings other than dwellings?, regardless of size. This has been adopted as part of the National strategy set out in the EWP to reduce carbon emissions.

Article 6 requires that when buildings with a total useful floor area over 1,000m² undergo major renovation, their energy performance be upgraded in order to meet minimum requirements in so far as this is technically, functionally and economically feasible. By way of implementation energy performance requirements have been set in relation to renovated systems and components in all buildings, regardless of size. In addition to the system and component level requirements, where works are carried out in buildings over 1,000m² that result in an increase in the amount of energy the building uses, builders are required to make reasonable improvements to the building as a whole where this is technically, functionally and economically feasible. This has been adopted as part of the National strategy set out in the EWP to reduce carbon emissions.

Main elements of the Directive	Objective	Implementation	Responsibility
Article 3 Adoption of a methodology	Requires the adoption of a methodology, at national or regional level, of calculation of the energy performance of buildings on the basis of a general framework.  The methodology shall be set at national or regional level.	Regulation 15 inserts Regulation 17A into the Building Regulations 2000 ("the Building Regulations"), implements article 3 by requiring the Secretary of State to approve a methodology for the calculation of the energy performance of buildings in England and Wales.  The methodology which has been approved by the Secretary of State will be published in an ODPM circular.  The methodology consists of 2 approved calculation tools and a procedure for approving alternative software such as dynamic simulation models for use in buildings with advanced features. The tools estimate the mass of CO <sub>2</sub> in units of kg per m <sup>2</sup> of floor area emitted per year through standardised use of the building (the "CO <sub>2</sub> emission rate").  The calculation tools approved to date are the Government's Standard Assessment Procedure SAP2005 (for small dwellings), and the Simplified Building Energy Model (SBEM) (for large dwellings and most non-domestic buildings).	First Secretary of State
Article 4 Setting of energy performance requirements	Article 4.1 Requires that minimum energy performance requirements for buildings are set, based upon the methodology referred to in Article 3. The requirements may differentiate between new and existing buildings and different categories of buildings. The requirements shall take account of general indoor climate conditions, in order to avoid possible negative effects such as	Regulation 15 also inserts regulation 17B into the Building Regulations, which implements Article 4 by requiring the Secretary of State to approve minimum energy performance requirements for new buildings, in the form of target CO <sub>2</sub> emission rates, based upon the approved methodology.  The target CO <sub>2</sub> emission rates have been approved by the Secretary of State by setting formulae to be used for the calculation. The formulae	First Secretary of State

inadequate ventilation, as well as local conditions and the designated function and the age of the building. These requirements shall be reviewed at regular intervals which should not be longer than five years and, if necessary, updated in order to reflect technical progress in the building sector.

require that the target CO<sub>2</sub> emission rate for any building is determined by:

- calculating the  $CO_2$  emission rate for a building of the same size and shape built to 2002 standards, using the relevant calculation tool approved in the methodology; and
- reducing that rate by a specified percentage (depending upon the way in which the building will be heated). The percentage varies according to the type of building and the heating method. For dwellings it is 20%, and for buildings other than dwellings averages around 27%.

The resulting figure is the target CO<sub>2</sub> emission rate for the proposed building.

The formulae are set out in the Approved Documents L-1A (for dwellings) and L-1B (for other buildings), approved on 7 March 2006 pursuant to section 6 of the Building Act 1984.

Article 4.3 Member states may decide not to set or apply the requirements to the following categories of buildings:

- buildings and monuments officially protected as part of a designated environment or because of their special architectural or historic merit, where compliance with eh requirements would unacceptably alter their character or appearance;
- buildings used as places of worship and for religious activities;
- temporary buildings
   with a planned time of
   use of two years or less,
   industrial sties,
   workshops and non residential agricultural
   buildings with low
   energy demand and
   non-residential
   agricultural buildings
   which are in use by a

Regulation 8, which amends regulation 9 of the Building Regulations, sets out the categories of building to which the implementing regulations (as well as all other energy related requirements in the regulations) apply.

By virtue of regulation 9, the implementing regulations apply to all buildings which use energy to condition the indoor climate, other than-

- listed buildings, buildings in a conservation area, and ancient monuments, where compliance would unacceptable alter their character or appearance;
- buildings which are used primarily or solely as places of worship;
- temporary buildings with a planned time of use of two years or less, industrial sites, workshops and nonresidential agricultural buildings with low energy demand;
- stand alone buildings other than dwellings with a total useful floor areas of less than

First Secretary of State

	sector covered by a national sectoral agreement on energy performance;  • residential buildings which are intended to be used less than four months of the year;  • stand-alone buildings with a total useful floor area of less than 50m².	50m².  Some aspects of the possible exemptions have not been taken up, namely:  • buildings used for religious activities;  • non-residential agricultural buildings which are in use by a sector covered by a national sectoral agreement on energy performance - because there are no such agreements in England and Wales;  • residential buildings which are intended to be used less than four months of the year;  • stand-alone dwellings with a total useful floor area of less than 50m².	
Article 5 New buildings	Requires that new buildings meet the minimum energy performance requirements.  For new buildings with a total useful floor area over 1,000m², the technical, environmental and economic feasibility of alternative systems such as:  • decentralised energy supply systems based on renewable energy;  • CHP;  • district or block heating or cooling, if available;  • heat pumps, under certain conditions,  is considered and is taken into account before construction starts.	Regulation 15 also inserts regulation 17C into the Building Regulations. Regulation 17C implements Article 5 by requiring that where a building is erected it shall not exceed the relevant target CO <sub>2</sub> emission rate which has been approved pursuant to regulation 17B.  The formula for calculating the target CO <sub>2</sub> emission rate for new buildings other than dwellings includes a benchmark provision for low and zero carbon (LZC) systems. It is not a formal requirement to include LZC systems in the actual building, but if not included, then equivalent carbon savings would have to be achieved through other energy efficiency measures. This LZC benchmark is included for all new non-domestic buildings not just those over 1000m <sup>2</sup> There is no equivalent LZC benchmark provision for new dwellings over 1,000m <sup>2</sup> , but the targets for all dwellings are set at such a level that builders have strong incentives to use these technologies where it is feasible to do so, and builders must meet these targets regardless of whether they choose to use LZC technology.  A new ODPM publication 'Low or Zero Carbon Energy Sources – Strategic Guide' describes a range of possible systems and how their contribution to compliance with the target CO <sub>2</sub> emission rate can be	First Secretary of State

		assessed.	
Article 6 Existing buildings	Requires that when buildings with a total useful floor area over 1,000m² undergo major renovation, their energy performance is upgraded in order to meet minimum requirements in so far as this is technically, functionally and economically feasible. These minimum energy performance requirements shall be derived on the basis of the energy performance requirements set for buildings in accordance with Article 4. The requirements may be set either for the renovated building as a whole or for the renovated systems or components when these are part of a renovation to be carried out within a limited time period, with the abovementioned objective of improving the overall energy	Article 6 has been implemented by setting energy performance requirements for renovated systems or components for all buildings, including those under 1,000m², and by requiring that where specified types of work are carried out on buildings over 1,000m² the whole building be upgraded to meet the relevant energy performance requirements where this is technically, functionally and economically feasible.  Regulation 19 substitutes a new Part L of Schedule 1 to the Building Regulations 2000. Regulation 4 of the Building Regulations requires that all building work in all buildings comply with Schedule 1. The new Part L requires that reasonable provision shall be made for the conservation of fuel and power in buildings by—  (a) limiting heat gains and	First Secretary of State
		(a) limiting heat gains and loses—  (i) through thermal elements and other parts of the building fabric; and  (ii) from pipes, ducts and vessels used for space heating, space	
		cooling and hot water storage;  (b) providing and commissioning energy efficient fixed building services with effective controls; and	
		(c) providing to the owner sufficient information about the building, the fixed building services and their maintenance requirements so that the building can be operated in such a manner as to use no more fuel and power than is reasonable in the circumstances.	
		Accordingly, whenever work on these systems and components is carried out,	

reasonable provision must be made for the conservation of fuel and power. Detailed technical guidance on what will amount to reasonable provision in particular circumstances is contained in Approved Document L-1B (for dwellings) and L-2B (for other buildings). In addition to the system and component requirements set in Part L, regulation 15 also inserts regulation 17D into the Building Regulations. Regulation 17D requires that where a building with a total useful floor area over 1,000m<sup>2</sup> undergoes one of the following types of work, such additional work as is necessary be carried out to ensure that the renovated building as a whole complies with the energy performance requirements set out in Part L of Schedule 1 to the Building Regulations, so far as is technically functionally and economically feasible. Those types of work are: an extension to a building; the initial provision of fixed lighting, heating, hot water, air conditioning or mechanical ventilation systems in a building; or an increase to the installed capacity of any such systems in a building. These types of work will result in an increase in energy intensity in a building and are therefore an appropriate opportunity to require the building as a whole to have its energy performance upgraded to meet minimum requirements (so far as this is technically, functionally and economically feasible). These types of work may not in all circumstances strictly speaking amount to "major renovation", and to that extent do more than is necessary to implement the Directive. Approved Document L-2B provides further technical guidance on what will amount to reasonable provision in particular cases. Articles 7-10 Requires-By virtue of article 15(2) Member First Secretary States may, because of a lack of of State

Energy performance certificates  Inspection of	that when buildings are constructed, sold or rented out an energy performance certificate be produced;	qualified and/or accredited experts, have an additional period of up to three years to apply fully the provisions of Articles 7, 8 and 9. These Articles will be implemented in separate regulations.	
boilers  Inspection of air-conditioning systems  Independent experts	the establishment of regular inspections of boilers, or provide advice to users in a way which has a broadly equivalent overall impact;		
	the establishment of regular inspection of air-conditioning systems of an effective rated output of more than 12kW; and		
	that the certification and inspections be carried out in an independent manner by qualified and/or accredited experts.		
Article 15 Transposition	Requires that the laws, regulations and administrative provisions necessary to comply with the Directive at the latest on 4 January 2006.	Regulation 1 provides that the regulations come into force on 6th April 2006, subject to transitional provisions that apply where building work has commenced or plans have been approved before that date.	First Secretary of State