The original Energy Performance of Buildings Directive was adopted in 2002. The Directive has now been ‘recast’, or revised, to clarify the original document and extend its scope in line with current European Union policy goals, whilst reducing the variations in its implementation. The Directive follows the general shift in focus of EU policy and regulation from carbon emissions to an explicit emphasis on energy performance. In particular, the Directive addresses the energy efficiency of buildings, both new and existing, and it recognises the importance of renovating the existing stock, and the long refurbishment cycles which can lock in poor energy performance for many years.

There are explicit references in the “recitals” to the Directive, which precede the Articles, to the need to limit energy used for air conditioning, and therefore to give priority to the reduction of overheating in buildings and emphasis on the use of passive cooling and thermal mass in buildings.

The recitals also recognise the vital role of properly trained and competent installers and professional experts in delivering integrated energy efficiency and renewable technologies.

The provisions of the Directive cover energy used for space and hot water heating, cooling, ventilation, and lighting for new and existing residential and non-residential buildings.

It sets a target for all new buildings to be ‘nearly zero-energy buildings’ by 2020, including existing buildings undergoing “major renovation”. The UK already has goals for zero carbon homes by 2016 and non-domestic buildings by 2019. The revised Directive includes several other new provisions.

These include the provision of a comparative methodology to enable governments to calculate cost-optimal levels for setting minimum standards of energy performance (Article 4).

For existing buildings the minimum energy performance requirements for new buildings will now apply when a ‘major renovation’ is to be carried out, with no threshold floor area (Article 7). Each government must list financial incentives for ‘nearly zero’ energy buildings (Article 10).

Public buildings over 500 sq m will have to display energy performance certificates (EPCs) from 2013, and in 2015 that drops to 250 sq m. These will also be mandatory for many larger private sector buildings. Additionally, EPCs

will provide detailed, building specific recommendations for improvements (Articles 11 to 13).

There are changes to the rules for boiler and air conditioning inspections and reports (Articles 14-16) and for independent experts and controls over certificates and inspection reports (Articles 17 to 18).

The recast also requires each government to introduce effective penalties for non-compliance, in response to the widespread lack of effective enforcement of energy certification and air conditioning inspections (Article 27).

Apart from the ‘nearly zero-energy’ target, which must be met by 2020, governments must adopt regulations and procedures for the other requirements by July 2012, and implement them between July 2012 and January 2013.

This briefing summarises the provisions of each Article, with a brief description of the changes and the likely implications. Comments which begin [UK] are specific comments on the situation in all or part of the UK.

Article 1
Subject Matter

In the original Directive this Article was titled “Objective”. The scope of the recast has broadened, particularly in relation to the renovation of existing buildings. There are new provisions in the recast relating to the national plans for nearly zero buildings and oversight of energy assessors.

The overall purpose of the directive promotes improvement of the energy performance of buildings in the EU. It requires:

- A common general framework for a methodology to calculate the integrated performance of buildings
- Minimum energy requirements for new buildings and building units
- Minimum energy requirements for buildings undergoing major renovations
- Minimum energy requirements for all building elements and technical building systems when installed, retrofitted or replaced
- Energy certification of buildings
- National plans for nearly zero-energy buildings
- Independent oversight systems for energy performance certificates and reports

Article 1 expressly states that the requirements are a minimum, and do not prevent any government from introducing (or maintaining) more stringent measures.

Article 2
Definitions

This article introduces a total of eleven new definitions, and amends several of the original definitions.
The Article provides new definitions of: “nearly zero-energy building”; “technical building system”; “primary energy”; “energy from renewable sources”; “building envelope”; “building unit” and “element”, “major renovation”; “European standard”; “cost-optimal level” and “district heating” or “district” cooling.

The original definition of CHP has been changed to “co-generation” and the wording amended.

The definitions of “building”; “energy performance of a building”; “air conditioning system” and “heat pump” have been amended, with some of the original text removed.

The definitions of “boiler”; “energy performance certificate of a building” and “effective rated output” are unchanged.

When defining a “major renovation”, governments must opt for either work in excess of 25% of the building value less intrinsic land value, or 25% of the surface building envelope”.

A “cost-optimal level” is defined as delivering the lowest cost during the anticipated lifespan of the building or building element. The equation includes investment costs, maintenance, and operating costs, compared with the value of the energy saved plus earnings from any energy produced.

Governments are required to demonstrate that the minimum energy performance standards they set are at a “cost-optimal level”, which is defined as delivering the lowest cost during the anticipated economic life, taking account of investment costs, maintenance, and operating costs, compared with the value of the energy saved plus earnings from any energy produced.

Article 3
Adoption of a methodology for calculating the energy performance of buildings

This article is unchanged in its overall thrust, although the reference to CO2 emissions has been dropped. This is consistent with a greater emphasis on energy efficiency.

Article 3 requires every government to apply a methodology which calculates the energy performance of buildings. These calculations must be based on a general framework incorporating at least the following items, listed in Annex 1 of the Directive, which is also broadly unchanged:

(a) the following actual thermal characteristics of the building including its internal partitions:
   (i) thermal capacity;
   (ii) insulation;
   (iii) passive heating;
   (iv) cooling elements; and
   (v) thermal bridges;

(b) heating installation and hot water supply, including their insulation characteristics;

(c) air-conditioning installations;
(d) natural and mechanical ventilation which may include air-tightness;
(e) built-in lighting installation (mainly in the non-residential sector);
(f) the design, positioning and orientation of the building, including outdoor climate;
(g) passive solar systems and solar protection;
(h) indoor climatic conditions, including the designed indoor climate;
(i) internal loads.

The positive influence of the following aspects must be taken into account, whenever relevant:

(a) local solar exposure conditions, active solar systems and other heating and electricity systems based on energy from renewable sources;
(b) electricity produced by cogeneration;
(c) district or block heating and cooling systems;
(d) natural lighting.

Buildings should be classified as below:

(a) single-family houses of different types;
(b) apartment blocks;
(c) offices;
(d) educational buildings;
(e) hospitals;
(f) hotels and restaurants;
(g) sports facilities;
(h) wholesale and retail trade services buildings;
(i) other types of energy-consuming buildings.

Article 4
Setting of minimum energy performance requirements

This article describes what governments must do in setting the minimum energy performance standards.

[UK] In the UK these are implemented through the Building Regulations and Standards determined by the responsible government. Building Regulations are a devolved responsibility in Scotland and Northern Ireland, and will be devolved to Wales by the time the recast is due to be implemented, although the implementing regulations must be notified to Brussels before the devolution takes effect, and it is not clear what implications that may have.

Minimum energy performance requirements must be based on the calculation methodology, and be cost-optimal. These must be reviewed at least every five years, and updated accordingly. They must cover buildings, building units and elements within the building envelope. Account must be taken of general indoor climate conditions, so as to avoid possible negative effects,
such as inadequate ventilation, as well as local conditions and the building’s designated function and age. Requirements can differ between new and existing buildings, as well as different building types.

Governments can opt to omit the following categories:

- buildings and monuments officially protected as part of a designated environment or because of their special architectural or historic merit, but only where compliance with the 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 processes
- workshops and non-residential agricultural buildings with low energy demand
- non-residential agricultural buildings if covered by a sectoral agreement on energy performance
- residential buildings intended to be used less than four months a year, or using less than one-quarter of anticipated annual occupation usage
- stand-alone buildings with a total useful floor area of less than 50m²

[UK] The relevant Building Regulations in the UK exempt some, but not all of these categories.

**Article 5**

**Calculation of cost-optimal levels of minimum energy performance requirements**

This Article is new, and it is intended to encourage governments to set minimum performance standards that are challenging, without being unreasonably costly. Under this Article governments will be asked to demonstrate that the standards they set are cost optimal across their building stock.

[UK] The work that the Zero Carbon Hub has undertaken on the technical and commercial viability of the “zero carbon” standard for England and Wales, coupled with the UK practice of regulatory impact assessments for new regulations, is likely to be presented by the UK administrations as meeting the requirement in respect to housing.

The Commission will publish a comparative methodology framework for calculating cost-optimal levels by 30 June 2011, differentiating between new and existing buildings. Using this framework, each government must use this to compare it with its' own existing calculation methodology, and report the results to the Commission by 30 June 2012. Subsequent reports must be submitted at regular intervals, at least every five years.

If the existing requirements deliver significantly less energy efficiency than the Commission’s methodology, the relevant government must provide a written justification for this shortfall. It must be accompanied by a plan to reduce significantly any gap within five years.

The Commission will publish a progress report on each Member State towards delivering cost-optimal requirements.

**Article 6**

**New Buildings**

Previously Article 5, this article has been extended to require the feasibility study on renewable energy to be documented and retained for possible later checking, and to explicitly allow the study to be carried out at either a building, a site or a development or area basis.

All new buildings must meet the agreed minimum energy performance requirements. Governments must ensure that, before construction starts, formal consideration is given the following alternative systems for heating:

- Decentralised energy supply systems based upon renewable energy
- CHP
- District or block heating or cooling
- Heat pumps

Such systems should consider technical, environmental and economic feasibility. All analyses should be documented and verifiable.

**Article 7**

**Existing buildings**

Previously Article 6, this Article has been extended in scope, although it is much shorter. The 1,000m² size threshold has been dropped, and governments are required to introduce requirements for the renovation of a building as a whole. Requirements for upgrading individual building elements may be set, by they must be additional to the whole building requirement, which is in turn to be linked to Article 4, minimum energy standards.

Governments must ensure that, whenever an entire building, or an element of it, undergoes major renovation, its energy performance is upgraded to meet minimum requirements under Article 4, and they must encourage the consideration of alternative systems for heating, as listed under Article 6.

**Article 8**

**Technical building systems**

This is a new Article. It requires governments to set minimum requirements for at minimum hot water, heating, ventilation and air-conditioning systems, covering their installation and commissioning. The England and Wales Building Regulations 2010 cover the installation and commissioning of fixed building services: although the Building Regulations include lighting, the Article does not, although it does refer to automation and control systems.

The Article also encourages the introduction of intelligent metering on construction or major renovation.
Governments must require system requirements for the new, replacement and upgrading of technical building systems installed in existing buildings. This covers inter alia heating, hot-water, air-conditioning and large ventilation systems, and any combination of such systems.

Encouragement for intelligent metering systems - in accord with Annex 1.2 of the Energy End-use & Energy Services Directive (COM 2006/32) - is required, as it is for automation control and monitoring systems.

Article 9
Nearly zero-energy buildings

This article requires governments to commit to “nearly zero-energy buildings” by 2020 and to prepare a national plan for increasing the number of such buildings, including setting targets “to stimulate the transformation of buildings that are refurbished into nearly zero-energy building. The national plan must also include a definition of nearly zero-energy buildings and intermediate targets for improving the energy performance of new buildings by 2015.

[UK] Current commitments in England are for “zero carbon” homes from 2016, and non domestic buildings no later than 2019, and so the UK is likely to argue that this Article is following (inter alia) the UK lead. It is unlikely to cause any significant additional measures in the UK, beyond the current pathway to “zero carbon” buildings. The definition of zero carbon homes in England and Wales is already in hand through the Zero Carbon Hub Carbon Compliance Standard Task Group.

By December 31 2020 every new building must be “nearly zero-energy”. All new buildings owned and occupied by public authorities will need to achieve this by 31 December 2018. Intermediate targets for 2015 are required from each government.

A national definition of nearly zero-energy buildings must be issued, including a numerical indicator of primary energy use expressed in kWh/m² per year.

Every government must create plans for increasing the overall number of nearly zero-energy buildings amongst the existing stock, particularly in the public sector: progress can be differentiated by building type. Such plans must include details of policies, including financial and other measures, designed to promote nearly zero-energy buildings, including the use of energy from renewable sources. Targets designed to stimulate the transformation of refurbished buildings into nearly zero-energy must be created, and provided for the Commission.

The Commission must evaluate each national plan, and can request further information or amendments, to which a response must be provided by the government in question within nine months. The Commission may then issue a recommendation.

Governments may exclude any specific building where renovating to near zero-energy is shown not to be cost-optimal. This must be based on relevant legislation.

The Commission will publish a zero-energy buildings progress report on each Member State before 31 December 2012, to be updated every three years. An action plan will follow, which may propose measures to increase the numbers of such buildings and spread best practice.
**Article 10**

**Financial incentives and market barriers**

*This Article is new, and is aimed exclusively at governments and the commission.*

Governments must publish by June 30 2011 a list of other existing and proposed measures and instruments – including those of a financial nature – not required by this Directive. This list must be updated every three years. When providing incentives for construction or major renovation of buildings, these must take account of requirements for cost-optimal levels of energy performance.

Having examined this list, the Commission may provide advice or recommendations as regarding specific national schemes. If invited, it must also assist in setting up regional or national financial support mechanisms designed to increase energy efficiency, especially in existing buildings, supporting the exchange of best practice.

By 2011, the Commission will publish an analysis of:

- The effectiveness of structural funds allocations in increasing energy efficiency in buildings, especially in housing
- The effectiveness of the use of funds from the European Investment Bank and other public finance institutions
- The co-ordination of EU and national funding and other forms of support intended to leverage energy efficiency investments
- The adequacy of funding for achieving EU objectives for energy efficiency

This analysis may lead to the Commission proposing new EU financial instruments designed to stimulate investment in energy efficiency measures in buildings.

**Article 11**

**Energy performance certificates**

*This was formerly Article 7 of the original Directive. The recast has extended the Article so that it now requires more specific recommendations to accompany an energy certificate, to address both major renovation and individual elemental improvements to energy performance. The Article also requires the recommendations to be tailored to the specific building, which means that generic advice is not sufficient for recommendations associated with an energy performance certificate.*

The requirement, previously in Article 7(3), for public display of certificates, is now a separate Article, as is the procedure for the issue of energy certificates.

Governments must mandate that energy performance certificates include details both of the performance of the relevant building or building unit, and of reference values in order to enable the owners or tenants to assess comparability of energy performance with similar properties.

The certificate must include recommendations for cost-optimal improvements relevant to the building. It must include details of renovation measures.
needed, including specific building elements and technical building systems. It must include information as to the necessary steps taken to implement the recommendations and guidance on where more detailed information can be obtained. Cost evaluation must include an assessment of energy savings and underling energy prices, together with a preliminary price forecast.

Certificates may provide estimates for payback periods based upon cost-optimal savings. For the non-residential sector, it may include the annual energy consumption figures and percentages of renewable energy used. A voluntary common EU certification scheme for non-residential buildings will be issued by the Commission by 2011, which all governments are encouraged to recognise.

In the public sector, governments are to encourage implementation in all publicly owned buildings of the recommendations included within the certificate, during its validity period. In all cases, this period cannot exceed ten years.

For apartments or for units designed for separate use in blocks, it is possible for certificates to be based on either a common certification for the whole building or upon the assessment of a similar building unit with the same energy relevant characteristics. A single-family home can have a certificate based upon a representative building of similar design, size and energy performance quality, but only if such similarity can be guaranteed by an accredited energy assessor.

**Article 12**

**Issue of energy performance certificates**

*This article covers the issue of energy performance certificates, extending the provisions previously included in Article 7(1) of the original Directive. It also introduces requirements relating to the inclusion of energy certificates in advertising of buildings for sale or rent.*

Whenever a building is constructed, sold or rented out, a certificate detailing its energy performance must be made available. This can either be to the owner or, by the owner, to the prospective buyer or tenant. A certificate must be acquired for all buildings occupied by a public authority with a useful floor area over 500 m², if frequently visited by the public. After 9 July 2015, the threshold drops to 250 m². A certificate issued under the earlier Directive (2002/91) complies, and remains valid for the ten years from the date of issue.

The full certificate must be shown to any prospective new tenant or buyer, and a copy handed over on completion of any contract. Governments can allow sellers of buildings still under construction to provide an assessment of future energy performance, which remains valid only until construction is complete, when an energy performance certificate must be issued.

All advertisements carried in commercial media concerning a building or part of it offered for sale or lease must state the energy performance from the certificate (or indicator if under construction). Any effects of these certificates in terms of legal proceedings will be subject to national legislation.
Article 13
Display of energy certificates

This Article covers the requirements for public buildings to display energy certificates. From 9th January 2013 the requirement will be extended to public buildings with a floor area greater than 500 m², and from 9 July 2013 the requirement will extend to floor areas greater than 250 m².

There is a new requirement, for any building over 500 m² which is “frequently visited by the public” to display an energy certificate, extending the requirements for Display Energy Certificates to all private sector buildings over 500 m² (over 250 m² from July 2013) that are frequently visited by the public.

Any buildings with a useful floor area over 500 m² occupied by a public authority, and frequently visited by the public, must have its’ energy performance certificate displayed in a prominent place clearly visible to the public. The threshold will drop to 250 m² from 9 July 2015.

Once an energy performance certificate has been issued relating to any other building with a useful floor area over 500 m², that energy performance certificate must be displayed in a prominent place clearly visible to the public - if that building is frequently visited by the public. It is not mandatory to display the recommendations included in the certificate.

Article 14
Inspection of heating systems

Formerly Article 8, this article introduces a provision to reduce the frequency of inspection where systems have automatic monitoring and controls in place. The provision for governments to adopt an information campaign is retained, but with increased provision for the Commission to seek additional information and evidence as to the effectiveness of the measures.

In order to reduce energy consumption in heating systems, governments have two options. Option one requires regular inspections of the accessible parts of systems used for heating buildings. This includes the heat generator, control system and circulation pump(s), with boilers of an effective rated output for space heating of over 20kW. The initial inspection must include an assessment of the appropriateness of the boiler size and efficiency compared with the heating requirements of the building; providing there are no changes to the heating system, this need not be repeated.

Heating systems with boilers over 100kW must be inspected every two years.

In the case of gas boilers, this can be delayed for up to four years. If an electronic monitoring and control system is in place, governments can vary the frequency of inspections. Similarly different inspection timetables can be adopted, setting the costs of inspections against any anticipated energy savings.

The second option, (currently adopted in the UK), is for governments to ensure that there is adequate provision of advice for users on the replacement of boilers, other modifications to the heating system and alternative solutions to assess the efficiency and appropriate size of the boiler. No regular time scale is required for this advice.
However if governments do choose this means of compliance, they must produce a report to the Commission every three years, beginning 30 June 2011, showing how this achieves as much as implementing this Article under the first option given. The Commission may require further justification of equivalence claims. Should this occur, governments have nine months to respond with amendments or extra information.

**Article 15**

**Inspection of air-conditioning systems**

Formerly Article 9, this article now permits governments to adopt a similar approach to the inspection of heating systems, and to reduce the frequency of inspections where there is automatic control and monitoring.

In order to reduce energy consumption in air-conditioning systems, governments again have two options. The first is to establish a regular inspection of the accessible parts of air-conditioning systems with an effective rating output of more than 12kW. The initial inspection must include an assessment of the appropriateness of the air-conditioning size and efficiency compared with the cooling requirements of the building: providing there are no changes to the cooling system or requirements, this need not be repeated.

If an electronic monitoring and control system is in place, governments can vary the frequency of inspections. Similarly different inspection timetables can be adopted, setting the costs of inspections against any anticipated energy savings. But no requirements are suggested, let alone required, regarding the frequency of any such inspections.

The second option is for governments to ensure that there is adequate provision of advice, and possible inspections, for users on the replacement of or modifications to the air-conditioning system.

However if governments do choose this means of compliance, they must produce a report to the Commission every three years, beginning 30 June 2011, showing how this achieves as much as implementing this Article under the first option given. The Commission may require further justification of equivalence claims. Should this occur, governments have nine months to respond with amendments or extra information.

[UK] Air conditioning inspections have been largely disregarded by many occupiers, and there is concern in several quarters about how to improve compliance levels ahead of the implementation of the recast.

**Article 16**

**Reports on the inspection of heating and air-conditioning systems**

This is a new Article setting requirements for inspection reports.

[UK] The UK already has standard report provisions under preparation.

After each inspection of a heating or air-conditioning system, a report must be issued. It must include recommendations for cost-effective improvements of the energy performance of the system. These may be based on a comparison with the best available feasible system. The inspection report must be given to the building owner or to the tenant.
Article 17
Independent experts

Formerly Article 10, this has two new paragraphs, setting out the requirement for accreditation to be competence based and for information on training and accreditation to be made public.

Governments must ensure that certification of buildings, and inspection of air-conditioning and heating systems, are carried out in an independent manner. This must be by qualified and/or accredited experts. These can operate as sole traders or be employed by public or private bodies.

Governments must publish details on training and accreditation of assessors. In addition, they must publish regularly updated lists of such experts, or accredited companies that offer the services of such experts.

Article 18
Independent control systems

This new Article requires governments to set up a system of control to oversee energy certification, and to undertake quality assurance activity.

[UK] This is already in place in the UK.

Governments must create an independent control system or systems to verify the validity of energy certificates and inspection reports for air-conditioning and heating systems. Separate oversight systems can be adopted for each, and may be delegated by governments to a regulator.

Each year, these regulators must make a random and statistically significant selection from the energy performance certificates issued. Each certificate selected should then be verified.

This procedure must cover checking

- that the input data for the building is accurate
- that the energy performance certificate, including the consequent recommendations, reflect the input data
- where possible, with an on-site visit to the building to establish consistency between the specifications provided in the certificate and the building itself

Similarly, a random and statistically significant selection of all the inspection reports issued annually must be subjected to verification.

Article 19
Review

This Article revises Article 11 of the original Directive, and is for the Commission.

The Commission has to evaluate how effectively the directive is being implemented. It must publish conclusions and if necessary make further
proposals by 1 January 2017. It will be assisted by the committee established under Article 26.

**Article 20**

**Information**

This Article is much extended and now explicitly requires governments to provide information about energy certificates, inspection reports, cost effective ways to improve energy efficiency, available financial instruments and provision of guidance and training for those implementing the Directive.

Governments must let owners and tenants know about what is available to enhance the energy performance of any building. In particular, they must explain what the certificates and inspection reports are all about, the cost saving implications, and the incentives schemes available. If governments ask for help, the Commission must assist them in staging these information campaigns.

Governments must ensure there is guidance and training available for those charged with implementing this directive. It must emphasise the importance of energy efficiency, and facilitate integration with renewables and district heating and cooling. This is particularly regarding planning, designing, building and renovating industrial or residential areas.

The Commission should further develop its website which provides information about the Directive to the public and to professionals. It must encourage the use of the European Regional Development Fund to facilitate energy efficiency improvements by providing assistance and information to interested stakeholders.

**Article 21**

**Consultation**

This is a new Article which requires the Commission to consult stakeholders, in particular over the provisions for nearly zero energy building and the provision of information.

To help ensure the directive is fully implemented, governments must consult with stakeholders. These should include local and regional authorities. This is particularly pertinent regarding implementation of Article 9 and 20.

**Article 22**

**Adaptation of Annex 1 to technical progress**

This Article is new, and allows the commission to update Annex 1, which underpins the national calculation methodologies, to reflect technical advances.

This refers to parts of the Annex cited under Article 3, covering methodologies regarding energy efficiency related devices, and pertinent external factors. It authorises the Commission to adapt these following any relevant technical progress.
Article 23
Exercise of delegation powers

This article sets a theoretical limit on the power of the commission under Article 21, but would require a majority vote in the Council or Parliament to enforce such a limit (see Article 24).

The powers delegated under Article 22 initially run until 8 July 2015. The Commission must report on how it is using these delegated powers before 8 January 2015. These delegated powers will automatically run for further periods of five years, unless revoked by the European Parliament or the Council under Article 24.

Article 24
Revocation of the delegation powers

A further new article, see Article 23 above.

Should either the European Parliament or the Council seek to revoke the powers granted under Article 22, it shall inform the other institutions before a decision is taken, indicating which powers it wishes to see revoked, and why. The decision of revocation nullifies Article 22 either immediately or at a specified time. But any prior actions taken under this Article remain valid.

Article 25
Objections to delegated acts

This article provides theoretical safeguards against abuse of Article 22.

The European Parliament or the Council have four months from notification to object to any act under Article 22. Once an objection is raised, the delegated act does not come into force. If neither objects, the delegated act becomes effective.

Article 26
Committee procedure

This Article was previously Article 14.

The Commission has created a special committee to assist with implementation.

Article 27
Penalties

This is a new Article, and one which could have significant impact. It requires the penalties for non-compliance to be “effective, proportionate and dissuasive.”

Governments must create penalties that apply to those infringe national provisions under this directive. Such penalties must be effective,
portionate and dissuasive. The Commission must be told what these penalties are by 9 January 2013.

[UK] The Coalition government has already consulted informally seeking views on improving compliance with the existing Directive, and work to address this is ongoing.

**Article 28**

**Transposition**

This Article states when the measures must be implemented by governments. The implementing legislation must be published and adopted by July 2012.

[UK] Relevant consultations will need to have taken place during 2011. Since many of the EPBD measures are linked to Part L of the Building Regulations in England and Wales (and its equivalent in Scotland and Northern Ireland), it is anticipated that any consequent consultations will be combined, for both technical and economic reasons.

Governments must transpose different Articles by different dates.

By 9 July 2012 the laws, regulations and administrative provisions must be in place to cover Articles 2 to 18, and Articles 20 and 27.

By 9 January 2013, the relevant provisions of Articles 2, 3, 9, 11, 12, 13, 17, 18, 20 and 27 must be operational.

By 9 January 2013, public authorities become subject to Articles 4 to 8, and 14 to 16. These Articles apply to other buildings from 9 July 2013 at the latest.

Governments must let the Commission know how they intend to transpose the directive into national law. When they adopt these legal measures, they must identify its provenance from this directive. They must also confirm that all references to the 2002 directive in existing laws, regulations and administrative provisions, now automatically refer to this directive.

**Table: Implementation dates for the various Articles by governments**

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<td>Article 3</td>
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</table>

**Article 29**

**Repeal**

This is self explanatory, but note the requirement in the previous Article for governments to transfer all references to the 2002 Directive to the recast version.

The original directive, 2002/91, is duly repealed.

**Article 30**

**Entry into force**

The directive entered into force on September 8 2010.