The Energy Performance of Buildings Directive 2010/21/EU (EPBD2) - summary of implementation via:

Proposed amendments to the Energy Performance of Buildings (Certificates and Inspections) Regulations (Northern Ireland) 2008 (as amended) (the 2008 Regulations), through the Building Regulations or by administrative arrangements.

Article 1 – Subject matter

Article 1 states that EPBD2 aims to promote the energy performance of buildings within the EU, taking into account outdoor climatic and local conditions, as well as indoor climate requirements and cost effectiveness. No action is required in terms of the 2008 Regulations.

Article 2 – Definitions

Article 2 sets out definitions for the purposes of EPBD2, some of which are additions or amendments to those in the first EPBD. Many (or equivalent terms) are already used in the 2008 Regulations or the Building Regulations. **None of the changed definitions require any amendments to the 2008 Regulations.**

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

This Article requires Member States to apply a methodology at national or regional level, for calculating the energy performance of buildings on the basis of the general framework set out in Annex I of EPBD2. This is set at national level in the UK, with the main difference from the first EPBD being the need to produce a numeric indicator of the primary energy use of a building (primary energy being energy from renewable and non-renewable sources which has not undergone any conversion or transformation process). **This is a change to methodology and as such does not require an amendment to the 2008 Regulations.**

Article 4 – Setting of minimum energy performance requirements

Article 4 requires Member States to ensure that minimum energy performance requirements for buildings are set with a view to achieving cost-optimal levels. The energy performance shall be calculated in accordance with the methodology set out in Article 3 and the cost-optimal levels shall be calculated in accordance with the comparative methodology framework referred to in Article 5. **In Northern Ireland minimum energy performance requirements are already set for new buildings and buildings that undergo a major refurbishment through the Building Regulations. No amendment to the 2008 Regulations is required.**

This Article also provides for Member States to exclude certain categories of buildings from applying the requirements set out in EPBD2. The Department is consulting on redefining the exemption in relation to buildings used primarily or solely as places of worship. The new exemption would read “buildings used as places of worship and for religious activities”. **This is discussed further**

in Section 4.1.1 of the consultation on proposed amendments to the 2008 Regulations.

Article 5 – Calculation of cost-optimal levels of minimum energy performance requirements

This Article requires the Commission to establish a comparative methodology framework for calculating cost-optimal levels of minimum energy performance requirements for buildings. This framework shall be established in accordance with Annex III of EPBD2 and shall differentiate between new and existing buildings and between different categories of buildings. It is not intended for this framework to replace the UK methodology set out in Article 3, but to operate alongside as a system for measuring the national methodology with what could be achieved with the cost-optimal methodology.

Member States will be required to report to the Commission on their minimum energy performance requirements, with the first report due by 30 June 2012 and at least every five years thereafter. Where a Member State's minimum energy performance requirements are significantly less than would have been achieved using a cost-optimal approach, that Member State will have to justify the difference in its report and set out the steps that will be taken to reduce this gap by the time the requirements are next reviewed. The Commission will publish a report on the progress of Member States in achieving cost-optimal levels of minimum energy performance levels.

The Commission has recently published the methodology. **This Article does not require an amendment to the 2008 Regulations.**

Article 6 – New buildings

This Article requires Member States to ensure that all new buildings meet the minimum energy performance requirements set in Article 4. Before construction commences the technical, environmental and economic feasibility of high-efficiency alternative systems such as:

- decentralised energy supply systems based on energy from renewable sources;
- cogeneration;
- district or block heating or cooling, particularly where it is based entirely or partially on energy from renewable sources;
- heat pumps

shall be considered and taken into account. This requirement is extended to all buildings, having previously only applied those over 1000m^2, and requires the analysis to be documented and for those documents to be retained for verification purposes. **This is a matter for Building Regulations.**

Article 7 – Existing buildings

This Article requires Member States to ensure that when buildings undergo a major renovation the energy performance of the building is upgraded in order to meet minimum energy performance requirements set in accordance with

Article 4 in so far as this technically, functionally and economically feasible. The requirement applies to the:

- building as a whole; and/or
- renovated part of the building; and/or
- renovated building element.

This requirement is extended to all buildings, having previously only applied those over 1000m^2. **This is a matter for Building Regulations.**

Article 8 – Technical building systems

This Article requires Member States to introduce provisions to optimize the energy use of technical building systems and to set system requirements in respect of the overall energy performance, the proper installation and the appropriate dimensioning, adjustment and control of the technical building systems installed in existing buildings (optional in new buildings).

The system requirements set for new, replacement and upgrading of technical building systems shall be applied in so far as they are technically, economically and functionally feasible and shall cover at least:

- heating systems;
- hot water systems;
- air-conditioning systems;
- large ventilation systems; or
- a combination of such systems.

This Article also requires Member States to encourage the introduction of intelligent metering systems whenever a building in constructed or undergoes major renovation. **This is a matter for Building Regulations, except for intelligent metering which is a matter for the Department of Enterprise, Trade and Investment (DETI).**

Article 9 – Nearly zero-energy buildings

This Article provides for Member States to ensure that after 31 December 2018 new buildings that are occupied and owned by public authorities are to be nearly zero-energy buildings. By 31 December 2020 all other new buildings are to be nearly zero-energy buildings. Member States may decide not to apply these requirements where the cost-benefit analysis over the economic lifecycle for the building in question is negative.

Nearly zero-energy buildings are defined in EPBD2 as buildings with a very high energy performance as determined in accordance with Annex I. The nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from on-site or nearby sources.

Member States are required to draw up plans for increasing the number of nearly zero-energy buildings, which should, among other things, include policies to increase the number of such buildings and targets for different

building categories. The European Commission will evaluate these plans publish a report by 31 December 2012 (and every three years thereafter) on the progress of Member States in increasing nearly zero-energy buildings. **This is a matter for Building Regulations, except for reporting on national plans which will be done administratively by DFP through DETI.**

Article 10 – Financial incentives and market barriers

Article 10 requires Member States to consider the most appropriate instruments of a financial or other nature, to improve the energy performance of buildings and stimulate the transition to nearly zero-energy buildings. By 30 June 2011 Member States were to have drawn up a list of existing and proposed instruments, other than those required by EPBD2, that promote the objectives of this Directive. The list shall be updated every 3 years. Member States shall take account of the cost-optimal levels of energy performance when providing incentives for the construction or major renovation of buildings. **Reporting on this Article is at National level. DETI will report on the Northern Ireland position through normal reporting arrangements on the National Energy Efficiency Plan referred to in Directive 2006/32/EC.**

Articles 11, 12 and 13 – Energy Performance Certificates (EPCs), the issue of EPCs and the display of EPCs

These are the key provisions of EPBD2 covered in Section 4 of the July 2012 consultation document.

Article 14 – Inspection of heating systems

This Article provides for Member States to either require the inspection of heating systems or opt to ensure the provision of advice to users concerning the replacement of boilers, modifications to the heating system and alternative solutions to assess the efficiency and appropriate size of the boiler. The Department opted for the provision of advice under Article 8 of the first EPBD and does not propose to change this approach. **No action is required.**

Article 15 – Inspection of air-conditioning systems

The 2008 Regulations already require air-conditioning systems with an effective rated output greater than 12kWh to be inspected at a frequency of not more than 5 years. As this satisfies the requirements of this Article, **no amendments to the 2008 Regulations are proposed at this time.**

Article 16 – Reports on the inspection of heating and air-conditioning systems

This Article requires an inspection report to be issued after each inspection of a heating or air-conditioning system.

As the Department has opted for the provision of advice in respect of heating systems, there is no requirement for a report to be issued.

The 2008 Regulations require an inspection report to be issued following each air-conditioning inspection. This meets the requirements of this Article and **no amendments in this regard are therefore proposed**.

However the Department is proposing to introduce the mandatory lodgment of air-conditioning inspection reports on the Register, which is covered by Section 5.4 of the July 2012 consultation document.

Article 17 – Independent experts

This Article requires Member States to ensure inspections for energy performance certificates and air-conditioning systems are carried out in an independent manner by qualified and accredited experts. Member States shall provide public information on training and accreditations and ensure regularly updated lists of qualified or accredited experts are made available to the public.

The 2008 Regulations stipulate that only accredited assessors may produce certificates or inspection reports for the categories of buildings or types of air-conditioning systems for which they are approved. Information on qualifications for assessors and a list of accreditation schemes is published on the Department's website www.epb.dfpni.gov.uk. Each accreditation scheme maintains a publicly available list of members. Details of accredited assessors can be accessed as follows:

- domestic buildings – www.epbniregister.com
- non-domestic buildings – www.epbniregisternd.com
- air-conditioning systems – www.epbniregisternd.com

The requirements of this Article are therefore currently met in Northern Ireland and no further action is proposed.

Article 18 – Independent control system

This Article requires Member States to ensure independent control systems are established for quality assurance of energy performance certificates and inspection reports. Ii is already a requirement that independent control systems are in place for energy performance certificates and reports on the inspection of air-conditioning systems. These requirements are included in the Scheme Operating Requirements (to which Northern Ireland is a party) which is a legal document setting out the operating requirements with which accredited organizations must comply.

The requirements of this Article are therefore currently met in Northern Ireland and no further action is proposed.

Article 19 – Review

The Commission will evaluate EPBD2 by 1 January 2017.

Article 20 – Information

Member States shall take measures to inform owners and tenants of buildings as to how to improve the energy performance of their building. This includes providing information on the purpose and objectives of EPCs and inspection reports, cost effective ways to improve the energy performance of the building and any financial instruments available to this end.

This Article also requires Member states to make available guidance and training for those persons responsible for implementing EPBD2, covering the importance of improving energy performance, the consideration of the optimal combination of improvements in energy efficiency, use of energy from renewable sources and the use of district heating and cooling when planning, designing, building and renovating industrial or residential areas.

The Department currently provides advice and guidance on the 2008 Regulations and this will be reviewed in line with the amendments proposed in this consultation and requirements of EPBD2. Nationally a suite of National Occupational Standards has been developed for all categories of energy assessors and this will reviewed and updated as necessary. **No amendments are therefore required to the 2008 Regulations.**

Article 21 – Consultation

Member States are required to consult stakeholders on the implementation of EPBD2.

Articles 22 – 26 relate to procedural matters within the European Commission regarding delegation.

Article 27 – Penalties

This Article provides for Member States to apply effective, proportionate and dissuasive penalties for non-compliance with EPBD2. **Sections 5 and 6 of the July 2012 consultation document deal with proposed amendments to penalties for non-compliance with the 2008 Regulations.**