# INFORSE-Europe's opinion on

# Recasting of the Energy Performance of Buildings Directive 2002/91/EC Consultation

20th June 2008

## 1.CLARIFICATION and SIMPLIFICATION ASPECTS

1. Which of the definition(s) or requirement(s) of the existing Directive should be clarified or simplified? Please choose the part(s) of the Directive you refer to: (compulsory)

| | | |
|---|---|---|
| None | Article 4 | Article 9 |
| Preamble | Article 5 | Article 10 |
| Article 1 | Article 6 | Article 11 |
| Article 2 | Article 7 | Article 12 |
| Article 3 | Article 8 | Article 13 |

(For each part you chose please explain what you propose to clarify or simplify)

Preamble:

- It should be clarified that passive solar heating are to be promoted via this directive in the preamble par. 12. The proposed renewable energy directive (COM2008-19) explicitly excludes passive solar energy use from its scope.
- Clarification of the language is possible in some places, such as a possible change of the text in the preamble's par. 15 which reads "Renovation requirements for existing buildings should not be incompatible with the intended function," could be changed to Renovation requirements for existing buildings should be compatible with the intended function,..."

Article 1:

INFORSE-Europe proposes that it is clarified that environmental protection is also an objective by adding this to the objective in line 4 of art.1

INFORSE-Europe proposes that part c) and e) are simplified in the following ways:

c)the application of minimum requirements on the energy performance of ~~large~~ existing buildings that are subject to major renovation;

[Reason: we propose to expand the scope as explained below]

and

(e) regular inspection of heating, ventilation, and cooling installations including boilers and ~~of~~ air-conditioning systems in buildings ~~and in addition an assessment of the heating installation in which the boilers are more than 15 years old~~.

The reason for this proposal is that it provides a simplification related to our proposal of expanding the scope of the inspection

Article 3:

INFORSE-Europe proposes that it is clarified in the last sentence that the energy performance of a building shall be expressed in a manner that is easy to understand in addition to being transparent.

Article 4:

At the first paragraph it should be clarified that:

- The requirements should be set at a level that will make buildings cost-effective including environmental costs
- The requirements shall be updated to reflect changes in energy costs (using present energy costs) and environmental protection.
- The exemptions (par.3 in art. 4) can be simplified to

-protected buildings and buildings used for religious activities where compliance with requirements would unacceptable alter their character and appearance.
-buildings where the requirements lead to measures that are not cost-effective including environmental costs because of low heating levels or because their intended use is two years or less. For specific sectors energy performance of such buildings can be set in national sectoral agreements.

Article 5:

To strengthen and clarify the text it is proposed that the limit of 1000 m2 is removed for requirements for supply.
To clarify and simplify the text, is proposed that the supply to be considered is:
- district, block or village heating or cooling [the words "if available" is not needed given the requirement of economic feasibility]
- local CHP [to clarify that this is additional to district heating that is often also CHP]
-solar heating supply [the addition of solar heating is important as it is often the most cost-effective local renewable energy option]

Article 7:

In par. 1 INFORSE-Europe proposes that for apartments the certification can be based on a common certification for the whole building. For buildings without a common heating system this should be supplemented with a certificate of the heating system in the apartment. It is thus proposed to delete the option of a representative apartment.
In par. 2 is proposed to add that the information must be presented in a way that is easy to understand for the inhabitants of the buildings. It is further proposed to delete the last sentence (on legal status of certificate) as the information seems unnecessary.

Article 8:

- It is proposed to reduce the limit for inspection of boilers to 5 kW and include renewable energy fuelled boilers.
- It is also proposed to clarify that boiler inspection of boilers below 100 kW must be done at least every 4 year.

It is proposed that the option (b) (no regular inspection) is removed, for simplification and because it seems that regular inspection is the best option.

Article 9:

It is proposed to limit the minimum size of air-conditioning for inspection of 4 kW; but allow longer periods between inspections for systems below 12 kW than for larger systems.

Article 12:

It is proposed that member states have as an obligation to ensure that a system is in place for information to users of buildings regarding the different ways to enhance energy performance of buildings.

Article 14:

To clarify the text, it is proposed that the modalities of the committee are described directly and not only via reference to an older decision. It is also proposed that the committee is open for stakeholders including environmental organisations.

## 2. THRESHOLDS WITHIN THE DIRECTIVE

The obligations of the current Directive on minimum energy performance requirements and inspections respectively cover existing buildings above 1000 m2 total useful floor area that undergo major renovation, and all new buildings, as well as boilers and air-conditioning systems above a certain rated output (in kW) respectively.

Please provide an answer to each of the following questions and, if possible, **justify it by quantifying the environmental, social and economic impact of your proposal.**

2.1. Do you propose that the 1000 m2 total useful floor area threshold for existing buildings that undergo major renovation (article 6 of the Directive) be changed or eliminated?

Yes, INFORSE-Europe proposes that the limit is reduced to 200 m2 or below. We do not know the cost-effective minimum threshold; but for requirements for new building components, the cost-difference is small between installations in large and small buildings.

2.2. Do you propose that the 1000 m2 total useful floor area threshold for the requirements on 'alternative systems' (article 5 of the Directive) and/or on the display of the energy performance certificate (article 7(3) of the Directive) be changed or eliminated?

INFORSE-Europe proposes that the threshold is removed for the requirements on heating supply (art. 5); but not for display of energy performance certificates.

2.3. Do you propose that the thresholds on the rated output of boilers and/or air-conditioning systems subject to regular inspections (article 8 and article 9 of the Directive) be changed or eliminated?

Yes, INFORSE-Europe proposes that the thresholds are limited to 5 kW output for boilers and 4 kW output for air conditioning. The systems below respectively 20 kW

for boilers and 12 kW for air conditioning represent a growing market and with inspections e.g. every 4 years we expect that the potential savings is generally larger than costs of inspections.

## 3. STRENGTHENING OF REQUIREMENTS

The existing Directive gives room for implementation at national/regional levels. Some national, regional or local authorities have laid down requirements which go beyond the Directive's requirements, e.g. on control schemes, link to financial incentives or on the realization of energy efficiency improvement measures.

Please provide an answer to each of the following questions and, if possible, **justify it by quantifying the environmental, social and economic impact of your proposal.**

3.1. Which new/changed requirement(s) or content concerning the energy performance certificate (article 7 of the Directive) do you consider to have a high impact on realizing energy savings in the buildings sector? (Max. 2000 characters)

INFORSE-Europe proposes to extend the labelling requirement, so buildings must have an energy certificate, which is not more than 15 years old. Typically after 15 years new cost-effective energy efficiency technologies has entered the market.

INFORSE-Europe proposes that the recommendations presented with the certificate shall be divided in measures that are cost-effective as individual investments and measures that are cost-effective only as part of a renovation. Many more measures are cost-effective as part of renovation than as individual measures.

The energy performance certificate shall contain clear and visible indicators in order that citizens with no special knowledge about energy can understand it quickly. This could be with the same kind of labelling than for household appliances. This should be completed with more detailed and technical information.

The certificate must be presented when the future tenant or buyer visits the building and not only when the contract is signed. Consequently, the tenant/buyer will really be able to take into account the energy efficiency criteria when choosing a new dwelling. Often the certificate is only presented when the contract is about to be signed, and then the tenant/buyer has already made up his mind. Such measures will make low efficient energy buildings more difficult to sell or rent. Consequently, landlords and sellers will be encouraged to improve their buildings.

Impacts of proposal: All proposals have a positive environmental impact. The proposals for better information for certificates have little extra costs, but will lead to savings and better understanding by users, and thereby to positive social and economic impacts. The requirement of labelling of houses each 15 years will lead to extra costs; but we expect that it will lead to higher savings than costs and therefore positive social and economic impacts. For this it is crucial how labels are presented and which follow-up activities are organised.

3.2. Which new/changed requirement(s) concerning the inspection of boilers (article 8 of the Directive) do you consider to have a high impact on realizing energy savings

in the buildings sector?
(Max. 2000 characters)

An increasing number of boilers are under 20 kW; so it is proposed to extend the regular inspections to boilers of 5 kW and above.
It is proposed to include a maximum duration between regular inspections such as 4 years.
It is proposed to include renewable energy fuelled boilers as well as heat pumps in the inspection scheme. Both biomass boilers and heat pumps can have reduced efficiencies from sub-optimal settings, and from ageing components that can be identified with inspections.

The assessment of the boiler as well as advice regarding the replacement or modification of the boiler to increase its energy efficiency should be given in a report to the user and should include proposed modifications and their estimated costs. This will strengthen the scheme and make the consumers able to better use the results of the inspection to save energy.

Some countries are facing limits of qualified technicians to carry out inspections, risking to f hamper the performance of the inspection scheme. Consequently, training of inspectors should be improved and enlarged This is the duty of the Member States but the European Commission can set some targets and indications.

Impacts of proposals: The proposals will all have positive environmental impacts because of saved energy. The increased reporting will have marginal extra costs. The increased inspections will have increased costs; but we expect that they will lead to higher savings than costs and therefore positive social and economic impacts. For the positive results it is crucial how reports and other information are presented for the users and which follow-up activities are organised to persuade the users to make improvements.

3.3. Which new/changed requirement(s) concerning the inspection of air-conditioning systems (artic le 9 of the Directive) do you consider to have a high impact on realizing energy savings in the buildings sector?
(Max. 2000 characters)

Many air conditioning systems are below 20 kW, so to increase the impact of the scheme it is proposed to extend the requirements for inspections of systems of 4 kW and above, and as far as practical possible of air-conditioning units where there are more than 4 kW-cooling output installed in each apartment of a building. This will cover all apartments with more than one single or two small separate air-conditioning units.
It is proposed to include a maximum duration between regular inspections such as 4 years.
Some countries are facing limits of qualified technicians to carry out inspections. Consequently, training of inspectors should be improved and enlarged This the duty of the Member States but the European Commission can set some targets and indications.

Impacts: The proposals will all have positive environmental impacts because of saved energy. The increased inspections will have increased costs; but we expect that they will lead to higher savings than costs and therefore positive social and economic impacts. For the positive results it is crucial how reports and other information are presented for the users and which follow-up activities are organised to persuade the users to make improvements.

3.4. Due to the complexity and variation of boundary conditions in the 27 Member States (e.g. with regard to the existing buildings stock, outdoor climate conditions, costs of energy, labour and material, taxes, etc.), minimum energy performance requirements are not stipulated at EU level in the existing Directive. They are left for the Member States to define as regards both their definition and parameters instead.
What type of approach do you consider feasible and effective which could be laid down at EU level with regard to minimum energy performance requirements for buildings?
(Max. 2000 characters)

INFORSE-Europe proposes the following ways to improve minimum energy performance requirements of buildings:

- In the directive, in article 4, include that the requirements for energy performance of building are set at a level that will make buildings cost-effective including environmental costs with present energy costs
- Development of indicative European standards and best practices for the different climate zones of EU, towards which member States should tend. Then Members States can evaluate themselves and compare their progression with other countries.
- Public progress reports of Member States on energy performance of buildings in the country and of national implementation of the directive The reports would enable the European Commission and others to check Member States Actions and to understand why some States lag behind (lack of national political incentives or overwhelming difficulties). Thus the Commission would be able to take this element into consideration for the next revision of the directive and in other policies
- Strengthen fora for exchange of best practices between countries including methodology for calculation of the energy performance
- Strengthen fora between professionals from all over Europe on energy performance of buildings, in cooperation with Member States.

3.5. Which other requirement(s) do you consider to need strengthening, and in which way?
(Max. 2000 characters)

- Increase the use of EU funding for increase of energy performance of buildings, including structural funds and European Investment Bank (EIB) instruments. This could include a dedicated EIB building energy fund.
- Regular inspection of ventilation systems, similar to inspections of boilers and air-conditioning.

## 4. THE ROLE OF THE PUBLIC SECTOR

The public sector is often seen as an important actor to raise broad awareness on energy efficiency in buildings and which can therefore also contribute to stimulating energy savings by acting as a leading example.

Please, if possible, **justify your answer by quantifying the environmental, social and economic impact of your proposal.**

Besides the current requirement of the Energy Performance of Buildings Directive for the public sector to display the energy performance certificate in a prominent place:
Do you consider the public sector should play a stronger role to act as a leading example for energy savings in buildings? Yes.

If you think it should, what further requirement(s) would you propose to include in the Directive for the public sector in order to act as a leading example for energy savings in buildings?
(Max. 1000 characters)

Higher standards for public buildings including social housing could save energy and set an example for others. The standards should reflect the cost-effective levels of energy efficiency with energy costs including environmental costs and with the interest and discount rates normally applied in the public sector.

Improved training and education for energy labeling professionals and other building professionals.

Financial incentives, including incentives for realizing of proposals from auditing and inspections. This can be with loans, grants, or a combination.

Some of this is already suggested in the present directive preamble but should be enforced.

Impacts: The proposed higher standards improve environment and social economy. Training and financial incentives will be costs for the public sector; but will improve environment, and, when implemented efficiently, will improve the social economy. Incentives to low-income groups will have positive social effects and reduce "fuel poverty".

## 5. OTHER

5.1. Do you consider that climate adaptation should significantly influence the level of requirements laid down by buildings regulation? ( yes or no question)
Yes.

5.2. Do you propose other aspects/ideas than the aforementioned to be included in the recasting of the Energy Performance of Buildings Directive?

What other requirement(s) do you propose? (Max. 1000 characters)
Please provide an answer and, if possible, **justify it by quantifying the environmental, social and economic impact of your proposal.**

INFORSE-Europe proposes that the requirements (in Article 4) shall be updated to reflect changes in energy costs and environmental protection.
It is important that the countries will maintain their freedom to set more ambitious requirements than required by the EU directive, e.g. to reach climate targets.

It is proposed that member states have as an obligation to ensure that a system is in place for information to users of buildings regarding ways to enhance energy efficiency. This can be done with information from the state, from local authorities, from other stakeholders and from NGOs. The information must be objective and independent from economic interests in sale of energy or equipment. The costs for this information can be from public bodies and/or from a levy on energy sales.
An independent representation of users should be legally integrated in the decision-making bodies, in order to participate to any policy change concerning the buildings sectors and the energy regulation.