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**Summary of the Impact Assessment
accompanying the Proposal for a Directive of
the European Parliament and of the Council on industrial emissions (integrated
pollution prevention and control) (Recast)**

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Summary of the Impact Assessment accompanying the Proposal for a Directive of the European Parliament and of the Council on industrial emissions (integrated pollution prevention and control)

1. POLICY CONTEXT, PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

IPPC and the body of legislation on industrial emissions play a significant role in the protection and improvement of the European environment and the health of its citizens. However it also has a role to play in addressing the calls from the Member States, the European Parliament and other stakeholders for "Better Regulation." Consequently the Commission launched in 2005¹ a review of the body of legislation on industrial emissions in order to ensure its environmental and cost-effectiveness.

The review is based on an extensive programme of ten studies and continuous, inclusive and structured consultation with stakeholders. A detailed options analysis has been carried out and all background information is available on a public CIRCA web site².

2. BACKGROUND INFORMATION ON INDUSTRIAL EMISSIONS AND BEST AVAILABLE TECHNIQUES

Industrial activities play an important role in the economic well-being of Europe, contributing to sustainable growth and providing high quality jobs. However, industrial activities also have a significant impact on the environment.

The largest industrial installations account for a considerable share of total emissions of key atmospheric pollutants (83% for sulphur dioxide (SO₂), 34% for oxides of nitrogen (NO_x), 43% for dust and 55% for volatile organic compounds (VOC)). They also have other important environmental impacts, including emissions to water and soil, generation of waste and the use of energy.

Emissions from industrial installations are covered by the following main pieces of legislation:

- Directive 96/61/EC concerning integrated pollution prevention and control³ (IPPC) sets out the main principles for the permitting and control of installations based on an integrated approach and the application of best available techniques

¹ COM(2005) 540final
² http://circa.europa.eu/Public/irc/env/ippc_rev/library
³ OJ L 257, 10.10.1996, p. 26

(BAT) which are the most effective techniques to achieve a high level of environmental protection, taking into account the costs and benefits.

- The so-called sectoral directives that lay down specific provisions, including minimum emission limit values for certain industrial activities (large combustion plants, waste incineration, activities using organic solvent and titanium dioxide production).

The IPPC Directive gives a degree of flexibility to the implementation of BAT, as geographical, technical and environmental considerations can be taken into account when setting conditions for permits.

To help the licensing authorities and operators to determine BAT, the Commission organises an exchange of information between experts from the EU Member States, industry and environmental organisations. This results in the adoption and publication by the Commission of BAT Reference Documents (BREFs).

The review process has demonstrated that the key principles of the current IPPC directive, in particular the integrated approach based on BAT, remain a sound basis for the future development of legislation on industrial emissions. The benefits of applying BAT have been confirmed by the Impact Assessment and the option of abandoning the BAT principle has therefore not been pursued.

However, there are significant shortcomings in the implementation of the current legislation that hinder the full exploitation of best available techniques originally intended by the Directive, that make enforcement at Community level very difficult and that are not conducive to the prevention or reduction of unnecessary administrative burden.

3. GENERAL PROBLEM DEFINITION AND OBJECTIVES

General problem definition

Since coming into force, several problems with the implementation of the legislation have become apparent. The extensive analysis carried out as part of the review process led to the identification of four specific problems:

- Insufficient implementation of BAT. The analysis shows that without further emission reduction from IPPC installations, the positive health and environmental effects that are to be obtained from the objectives set in the Thematic Strategy on Air Pollution (TSAP) will not materialise and distortion of competition will continue.
- Limitations with regard to compliance, enforcement and environmental improvements that hinder environmental protection.
- Unnecessary administrative burdens due to the complexity and inconsistency of parts of the current legal framework.

- Insufficient scope and unclear provisions of the current IPPC Directive that could hinder the achievement of the objectives set in the Commission's Thematic Strategies.

A further problem identified was that of constraint on the use of more flexible instruments such as NO_x and SO₂ emission trading systems. This issue will be further explored in a separate process to the Directive revision, but is included within the impact assessment in order to demonstrate the potential benefits of such measures.

Objectives

The overall objective remains the prevention and control of pollution and its impacts arising from industrial activities to achieve a high level of protection of human health and the environment. This should be achieved in the most cost-effective and efficient way whilst ensuring the reduction of unnecessary administrative burdens.

Within the context of this continuing objective, further action is needed to address the four problem areas outlined above.

- (1) Support Member States in implementing BAT-based permitting
- (2) Strengthen compliance and increase environmental improvements while stimulating innovation
- (3) Cut unnecessary administrative burden and simplify current legislation
- (4) Better contribute to the objectives of the Thematic Strategies by reviewing the current scope and provisions of the IPPC Directive

The Impact Assessment contains four chapters addressing these issues in detail. A further fifth chapter considers the possible future use of IPPC-compatible market based instruments. The synergies and linkages between the various objectives and options have been carefully assessed throughout the whole Impact Assessment (IA). The summary below reflects this structure.

4. SUPPORT MEMBER STATES IN IMPLEMENTING BAT-BASED PERMITTING

Specific problem definition

Vague provisions on BAT, the large degree of flexibility left for competent authorities to deviate from it in the permitting process and the unclear role of the BREFs have led to significant differences in the uptake of BAT across the EU. This lack of legal clarity has also hampered Community enforcement actions. The main shortcomings in implementation are:

- Permits issued for implementing the IPPC Directive often include conditions that are not based on BAT as described in the BREFs with little, if any, justification for such deviation.

- Minimum requirements of the sectoral Directives are often used as default emission limits for IPPC permits, disregarding existing legal requirements. This is a problem in particular for Large Combustion Plants (LCP) that contribute significantly to the EU-wide emissions of key air pollutants such as SO₂ (~ 80% of total emissions) and NO_x (~30% of total emissions).

As a result, IPPC is failing to deliver the benefits originally intended, whilst allowing distortions in the internal market. Member States projected air emissions will greatly exceed the 2020 targets associated with the objectives of the TSAP if no further action is taken and consequently measures to implement BAT in IPPC installations are necessary in order to rectify this situation.

Analysis of options

Nine options have been assessed to determine how effectively they tackle the issues identified taking full account of the costs and benefits. The following options are recommended.

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| Role of BAT : strengthen and clarify the concept and use of BAT, increase transparency by requiring that the use of flexibility must be justified and documented |
| Use of sectoral Emission Limit Values (ELVs) versus BAT : strengthen existing minimum requirements in certain sectors (LCP, certain cement kilns co-incinerating waste, titanium dioxide) |
| Status of BREF process : to improve collection of data and increase consistency between data formats used in the BAT reference documents and the permit |

Some of the main impacts of these options are:

- Significant improvement in Member States' performance in basing permit decisions on BAT taking into account the costs and benefits, and improvement in the scope of information in future BREFs.
- Calculated health and environmental benefits from enhanced take up of BAT that would greatly exceed the costs for installations to comply with the Directive. The benefits depend on the current performance of BAT-based permitting for a region or sector; for example, for LCP the EU-wide net benefits would be € 7 - 28 billion per year including the reduction of premature deaths / years of life lost by 13,000 and 125,000 respectively (excluding any additional environmental benefits such as reduced eutrophication and acidification).
- A reduction in the gap between Member States predicted emissions and the agreed TSAP objectives for 2020 by 30-70 % from LCP.
- No significant long-term impacts on competitiveness, social impacts or detrimental long-term effects on economic growth have been identified given possible flexibility in well-founded and documented cases. Instead the analysis shows that a more unified application of BAT would help reduce distortion of competition in the industry sectors covered by the Directive.

5. STRENGTHEN COMPLIANCE AND INCREASE ENVIRONMENTAL IMPROVEMENTS, WHILE STIMULATING INNOVATION

Specific problem definition

The provisions in the current legal framework on compliance reporting, inspections and permit reviews are vague resulting in large variations between Member States in the application of the legislation, and consequent sub-optimal levels of environmental protection and distortion of the internal market. Furthermore IPPC needs to provide greater incentives for stimulating innovation.

Analysis of options

Eighteen specific options were assessed to see how they support the implementation and enforcement of the legislation while striking a balance between benefits and costs leading to the following recommendations:

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| Inspection, reporting on compliance, permit review: introduce clear requirements whilst giving Member States some flexibility in approach as long as minimum criteria are met |
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| Innovation: facilitate continuous improvement by increasing IPPC's impacts on innovation |
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Some of the main impacts of these options are the following:

- Help in securing and, in certain cases, speeding up implementation of BAT thereby contributing to the achievement of the objectives of the Thematic Strategies and reducing distortion of competition.
- Positive environmental, economic and social benefits from the stimulation of innovation and the possibility of developing lead markets.
- The achievement of additional health and environmental benefits incurring necessary administrative costs of around €40m per year, 65% of which would be borne by Member States authorities.

6. CUT UNNECESSARY ADMINISTRATIVE BURDEN AND SIMPLIFY CURRENT LEGISLATION

Specific problem definition

Current legislation on industrial pollution is complex and sometimes inconsistent leading to the following problems:

- Authorities and operators may have difficulties in understanding and interpreting the different pieces of legislation, with the result that implementation is incomplete and ineffective.
- Some existing requirements, such as those on permitting and reporting, are misaligned and/or overlap leading to unnecessary administrative burden.

Analysis of options

Ten specific options have been assessed against increasing legal clarity and improving implementation whilst cutting unnecessary administrative costs. The following options are recommended:

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| Addressing inconsistency in multiple Directives: merge, by means of a recast, the IPPC Directive and six sectoral Directives into a single Directive on industrial emissions |
| Reducing costs of IPPC permitting and reporting: introduce changes in the legislation to simplify permitting, reduce reporting by operators, introduce Action Programmes to support Member States in reducing unnecessary administrative costs, streamline reporting by Member States. |

A single Directive on industrial emissions will provide a clear, coherent and simplified legal framework with the following main impacts:

- Elimination of unnecessary administrative burdens of about €30m/year through combined permitting and €2m/year through streamlined reporting and monitoring.
- Improved uptake of BAT through clarification of the interaction with sectoral minimum requirements.
- Significant administrative costs reduction at Member State level (estimated to be in the order of €150-300m/year) as most opportunities to cut administrative burden are found at the national or regional level.

7. BETTER CONTRIBUTE TO THE OBJECTIVES OF THE THEMATIC STRATEGIES BY REVIEWING THE CURRENT SCOPE AND PROVISIONS OF THE IPPC DIRECTIVE

Specific problem definition

Applied properly, the IPPC Directive is a cost-effective way of regulating industrial pollution and reducing emissions. The review analysed where a clarification or extension of the scope of IPPC would contribute to such reductions.

Analysis of options

A wide range of options (considering inclusion of 17 different activities and provisions on soil contamination) have been analysed in terms of their benefits and their cost-effectiveness for achieving existing targets. The main recommended options are:

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| Inclusion of Combustion installations between 20 and 50 MW |
| Inclusion of Industrial plants for the preservation of wood and wood products |
| Inclusion of Production of wood based panels |

For several other activities, the analysis has shown that the scope of the legislation should be clarified to address inconsistencies (waste treatment, chemicals, ceramics, and food production).

However, there are also activities (e.g. cattle rearing, certain waste treatment activities, aquaculture) that are deliberately excluded from the Directive owing to limited environmental benefits or excessive costs.

In addition, the introduction of more specific provisions on soil monitoring and remediation are also recommended.

Some of the main impacts are

- Contribution to some key environmental and health objectives (e.g. inclusion of the 20-50 MW combustion installations helps to close the gap between Member States projected industrial emissions and the TSAP objectives by 2 - 6%). The net environmental and health benefits of the inclusion of such combustion installations are estimated to be €732 million to €1.6 billion.
- Inclusion of some 4,400 installations within IPPC (compared to the 52,000 already included) some of which (~33%) are already covered by a BAT-based permitting system in the Member States.
- Provision of a more level playing field for the sectors concerned.
- The environmental benefits achieved would result in an increase in necessary administrative burden of about €37m/year.

8. FACILITATE POSSIBLE FUTURE USE OF IPPC-COMPATIBLE MARKET BASED INSTRUMENTS SUCH AS AN EMISSION TRADING SCHEME FOR NO_x AND SO₂

Specific problem definition

The present IPPC Directive does not allow the use of market based instruments as an alternative to BAT-based permitting. This may limit potential sector-wide cost savings.

Analysis of options

Two main options to facilitate the possible use of market based instruments have been considered. The recommended option is the following:

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| Facilitate use of market based instruments: subject to the adoption of a possible future legal instrument, allow Member States to achieve BAT-based emission levels through an emissions trading system based on EU rules instead of individual BAT-based permit conditions for NO _x and SO ₂ |
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The draft legal proposal does not include text regarding the introduction of emissions trading for SO₂ and NO_x. Instead the Commission will continue its work in view of a possible future legal instrument laying down EU-wide rules on this issue.

This work will include a full analysis of options, including the scope and the allocation of allowances, and will look into potential direct and indirect impacts for economic sectors as well as drawing on the experience from greenhouse gas emissions trading. This has the potential to achieve costs savings compared to BAT permitting of around € 0.3 to € 1 billion per year for LCP alone.

9. CONCLUSIONS ON THE PROPOSED POLICY PACKAGE

Following extensive consultation of stakeholders, the Impact Assessment offers a thorough analysis of a wide range of options.

The proposed single Directive on industrial emissions with all the recommended options of the policy package will improve the efficiency of the legislation in achieving its environmental and health objectives in the most cost-effective way. It will also reduce administrative burden, with an expected net reduction estimated between €105 and 255 million per year, and minimise distortions of competition within the EU without hampering the competitive position of European industry.