

The Changes in Industrial Operations

FINAL REPORT



**IMPEL
NETWORK**

**European Union Network for the Implementation
and Enforcement of Environmental Law**

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FOREWORD

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The network is commonly known as the IMPEL Network

The expertise and experience of the participants within IMPEL make the network uniquely qualified to work on certain of the technical and regulatory aspects of EU environmental legislation. The Network's objective is to create the necessary impetus in the European Community to make progress on ensuring a more effective application of environmental legislation. It promotes the exchange of information and experience and the development of greater consistency of approach in the implementation, application and enforcement of environmental legislation, with special emphasis on Community environmental legislation. It provides a framework for policy makers, environmental inspectors and enforcement officers to exchange ideas, and encourages the development of enforcement structures and best practices.

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This report is the result of a project within the IMPEL Network. The content does not necessarily represent the view of the national administrations or the Commission.

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Research team:*Ms. Marianne Lindström**Ms. Elise Sahivirta**Ms. Jaana Pennanen**Finnish Environment Institute**P.O. Box 140**FIN-00251 Helsinki, Finland**Phone: int. + 358 9 4030 0339**Telefax: int. + 358 9 4030 0391**E-mail: marianne.lindstrom@vyh.fi****Advisory Committee:****Mr. Mika Seppälä**Mr. Jukka Nurmio**Ministry of the Environment**P.O. Box 380**FIN-00131 Helsinki**Phone: int. +358 9 19911**Telefax: int. +358 9 1991 9545**Ms. Emelie Enckell**Uusimaa Regional Environment Centre**P.O.Box 36, FIN-00521 Helsinki FINLAND**Phone: int. + 358 9 1488 81**Telefax: int. + 358 9 1488 8295*

1 Introduction

National environmental legislation and Community legislation stipulate that the requirements for environmental protection are fulfilled before industrial operations can be started up. In practice, a permit, a notice or an equivalent decision by a competent authority is used to control the operations. Industrial operations though are not static, changes in operation may occur frequently. When a change occurs, the original permit may no longer be valid. Therefore, national and Community legislation also have provisions that control changes in operation.

The IPPC directive (Directive on Integrated Pollution Prevention and Control, 96/61/EC) requires that the competent authority is responsible for regulating changes in operation. Article 2 (10) (a) and (b) of the directive defines two types of change - change in operation and substantial change. In accordance with Article 12 (1), all changes in operation of the installation that may affect the environment require the competent authority to take action, if necessary by updating the permit or the conditions. Moreover, in accordance with Article 12 (2), a permit is required for a substantial change. The permit application must cover the affected parts of the installation. Member States use different mechanisms for regulating changes in operation. Additionally, the authorities' interpretations vary concerning the extent of the changes in operations.

This is the final report of the IMPEL Network Project "Changes in Industrial Operations". The aim of the project was to provide a basic insight into the practices of authorities responsible for controlling changes in operation from the point of view of environmental protection. The project was useful in clarifying the legislative demands of each of the participating Member State and showing how these demands and requirements are interpreted by different authorities. The overall objective was to find out what is good practice in supervision and control of changes in industrial operations, by focussing on the practice of authorities handling these changes.

A two-step process was used to get the needed information. First, a draft comprehensive questionnaire concerning changes in industrial operations was prepared and sent out for comments to the Member States. The comments of the Member States were then incorporated into a final questionnaire that was sent out to all Member States in July 1999. The answers were then analysed. The second step was to hold a seminar to get more in-depth information, where the most problematic questions were discussed, key difficulties were identified and good practices for different situations were agreed on. The seminar was held in Helsinki on the 13th to 14th December 1999.

The questionnaire covered specific topics from the IPPC directive and its implementation in the Member States. In particular the contents of Articles 2 (10) (a) (b) and 12 (1) (2) were looked at. Special attention was also paid to Articles 7, 13 (1) (2) and 15 (1) (2) and to Articles 3 and 5 (1) (2). The aim of the questionnaire was to clarify the similarities and differences between the different Member States in implementation of the IPPC directive and in practices of the authorities supervising and controlling operational changes. Answers to this questionnaire have been provided by the following Member States: Austria, Denmark, Finland, France, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the United Kingdom (Table 0). The evaluation of the questionnaire is presented in Annex I of this report.

The seminar themes were legal bases, application, supervision, change in operation and substantial change. In the seminar different practices in the attending countries were discussed and possible solutions to the problems were suggested and at last good practices for different situations were agreed on. The chairman of the seminar was Mr Mikael Hildén, Division Manager, Environmental Policy Instruments Division, Finnish Environment Institute. The

seminar agenda and the list of participants are presented in Annexes II and III of this report. The seminar report has been sent out to the representatives of the attending countries for comments in January 2000 and their comments have been incorporated into the seminar report and in the final report. The first goal of this comparative report is to provide a summary of the various answers and to address differences and similarities in practice. The other goal is to give practical recommendations to IMPEL regarding voluntary guidelines on how to supervise and control changes in industrial operations that may affect the environment.

The project team consisted of the project manager, Ms Marianne Lindström, Senior Planner, Finnish Environment Institute, and seven project experts: Mr Mika Seppälä and Mr Jukka Nurmio, Legal Advisers, Ministry of the Environment of Finland, Ms Elise Sahivirta and Ms Jaana Pennanen, researchers at the Finnish Environment Institute, Mr Jouko Tuomainen, Senior Researcher, Finnish Environment Institute, Mr Rafael Bärlund, student of political science working at the Finnish Environment Institute, and Ms Emelie Enckell, Chief of the Environmental Protection Division, the Uusimaa Regional Environment Centre.

This report was drafted by Marianne Lindström, Elise Sahivirta and Jaana Pennanen. Ms Lindström is head of the Unit for Effectiveness of Legislation under the Policy Instruments Division at the Finnish Environment Institute. Ms Elise Sahivirta is a legal researcher and Ms Jaana Pennanen is environmental researcher in the same unit. The first draft of this report was sent out for comments in June 2000 to all Member States and to the representatives participating in the seminar. All comments received have been incorporated. We are grateful to all those who contributed to this report by answering the questionnaire, taking part in the seminar and by providing us with comments on the draft report.

This study is set up as follows: first the introduction, then the legal background, the authorities, change in operation and substantial change, right to be heard and right to participate, application for a permit, permanence of a permit and supervision. The last chapter gives some concluding remarks, key difficulties, suggestions for good practice and proposals for further work. The annexes contain the evaluation of the answers to the questionnaire, the seminar agenda and the participants.

2 Legal background

2.1 General issues

This chapter deals with the implementation of the Council Directive 96/61/EC (the IPPC directive) of 24th September 1996 concerning integrated pollution prevention and control in the Member States and the relations between the IPPC directive and other regulations. The IPPC directive entered into force on 30 October 1999. Many, but not all, of the Member States brought their laws, regulations and administrative rules in line with the provisions before this time limit.

The section "legal background" of the questionnaire aimed to find out if national legislation of the Member States needed revision to meet the provisions of the directive. Special attention was given to how the IPPC directive (Art. 12) was implemented in the Member States.

Article 12 of the IPPC directive:

"Changes by operators to installations

1) Member States shall take the necessary measures to ensure that the operator informs the competent authorities of any changes planned in the operation of the installation as referred to in Article 2 (10) (a). Where appropriate, the competent authorities shall update the permit or the conditions.

2) Member States shall take the necessary measures to ensure that no substantial change in the operation of the installation within the meaning of Article 2 (10) (b) planned by the operator is made without a permit issued in accordance with this Directive. The application for a permit and the decision by the competent authority must cover those parts of the installation and those aspects listed in Article 6 that may be affected by the change. The relevant provisions of Articles 3 and 6 to 10 and Article 15 (1), (2) and (4) shall apply mutatis mutandis."

2.2 Implementation of the IPPC directive

2.2.1 Implementation of the IPPC directive in the legislation of the Member States

In the questionnaire it was asked "*Does the IPPC directive require special changes in your national legislation?*" (Table 1). The aim of the question was to find out how much and in which specific ways the IPPC directive has affected the national legislation of each Member State.

The directive has required some changes in the legislation of all the Member States that answered the questionnaire. The measures varied from small amendments to totally new laws. Many of the Member States brought their laws, regulations and administrative rules in line with the provisions before the due date of the IPPC directive. In fact, the directive was, in many cases, taken into account long before the directive itself came into force (e.g. in Ireland). Of the newest Member States (Austria, Sweden and Finland) the effects were most extensive in Finland, where a totally new law, the Environmental Protection Act, was enacted and alterations in over 20 laws were made. With this renewal of the environmental laws, not only the IPPC directive was implemented, but also all the environmental laws concerning polluting activities were collected together under a single comprehensive law.

The changes in legislation the Member States had to make in order to implement the directive concerned various topics, as follows:

- In Austria reconsideration and updating of permit conditions (Art. 13), emission limit values and energy efficiency.
- In Denmark public hearings and revaluation.
- In Finland transition from a sector-oriented approach to an integrated approach, emphasised energy efficiency and a more holistic view on environmental issues, for example.
- In Portugal transition from a sector-oriented approach of the permit conditions (waste water) to an integrated approach.
- In Spain co-ordination between different authorities, and
- In the Netherlands a non-technical summary is now required to be added to the applications.

In general, the implementation of the IPPC directive has resulted in numerous changes and alterations in the national legislation of most Member States, rather than new pollution prevention legislation being created. A factor that stands out is energy efficiency, which is widely emphasised in many Member States.

2.2.2 Implementation of Article 12 of the IPPC directive in the Member States

“How has the IPPC directive been implemented/will be implemented in the Member States, especially Article 12?” (Table 2). The aim was to clarify the previous question and especially to find out how Article 12 of the IPPC directive concerning changes by operators to installations is implemented in each Member State.

The contents of Article 12 were not new in the legislation of the Member States before the directive. For example, in Sweden and France, Article 12 was already covered by the national legislation, in the United Kingdom the directive and Article 12 have been largely introduced by secondary legislation and in Ireland the Environmental Protection Act transposed Article 12 into Irish law long before the directive came into force. Article 12 and the IPPC directive resulted in some, mostly minor, changes. The way in which Article 12 is transposed into legislation varies from a word-by-word adaptation to adapting the reason of the article (*ratio legis*).

2.2.3 Supervisory authority of the changes

“How is the supervision of the above mentioned regulation arranged?” (Table 3). This third question aims to find out, for example, if the same authority could act both as a permit granting authority and as a supervising authority. The results of the questionnaire give the impression that in all Member States that answered the questionnaire the competent authority is the same as the supervisory authority. The results were unclear; thus, the question was discussed further in the seminar and the answers were specified. The question and its problems are handled in detail in section 3.2.3.

2.2.4 The scope of national laws

Annex I of the IPPC directive lists categories of industrial operations that are within the scope of the directive. The list concerns mostly large industry such as energy industries, production and processing of metals and the chemical industry. The next question was if the Member States have the same scope to their legislation as the directive or is the scope wider. *“Are these regulations applied to other plants than those that have been listed in Annex I of the IPPC directive?”* (Table 4).

The IPPC directive is a directive whose purpose and scope is to achieve integrated prevention and control of pollution arising from the activities listed in Annex I. Its legal background, especially Article 130 s (1) of the Treaty, gives Member States the possibility to widen the scope of the directive, for example, to small operations and to create national solutions in its application.

The scope of the directive varies in the different Member States. Some Member States directly apply Annex I of the IPPC directive. From the Member States that answered the questionnaire, Austria, Portugal and Spain are using the same scope as the directive. Other Member States (e.g. Denmark, Finland, France and Sweden) apply the directive also to smaller industry. In Italy the scope is in connection with the EIA and SEVESO directives. The Netherlands replied that there is no legal distinction in Dutch law between an IPPC installation and an other installation that needs a permit.

In the majority of the Member States the scope of application is wider than in Annex I, only two Member States from a total of 12 applied Annex I as such. The size of the plants affected varied from small enterprises to large industry. To give a perspective of the scope in different Member States, for example, the French regulations concern 63 000 plants, of which only about 15 000 fall under the IPPC directive. In Sweden out of approximately 17 000 plants, only about 800 fall under the directive.

In close connection with the question of scope is the question of an installation and its definition. The issue was discussed in the seminar, but not asked in the questionnaire. All of the Member States considered the definition difficult. There is no general rule on how to define an installation. The most relevant factor seems to be a technical and operational connection on the same site. In Austria it is the entity and partly the ownership of the installation that decide the scope. In the Netherlands the interpretation is basically the same, but for ownership to be relevant there has to be a real possibility to affect the decision-making of another company. Often this is the case. While considering the definition of an installation, a technical connection was considered to be relevant in each Member State attending the seminar. The issue of technical connection is decided on a case-by-case basis. The United Kingdom pointed out that although the definition of an existing installation is clear in the directive, Article 12 (2) requires a permit for a substantial change to be in place prior to the change coming into effect. This appears to apply even if it is an existing installation and the change comes into effect prior to 30th October 1999.

2.3 Other regulations concerning change in operation

2.3.1 Supervision systems in permit systems required by other directives

“Have the supervision systems, which correspond to the IPPC directive, been used in the permit systems required by other directives?” (Table 5). The aim of the question was to find out if the Member States have supervision systems required by other directives that are similar to the system required by the IPPC directive. If the Member States have other supervision systems the aim was to find how they differ from the system required by the IPPC directive.

Three of the Member States (Austria, Finland and Spain) replied that there are no corresponding supervision systems. In most of the answering Member States there were several corresponding supervision systems required by other directives. In Italy the supervision system is based on the decision that all existing plants will be covered by the IPPC directive. Substantial changes and new installations will apply to EIA competent authority and, if necessary to the EIA procedure. In the Netherlands the installations that do not fall under the IPPC directive and need a permit in accordance with another EC directive, fall under the same regulations of the Dutch Environmen-

tal Management Act and/or the Pollution of Surface Waters Act. In Portugal similar supervision systems are required according to the directives related to, among others, wastewater, air emissions, waste and noise.

From the answers given one could conclude that industrial operations in most of the Member States need more than one permit to operate and that most Member States have other supervision systems corresponding to the IPPC directive. Only Sweden answered that their new integrated permit system, according to the Environment Code, covers most of the relevant environmental directives.

2.3.2 The concepts of change in operation and substantial change in other permit systems

“Have the concepts of change in operation and substantial change which correspond to the IPPC directive been used in the permit systems required by other directives?” (Table 6). The aim of the question was to clarify if the Member States have other environmental permit systems based on other directives in which the same kind of concepts “change in operation” and “substantial change” are used.

Six Member States (Austria, Ireland, Portugal, Spain, Sweden and the United Kingdom) did not have a similar concept in use in other permit systems required by other directives and six Member States (Denmark, Finland, France, Greece, Italy and the Netherlands) did. The Finnish system changed from 1 March 2000 and the integrated pollution permit system covers most of the relevant directives. Sweden has an integrated permit system, which covers most of the relevant directives.

In the United Kingdom, one of the problematic parts of the IPPC directive and its concepts was considered to be the splitting of changes into two categories, substantial ones and others. In the United Kingdom changes had to be split into three categories to take into account that some changes in operation need a change in permit conditions, whereas, others would not. The United Kingdom has the following categories

- 1) Notification of a change that does not have a significant negative effect on the environment and does not require any changes in the permit conditions.
- 2) A change that does not have significant negative effects on the environment, but requires a change in one or more conditions of the permit.
- 3) A change that meets the definition of substantial change as given in the directive.

In general, in a small majority of the Member States who replied to the questionnaire (seven out of twelve) there are similar concepts of “change” and “substantial change” in other permit systems required by other directives.

2.3.3 Other national environmental permit systems

In many Member States, for industrial operations to be allowed to function, several environmental permits are required. The IPPC directive requires an integrated approach to environmental issues, not necessarily a one permit system as long as the permits and permit procedures are fully co-ordinated.

The question *“Are there other national environmental permit systems in your country that apply to industrial operations which are not based directly on the directives?”* (Table 7) aims to clarify if the Member States have other environmental permit systems not based on directives that affect industrial operations.

The Finnish integrated system came into force on 1 March 2000 (which implemented the IPPC directive) and after that all permits concerning pollution are integrated. There are also other permit systems covering industrial operations, among others, construction permits and permits concerning water construction and permits under the Chemicals Act. Of these permits, the permit required by the Chemicals Act is based on the Seveso directive. The environmental authorities do not give permits for construction.

Nine Member States also regulate their industrial operations through other permit systems than those based on directives. In Greece there is a effluent discharge permit, a waste disposal permit and a toxic waste disposal permit. In the Netherlands a considerable number of installations that need permits are not covered by EC directives. On the other hand, IPPC installations may need, in addition to the environmental permit, other permits such as a construction permit. In Italy permits for emissions to air, discharges to water and for waste management were not based on the IPPC directive at the time the questionnaire was answered.

Portugal, Sweden and the United Kingdom answered that they have no other permit systems than the ones based on the directives. Sweden has an integrated permit system, which covers most of the relevant directives. In general, it can be said that in most of the Member States polluting industrial operations are controlled also by other environmental permit systems than those based on directives. A purely integrated permit system is a rarity.

2.4 Summary of the answers and the discussion in the seminar concerning “legal background”

This section tried to clarify what kind of legal instruments the Member States have in environmental permitting and what are the impacts of the IPPC directive on the legislation concerning polluting industrial operations.

In general, every Member State attending the seminar has had to change its legislation because of the IPPC directive. The implementation situation of the directive varied at the moment the answers were given. Also the influence of the IPPC directive seems to vary. In some countries the influence was very clear and in some not so extensive. This is affected by the fact that the time used by the different Member States to implement the IPPC directive directly or indirectly into their legislation showed a variation of nearly 10 years (according to the answers from 1992 to spring 2000).

In most of the Member States polluting operations cannot be regulated only by methods based on the IPPC directive, also other permits are being required, for example, construction permits and other permits based on national demands. The majority of the Member States do not have a comprehensive permit system, even if the IPPC directive is fully implemented.

According to the answers the changes in operation concerned, for example, energy efficiency, the co-ordination of different authorities, public hearings and other details. One of the most frequently mentioned factors was energy efficiency.

In the seminar many of the Member States discussed the question whether a permit authority can also be a supervising authority. The difficulty in having the same authority as a permit and a supervising authority was widely agreed upon. The lack of manpower in supervision was a problem acknowledged in every Member State. As a minimum criteria for good administration, it was suggested that at least the persons in the authorities dealing with both questions should not be the same. Special attention must be paid to maintaining objectivity, but there are no obstacles to consultation and co-operation between the authorities.

The permit defines the installation (capacity, etc.) on a case-by-case basis. There is no general rule on how to define an installation, and the definition of an installation was considered as

difficult in each Member State attending the seminar. The most relevant factor in defining an installation seems to be a technical and operational connection on the same site. In consideration there are always two aspects, legal aspects (ownership, joint liability, etc.) and the technical and operational one. Basically, the permit defines the installation. It is important to take these aspects into consideration on the same site. The seminar suggested as good practice the evaluation of the whole entity when defining an installation.

3 The Authorities

3.1 General issues

The third topic deals with the competent authorities that grant, change and supervise the environmental permits. Article 7 of the IPPC directive states, that

Integrated approach to issuing permits

“Member States shall take the measures necessary to ensure that the conditions of, and procedure for the grant of, the permit are fully coordinated where more than one competent authority is involved, in order to guarantee an effective integrated approach by all authorities competent for this procedure.”

3.2 Competent authorities in cases of change in operations

3.2.1 Competent authorities in permitting

The IPPC directive does not stipulate how many permit granting authorities a Member State has to have, but it stipulates that the permit has to be fully co-ordinated in cases of several permit granting authorities. According to the preamble of the directive the full co-ordination of the authorisation procedure and conditions between competent authorities makes it possible to achieve the highest practicable level of protection for the environment as a whole. In Article 2 of the directive the concept of a “competent authority” is defined

“Competent authority shall mean the authority or authorities or bodies responsible under the legal provisions of the Member States for carrying out the obligations arising from this Directive.”

The first question in this section was “*How many competent authorities are responsible for granting the permits in cases of change in operations in your country?*” (Table 8). The aim of this question was to find out whether the Member States have chosen the alternative of a single body to handle a case of change in operation and substantial change or if there are several authorities whose work is co-ordinated in permitting.

The IPPC directive does not require one single authority in permitting. The Member States have the opportunity to organise the question of competent authorities according to national interests as long as the co-ordination between different authorities is fully organised.

Most of the Member States (e.g. Finland, France and Sweden) have a system of one competent authority that is responsible for a permit and its changes in a single case. The number and status of possible authorities in each Member State vary, depending on the national legislative and administrative systems. In Finland there is only one authority responsible for granting or changing a certain permit. The authority responsible in each case depends on whether the installation is of great or small environmental importance. In Finland there are, in general, two national level permit authorities besides municipal level authorities. The difficulty in having several competent authorities in the country lies in integrated implementation of the legislation. There have been differences in interpretations of the legislation between different level authorities as well as differences in geographical level. The new environmental protection act in Finland did not solve this problem.

There are also Member States (e.g. the Netherlands, Greece and Spain) that have a system of several competent authorities and one co-ordinating authority in environmental permitting. The Netherlands and Spain have different authorities (Water Boards and National Water Body) in overseeing water decisions. This was also the case in Finland before 1 March 2000.

In Portugal the environmental permit is integrated into a comprehensive permit for an installation that also includes for example, other aspects such as worker safety and electricity. The co-ordinating authority for this comprehensive permit is the regional authority for industry.

In general, most Member States have only one competent authority for a single case, but several authorities that are competent in dealing with the same kind of permit issues in the country. The competence between these authorities is mostly divided on the basis of size and effects of the installation (jurisdiction over the subject matter) and of the geographical location (geographical jurisdiction). In the seminar discussions, co-ordination and negotiations between these different permit granting authorities were seen as necessary and important in order to take an integrated approach and to agree on interpretations in different parts of the country.

3.2.2 Competent authorities in reconsidering and updating a permit

The IPPC directive does not stipulate which authorities are competent to reconsider or update a permit in cases of change in operation and in cases of substantial change. The aim of the question "*Which authorities are competent to reconsider or update a permit in cases of change in operation?*" (Table 9) was to clarify the authorities competent in updating and considering the permit in the different Member States. In addition, the question aims to find out if the competent authorities in these cases are the same as the permit authorities.

Many of the Member States (e.g. Austria, Finland, Portugal and the United Kingdom) answered that in these cases the competent authority is the one originally responsible for the permitting. There seem to be no problems in this respect. A permit granting authority is a natural choice, because of the knowledge it has of the issue.

The number of competent authorities is large and varies a lot in the different Member States. It is also a fact that regional differences exist in all Member States. This might cause regional differences in interpretations, but is not necessarily a problem, because the cases can also vary. In some Member States the permitting administration is centralised and in some decentralised. There is not one single and simple answer as to what is best. They both have advantages and disadvantages. Many countries try actively to minimise the possible problems. Austria holds informal forums for exchange of experience and 1-3 meetings per year. In France, the Ministry provides guidelines and standards for regional authorities.

3.2.3 Competent authorities in supervising

This question tries to clarify "*Which authorities are competent to monitor and control the changed circumstances?*" (Table 10) and if the permit authority can also be a supervisory authority. If this would be the case, do the Member States consider this as problematic.

To the question "*Can a permit authority also be a supervisory authority?*" all the Member States answered yes in the questionnaire. In the seminar the working groups discussed the matter widely and the answers were specified. In many of the Member States the permit authority can, at the present, be a supervisory authority, but not in every case. In Sweden the environmental court cannot be a supervising authority. The county administrative board can be both a permit and a supervisory authority (however never the same unit). In Finland the Environmental Permit Authority has no supervising duties, according to the law. However, the other permit granting authorities, regional environment centres and municipal environmental authorities, can act as supervising authorities.

In Portugal permitting and supervision have no connection and industry is not in favour of local authorities issuing permits. In the Netherlands and Portugal there are different persons for permitting and supervising. In these countries permitting and supervising authorities hold discussions about the current permitting cases. In Austria the situation varies. In Denmark, Finland, France and the United Kingdom usually the same person is both the permitting and supervising authority, a fact that depends on the expertise and resources of the authorities.

All Member States attending the seminar were suffering from a lack of manpower in supervision. This could become problematic if the same person represents both a supervisory and a permit authority.

In general, the conclusion from both the questionnaire and the seminar was that it is not good practice if the same person carries out permitting and supervision tasks, although this is the case in several Member States today.

3.2.4 Co-operation between competent authorities

The question "*How is the co-operation between the competent authorities secured?*" (Table 11) aims to find out how the co-operation between the different authorities is secured. The question concerns co-ordination between the permit granting authorities required under the IPPC directive and co-operation between authorities responsible for permitting and supervising.

According to the answers given in the questionnaire, the majority of the Member States have adopted the one permit authority system. In Member States with a co-ordinated system (e.g. Greece, the Netherlands and Spain) the full co-ordination is arranged through legislation. In Greece the environmental conditions permit is a prerequisite for the operation permit. In Spain the co-ordination between different levels of competent authorities is ensured by legal procedures. In the Netherlands the legislation (the Environmental Protection Act and the Pollution of Surface Waters Act) aims at procedural co-ordination as well as coherence between the contents of both permits. In practice this co-ordination is achieved by sending the applications for both permits simultaneously to both permitting authorities, who consult with each other. The procedure is the same in cases of change in operation.

The methods of ensuring co-operation between the different authorities vary in different Member States. In Finland authorities are active in seminars, in issuing statements and in using the right to appeal. The national level authorities (regional environment centres) are obligated to give guidance to the local level authorities (municipal environmental authorities). Sweden answered that the co-operation is not seen as relevant.

In general, the methods vary but the issue of co-ordination is considered to be important. In the discussions at the seminar the open co-operation between different authorities was seen as both necessary and useful. There was also a need for international co-operation and discussions between the different Member States about the interpretation of the directive.

3.3 Summary of the answers and the discussion in the seminar concerning "the authorities"

In some countries the permitting administration is centralised and in other countries decentralised. To centralise or decentralise is a question to which there is no single correct answer, as both have advantages and disadvantages. Guidance and networks are particularly important in a decentralised permitting and inspection system.

In the seminar the issue of regional differences was widely discussed. It was recognised that regional differences exist in all Member States. In this respect guidance on interpretation of the legislation was considered as necessary. Especially if legal decisions are made on a case-by-case

basis, the interpretations may vary too much and the reliability and predictability of the authorities' decisions may suffer. The need for more equity was recognised in all opinions given at the seminar. Additionally, exchange of information, as in the IMPEL network, between authorities on a national and international level was recognised to be useful, because each country's experiences benefits all parties. In general, guidance and networks are needed to minimise regional differences.

The same person should not be responsible for issuing permits and for supervision although this is the case in several Member States today. This is also unsatisfactory from an environmental protection point of view and does not help in creating objectivity. A sufficient personnel for supervision and permitting is a necessity for good practice. If the permit authority is also the supervising authority, the persons charged with the responsibilities should not be the same, and special attention has to be paid to the tasks so that objectivity is maintained. Networks between the authorities though were generally considered to be very useful, especially in order to minimise regional differences.

Information about the interpretations of the directive in other Member States was also seen as useful.

4 Change in operation

4.1 General issues

This topic deals with the definition and assessment of a change in operation and the inspection procedure in these circumstances. In accordance with Article 2 (10)(a)

"Change in operation shall mean a change in the nature or functioning, or an extension, of the installation which may have consequences for the environment."

Furthermore in accordance with Article 12 (1)

"Member States shall take the necessary measures to ensure that the operator informs the competent authorities of any changes planned in the operation of the installation as referred in Article 2 (10)(a). Where appropriate, the competent authorities shall update the permit or the conditions."

4.2 Definition and assessment of a change in operation

4.2.1 Definition of a change in operation

"How is change in operation defined in your legislation?" (Table 12). The aim of this question was to find out if Member States have specially defined a "change in operation" in their national legislation and also to show how many differences or similarities there are between the countries. The question clarifies if the definition of a change in operation corresponds directly to the definition of Article 2 (10)(a), or if there are national definitions that differ from it. The issue is important because the IPPC directive obliges the operator to inform the competent authorities of any change in operation of the installation.

The answers point out that some of the Member States use exactly the same definition as in the IPPC directive, while in two-thirds of the Member States there are some minor differences as to the meaning of the concept. In Italy, Portugal and the United Kingdom the definition seems to be exactly the same as in Article 2 (10)(a). In the United Kingdom some changes of operation need a change in permit conditions whereas others would not. Furthermore, Austria is planning to use the same definition as the IPPC directive.

In the Netherlands the concept as such is not defined. In the new Dutch legislation three kinds of changes of operation are distinguished. In Denmark a change in operation is not defined as such, but a change that results in increased pollution requires an approval by the authorities. In Spain the definition corresponds to Article 2 (10)(a), but also effects on safety and human health have been taken into consideration. In the Finnish legislation there is no explicit definition.

In general, some Member States have adopted the definition of a change in operation straight from the IPPC directive. Others have slightly modified the concept of the IPPC directive according to national requirements. Some Member States have not defined the concept of a change in operation at all according to the IPPC directive. No one of these approaches is more used than the others.

4.2.2 Changes in operation that need notification

"What kind of changes in operation must the operator notify to the authority in the way that Article 12 requires?" The aim of this question was to clarify how the limit of a change in

operation has been defined in Member States. The question is important because the IPPC directive requires that the competent authority have to be informed of any changes planned in the operation. The questions are "what kind of change crosses the threshold of notification" and "can discretionary decision be made when the authority assesses the need of notification". Also of interest is "what kind of change can cross the threshold itself" and "could the interaction between two or more changes necessitate notification".

The questionnaire gave nine alternatives of changes in operation: change in process, change in capacity, change in volume of production, increase or decrease in emissions, change in raw materials/chemicals used, increase in accident risk, increased storage of dangerous materials, expansion of installation and other changes. The Member States were asked if the operator must notify the authority of these changes.

The results of the questionnaire show that almost all of the Member States make the decision on a case-by-case basis. The authorities make a discretionary decision when they assess the need of a permit and there is no threshold value that authorities have to follow (Austria, Denmark, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the United Kingdom). In these Member States most of the changes mentioned may require notification and in Austria, even changes that do not increase emission. In Sweden authorities have to be notified of all changes in operation.

In the Netherlands no distinction is made between substantial and non-substantial changes. In the new Dutch legislation, which enters into force on 1 October 2000, changes in operations that are not fully in accordance with the permit may lead to either a notification or an amendment of the permit. If emission limits in the permit are exceeded an application for amendment of the permit is needed. If not, a prior written notification may - if some other criteria are met - be sufficient. One of these criteria is that the change is made according to BAT. When this is not the case, the permitting authority may not accept a notification. In the answers of the Member States it was hard to identify those changes which when taken together need notification. In many countries each change can be considered individually and can be important in itself.

In Denmark there is no notification system because most changes in operation need a permit. In France, in most cases, the authorities make a discretionary decision when they assess the need for notification. Notification of changes in data given in the register is mandatory (change in capacity, increase or decrease in emissions and increased storage of dangerous materials).

In Greece authorities also need to be notified of complaints about serious pollution problems. In Ireland a change in emission or type of emission currently triggers a review. The Netherlands pointed out that an increase or a decrease in emissions or an increase in accident risk are only indications of changes in operation but are not as such cause for notification. In Spain there are threshold values for the industrial activities mentioned in Annex I of the IPPC directive and the change in the volume of production does not need a notification. In Sweden most of these changes require a notification or a new permit provided that the change is not covered by the scope of the existing permit. In the United Kingdom authorities need to be notified of any change that may have consequences for the environment.

In Finland the practice is that the competent authority is notified of a change of 10 to 20 percent in capacity (depending on the activity). A discretionary decision depends on quality and quantity. Other changes, for example, in wastes or production breaks also require notification in Finland. The notification procedure varies with the industrial activity. Rather small changes in waste treatment plants and VOC plants may trigger a notification procedure more easily than changes in power plants and asphalt plants, because of the increased risks to health and the environment.

4.3 Procedure in cases of change in operation

4.3.1 Operators' obligations to inform the authorities

The aim of the question "*What measures are required from the operator in order to inform the authority of a change in operation?*" (Table 13) was to clarify how Member States have ensured that the competent authority will be informed of changes planned in the operation. Of interest is also what kind of information the authority requires.

In most of the Member States the practice is that the operator reports to the competent authority by notification (Table 12). In some of the Member States a notification is sufficient if the change is minor but a major change may require a permit application. Usually the notification should contain some kind of justification for the change and an evaluation of the expected consequences (e.g. Finland, the Netherlands, Portugal and Sweden). In Ireland and in the Netherlands the information should be similar to the requirements for a permit application.

The responses of Finland, Sweden and the United Kingdom showed that either the competent authority shall be notified or a permit application shall be required. In Sweden a notification is sufficient if the change is minor and no detriment of significance to human health or the environment is foreseen. In other cases a permit application is required (see Table 13). In the United Kingdom a permit application is required if a change in permit conditions is needed. Otherwise only a notification is required.

In Denmark the procedure is tighter than in other Member States. In Denmark it is illegal to start a new activity without a permit and to make changes that increase pollution. As a result, no notification is required.

The practice in most Member States is that the operator should report to the competent authority by notification. In some of the Member States a notification is sufficient if the change is minor but a major change may require a permit application. Apart from that there are Member States where a notification is required, but it should contain the same documents as a permit application in these cases. Even tighter procedures exist (a permit is always required), but they are exceptions. Usually the notification should contain some kind of justification of the change and an evaluation of the expected consequences.

4.3.2 Authorities' control of a change in operation

The aim of the question "*What measures are required from the authority to control a change in operation?*" (Table 14 and Figure 1) was to find out the inspection practices of authorities in cases of change in operation. The answers gave the impression that the practices differ somewhat in different Member States but not remarkably.

Checking a permit, changing the permit conditions, inspecting a plant and informing the operator that a new permit is needed are widely used measures in the Member States when the authority controls a change in operation. In different Member States different combinations of these measures are being used. In some of the countries these measures are not required, but the competent authority can take these actions if necessary.

Some Member States also have other measures in use. In Austria the notification has to be confirmed in writing by the authority. In Finland the authorities negotiate with the operator if further information and investigations are needed. In the Netherlands in any "normal" case, the authority gives a public notice of the notification. In Sweden the issuing of recommendations or orders to take precautionary measures are used as well.

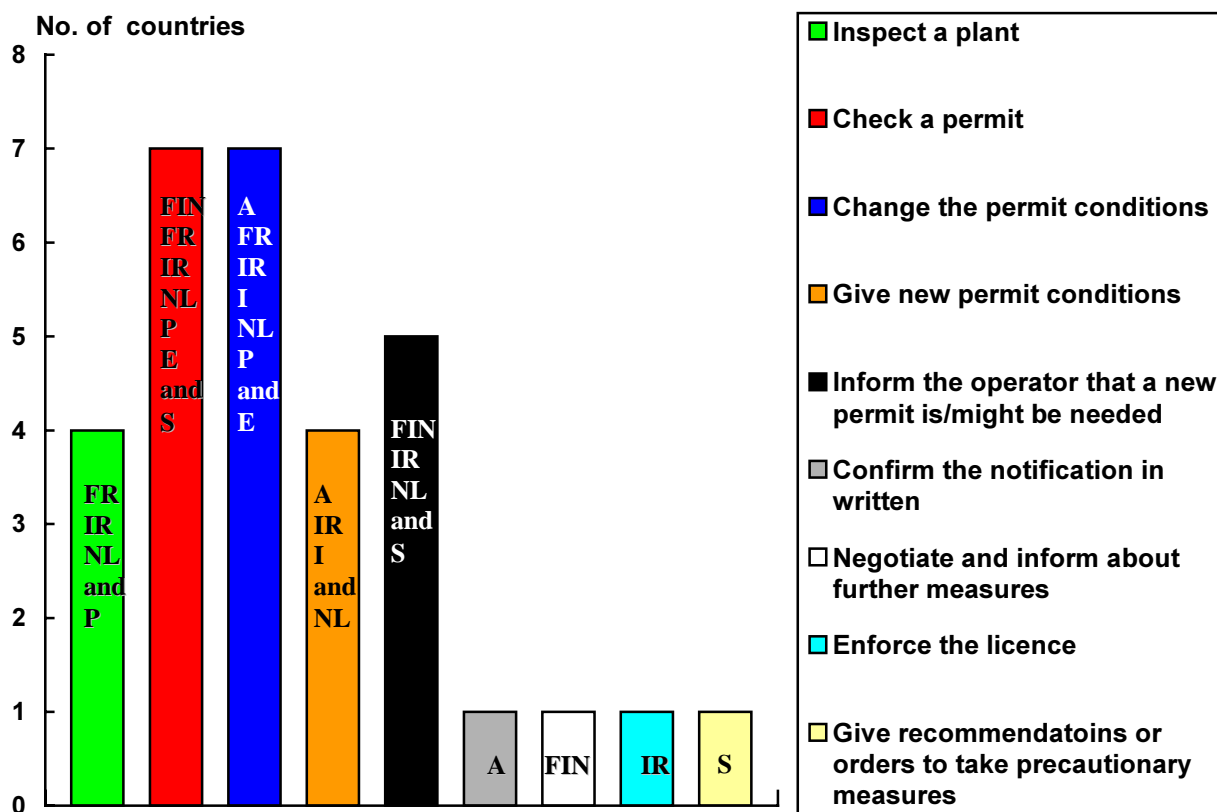


Figure 1: What measures are required from the authority to control the change in operation?

4.3.3 Change before the authority's approval

"Can the operator begin the change before these measures have been completed?" (Table 15). Almost all the Member States answered "no" to this question. In Austria and in the Netherlands the authority has to respond to a notification within a time limit. According to a new Dutch law the time limit is six weeks. In Spain, consideration is on a case-by-case basis.

Exceptions were provided by Finland, the United Kingdom and Sweden. In Finland a change cannot be made if the authorities have not approved it. However, in practice there are situations where the operator fails to notify authorities of a change, because the operator is not always aware that notification is needed. Therefore the notification is often demanded when the change already has been made. The United Kingdom pointed out that the operator can start building a change, but cannot start to operate until the authorities have approved it. It would be at the operator's own risk. In Sweden and in Portugal the practice in this case differs from that in other Member States. In Sweden the operator is allowed to operate before the authorities have checked the permit and issued recommendations or orders to take precautionary measures if the change only requires a notification. The operator could start the operation in this situation at his own risk.

4.4 Summary of the answers and discussion in the seminar concerning “the change in operation”

In addition to what has been said before, the answers to the questionnaire could be summarised as follows. In general, it is difficult to define a change in operation in practice no matter how precisely it is expressed in the legislation. It is even difficult to estimate when a change in operation can be said to occur or when a change is so significant that it can be called a substantial change. A case-by-case assessment should always be done.

The seminar participants also discussed how, little by little, several minor changes requiring notification can create a situation where the original permit has been completely altered and, effectively, several minor changes have led to a substantial change. Such a change would have been recognised as substantial and would have needed to go through the permit process. This is quite a problematic part of the notification procedure. Some Member States have solved this problem by creating an environmental reporting system, where once a year the situation is checked as a whole.

Almost all the Member States demand at least a notification in cases of a change in operation, and eventually this notification can become part of the permit. Therefore, a notification process is a formal and binding process in most of the countries. Under the Netherlands' new law, changes with adverse effects that are fully in accordance with the permit can be implemented without any procedure. Instead, a notification procedure is applicable when a change not only has adverse effects but also violates some permit requirements.

Some examples of less obvious changes in operation that require notification were pointed out in the seminar: waste water treatment plant, increase in risk, changing of chemicals, changing of fuels and change in self-monitoring. New permit conditions may also be justified when harmful discharges or emissions are reduced. Authorities should also be notified of an increase in energy consumption, because this is usually connected with, for example, a change in capacity or process.

If the change in operation concerns a new raw material it is very likely that alterations to the permit will be required. A notification is sufficient only if the change is minor and no detriment of significance to human health or the environment will arise (Sweden).

The practice in the Member States also varies between small and large operations. Small operators may not always be aware of their obligation to inform the authorities about changes. In these cases a good practice for the authority would be to start with a gentle approach (advice), after which harder measures could follow (e.g. admonition).

In practice there is no general rule on how to handle changes in less obvious cases. Decisions are generally made on a case-by-case basis in all Member States.

5 Substantial change

5.1 General issues

The various questions under topic five relate to the definition and appraisal of a substantial change in operation, the procedure in these cases and the reconsideration of permit conditions. In accordance with Article 2 (10)(b),

"Substantial change shall mean a change in operation which, in the opinion of the competent authority, may have significant negative effects on human beings or the environment."

Furthermore in accordance with Article 12 (2)

"Member States shall take the necessary measures to ensure that no substantial change in the operation of the installation within the meaning of Article 2 (10)(b) planned by the operator is made without a permit issued in accordance with this Directive."

5.2 Definition of substantial change

5.2.1 The concept of substantial change

"How is substantial change defined in the legislation in your country?" (Table 16). The aim of the question was to find out whether the Member States have defined "substantial change" in their legislation or whether in practice they take a case-by-case approach and have some other methods to define "substantial change". Also of interest was whether any guidelines were given to the authorities to define the concept.

According to the answers in the questionnaire and the discussions in the seminar working groups, the question of defining substantial change gives rise to contradictions. It seems that there are definitions, but not explicit ones.

It was stated in the seminar that there is no exact definition of substantial change in use in the Member States. Conclusions from the questionnaire were that some Member States (e.g. Italy, Portugal and the United Kingdom) have a definition, but perhaps not an exact one. Italy and the United Kingdom define substantial change according to the IPPC directive. The definition in the Portuguese legislation is a change of the characteristics of the operation or an expansion of the installation, which may have significant negative effects on human beings or the environment namely by increasing emissions or creating new sources of emissions.

In Denmark and in Sweden the concept does not seem to be of great importance. In Sweden there is no need to define it because the requirements for a change in operation have a much broader scope and in Denmark the concept is important in deciding whether a public hearing is needed or not. In the Netherlands there is no distinction between substantial or non-substantial changes.

In Greece there is no explicit definition. In the United Kingdom ministry gives guidance in defining substantial change, but, in the end, considerations are made case-by-case, based on environmental effects. France, Italy and Spain are preparing instructions to the authorities on how to assess substantial change. In Finland the new Environmental Protection Act has a definition that corresponds to the definition of Article 2 (10)(b) as well as covers partly the definition of a change in operation.

The definition of “environment” was discussed in the seminar and the concept was generally noted as important while evaluating and defining substantial change. Some of the participants pointed out that there are no distinct or clear rules in evaluating substantial change and the concept of “the environment”. According to the opinions of some participants in the seminar the evaluation should include also, among other things, cultural heritage and landscapes. In France “conservation of sites and monuments” is taken into consideration while evaluating a change. The working group discussed the issue but did not agree on a general recommendation on the matter.

In the seminar the working groups also discussed, in connection with the question of the definition of substantial change, matters concerning changes in processes, changes in capacity and changes in raw materials. Changes in raw materials were always considered to be a substantial change, even if the environmental effects would decrease, because the original permit could no longer be followed. Capacity and traffic were identified as very important factors in assessing whether there was substantial change.

Capacity: In the United Kingdom a change is considered as substantial if the effects on the environment are increased by more than 2% (the increase in capacity does not matter). France also uses numerical methods. France has a 10% rule for emissions of pollutants (but it can also be a capacity). Italy has recently implemented the IPPC directive and considers matter on a case-by-case basis. In Finland a 20% increase in capacity is normally considered a substantial change although the practice may vary between different authorities (20% is not based on law but on practice). Portugal has a law-based rule of 25% and in Portugal permits can have a fixed capacity. All countries referred to the plant capacity in the permit. Few, if any, countries fixed the capacity in the permit conditions. In Finland, permit conditions for fish farms are in some cases fixed to capacity. In the United Kingdom the changes in the effects on the environment are evaluated, capacity does not have any weight in the consideration. In France a decrease in capacity can also be viewed as a substantial change.

Traffic: The working group also discussed whether questions about traffic ought to be evaluated while considering substantial change. There was no general rule on this and the interpretation varied in the different Member States. In the United Kingdom traffic is not estimated in cases of substantial change (estimating traffic belongs to planning). In the Netherlands the traffic may be included in a IPPC permit. However, court rulings are not quite clear yet about the scope of possible traffic requirements in the permit. In France traffic is considered in the context with substantial change and the authorities have the right to order the operator to choose, for example, a different route to the site. Traffic can also be a reason to deny a permit. This is not based on the IPPC directive, but on national legislation.

In Finland the environmental authorities are generally against evaluating traffic as a part of the permit, at least in the case of public roads and routes not belonging to the site. In evaluations made in accordance with the new legislation, which implements the IPPC directive (since 1.3.2000), the question is not so clear yet. Many of the permit authorities see a possibility of including the estimation of traffic in the concept of substantial change. There are no specific provisions for the matter in the legislation. Only in practice will the interpretation become clearer.

5.3 Assessment of substantial change

5.3.1 Assessing the concept of substantial change

“Has the interpretation of the EIA directive Article 3, concerning effects on human beings and environment, been used when assessing the concept of substantial change?” (Table 17). In other words, have the Member States used the definition of substantial change in the EIA directive

when defining substantial change in the implementation of the IPPC directive. Also of interest was whether the Member States differed in their interpretations of substantial change, as defined in the two directives.

In the EIA directive Article 3 defines a substantial change

"The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 11, the direct and indirect effects of a project on the following factors:

- Human beings, fauna and flora;*
- Soil, water, air, climate and the landscape;*
- Material assets and the cultural heritage;*
- The interaction between the factors mentioned in the first, second and third indents."*

In the questionnaire responses five of the Member States (France, Greece, Italy, Portugal and Spain) stated that they have used the definition of substantial change in the EIA directive when assessing the concept of substantial change in the IPPC directive. In France and Italy there are no differences in the interpretations of the two directives. (See also the discussion concerning different EU instruments in 5.2.1.). France pointed out that, for example, conservation of monuments and sites is taken into consideration when defining substantial change, which is not the case in many other Member States. Portugal pointed out that the criteria of the EIA directive could be a useful tool in defining concept of substantial change under the IPPC directive. In cases that fall within the scope of the two directives a screening phase can contribute to the efficiency of the decision.

Of the Member States answering the questionnaire, Austria, Ireland, the Netherlands, Sweden and the United Kingdom have not used the definition in the EIA directive when defining substantial change under the IPPC directive. The United Kingdom pointed out that the interpretation has not been transposed directly into the regulations, but similar criteria are used by the Competent Authority.

Denmark did not answer the question. In Finland the EIA directive is applied only in large operations and to large projects. Additionally, the scope of the IPPC directive is wider in Finland and the threshold for the EIA directive is higher than for a permit.

5.3.2 Significant negative effects on human beings or the environment

The IPPC directive defines substantial change as

"A change in operation which, in the opinion of the competent authority, may have significant negative effects on human beings or the environment."

The question *"What are, according to the opinion of the authorities, significant negative effects on human beings or the environment (Article 2(10)(b))?"* (Table 18) was aimed at determining whether these negative effects have been specially defined in the Member States, or are they considered case-by-case by the competent authority (Figure 2). Of additional interest was, what these specific criteria would be, if there is some.

No. of countries

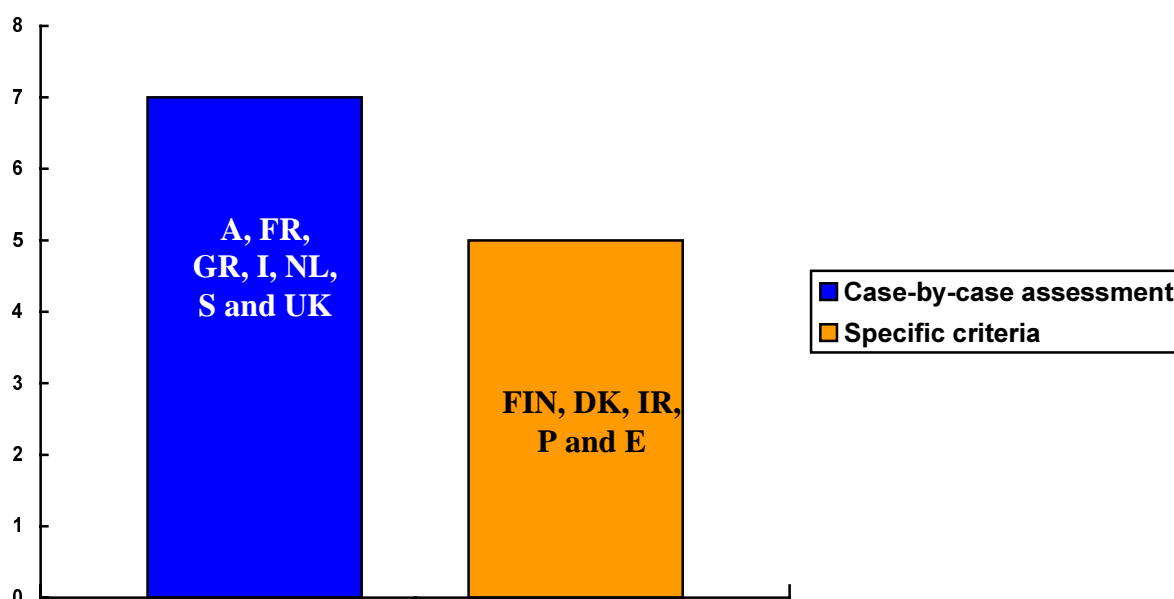


Figure 2: Do you have specific criteria for assessing significant negative effects on human beings or the environment?

In the answers given in the questionnaire, Austria, France, Greece, Italy, the Netherlands, Sweden and the United Kingdom use case-by-case assessment to determine the significant negative effects on human beings or the environment. Five of the Member States (Finland, Denmark, Ireland, Portugal and Spain) use definitions in the assessment. Negative effects on the environment are not further specified in Dutch law. According to the new Dutch legislation (from 1 October 2000) on changes of operation, a change in operation that leads to negative effects may be implemented without any procedure or may trigger a notification or an amendment of the permit. This depends on the contents of the permit given to the installation. As a rule, changes with considerable negative effects will also exceed the emission limits of the permit and thus need an amendment of the permit. Changes with minor negative effects, in some cases, will not be fully in accordance with the permit but probably will not lead to a violation of the limits in the permit, and thus the authorities should be notified of them. Changes with no or very small adverse effects normally will be not in conflict with the permit at all and can be implemented without any procedure.

In the United Kingdom there are no specific criteria, but guidance on how to assess significant negative effects is given in order to sustain and ensure consistency in evaluation across the Agency. The problem and the risk of not having any guidance in a case-by-case evaluation is the possible non-uniformity of decisions.

In the Member States that do have criteria in definitions, the criteria vary from increased risk (evaluated by the authority) to exceeding of specific numerical values, for example, air quality standards.

Portugal defines the “significant negative effects in human beings” as increase of risk to human beings from raw materials and “significant negative effects on the environment” as increase of emissions or new emissions. In Finland significant negative effects on human beings are 1) increased risk of contamination of water (ground water included), air and soil, and 2) pollution

above national or WHO guidelines. Negative effects on the environment are the same as on humans, with the addition of increased risk of eutrophication of waters and increase of emissions, wastes or noise, and damage to nature and landscape or recreational values. In Spain the definition is the same in both cases.

5.3.3 Instructions on how to assess substantial change

The evaluation of “significant negative effects on human beings or on the environment” is in many cases difficult. The aim of the question “*Do you provide instructions to authorities on how to assess substantial change?*” (Table 19) was to find out if Member States provide any guidance or instructions to the authorities to help them assess the effects of changes. It would also be of interest whether this guidance is formal or informal.

In the answers to the questionnaire, eight Member States (Austria, Denmark, Finland, Greece, the Netherlands, Portugal, Sweden and the United Kingdom) said that they do not have any instructions for the authorities and only three Member States (France, Italy and Spain) provide the authorities with some guidance.

The United Kingdom replied that guidance is given to the authorities in order to ensure consistency but no official instructions are provided. (See also question 5.3.2). France replied that guidance is given case-by-case. Austria does not provide official guidance but supports informal exchange of technical experience, for example, a conference at least once a year.

Italy will issue guidance documents about the IPPC provisions and, if possible indication will also be included to assess changes to industrial plants. The guides are mainly intended for permitting procedure clarification and BAT definition. Spain is preparing national guidelines for different industrial sectors (the only Member State to do so).

In general, according to the questionnaire, guidance is seldom given and it varies from case-by-case advice to a more or less detailed general guidelines.

In the general discussions of the seminar, guidance was considered to be very important. Without any guidance, non-uniformity in permits and interpretations of national and EU level legislation may become too great. This, in turn, may lead to numerous appeals, slowing down permit processes and making permits costly. Variations in interpretations are also unsatisfactory from a legal point of view.

5.4 Inspection procedure in cases of substantial change

5.4.1 Measures to ensure that no substantial change is made without a permit

The IPPC directive Article 12 (2) stipulates that

“Member States shall take the necessary measures to ensure that no substantial change in the operation of the installation within the meaning of Article 2(10)(b) planned by the operator is made without a permit issued in accordance with this Directive.”

In practice this may be a difficult task and the operators are not always aware of their duty to inform the authorities. The question *“How are the necessary measures carried out so that the operator does not begin to make any changes in the installation, in a case of substantial change, without the permit required by the directive?”* (Table 20) was asked to determine how different Member States ensure notification in advance.

Most of the Member States that answered the questionnaire said that firstly a substantial change is not allowed without a permit and that supervision of the matter is handled with inspections. In addition there are sanctions in case of violations.

Some Member States (e.g. Ireland, Italy, the Netherlands and the United Kingdom) did not explain in their answers what are the consequences of violations. In general the sanctions in the Member States were fines or administrative enforcement.

Finland pointed out that normally the operator is aware of the need for a notification or a new permit. In practice, changes, also substantial ones, are sometimes made without notification. This can happen because the operator is not always competent to decide whether the authority should be notified of a change or not. This is, of course, not satisfactory and does not fulfil the meaning of the directive. It is a fact though: violations of this sort happen and in practice the authorities have little means to supervise this specific part of the directive. Finland also pointed out that in practice many of the changes are checked and evaluated after the change in operation is already in place. The consequences are regulated on the legislative level (from imprisonment and fines to administrative enforcement) but in practice these methods are not often used. One reason for this unsatisfactory situation is the lack of manpower in supervision. All the Member States complained in the seminar that the lack of manpower in supervision is a fact. The Member States also pointed out that even if the main responsibility for being aware of the consequences of one's actions lie on the operator, it is, in many cases, too difficult for the operator to recognise the need for a notification or application for a permit. The discussion between the authorities and the operator is therefore important. The earlier the negotiations take place, the better.

5.4.2 Measures to supervise substantial changes

The aim of the question *“What measures must the authority take to supervise substantial changes?”* (Table 21, Figure 3) was to clarify and specify the previous question and to find out what the mandatory measures are in supervising substantial changes.

There were four measures widely used in the Member States to supervise substantial changes: checking the permit, inspecting the site, changing or giving new permit conditions and requiring a new permit.

No. of countries

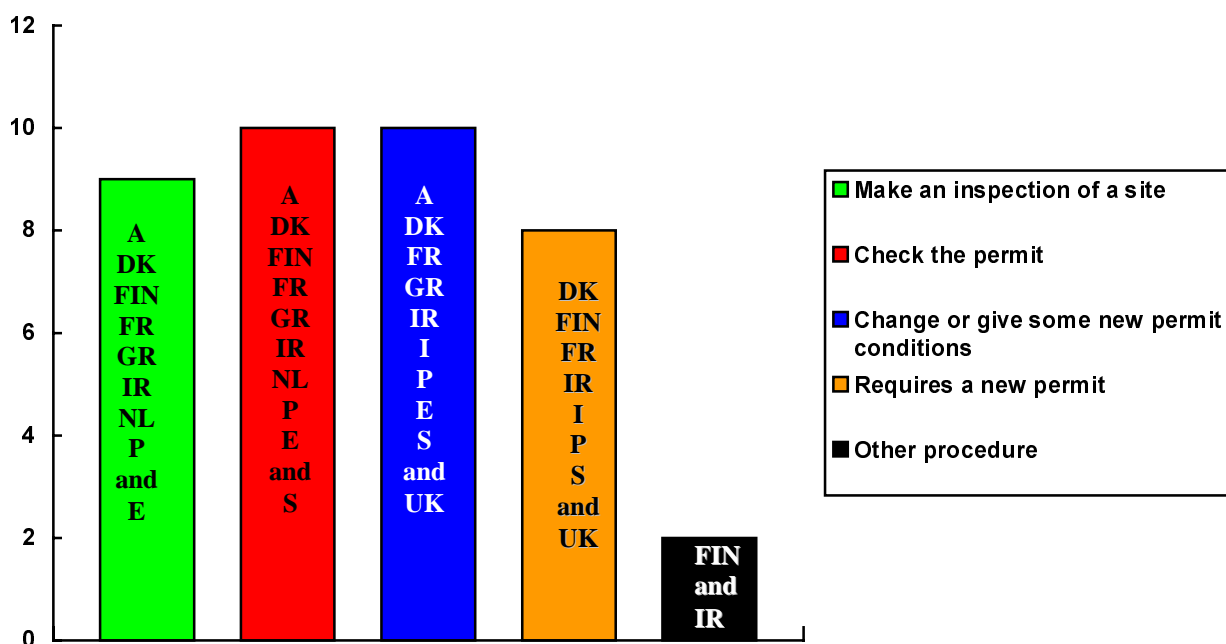


Figure 3: What measures must the authority take to supervise substantial changes?

In most Member States most of the measures given as alternatives in the questionnaire were mandatory. The answers given did not clarify in which situations the measures are or can be used or if there are any conditions in using them. An inspection on the site is not mandatory in Austria. In the United Kingdom any combination of the alternatives given in the questionnaire can be used depending on the assessment by the competent authority. This is, with the exception of the option of changing the permit, also the case in the Netherlands. In Sweden the authorities may check the permit, change the permit, give new permit conditions, or require a new permit. Italy pointed out that the evaluation might include inspections.

In ten Member States checking the permit is mandatory, Italy is an exception and in the United Kingdom it is not mandatory, yet possible. In Spain a new permit is required only if necessary. Denmark, Finland, France, Ireland, Italy, Portugal, Sweden and the United Kingdom always require a new permit, but Austria do not. In Austria measures to supervise substantial changes are: inspection on site (not mandatory), review of the permit, change the permit or give new permit conditions. Greece did not reply to this part.

5.4.3 The extent of change of a permit

One of the major difficulties in considering substantial change is what to do with the permit and its conditions in the new situation after substantial change occurs. Should the whole permit be “opened” for consideration or is it sufficient to rewrite some of the permit conditions. The question “*Is it usual, that permit condition, or the whole permit, that is changed in the situation of substantial change?*” (Table 22) tries to find out what the practices in different Member States are in these situations and if the practices vary.

In the Member States the practices seem to vary considerably. In Austria permit conditions are usually changed. In Finland, France and Sweden the whole permit is changed. In Ireland it depends on the situation. In the Netherlands permit conditions are changed, but also the whole permit can be changed whenever the change in operation has very broad implications for the

content of the permit. Member States in which the alternatives vary on a case-by-case basis are Denmark, Italy, Portugal and Spain.

These questions, should the whole permit be “opened” for consideration or is it sufficient to rewrite some permit conditions, were also discussed in the seminar. In the seminar it was pointed out that there are no general rules for opening the whole permit or just rewriting the permit conditions in cases of substantial change. The interpretations vary in the different Member States and it seems to be difficult to suggest a good practice in this respect.

5.4.4 Effects on other permits of the installation

It is not often that an installation can operate on the basis of one single permit. In many cases the operation requires several different permits. The question “*Will the substantial change have an effect on other possible permits of the installation?*” (Table 23) tries to find out the degree of difference between the permits for operational activities and if there is a connection between these permits in cases of substantial change. Of further interest was in which cases a substantial change could affect other permits of an installation.

Finland and Italy named a connection to the Seveso directive. Austria pointed out that the decisions are made on a case-by-case basis, but there are plans for a comprehensive procedure on federal level after which there would be only one permit for the installation. In the Netherlands a change of Surface Waters-permit may also be relevant at the same time. If a substantial change in Portugal has other effects than environmental ones, other permits concerning the installation may be affected but then the competent authorities would be other than environmental authorities. In Sweden this question is not relevant because the integrated permit system covers most of the relevant directives.

The question was not discussed in the seminar and it seems that there are no great difficulties in this area.

5.5 Summary of the answers and the discussion in the seminar on “substantial change”

The Member States do not have a unified and detailed definition of substantial change and this was considered in the seminar to be a major difficulty. In practise, the Member States let their authorities make case-by-case decisions on substantial change, for example, by applying some numerical rules (some based on legal norms, some on national practices).

The definition of substantial change is not detailed enough in the environmental legislation of the Member States. The practices vary a lot in different countries, for example, in evaluating the effects of increased traffic. An emerging concern in the seminar was whether an increase in transport should be considered as a part of the permit. The question how to handle changes in raw material was also of concern.

The seminar suggested as good practice guidance on assessing change and substantial change. Guidance should be available to the authorities for integrated assessment of emissions and effects. The governmental level ought to provide guidance also on the definitions of change and substantial change. Information about the practices in other Member States would be useful in this respect.

As a result of the discussions in the working groups it can be said that the definition of substantial change is not detailed enough in the environmental legislation of the Member States. There are also differences in evaluating questions concerning substantial change. The seminar participants considered these different practices of the Member States as one of the key difficulties in evaluating substantial change. Another difficulty in evaluating substantial change

is that the wordings of the different EU directives are not equivalent and the interpretations of the directives vary in the different Member States. In this respect more co-operation is needed.

The seminar pointed out that the borderline between a change in operation and a substantial change is hard to define. Also the awareness of the operators, especially the small and medium-sized operators (SMEs), is rather deficient and they may need advice from the authority. There is a lot to be done in increasing the awareness of the operators, especially the SME operators, of permit procedures and the requirements. The seminar pointed out that guidance on integrated assessment of integrated emissions and effects was considered to be good practice, and was needed in every Member State attending the seminar.

In the seminar, negotiations between the operator and the authority as early as possible were seen as good practice. In this way it could be ensured that no change in operation that needs a permit will take place without one. Changes are not always detected during inspections. The lack of resources was considered to be one of the main reasons for insufficient supervision. Negotiations can also help in distinguishing a minor change from a substantial one. Early contacts are important in order that the operators would know the requirements of the authorities and the authorities obtain better knowledge of the changes in operations.

There is no general rule to whether the whole permit or just its conditions ought to be changed in cases of a substantial change.

6 Right to be heard and right to participate

6.1 General issues

An important part in the processes of change and substantial change is the question of participation and of the right to be heard. In accordance with Article 15 (1) and (2)

"Member States shall take the necessary measures to ensure that applications for permits for new installations or for substantial changes are made available for an appropriate period of time to the public, to enable it to comment on them before the competent authority reaches its decision. That decision, including at least a copy of the permit, and any subsequent updates, must be made available to the public."

The results of monitoring of releases as required under the permit conditions referred to in Article 9 and held by the competent authority must be made available to the public."

6.2 Publicity

6.2.1 Access to application documents

Member States have different ways of making an application public. The IPPC directive stipulates that

"Member States shall take the necessary measures to ensure that applications for permits for new installations or for substantial changes are made available for an appropriate period of time to the public..."

To identify some of the differences, the following question was asked *"How is it ensured that the application is available to the public?"* (Table 24, Figure 4).

In the seminar the question of public participation and access to information was widely discussed (when must the public be heard and in which ways, must there be a public hearing or is it enough to inform the public via newspapers, for example).

In Austria the authority makes the documents available to the public during a period of 6 weeks after the application has been submitted to the authority (*lis pendens*). In the Netherlands the authority should make a deposition of the application together with the draft decision as soon as possible but no later than 14 weeks after receiving the application. In Greece the authorities make the application public by announcing it in newspapers, on radio and so on. The time to react is 30 days and after this a public hearing (session) is organised for all parties (authorities, industry, parliament representative, local representatives, etc.) to comment on the application. Spain has not organised public participation yet.

In order to be able to comment on an application before the competent authority reaches its decision it is important that the methods used in informing the public are effective. Many of the Member States inform the public via newspapers or notice boards. Also other methods such as radio and the Internet are in use. In Portugal the announcement is posted on the notice board of the competent authority and of the municipality. Portugal is the only Member State to use a notice board as the single method of informing the public about an application. Finland also uses notice boards as a method of informing the public, but there have been complaints from the public and NGO's about this method because it is not considered sufficient in ensuring the

public's right to access of information. In Greece, Italy, Sweden and the United Kingdom notice boards are not used to inform the public. In many of the countries several different methods are used at the same time. In the seminar the use of the Internet in informing the public was pointed out as an interesting new alternative.

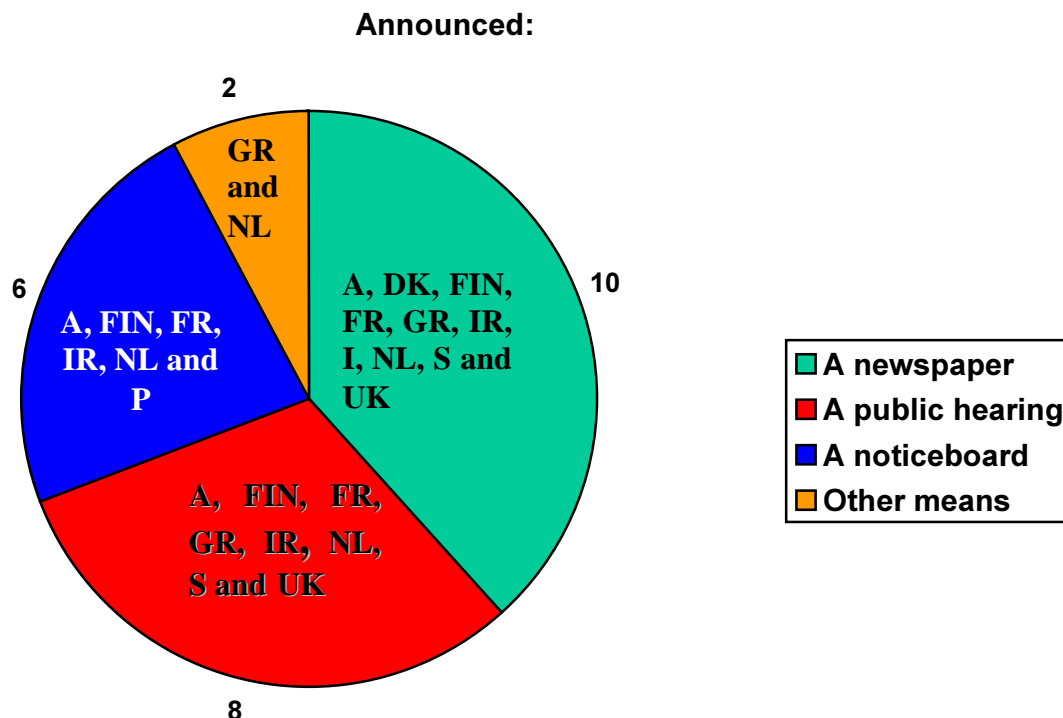


Figure 4: How is it ensured that the application is available to the public?

The question of a public hearing was widely discussed in the seminar. In cases of substantial change the question of public hearings was regarded as important in all of the Member States, but not always in cases of change in operation. In Denmark the distinction between change in operation and substantial change was considered as important mostly because of public hearings: a substantial change always requires a public hearing, whereas a change in operation does not.

In general, public hearings depend on the case and its impacts on the public health and the environment. The seminar participants pointed out that the concept "public hearing" is not defined sufficiently in the IPPC directive. All the participating countries shared the opinion that a public hearing is not necessary in every case of substantial change; however, a notice to the public (e.g. by using a notice board) was always considered obligatory in these cases. In the United Kingdom the authority makes the decision to hold a public hearing in cases deemed to be of public interest, for example, for contentious applications. In Ireland a public hearing is organised when considered necessary and in the Netherlands a public hearing is organised when requested. Anyone may submit such a request but there are two procedural requirements to be met. Italy answered in the questionnaire that public hearings are not used.

In general, in cases of substantial change, the question of public hearings came up with all the Member States attending the seminar. Another question that was widely discussed in the seminar was access to information. What kind of information must be available to the public and who is responsible for informing the public?

Generally, in all the Member States attending the seminar, the operator can request that some information be kept confidential (business secrets, military secrets). In Finland information about the environmental quality, emissions or monitoring information cannot be declared as confidential. There was also some concern over the possibility of using information for illegal purposes (crime, terrorism, etc.).

In all the Member States, except for Italy, the authority informs the public of changes in operation. In Italy the operator is responsible for informing the public by means of an announcement in national newspapers of the geographical position of the installation and of the name of the owner. Access to information was considered as very important and in several countries the practice is changing towards using the Internet to help in informing the public. For example, the United Kingdom pointed out that the practice there is moving towards the use of the Internet so that eventually all the applications would be sent over the Internet. The use of the Internet was also being considered in France. At the moment the most commonly used method is an announcement in the newspaper.

The stage at which information is accessible to the public is relevant in order for the public to be able to exercise its right to participate effectively in environmental matters. Each Member State has its own methods of ensuring this right. The question "*At what stage of the process are the documents made available to the public?*" (Table 25, Figure 5) tries to find out what methods are used in Member States.

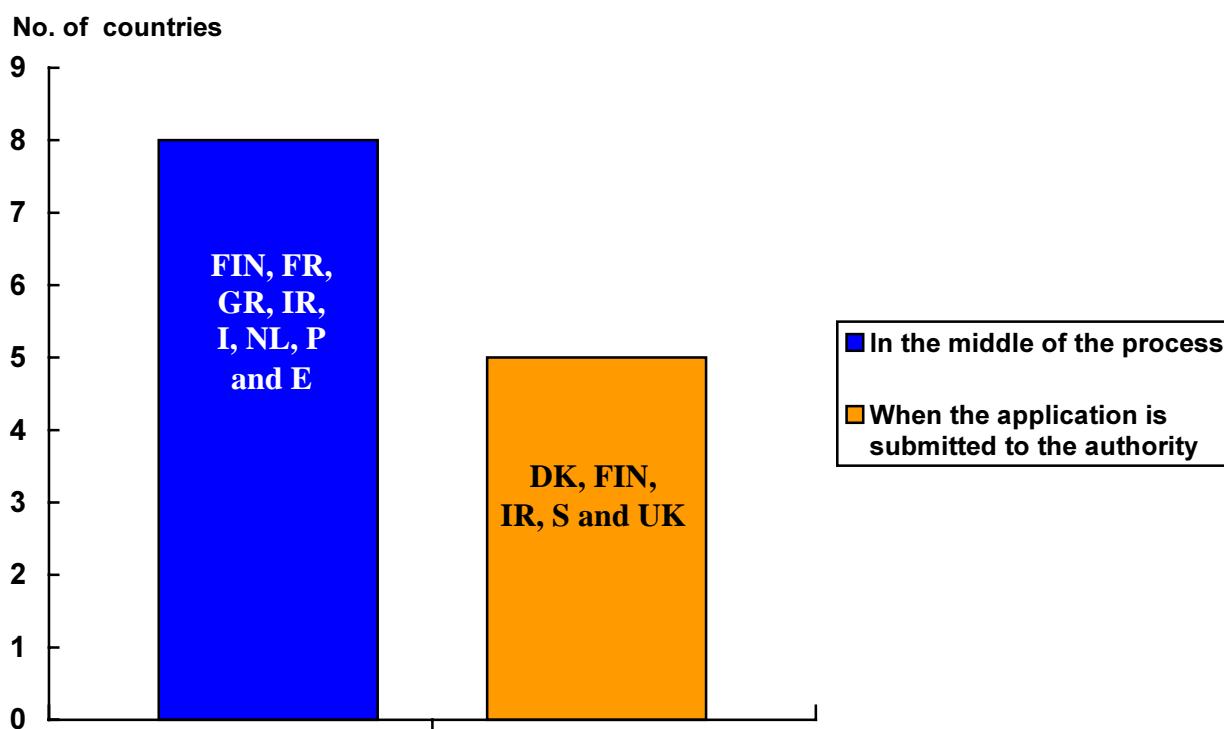


Figure 5: At what stage of the process are the documents made available to the public?

In the questionnaire two alternatives were given; either the application becomes open to the public immediately after it has been submitted to the authorities or it becomes available during the permit process. In Finland, Sweden and the United Kingdom the application becomes available to the public immediately after the application is submitted to the authority (lis

pendens). In Austria, Denmark, France, Greece, Italy, the Netherlands, Portugal and Spain the application becomes available to the public during the permit procedure. In Ireland both alternatives are possible. In Austria the application must be made available to the public during a 6-week time period. In Denmark the time is defined "as soon as possible". In Finland unofficial negotiations can take place before the applications are submitted to the authorities. During this unofficial time of negotiations, the application is not available to the public. Unofficial negotiations take place only when there is something the authority needs to check in the application or when additional information is needed.

In general the information is available at an early stage of the process.

6.3 Participation

6.3.1 Right to participate

The right to be a party to a permitting process varies in the different Member States. The questions "Who has the right to participate in the permit procedure in cases of a change in operation and in case of a substantial change and in what capacity?" (Tables 26 and 27, Figures 6 and 7) aim to clarify the practices in use in different Member States.

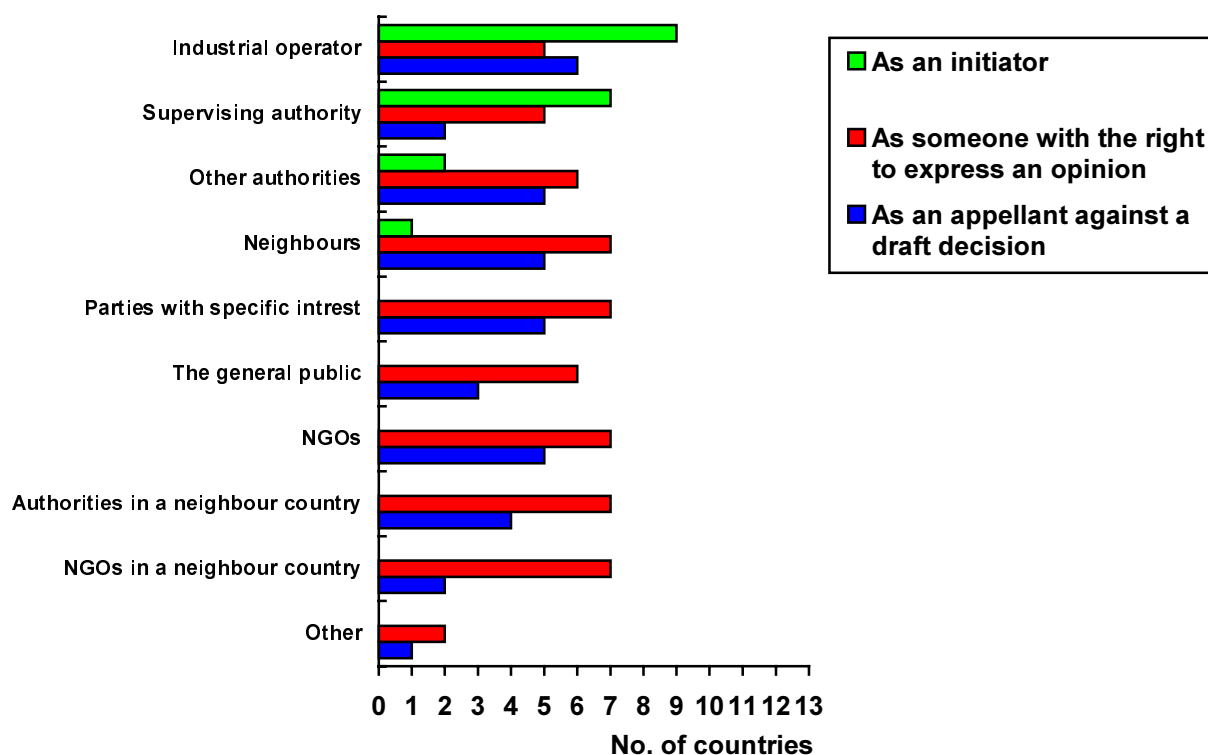


Figure 6: Who has the right to participate in the permit procedure in cases of a change in operation and in what capacity?

Many of the Member States differentiate between participation in a permit procedure concerning substantial change and a change in operation. Because a change in operation does not always require a permit and a notification procedure might be adequate, there is little need for public participation in this situation. In some countries the distinction is not relevant. In the Netherlands, for instance, the right of the public (in the Netherlands this is anyone – actio

popularis) to give an opinion is given in the permit procedure as well as in the (new) notification procedure.

In Austria the authority decides, based on legal provisions, who is allowed to participate in a permit procedure (no participation of NGO's). A legislative change will be necessary in Austria in respect of the implementation of the Aarhus Convention, but not due to the IPPC directive. Austria also pointed out that no permit procedure is foreseen for a change in operation. In Finland the neighbouring landowners gave the right to participate in the matter both as appellants against the decision and as initiators of a change in the permit.

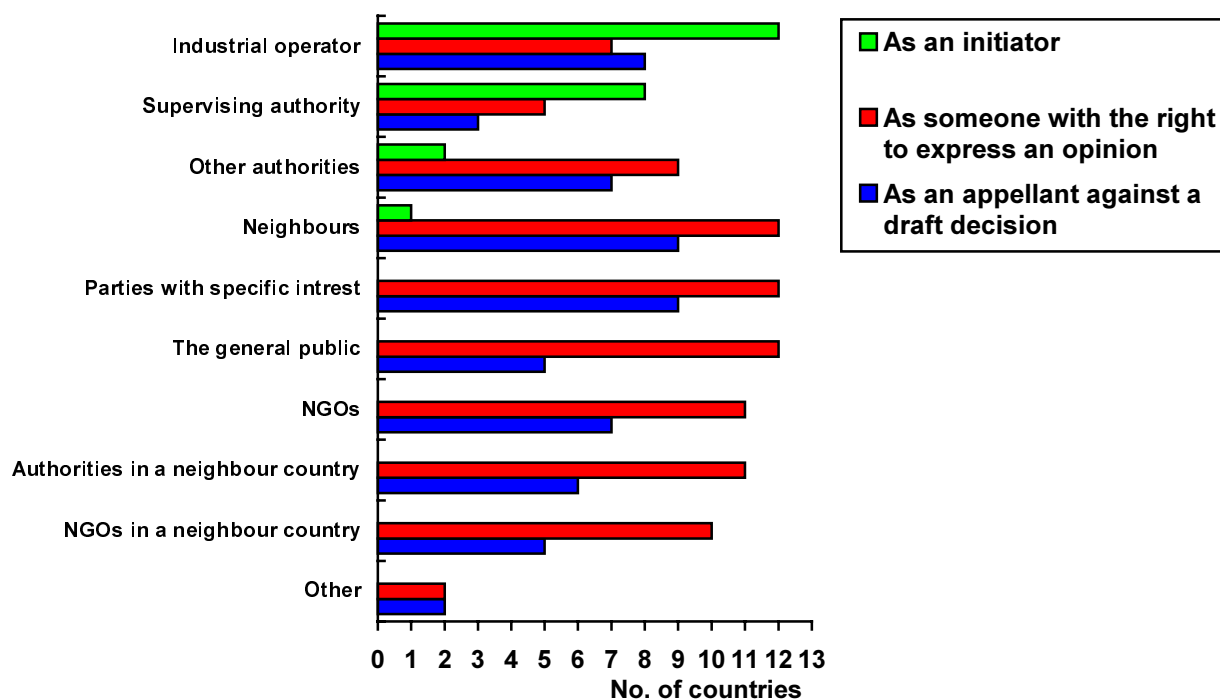


Figure 7: Who has the right to participate in the permit procedure in cases of a substantial change?

NGO's have a different status in the different Member States. A majority of the Member States gave NGO's the role of an appellant. In Finland the legislation was changed in this respect on 1 March 2000, when the new Environmental Protection Act enforcing the IPPC directive came into force. Finland seems to be the only country where neighbouring property owners can act as initiators of the process. The United Kingdom pointed out that regardless of the status of the parties, the authority is bound to take into account all relevant comments received, whatever the source.

There is a tendency to increase the right to participate in permit procedures. This is in accordance with the requirements of the Aarhus Convention.

6.4 Summary of the answers and the seminar concerning “the right to be heard and participation”

Publicity and public hearings were, in general, considered to be a very important part of the process, especially in cases of substantial change. The legal practices in this area vary and the concept of “public hearing” was felt to be unclear, both in the directive and in practice.

The working groups pointed out that oral public hearings depend on the case and its effects on public health and the environment. “Public hearing” is not defined sufficiently in the IPPC directive. Participants in the seminar discussed if an oral public hearing should always be held in cases of substantial change. All the participating countries saw this as unnecessary, but at least a notice to the public (e.g. by posting on a notice board) was considered as obligatory in cases of substantial change.

Access to information is considered to be very important in all the Member States. In several Member States the practice is changing towards using the Internet in implementing this right.

In the seminar it was seen as good practice to inform the public about the applications via the Internet. Also the permits could be announced over the Internet (many of the Member States were considering this). At the lower end of the scale of good practise, a permit should at least be announced in a newspaper.

In general the right to participate in permit procedures is increasing.

7 Application for a permit

7.1 General issues

The seventh topic relates to the documents for an application and to the BAT requirements in cases of change. In accordance with Article 6 (1)

"Member States shall take the necessary measures to ensure that an application to the competent authority for a permit includes a description of:

- *the installation and its activities,*
- *the raw and auxiliary materials, other substances and the energy used in or generated by the installation,*
- *the sources of emissions from the installation,*
- *the conditions of the site of the installation,*
- *the nature and quantities of foreseeable emissions from the installation into each medium as well as identification of significant effects of the emissions on the environment,*
- *the proposed technology and other techniques for preventing or, where this not possible, reducing emissions from the installation,*
- *where necessary, measures for the prevention and recovery of waste generated by the installation,*
- *further measures planned to comply with the general principles of the basic obligations of the operator as provided for in Article 3,*
- *measures planned to monitor emissions into the environment. An application for a permit shall also include a non-technical summary of the details referred to in the above indents."*

Article 12 (2) also prescribes that the application for a permit and the decision by the competent authority must cover those parts of the installation and those aspects listed in Article 6 that may be affected by the change.

In accordance with Article 3 (a)

"Member States shall take the necessary measures to provide that the competent authorities ensure that installations are operated in such a way that all the appropriate preventive measures are taken against pollution, in particular through application of the best available techniques."

Tables 28 and 29 show how the Member States have identified the documents that are required in cases of change in operation and cases of substantial change. The next question identifies those countries that have a standard for BAT (Table 30). Further interest is given to those Member States that have a standard. So the fourth question is on how the standard is taken into consideration (Table 31). The final question asked how it was ensured that the BAT requirements are followed and what problems are related to the BAT requirements (Table 32).

7.2 Application documents

7.2.1 Required documents in cases of change in operation

The aim of the question "*What documents are required in cases of change in operation?*" (Table 28) was to find out the required application documents in cases of change in operation. It seems that the practice differs considerably in different Member States, because the requirements for a notification and a permit vary extensively in the Member States (see section 4.3.1). Also the definition of change in operation varies in different Member States.

In Finland, Ireland, the Netherlands, Portugal, Sweden and the United Kingdom all of the documents that are mentioned in Article 6 are required in cases of change in operation. In Denmark a description of the significant effects of the emissions on the environment, including a description of the environmental techniques and a technical evaluation of the environmental aspects of the project, is needed. The technical evaluation should include a statement demonstrating that the conditions for granting the permit have been fulfilled. However, in some countries the need for information is decided case-by-case. In Ireland not all of the information in Article 6 may be required. The same holds true in the Netherlands because the distinction between change and substantial change is not directly relevant. The deciding factor is whether a change has negative effects that exceed the emission limits of the permit. Otherwise, a notification is sufficient or in some cases a notification is not even needed. A notification will, in many cases, contain considerably less information than an application for an amendment of the permit.

In Sweden a notification is required if the change is minor and no detriment of significance to human health or the environment is foreseen. A notification must contain the information, plans and technical descriptions that are required for an assessment of the nature, extent and environmental impact of the environmentally hazardous activity or action concerned. The report should also, to the extent that is needed, contain an environmental impact assessment. Further, in Sweden a permit application is needed if the change is not minor or if detriment of significance to human health or the environment may arise. The application should contain documents for assessing the activity or measure, an environmental impact assessment, information for assessing compliance with the rules and legislation, proposals for protective measures to prevent the effects of the activity and proposals for control of the activity (see Table 12).

In the United Kingdom there are three types of changes, but all documents are required only when there is a change from the original application. In Austria, France, Greece, Italy and Spain less documentation is required in cases of change in operation than in cases of substantial change. In Austria a description of the intended change is required in cases of change in operation. A decision on the contents is made case-by-case (see Table 12). In France the following information is required: a description of the installation and the activities and a description of emissions or discharges into each medium. In Greece the Article 6 documents are required with a few exceptions: the impact on the environment, further measures planned to comply with the general principles (Art. 3) and measures planned to monitor emissions into the environment (see Table 28). In Italy a report describing the change is required which includes an evaluation of expected consequences in terms of emission of pollutants and risk to the environment (see Table 13). In Spain none of the documents is required in cases of change in operation.

In cases of change in operation, the majority of the Member States require the same information from the operator as Article 6 of the IPPC directive. As to what documents are needed, however, decisions are usually made on a case-by-case basis.

7.2.2 Required documents in cases of substantial change

"What documents are required in cases of substantial change?" (Table 29). It seems that there are some variations in the practice in different Member States. The situation is anyway more uniform than in cases of change in operations across the Member States.

In the Member States, almost without exception, all the documents prescribed in Article 6 (1) are required. In six Member States (Finland, Ireland, the Netherlands, Portugal, Sweden and the United Kingdom) all the documents are required both in cases of change in operation and in cases of substantial change (Tables 28-29). In Denmark a description of the significant effects of the emissions on the environment, including a description of the environmental techniques and a technical evaluation of the environmental aspects of the project, is needed. The technical evaluation should include a statement demonstrating that the conditions for granting the permit have been fulfilled. In the Netherlands it should be noted that the distinction between change and substantial change is not directly relevant (see section 7.2.1). In Sweden there is no need to distinguish between the concepts of change in operation and substantial change. All the documents for a permit are required in both cases if the changes are not minor and detriment of significance to human health or the environment may arise.

Austria, Portugal, Denmark and the United Kingdom replied that documents are needed only in those cases when it is relevant to the change or when there will be changes from the original application. In these cases a full application must be sent to the authority. In Greece the documents of measures planned to monitor emissions to the environment are not required in cases of substantial change. Otherwise other documents are required.

Some other documents, not mentioned in the Article 6, are also required in Finland, Greece and Sweden. In Finland the application for a permit (also in cases of change in operation) has to cover the following information or documents:

- costs of proposed pollution control and abatement measures
- detailed map of the location and list of neighbours and their properties
- state of the environment and possible changes in environmental and health effects, and
- production capacity, expected production and operational timetable.

In Greece the following information and documents are required:

- site allocation permit for substantial expansion of the site
- effluent discharge permit, and waste and toxic waste disposal permits, and
- view of prefecture or local authorities in any case.

Sweden also requires an environmental impact assessment (in cases of change in operation as well).

Almost all the Member States require the same information from the operator in cases of substantial change as is stipulated in Article 6 of the IPPC directive. In addition, some Member States require further information.

7.3 BAT requirements

7.3.1 Standards for BAT in cases of change

"Does your country have a standard for BAT and if so, for which industries?" (Table 30) *"How is the standard taken into consideration in cases of change?"* (Table 31). The aim of these questions was to clarify if there are standards for BAT for different industries and how they are

taken into account. The situation varies considerably in different Member States. Four of the Member States (Denmark, Greece, Portugal and Sweden) answered that they have no standard for BAT, whereas, for example, in the United Kingdom has standards for all industries covered by the IPPC directive and any industries previously subject to similar regulations (Table 30).

Austria pointed out that they have a standard for BAT because there are several waste water emission ordinances, for example, for breweries, fisheries and the pulp industry. Finland and France have ordinances or non-binding guidance for certain sectors. Italy has local standards for effluents discharged into the Venice lagoon. In the Netherlands permits have to be issued on the basis of the ALARA principle (environmental effects have to be minimised to a level as low as is reasonably achievable), which can be considered as the Dutch equivalent of BAT (see Table 4). Spain has standards for altogether 14 IPPC activities. In Denmark and the Netherlands national guidelines exist for emissions into the air and for discharges into surface waters. In the Netherlands the BAT standards will in future be integrated into these guidelines. In Denmark guidelines for air pollution cover "best available cleaning technology". In Finland, the Council of State has made decisions on emissions into air.

Answers to the question "how the standards are taken into consideration" are presented in Table 31.

7.3.2 Following BAT requirements in cases of change

"How will it be ensured that the BAT requirements are followed in changed permit conditions when the whole or a part of the operation is changed?" "Are there some problems, which are related to the requirements of the best available techniques in cases of a change in operation?" (Table 32). The aim of these questions was to clarify how the Member States are going to ensure that BAT requirements are being followed and to find out if there have been problems with the BAT requirements.

Usually cases are considered on a case-by-case basis. In some countries there is as yet no experience of implementing the BAT requirements of the IPPC directive. Special problems, pointed out by the Member States, were that existing installations can be old and that obsolete BAT standards and fixed technical requirements could be a threat to innovative progress of the operations (Table 31-32). Fixed standards might also be an obstacle to updating the permit. This might lead to a situation where emissions decrease but the environmental effects do not change.

7.4 Summary of the answers and discussion in the seminar concerning "application for a permit"

As a rule, the Member States require that an application to the competent authority for a permit should include the information that is stipulated in the IPPC directive. Exceptions are also common. The practice differs quite a lot in cases of change in operation but the situation is more uniform in cases of substantial change. In some cases this might be a consequence of the different definitions of change in operation and substantial change.

In Finland, Ireland, the Netherlands, Portugal, Sweden and the United Kingdom all the documents (prescribed in Art. 6 (1)) are required both in cases of change in operation and in cases of substantial change. In France, Italy and Spain all the documents are required in cases of substantial change, but only a few documents are required in cases of change in operation. Additionally, in Greece, Finland and Sweden other documents are required. In Denmark the documents are only required in cases of changes which increase pollution.

In the seminar it was pointed out that guidelines and emission standards often become obsolete in about five years time. That is why they should be updated systematically. Bat Reference Documents (BREFs) give good technical information both for the authority and the industry.

BAT levels referred to in the BREFs are often not stringent enough. BREF may reduce asymmetry in environmental performance between industries in different places and even within countries.

8 Permanence of a permit

8.1 General issues

Concerning reconsideration and updating of permit conditions by the competent authority, Article 13 of the IPPC directive stipulates that

- 1) *Member States shall take the necessary measures to ensure that competent authorities periodically reconsider and, when necessary, update permit conditions.*
- 2) *The reconsideration shall be undertaken in any event where:*
 - *the pollution caused by the installation is of such significance that existing emission limit values of the permit need to be revised or new such values need to be included in the permit,*
 - *substantial changes in the best available techniques make it possible to reduce emissions significantly without imposing excessive cost,*
 - *the operational safety of the process or activity requires other techniques to be used,*
 - *new provisions of Community or national legislation so dictate.*

The issue here is the validity of a permit and the discretion the authority has to change a permit or its conditions.

8.2 Reconsideration of permit conditions

8.2.1 Periodical reconsidering and updating of permit conditions

Article 13 (1) stipulates that “*Member States shall take the necessary measures to ensure that competent authorities periodically reconsider and, where necessary, update permit conditions*”. The aim of the question “*How is it ensured that the competent authorities periodically reconsider and, where necessary, update permit conditions?*” (Table 33) was to find out how each Member State meets this provision of the directive in practice.

The practice varies in the different Member States. The most common case is updating the permit within a period of ten years regardless of the case. Ireland has an interesting approach - an obligatory 3-year period of immunity in which the permit is protected from interference by the authority, unless there are material changes, or increased or new emissions. After this 3-year period a permit can be reviewed at any time. Denmark has a period of immunity of eight years from the date of the permit. This immunity can be set aside in the situations mentioned in Article 13 (2). This idea of a immune period seems to be a unique approach. In most countries there are no immune periods, so the permits can be updated or changed at any time if certain preconditions are fulfilled, for example, changes in operation are observed during monitoring.

In Sweden the revision is not obligatory, it is up to the authority to decide if the permit has to be reconsidered after ten years. In Italy the compulsory updating period is five years after which the authority updates the permit in cases covered by Article 13 of the directive. In Portugal legislation stipulates compulsory revision of a permit after a period of ten years. The permit conditions can, however, also be checked earlier than this, for example, when the authority receives complaints from citizens or NGO's about accidents that have occurred, or when monitoring reports show a need to reconsider the permit. In Finland the situation changed when

the new Environmental Protection Act came into force. The Act now ensures periodical review of the entire permit. Before, water permits were periodically checked, and other environmental permits only in cases of change in operation.

In the Member States that are using compulsory systems in updating, the initiative to update a permit can lie both on the operator and on the authority. In Denmark the authorities are responsible for the revaluation and must therefore take the initiative in updating. In Austria the initiative lies with the operator, though the authority has the right to control the process whenever needed.

The United Kingdom was the only Member State to issue guidance to its authorities on how often reviews are undertaken in each industrial sector as a minimum, if there are no instances that would require a review before this time period.

8.2.2 Situations in which a permit condition or the permit is changed

The practices in the different Member States vary in the way in which they reconsider and update permits and permit conditions. The question "*Under which situations is a permit condition or the permit changed?*" (Table 34) was asked to find out according to what criteria are these changes made.

The Member States were given several alternatives of possible situations in which the permit or permit conditions could be changed; change in operation, substantial change, reconsideration of the permit conditions, emission limit value revision, changing of BAT, changing the techniques because of safety, new legislation or some other reason.

A change in operation seldom seems to lead to a change in a permit or its conditions. Exceptions to this were Sweden, where it is very common, and the United Kingdom, where it is usual to change permits or permit conditions in cases of a change in operation.

In most of the Member States substantial change was a reason to change the permit or its conditions. Only France replied that this is seldom the case. Revision of emission limit values usually resulted in a change of the permit or its conditions. Only Finland, Greece and Sweden answered this question with "seldom". Of interest also was Finland's answer that changes in BAT, until now, have never led to changes in a permit or its conditions, nor have technical changes to improve safety. Member States where BAT seldom leads to changes are France and Sweden.

Austria pointed out that decisions are made on a case-by-case basis and Sweden pointed out other reasons, for example, cases where the applicant has misled the authority by supplying incorrect information. In general, all the alternatives given are in use in the Member States. Italy pointed out that the question presumes consolidated experience with IPPC endorsement.

8.2.3 Validity and reconsideration of a permit

The question "*For how long is an updated permit valid?*" (Table 35) was asked to find out the practice used in the different Member States, assuming that it might differ.

The Member States where the permit has a time limit are Greece, Italy, Portugal and Spain. The period of validity varies from five to ten years. In Italy the EMAS registered plants have a different time limit (8 years) than other plants (5 years). In Sweden permits have, in general, no time limit, but there is a possibility in certain cases to use permits with fixed time limits.

Discussions in the seminar clarified this question. In Finland all the water permits used to have a time limit, usually 5-10 years, because environmental permits used to be sector oriented. The water courts that granted water permits had the legislative possibility to grant permits with time

limits, which was not the case in other environmental permits. (The status of water issues has been specific in Finland). There is no reason to believe that this practice would change because of the new legislation, except that the Environmental Protection Act provides for more possibilities to use permits with time limits, especially in situations where this was not possible before.

The United Kingdom pointed out that the authorities are given guidance on how often a permit for each sector should be reviewed as a minimum. The implementation of Article 13 means that most permits are now reviewed more frequently than this national minimum would require.

8.3 Summary of the answers and the seminar concerning “permanence of the permit”

The updating of permits varies in the different Member States. The issue is usually solved on a case-by-case basis, at a maximum the updating can take place every ten years. In general, some Member States have no fixed periods for updating the permits. These Member States use a case-by-case approach. The issue was discussed in the seminar and the answers in the questionnaire were clarified. In Finland and the Netherlands the permits are updated every 4-7 years (with a timetable for waste treatment facilities). In Italy most permits are updated every five years and in Portugal every ten years.

It was pointed out that it is crucial for an adequate updating that the operators inform the authority about changes before they take place.

There is no general rule or practice for the time span of permits. The issue was not considered to be problematic, although the operators would generally prefer longer periods of validity.

It was pointed out in the seminar that in many countries the capacity of the plant is often given a higher value than the real volume of the operation, so that the operator would not need to apply for a new permit so often. This problem is solved by giving a time limit in a permit for the implementation of the project in question. (The method is used, for example, in the Finnish Environmental Protection Act and in the Netherlands.) According to Dutch law, a permit for an installation will cease to be valid if the installation is not completed and commissioned within three years after the permit becomes irrevocable. If there is reason to believe that the installation cannot be completed and started up within that period, another time limit may be specified in the permit.

9 Supervision

9.1 General issues

The eighth topic deals with supervising authorities, supervising of changes in operations and the actions that are taken by the competent authority if the law or administrative regulations are disregarded.

The first question clarifies how the authority becomes aware of changes in operation, if the operator neglects this duty (Table 36). The next questions deal with the actions of the authority when the operator does not report a change in different cases (Tables 37-38 and Figures 8-9). In connecting to the previous question, Table 39 specifies the most common coercive measures in cases of substantial change. The use of the term "coercive measures" might have led to a small linguistic problem.

9.2 Supervising changes in operation

9.2.1 Sources of information about unreported changes

"How does the competent authority become aware of unreported changes in operation?" (Table 36). The aim of this question was to clarify those situations where the operator has not reported a change, contrary to the provisions. This question gives background information to the next question on how the authorities react to a violation.

The competent authority might become aware of a change during inspection or control activities, from information by the public, from monitoring results, by notification from another regulatory authority or by hearing about the case in the media. In France, the Netherlands and Portugal authorities usually becomes aware of unreported changes through their own inspection or control activities, while in Italy and Spain the operator's monitoring usually alerts the authorities. In Ireland both situations are common. In Denmark the usual situation is that the public detects the change. Finland mentioned that sometimes the authority reads about a violation in a newspaper. In the United Kingdom, another regulatory authority sometimes informs the competent authorities of unreported changes. The United Kingdom pointed out that regulations require prior notification or permitting of all changes in operation. Therefore, an unreported change would be an offence and likely to result in enforcement action being taken by the regulator against the permit holder.

9.3 Actions by the competent authority

9.3.1 Changes in operations which have not been reported to the authority

The aim of the question *"What steps does the authority take, if the operator has not reported a change in operation?"* (Table 37, Figure 8) was to find out what measures the authorities take in cases of violation. The most common practice seems to be that the authority may request a notification and require a permit (in Greece and in Ireland) or requests a notification and starts enforcement action (in France and in the Netherlands).

In Italy the decision is made case-by-case because the law regulates fines or administrative enforcement in cases of "violation of permit conditions" and "not reporting to the CA of emission data" but not exactly in cases of unreported change in operation.

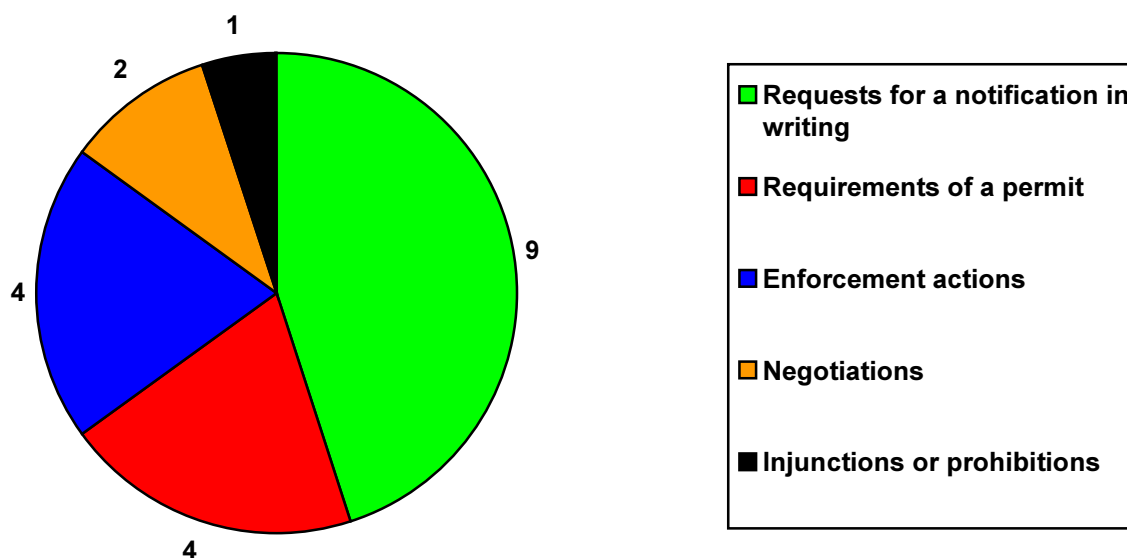


Figure 8: What steps does the authority take, if the operator has not reported a change in operation?

In Sweden the authority may request a notification and require a permit in these cases. An operator violating the provisions is also liable to pay a fine or to be sentenced to a maximum of two years imprisonment. The supervisory authorities should take any measures necessary to ensure that violations are corrected. In Sweden, in practise, the authority takes similar steps in cases of a change in operation and a substantial change. Thus, Sweden seems to be stricter in cases of change in operation than other Member States.

In Finland the practice is more moderate than, for example, in Sweden. The authority can negotiate, request a notification or require a permit. In Austria and Portugal the authority requests only a notification in writing. In Spain the authority just negotiates with the operator.

In the United Kingdom the actions can vary depending on the scope of the change.

9.3.2 Substantial changes which have not been reported to the authority

The aim of questions "What steps does the authority take, if the operator has not reported a substantial change?" (Table 38, Figure 9) and "What are the most common coercive measures in cases of substantial change?" (Table 39) was to find out what kind of action will be carried out if the regulations are violated. A comparison will give a clearer picture of what the differences are in practice between a change in operation and a substantial change.

There are many ways to respond to cases of violation when the change is substantial (e.g. in Finland, France and Portugal). However, for example, in Austria, Denmark and Greece only a few measures seem to be used. The practice in cases of substantial change is usually much more strict than in cases of change in operation.

An exception is Sweden, where the actions in both cases are quite similar.

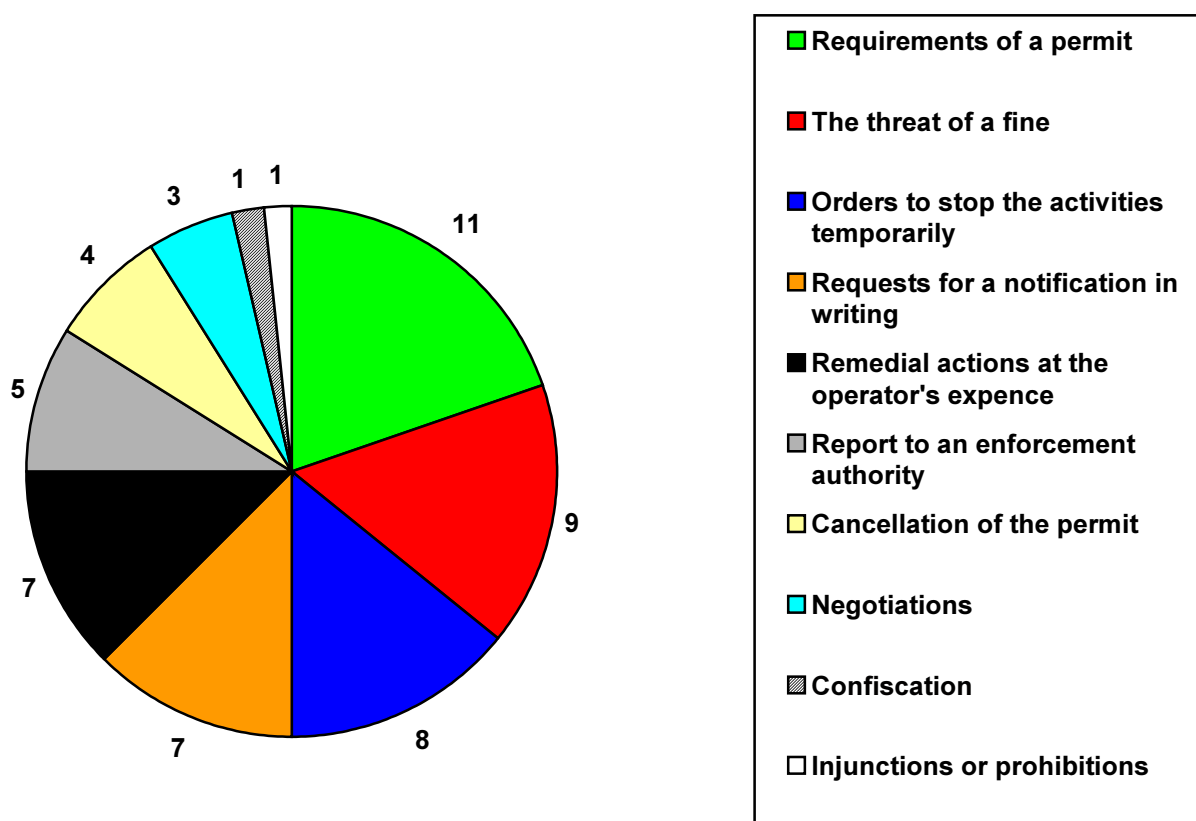


Figure 9: What steps does the authority take, if the operator has not reported a substantial change?

Usually the authority requires a permit from the operator in cases of substantial change. Other steps are the threat of a fine, orders to stop the activities temporarily, requesting a notification and the threat that remedial action will be taken at the operator's expense. Confiscation, injunctions and negotiations are mentioned only in one or two answers.

9.3.3 Procedures on how to act in cases of violations

The aim of the question *"Do you have clear procedures on how authorities are to act in these cases?"* and *"What kind of procedures?"* (Table 40) was to find out if the Member States have some instructions for the authority in cases of violations. The question deals also with cases of change in operation and substantial change. The Member States answered mostly that they do have some procedure. Four Member States (Austria, Italy, Portugal and Sweden) answered that the procedures are written into existing law. Denmark, Ireland and the United Kingdom reported that they have guidelines or other internal procedures on enforcement or they have a prosecution policy. Finland and Portugal reported that although they have clear procedures on how to act in these cases, the decisions are, in the end, made on a case-by-case basis. Three countries (the Netherlands, Spain and Greece) answered that they do not have any specific procedure. In the Netherlands, to a large extent, the authority has discretion on how to act.

In summary, the situation varies to a large extent in the Member States. It can be said that some Member States have regulations covering cases of violations or have procedures on how authorities should act in these cases. On the other hand, there are countries where it can be said that the authorities make decisions on a case-by-case basis.

9.4 Summary of the answers and discussion in the seminar concerning “supervision”

There is no one primary source from which the authorities get information about violations. Inspection activity seems to be one important source, but also results of the monitoring by the operator and information provided by the public are important ways that authorities become aware of unreported changes in operations.

In general, a change in operation can have positive as well as negative environmental impacts, whereas a substantial change often is negative from an environmental point of view. The operator is responsible for recognising and notifying the authority of these changes. Negotiations beforehand about changes are important in defining minor change, change and substantial change. Early contacts between authorities and operators are important.

There is no general rule on how to handle changes in less obvious cases. The decision is generally made case-by-case in all Member States. Austria, Italy and Portugal must follow legislative procedures on how to act in cases of serious violation. In Finland, Ireland, Denmark and the United Kingdom the authorities have more discretion to handle a situation and legislative procedures are not always undertaken.

In the seminar it was pointed out that operators of small and medium-sized (SME) installations are less aware, and they need advice from the authorities. Operators of small installations may not always be aware of their obligation to inform the authorities about changes. In these cases a good practice for the authority would be to start with a gentle approach (advice), after which harder measures could follow (e.g. admonition).

The authorities of all the Member States stated that they can make unannounced inspections of an installation at any time. Normally, inspections are made once every 1 - 3 years. Criteria for inspections are similar in all the Member States. All the Member States rely on self-monitoring and operators' reports. The scope of inspections varies. For instance, the Netherlands and the United Kingdom conduct a very thorough inspection of the whole installation. Changes in operations are not always detected by inspections.

10 Conclusions

10.1 Key Difficulties in Handling Changes in Industrial Operations

One of the main problems that came out in the questionnaire responses (Table 41) was that the Member States do not have unified and detailed definition of a change in operation and a substantial change. The most important question is when a change is only a change and when it has to be regarded as a substantial one. It is problematic that the borderline between a change in operation and a substantial change is hard to define. This also causes other problems, for instance, with public hearings. Some of the Member States require that the public must be informed in cases of a substantial change, but not in cases of a change in operation. If the definition is unclear, regional differences might also be marked and authorities practises might change on a case-by-case basis.

10.1.1 Legal Basis, Authorities and the Right to be Heard and Public Participation

In general, every Member State attending the seminar has had to change its legislation because of the IPPC directive. In some countries the influence of the directive was marked and in some not so profound. The changes made concerned, for example, energy efficiency, co-ordination of different authorities and public hearings.

In an application, the operator can ask for a higher production capacity than the real volume of the operation, so that he does not need to apply for a new permit so often. This problem is solved by setting a time limit in the permit for implementation of the project.

Each Member State found it difficult to define an installation. The most relevant factor in defining an installation seems to be technical and operational connections on the same site.

Several permit authority systems exist in the Member States. The administration can either be centralised or decentralised and both systems have advantages and disadvantages. Guidance and networks are especially important in decentralised permitting and inspection systems.

Insufficient supervising manpower is seen as one of the main problems. Changes in operations task the capacity of the competent authorities, and the lack of recourses was considered to be one of the main reasons for insufficient supervision.

10.1.2 Change in Operation

In general, the concept and implementation of a change in operation have proved to be difficult in every Member State. Especially in cases where a change in operation results in positive effects, there is no exact definition of this kind of change, and interpretations vary a lot. Similar difficulties arise in the interpretation of the BAT requirements and changes of chemicals.

Almost all Member States demand at least a notification in cases of a change in operation. In the seminar it was pointed out that the notification of several minor changes can gradually create a situation that ought to be considered a substantial change. The original permit has ceased to be consistent with the operation. In this kind of situation the threshold to update the permit might be very high, although, as a matter of fact, the situation ought to be considered as a substantial change.

Operators of small installations may not always be aware of the difference between a change in operation and a substantial change and they therefore need advice from the authority at an early stage.

In practice there is no general rule on how to handle changes in less obvious cases. Decisions are generally made case-by-case.

10.1.3 Substantial Change

The Member States do not have a unified and detailed definition of substantial change and this was considered to be a major difficulty. In practice, the authorities come up with case-by-case decisions on substantial change, for example, by applying some numerical values (some based on legal norms, some on national practices).

Another difficulty in evaluating substantial change is the differences in the wordings of the different EU instruments (e.g. substantial change is a broader concept in the EIA directive than it is in the IPPC directive).

Every change requires at least a notification procedure. The notification of several minor changes can in the end lead to a situation where very little of the original permit still exists. The situation could be considered a substantial change, but if the changes are gradual they appear to be minor changes only.

One key difficulty the group also addressed was how effects from other factors, for example, traffic, should be taken into consideration.

Public participation is not defined sufficiently in the IPPC directive. Should there always be an oral public hearing in cases of a substantial change? This was seen as not necessary by all the participating countries. However, public notice (e.g. posting on a notice board) was considered obligatory in cases of substantial change.

10.1.4 Application, Supervision and the Permanence of the Permit

As a rule the Member States require that permit applications for a change in operation or a substantial change should include the information that is stipulated in the IPPC directive. The use and the role of BAT and BREFs were also discussed. The updating of documents can be problematic and the BAT standard thus become a minimum criteria rather than a goal.

One key difficulty in application and supervision is the question of how to ensure that the operators are aware of the need for a permit or a notification procedure. Changes are not always detected during inspections. The lack of resources was considered to be one of the main reasons for insufficient supervision.

The way permits are updated varies in the different Member States. It is usually carried out case-by-case. An adequate updating depends on operators informing the authority about changes before they take place.

10.2 Suggestions from the Seminar for Good Practice

10.2.1 Legal Basis

1) Some Member States have solved the problem of several minor changes forming a substantial change by creating an environmental reporting system, where once a year an installation is examined as a whole.

- 2) It is very important that the authority decides as early as possible whether a notification procedure is adequate or if an application for a permit is needed in cases of a change in operation. The notification procedure may be informal or formal. If there is a need for public participation or if the notification is meant to become a part of the permit, a formal procedure should be followed.
- 3) If the original permit is no longer sufficient, the permit should be changed even if the effects on the environment and on human beings would be decreasing.
- 4) In permit applications a higher capacity than the real volume of the operation is sometimes listed so that the operator does not need to apply for a new permit so often. This is solved in many Member States by setting a time limit in the permit for implementation of the project.
- 5) In defining an installation it is important to evaluate the whole entity. Basically, the permit defines the installation. It is important to take into consideration legal connections and technical and operational connections on the same site.

10.2.2 Change in Operation

- 1) Early contacts between authorities and operators are very important. Negotiations in advance can make it much easier for the authorities to evaluate the changes. Good practice is that the authority is able to decide between a notification or a permit procedure at an early stage.
- 2) The notification procedure is largely used in the Member States because it is a less bureaucratic way of dealing with changes in operations. The only negative feature is that a notification procedure is not as legally binding as a permit procedure.
- 3) The authority has to check the notification and inform the operator whether it is accepted or not.

10.2.3 Substantial Change

- 1) Good practice is informing the public of applications via the Internet. Permits could also be announced via the Internet (many of the Member States are considering this). As a minimum, a permit application should be announced in a newspaper. If a substantial change is of great public interest, a public hearing should be held.
- 2) National level guidance for integrated assessment of emissions and effects as well as for defining change and substantial change should be available to the authorities.
- 3) Exchange of knowledge and information both on the national level and between the Member States is recommended.

10.2.4 Application and Supervision

- 1) Negotiations between the operator and the authority as early as possible is seen as good practice. In this way no change will be made without the necessary permit. Negotiations are also helpful in distinguishing between a minor change and a substantial one.
- 2) In order not to endanger objectivity, resources for supervision and permitting (personnel) should be increased.
- 3) Guidance and networks to minimise regional differences are recommended.

10.3 Overall Conclusions and Proposals for Further Work

In general, the IPPC directive has caused very similar problems in the Member States. Some of the problems are related to the definition of change in operation. The distinction between a change in operation and a substantial change is hard to define and some Member States do not have a definition of a minor change. Interpretations and wordings also vary in different EU directives and co-ordination is needed. It is suggested that Member States periodically exchange new approaches and experiences in this field, for example, through the IMPEL network.

Better management of changes in operation is required. Guidance for integrated assessment of emissions and effects is particularly important in decentralised permitting and inspection systems. If changes in industrial operations are considered only on a case-by-case basis, the interpretations may vary too much and the reliability and predictability of the authorities' decisions may suffer. All the attending Member States recognised the need for equity. Exchange of information, as in the IMPEL network, between authorities on a national and international level is most useful, because knowledge of other countries' experiences benefits all parties.

In BAT and BREF work there is a need for more frequent and systematic review of documents to keep up with technical developments.

Notification procedures can be a less bureaucratic way of handling minor changes. This depends, among other things, on the way the notification procedure is regulated (i.e. a legally binding procedure or not). Notification can be a "preceding procedure", where the notification becomes a formal part of the permit.

Early contacts between authorities and operators are important before a change in operation takes place. Operators will know what authorities require from them in cases of changes in operation and the authorities can be sure that operators know about the requirements of a change beforehand.

Public hearing, access to information and participation in the procedures are becoming more important all the time and the practice in several countries is moving towards more openness and use of the Internet.

New emerging concerns that may affect the permitting are:

- Issues related to transportation to and from the installation;
- Changes in raw material and chemicals;
- Demands on waste prevention;
- Energy efficiency;
- Eco-efficiency.

Authorities should continue to strive for good practices for supervision and control of changes.

Annexes

Annex I Evaluation of the answers

Annex II Agenda of the seminar

Annex III Participants in the seminar