European Union Network for
the Implementation and Enforcement
of Environmental Law

Identifying Good Regulatory Practice In The EU Emissions Trading Scheme

Introduction to IMPEL

The European Union Network for the Implementation and Enforcement of Environmental Law is an informal network of the environmental authorities of EU Member States, acceding and candidate countries, and Norway. The European Commission is also a member of IMPEL and shares the chairmanship of its Plenary Meetings.

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.

Information on the IMPEL Network is also available through its web site at:
http://europa.eu.int/comm/environment/impel

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EXECUTIVE SUMMARY

The project on which this report is based set out to identify good regulatory practice in relation to the EU emissions trading scheme (EU ETS), which was established by Directive 2003/87/EC, and to inform the second phase of the EU ETS. It was organised through IMPEL and the information analysed in the project was obtained using a questionnaire that was distributed to regulatory authorities in a number of EU Member States. The questionnaire was finalised on the basis of discussions held at an initial IMPEL workshop (held in October 2004) of Member State experts, who are all actively involved in the regulatory aspects of the EU ETS. The draft findings, recommendations and conclusions were presented at a second workshop in March 2005, on the basis of which a draft report was produced. This was then peer reviewed by the participants of the workshops before being finalised in May 2005.

In the course of the project, it was realised that the EU ETS was still at too early a stage to be able to identify good practice in relation to certain aspects of the scheme, such as monitoring and reporting. In addition, other practices were the result of particular national circumstances or choices, which made it difficult to identify whether one practice was inherently better than another. Hence, the report provides a snapshot of regulatory practice at an early stage of the EU ETS, which should provide some useful and interesting information to other regulatory authorities that are considering developing and implementing an emissions trading scheme. Additionally, the countries involved in the project identified significant common areas of concern, which they have agreed to take forward.

Section 1 of the report provides more information on the aim of the project and the methodology used, while Section 2 gives an overview of the key characteristics of an emissions trading scheme for those readers unfamiliar with the instrument. Section 3 presents a detailed discussion of the findings of the project, while Section 4 presents conclusions that could usefully be taken into consideration when developing and implementing the regulatory aspects of an emissions trading scheme. Key findings of the project include:

- From the regulatory perspective, the definitions and scope of activities to be covered by an emissions trading scheme need to be more precise than those included in command and control legislation aimed at similar sources.
- Consideration needs to be given to the most cost-effective way of addressing installations that emit relatively low levels of greenhouse gas emissions, including whether they should be covered by an emissions trading scheme or another, parallel, instrument.

- Potential problems in the EU ETS have arisen as a result of the desire to leave as much of the operational detail as possible to the individual Member States. In the event of similar devolved emissions trading schemes, attention, therefore, needs to be paid to ensuring that aspects of the scheme that could potentially increase market distortions, e.g. the allocation methodology and the approach to new entrants and closed installations, are harmonised as far as possible.
- A devolved approach is appropriate in relation to, for example, permitting and institutional structures, as the approach chosen reflects national legislative and regulatory circumstances.
- The monitoring and reporting of emissions covered by an emissions trading scheme is complex. Hence, guidelines are likely to be complex, but consideration needs to be given to developing other means of demonstrating how monitoring and reporting should be done, e.g. the development of templates and 'frequently asked questions' sheets.
- In order to ensure that a devolved scheme delivers in the same manner across the participants, consideration should be given to harmonising verification procedures and the accreditation of verifiers.
- The devolved nature of the EU ETS has also led to replication of effort, e.g. in relation to the development of national registries, which could have been avoided.
- The use of electronic means of communication, e.g. dedicated websites and email addresses and templates, has proved useful. Applications for permits can also be made electronically, although there might be legal issues surrounding signatures.
- It is also useful to engage industry at an early stage in the process of setting up an emissions trading scheme, with dedicated working groups, seminars and workshops and group emails, all considered to be useful means of doing so.
- Consideration could be given to developing a charging regime that aims to cover the costs of the scheme.

In relation to future phases of the EU ETS, particularly the second phase that will run from 2008 to 2012, the report makes a number of recommendations, which have been developed into an action plan to be taken forward by Member State experts (see Section 5). The need for urgent action was identified with respect to:

- The definitional problems present in the original Directive;
- Issues arising from the existence of the new entrants reserve, particularly the methodology used to allocate allowances to new entrants;
- The particular problems relating to installations that emit relatively low levels of greenhouse gases, including the potential application of a *de minimus* threshold to exclude the smallest emitters from the scheme, as well as the monitoring, reporting and verification of emissions from such installations; and
- Various aspects of monitoring and reporting, including feeding in to the Commission's consultation and ongoing stakeholder discussions.

Other, less urgent action to be taken forward by the IMPEL EU ETS experts includes a review of the approach taken to the closure of installations, the development of guidelines on certain aspects of monitoring and reporting and a review of verification, as well as the regular exchange of information on general practice in relation to, for example, compliance, enforcement, registries and charging.

Disclaimer
This report on Identifying Good Regulatory Practice in the EU Emissions Trading Scheme 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.

IDENTIFYING GOOD REGULATORY PRACTICE IN THE EU EMISSIONS TRADING SCHEME

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1 Introduction

1.1 The EU Emissions Trading Scheme

As a result of Directive 2003/87/EC[1], the European Union's Greenhouse Gas Emissions Trading Scheme (EU ETS) came into operation on 1 January 2005. The aim of the scheme is to contribute to the cost-effective reduction of greenhouse gas emissions from certain industrial activities, which are listed in Annex I of the Directive. In its first phase – from 2005 to 2007 – the EU ETS only applies to emissions of carbon dioxide (CO_2), but in subsequent phases other greenhouse gases may be included.

The scheme works by requiring operators of installations carrying out the specified activities to hold a permit, which allows the installation to emit a certain amount of CO_2. The allowances for each installation are set at the national level in a National Allocation Plan (NAP). Each NAP has to be approved by the European Commission to ensure that they meet a number of criteria, including that they are consistent with each Member State's emission target under the Kyoto Protocol. The number of allowances allocated to an installation effectively places an upper limit on the number of tonnes of CO_2 that that installation can emit free of charge. If an installation emits more CO_2 than it has allowances for in any calendar year, its operator will need to buy additional allowances from companies that have allowances to spare, i.e. their installations will have emitted less CO_2 than they had allowances for. In this way a market in CO_2 is created.

The second phase of the scheme runs from 2008 to 2012 to coincide with the Kyoto Protocol commitment period, i.e. the period within which the EU Member States and other industrialised countries that have signed up to the agreement will have to meet their emissions reduction targets. Hence, the first phase is very much a pilot phase to make sure that the system works and to give operators and regulatory authorities experience of the scheme.

1.2 The Aim of this Report

As the EU ETS is the first trans-national scheme of its sort in the world, there will be a lot of learning by doing in the first phase. There are significant challenges that will need to be overcome that will require the co-operation and collaboration of Governments and their agencies, as well as that of industry. Regulators and advisory bodies in all 25 EU Member States will be facing similar challenges.

The EU's 6th Environmental Action Programme (6EAP) provides continuing support for IMPEL's exchange of information on implementation experience between Member States. In this capacity, the 6EAP notes that IMPEL can play an important role in improving the implementation of legislation. IMPEL has a potentially important role to play, therefore, in relation to the exchange of information and

[1] Directive on Establishing a Scheme for Greenhouse Gas Emission Allowance Trading within the Community and Amending Council Directive 96/61/EC (OJ L275, 25.20.03)

experience between regulatory authorities involved in the EU ETS. This could be invaluable in exchanging information and experience on the regulatory aspects of the EU ETS.

The project on which this report is based attempts to take advantage of IMPEL's unique position. The Environment Agency of England and Wales (EA) initiated the project and commissioned the Institute for European Environmental Policy (IEEP) to assist with the work. Other Member States were actively involved in the various stages of the project, including attending meetings, commenting on the draft questionnaire, completing the questionnaire and commenting on drafts of the final report (see below). The objective of the project was to:

- Develop a good regulatory practice guide for emissions trading schemes based on the experience of the EU Member States within the EU ETS.
- Utilise the experience gained in the course of the preparations for the first phase to inform the second, and subsequent, phases of the EU ETS.

The target audience for the report is those planning new ETS schemes and those responsible for regulating or advising on the EU ETS scheme, in particular those responsible for developing the operational framework for Phase II.

1.3 Methodology

The project had the following key phases:

- **Development of a questionnaire.** In discussion with the EA, IEEP developed a draft questionnaire in autumn 2004 to be used as the basis for obtaining information on the regulatory practices within the Member States.
- **First workshop of IMPEL experts.** The draft questionnaire was presented to and discussed by the IMPEL experts at the first workshop, which was held in London in October 2004.
- **Finalisation and circulation of the questionnaire.** The questionnaire was finalised on the basis of the discussions at the first workshop and then circulated to designated people within the IMPEL Network in late October 2004. Each recipient of the questionnaire was responsible for ensuring that it was completed on behalf of that country by liasing with other experts in the relevant areas within their own countries.
- **Analysis of the questionnaires.** Questionnaires were received relating to 12 Member States, of which three joined the EU in May 2004[2]. The responses were analysed in early 2005 to identify common themes, problems and issues, as well as possible examples of good practice and questions in need of further exploration.
- **Second workshop of IMPEL experts.** The findings of the analysis of the questionnaires were presented to and discussed by IMPEL experts at a second workshop held in London in March 2005. The discussion informed the

[2] The twelve Member States that supplied questionnaires for the analysis were: Czech Republic, Germany, France, Ireland, Italy, Hungary, Netherlands, Poland, Portugal, Finland, Sweden and the UK (separate responses from England & Wales and Scotland).

conclusions and recommendations of the draft final report, as well as an action plan for the IMPEL experts to take forward.

- **Peer review.** The findings of the analysis, and the conclusions and recommendations developed at the second workshop, were used to develop a draft final report, which was circulated in April 2005 to the experts for their comments.
- **Finalisation of the report.** The comments of the experts were then taken on board in the final report, which was finalised in May 2005.

As the project developed, it was realised that experience with the EU ETS was at too early a stage to be able to identify good practice in relation to some aspects of the scheme, e.g. verification and enforcement, while for other aspects of the scheme, practice reflected choices that were the most appropriate within the different national contexts. In other words, it was not possible to identify whether alternative practices were good or not, rather that different approaches, e.g. to permitting or institutional arrangements, exist and could be considered when developing other emissions trading schemes. In the event, this report provides a snapshot of regulatory practice at an early stage in the operation of the first phase of the EU ETS. However, the process has been particularly useful for the countries involved as they have identified common areas of concern and have agreed to take many of these forward.

1.4 Structure of this report

The next section of the report gives a more detailed overview of the various aspects of the EU ETS in order to put what follows in context. Section 3 discusses the findings of the analysis of the regulatory practice in the Member States in question. Where possible examples of good practice are identified, otherwise alternative approaches are presented to indicate the different approaches possible. The section is structured so as to reflect the different stages of the EU ETS, which also reflects the structure of the questionnaire. These are:

- Links with other Legislation
- Definitions and Scope of the Directive
- Allocations
- Allowances and Permits
- Monitoring and Reporting
- Verification
- Compliance
- Enforcement
- Registries
- Communication
- Institutional Issues
- Charging and Funding

Section 4 sets out the main conclusions and recommendations, while Section 5 presents the action plan, as agreed at the second workshop.

2 Overview of Emissions Trading Process

The development of an emissions trading scheme is a complex process and the development of the EU ETS was no exception. There are numerous stages and decisions to be made to ensure that the implementation is effective and that a functioning market emerges. In addition, new relationships must be developed between the different parties. Industry must have confidence in the range of new actors, some of which will be new, and feel a degree of ownership of the scheme. For their part, regulators have to develop different institutional structures, procedures and processes in order that the scheme can properly function. Many of these could be completely different to the traditional structures and processes that are in place for traditional command and control measures.

This section provides an overview of the key decisions and elements of an emissions trading scheme, with particular reference to the EU ETS. The first decision to be made in the design of a new ETS is the type of scheme that is required. The EU ETS is a so-called 'cap-and-trade' scheme (see Box 2.1).

Box 2.1 – Cap and Trade versus Baseline and Credit Trading Systems[3]

There are two broad types of emissions trading scheme:

- ***Cap and trade***. An overall absolute cap, target or envelope of emissions per unit time is fixed, and this cap is allocated to various parties who can then trade. Cap and trade ensures that the target is achieved.
- ***Baseline and Credit*** The baseline establishes a standard, e.g. grams of lead per gallon of petrol, against which allowances are generated. If emissions of the party in question are lower than the benchmark, then the difference can be traded. If the benchmark becomes zero, then an absolute objective is achieved. Baseline and credit of this nature is sometimes characterised as rate based. There is no absolute cap implied in this case; if firms continue to increase their energy input at a faster rate than the baseline declines, then overall emissions will expand.

The cap and trade model is preferable, from a policy perspective, if the aim is to ensure that emissions reductions are achieved, as is the case with the EU ETS. From a design and administrative perspective, the cap and trade model could also be seen to be preferable, as the process of setting the baseline, i.e. the standard to be bettered in order to generate credits, in the baseline and credit scheme can be complex and time consuming. However, from the perspective of industry, the rate-based approach is arguably preferable, as, if the standard is met, industry can expand indefinitely without having to buy allowances. This could be important to firms that are facing international competitors who are not in an emissions trading scheme.

As mentioned in Section 1.1, the EU ETS works by allocating allowances to the operators of the relevant installations. The EU ETS requires that allowances are allocated principally through grandfathering, but also allows for a small proportion of allowances to be auctioned (see Box 2.2 for more information on these options). As a result of the principle of subsidiarity, whereby decisions are left to be made at the most appropriate administrative level, many decisions on the details of the EU ETS are left to individual Member States. These have to be set out in the respective National Allocation Plan (NAP). Hence, it is up to Member States to effectively set a national 'cap' and to decide whether any auctioning of allowances will take place in their country, as well as deciding on the allocation methodology and the number of

[3] Based on 'Emissions Trading - Arrival of a New Economic Instrument in Europe', chapter in EEA (forthcoming) *Market Based Instruments in Environmental Policy in Europe* see www.eea.eu.int

allowances to be allocated to individual installations. The Directive also allows for a proportion of allowances to be held back in a new entrants reserve (NER) to be allocated to those installations that were not included in the original NAP, as they were not operational at the time. Hence, there could be potentially 25 different approaches to the allocation of allowances within the EU ETS. In order to ensure that the 25 NAPs are broadly consistent, the European Commission has to ensure that each one is consistent with a set of guidelines. The generation of NAPs has been time pressured in the first phase of the EU ETS and this has generated problems for the commencement of trading (see Section 3.3).

Box 2.2 – Auctioning versus Grandfathering[4]

There are essentially two ways of allocating allowances:

- ***Auctioning***. Allowances are auctioned; thus operators pay for all the allowances they receive. This is arguably the most economically efficient method and the method that is generally favoured in the academic literature.
- ***Grandfathering.*** Allowances are given away free to operators on the basis of past, or expected future, performance. This approach is often preferred in practice, as it is the compromise that industry is prepared to accept in order to sign up to an ETS.

A hybrid scheme, in which a certain proportion of allowances are auctioned, is also possible. The EU ETS, which requires that 95% of allowances in the first phase (falling to 90% in the second) are grandfathered with the possibility that the remainder are auctioned, is an example of such a hybrid.

The scope of the scheme – in terms of the gases and activities it covers – and the definitions of these activities are set out in the Directive establishing the EU ETS. The Directive could potentially cover emissions of all six Kyoto greenhouse gases, but in the first phase will only cover emissions of carbon dioxide (CO_2) from the specified activities. In order that the scheme does not cover very small emissions sources, the Directive includes minimum criteria for some activities, e.g. for combustion installations a rated thermal input of 20MW and for glass manufacture a melting capacity of 20 tonnes a day, below which activities need not be included. In the first phase of the scheme, Member States are allowed to opt-out installations for which equivalent policy measures are already in place provided that these deliver equivalent emissions reductions.

Directive 2003/87 requires that each Member State issues a permit to each operator of an installation that undertakes an activity covered by the EU ETS. This permit has to contain the monitoring and reporting requirements imposed on the operator in light of the EU ETS, as well as a requirement to surrender allowances equal to the emissions of that installation in each calendar year, although the details are left to the relevant authorities in the Member States. The European Commission has issued Monitoring and Reporting Guidelines[5] in relation to the monitoring and reporting of emissions covered by the EU ETS. Operators are required to monitor their level of emissions in a given period and report these, according to the provisions of the permit. As a result of the financial implications of emitting more or fewer emissions than an installation has allowances for, it is important that the emissions reported are verified. Hence, the

[4] ibid, for further discussion and references

[5] Decision 2004/156/EC establishing guidelines for the monitoring and reporting of greenhouse gas emission pursuant to Directive 2003/87/EC (OJ L59, 29.01.04)

Directive requires that Member Stares ensure that reports submitted by operators are independently verified. In order to facilitate trading of surplus allowances, Member States are required to set up a registry within which allowances will be held and traded. With respect to penalties for non-compliance, the Directive requires Member States to ensure that operators that do not surrender a sufficient number of allowances to cover their emissions in any given year pay an 'excess emissions penalty' of 100 Euros (40 Euros in the first phase). The Directive requires that Member States put penalties in place to ensure that operators comply with all other requirements of the Directive, but do not state what these are or what the level of the penalty should be.

In addition to the above, the establishment of an emissions trading scheme leads to the creation of additional infrastructure outside of the responsibility of national governments or their agencies: the financial services providers and traders.

This report focuses on the role of the regulatory authorities in the above, as identified by the experts present at the first workshop.

3 Regulatory Practice in relation to the EU Emissions Trading Scheme

3.1 Links with other Legislation

The EU ETS is an innovation at the EU level, as other legislation regulating pollution from industrial sources is of the more traditional command-and-control form, e.g. the Directive on Integrated Pollution and Control (IPPC) (see Box 3.1). The scope – in terms of the activities that are covered and the minimum thresholds for these – of the EU ETS and IPPC Directives are quite similar. However, the scope of the IPPC legislation is broader, so that the EU ETS effectively only applies to a subset of IPPC activities. The exception is that the minimum threshold for the inclusion of combustion installations in the EU ETS is lower than that used in the IPPC legislation, so there are smaller combustion activities that are included in the EU ETS, but which are not covered by IPPC. In addition, the EU ETS Directive amends the IPPC Directive so that the energy efficiency requirements of the latter do not need to be applied to installations that are within the scope of the EU ETS.

Box 3.1: The Directive on Integrated Pollution and Control (IPPC)

The principal aim of the IPPC Directive[6] is to introduce an integrated approach to controlling pollution from certain industrial sources. It applies to six categories of industry: energy; production and processing of metals; minerals; chemicals; waste management; and 'other'. The 'other' group includes facilities operating in the areas of pulp and paper production, textile treatment, tanning, food production, and the intensive rearing of poultry and pigs. Within each category, the scope of the Directive is defined further either in relation to the nature of the process or product (e.g. refining of oil) or the size of the operation (e.g. production of ferrous metal above 20 tonnes per day).

The Directive differs from much previous legislation aimed at reducing pollution from industrial sources, as it requires operators and authorities to think about all emissions and impacts in the design of the whole plant ('clean technology') rather than relying on 'end-of-pipe' techniques. It also differs in that it does not simply address one type of pollution, e.g. emissions to air, but requires that a range of environmental impacts, including emissions to air, water and soil, as well as waste generation and energy use, are taken into account.

The operators of IPPC activities have to possess a permit for the installations undertaking these activities. This has to set out the process technology, in the form of 'Best Available Techniques' (BAT), set emission limits for pollutants, and set monitoring and reporting requirements. The detailed organisational and institutional aspects of the regulation of the IPPC regime are left to individual Member States.

3.2 Definitions and Scope of the Directive

As a result of the overlap between IPPC and the EU ETS, many EU Member States used the list of installations covered by the former to identify the installation to be included in the latter as far as this was possible. As a result, most were at least relatively confident that they had identified all installations that should be included in the EU ETS, but some noted that a handful of installations had been identified since the allowances had been allocated. The speed with which the scheme had to be introduced caused some problems for Member States with several reporting that the permitting process was still ongoing when they returned their questionnaire.

[6] Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control, OJ L257, 10/10/96

In spite of the overlap between the activities covered by the existing IPPC legislation and the new EU ETS, many Member States experienced problems with defining an 'installation' and their boundaries, particularly in relation to combustion installations, or had problems associated with a particular industry (see Box 3.2).

Box 3.2: Problems with the definitions of installations included in the EU ETS

- The lack of a precise definition of combustion activity. There have been different interpretations of the definition of combustion activity, with a range of medium and broad definitions being used by different member states.
- The aggregation of combustion activities to meet the minimum threshold. There has been some confusion here as to whether, for example, small domestic boiler units should be included/excluded from the installation and there is a case for a *de minimus* threshold here. There has also been some confusion as to whether standby units should be included or excluded from the installation.
- The impact of including a *de minimus* threshold. Some member states have applied a minimum qualifying annual emission of carbon dioxide to installations that should be included in the scheme, which is an useful approach for removing those operators that emit very little carbon dioxide from the scheme.
- Defining the installation boundaries in the steel and ceramics industries, where some parts of the process are captured and others are not.
- The inclusion, or not, of an installation where energy is recovered for district heating or where there are no CO_2 emissions as a result of recycling.
- The definition within the ceramics sector. As some significant GHG emitters, e.g. pottery, are not included, whereas smaller brick and tile manufacturers are included.
- Multiple operator cases, where a combustion plant is operated by an independent company providing heat, steam or service to the 'main installation'.

In spite of the minimum thresholds in the Annex to the legislation, the regulatory authorities in some Member States are concerned with the amount of effort that has to be put into ensuring that installations with relatively low levels of emissions, but which were still above the thresholds set out in the legislation, meet the requirements of the legislation. There was concern that the effort needed to engage the operators of these installations, which tended to be small, was disproportionate compared to the likely emissions reduction that could be achieved. The Netherlands used the opt out provision of the Directive to exclude smaller installations emitting less than 25kTCO_2 annually from the first phase of the scheme on the basis that other measures were in place for such installations that would result in equivalent emissions reductions. Poland had applied to the Commission to be allowed to take a similar approach. Sweden and Finland have compulsorily included some smaller (i.e. those with a rated thermal input of less than 20MW) district heating installations, if they are connected to a network that has a total output of more than 20MW (Sweden) or where one or more installations connected to a network have outputs greater than 20MW (Finland). The majority of regulatory authorities in the Member States would support the inclusion of a *de minimus* threshold in the Directive, although the level at which this could be set was left open.

Member States have attempted to solve any problems in their own ways, and hence there is a risk that the interpretation is different between Member States, which could lead to an inconsistent application of the Directive. Ideally, the Directive needs to be amended in order to address the definitional problems that Member States have been

having, and to introduce a *de minimus* threshold. However, given that the second phase of the EU ETS will begin in 2008, it is unlikely that the Directive could be amended in time, particularly as proposing an amendment, no matter how specific it was, would risk opening up other issues for debate.

3.3 Allocations

All EU Member States had created a new entrants reserve. In addition to completely new installations, some Member States also used the new entrants reserve as the source of allowances distributed to significant extensions of installations. There were different approaches to the identification of new installations, as some Member States simply took these to be any installation applying for a permit after, or not operating before, a certain date. One Member State granted permits to 'Known Planned Developments' (KPDs), these being projects that are certain to become operational in the course of the 2005-2007 phase. These projects had to be permitted by March 31, 2004 either as part of existing installations or as new installations, thus allowing the Competent Authority to allocate to the projects from the initial national allocation. Allowances are only issued a month after KPDs are commissioned. Projects that fail to commission have their allowances allocated to the new entrant reserve or if they are late, have their allowances reduced pro-rata and the excess allocated to the new entrants reserve.

Most Member States dealt with new installations and extensions to existing installations (requiring a variation to the permit) in a similar manner, i.e. the installation had to have a valid permit – or a revised permit in the case of an existing installation – before allowances were allocated.

However, from a regulatory perspective, the existence of a new entrants reserve causes significant problems (see Box 3.3). Member States have used different methodologies for allocating allowances to new entrants, but whichever methodology is chosen potentially discriminates against someone. For example, if allowances to new entrants were based on projected emissions using best available technology, as used by some Member States, then, in the approach taken by the EU ETS, this discriminates against new entrants, as existing installations were not allocated their allowances on this basis. However, if allowances to new entrants are allocated on the basis of average sectoral emissions from past years, this is arguably unfair on those existing installations that have taken action to reduce their emissions in the past. Hence, the different approaches taken in Member States – some of which arguably favour new entrants, while some favour existing installations – could potentially introduce market distortions whereby similar installations in different countries receive different levels of allowances.

Box 3.3: Regulatory Implications of the existence of a New Entrants Reserve

All Member States (involved in the IMPEL project) have a new entrants reserve (NER). The size of NERs ranges from 0.6% to 8.5% (including known/planned new entrants) of annual allocated allowances.
There are concerns that New Entrants are treated differently in different Member States, especially as the allocation methodologies have been developed separately.

- The different allocation methodologies are likely to give different allocations across the EU, which could lead to competitive distortions. Allocation methodologies for new entrants had not been fully detailed by some Member states at the time of the review, but those which were outlined can be described as using 'emissions projections'; production projections'; and 'benchmarking'.
- There is a significant administrative burden in managing a New Entrant Reserve.
- There is a need for verification of new entrants.
- Different approaches have been used by Member States when new entrant demand for allowances exceeds NER capacity. Some will allocate on a first-come, first-served basis. Further requests would have to be purchased in the market. Other Member States will purchase additional allowances which ensures all new entrants the same treatment but poses an unlimited financial burden on Member States balances.
- Criteria used to define extensions to existing installations qualifying for allocation from the NER vary, giving the potential for distortion. Definitions can be grouped into 4 main categories : change in capacity (above a threshold); case-by-case (requiring demonstration of a significant change); change to IPPC permit; development compulsory pursuant to legislation (resulting in a minimum of 10% increase in emissions); and other specific cases such as increase in Good Quality CHP.

From a regulatory perspective, therefore, some argued that it would be best not to have a new entrants reserve, instead requiring new entrants to purchase allowances on the market. However, given that a new entrants reserve does exist within the EU ETS, the adoption of a common approach across the Member States would at least reduce the potential for market distortions that may well arise from the different approaches in Member States.

Regulatory authorities also have to deal with the closure of installations that have been granted allowances for the first phase of the EU ETS. However, defining closure is not easy. Some Member States have defined closure of an installation as being when the activity ceases, while others have defined it as when the installation is no longer operational or when the permit has been withdrawn. Clearly, these potentially refer to different stages of the 'closure' process. Hence, an installation that ceases its activity, but retains its permit, will be treated differently in different Member States and thus could retain allowances in some, but not in others. As with the different approaches to the new entrants reserve, the different approaches to closure could potentially interfere with market decisions. In some countries, the national legislative framework caused additional problems that were not linked to the EU ETS. In most Member States, once an installation had been closed, its allowances for future years were either cancelled or transferred to the new entrants reserve. However, in one Member State allowances, once allocated, could not be taken away, even for future years, unless compensation would be provided. In this country, therefore, there was no need to define 'closure'. The different approaches to closure could be important for specific cases, but it was not clear whether this was a major issue. One potential way of addressing the problems of defining closure was to put the onus on the operator to prove that they were operational.

Of those Member States that submitted a questionnaire for the purpose of this study, only two had retained a proportion of the allowances with a view to auctioning them, while a few more were considering auctioning surplus new entrants' allowances. No Member State had yet agreed a methodology for doing so. The regulatory authorities also raised issues in relation to the need to harmonise business as usual modelling, as well as the harmonisation of allocations for existing installations.

3.4 Permits

Given the overlap between the EU ETS and the IPPC Directive (see Section 3.1), it is not surprising that there are some links between the permits issued under the two approaches. However, the links vary between Member States – from simply ensuring that the appropriate installations also had an IPPC permit, through ensuring that the two permits were compatible to integrating the two permits. Much attention has been given to the possibility of integrating the two permits with France and Germany both deciding to integrate the greenhouse gas emissions permit into the IPPC permit, while Ireland and Portugal are planning to do so in the future. Other Member States – notably the UK and the Netherlands – have decided not to integrate the two as they considered that this was not helpful given the current scope of the two pieces of legislation.

In some cases, the adoption of different approaches reflected different historical approaches in relation to regulation (see Box 3.4 for further discussion). However, it was noted that, as the EU ETS develops to cover potentially more gases and sources, including possibly non-industrial sources, then the approach currently taken would be reviewed and possibly amended. It was underlined that whichever approach was used, it should be flexible and transparent.

Box 3.4: Integration of GHG emission permits into other permits

The principal arguments in favour of integrating the GHG permit with existing permitting regimes aimed at similar sources include the desire not to create another permitting system and the potential advantages of utilising a permit with which most of the operators were already familiar. In Germany the tight schedule to implement the EU ETS has been – among others – an important reason to use the existing permitting regime.

A key argument against integrating the GHG permit with an existing permitting regime, which, in the case of EU Member States, would be the IPPC Directive, is that it is difficult because the two approaches are so different. The IPPC Directive is a command-and-control approach with the onus on the regulator to make sure that the operator complies, whereas the EU ETS is much more flexible and puts the onus on the operator to comply. The institutional and regulatory set-up in a country can also influence the approach to be taken with respect to permitting. For example, in the Netherlands, the issuing of permits under the IPPC regime is devolved to provinces and municipalities, which take different approaches. On the other hand, with respect to the EU ETS it was felt that it was much more important to have a common approach to compliance and enforcement, so permitting is undertaken at the national level.

Member States did not highlight any significant permit requirements beyond those set out in the Directive – other than basic administrative issues. Some Member States also made a distinction between the action operators need to take when information contained within a permit changes. In these cases, minor, principally administrative, changes often required only a notification on behalf of the operator, whereas major changes required a permit variation. Other countries required all changes to be notified to the competent authority, which then determined whether a permit variation was required.

3.5 Monitoring and Reporting Guidelines

Monitoring and reporting is a detailed, complex activity, which argues for rules that

have two nearly opposite aims: clarity, and flexibility. The more prescriptive a European regulation, and the more detail it is spelled out in, the more straightforward the task of regulators and industry. However, given the EU ETS covers a range of states with varying national conditions, flexibility is absolutely necessary. The Monitoring and Reporting Guidelines (MRG) under the EU ETS have therefore left much to the discretion of Member States, which can in turn choose to fill in more detail and be more prescriptive if they choose (see Box 3.5). A range of practices are in evidence, and it is clear that there are national practices that could be both refined and replicated, but that European level guidance should probably also evolve – primarily through more information rather than amendment of the legislation, though this could be an option for specific points.

Box 3.5: The tier system[7]

How does the "tier system" work?

The tier system provides a set of building blocks to determine the appropriate monitoring methodology for each installation. The tier system defines a hierarchy of different ambition levels for activity data, emission factors and oxidation or conversion factors. The higher the number of the tier chosen, the higher the level of specificity and accuracy. The operator must, in principle, apply the highest tier level, unless he can demonstrate to the regulatory authority that this is technically not feasible or would lead to unreasonably high costs.

How is the principle of cost-effectiveness implemented?

The principle of cost-effectiveness aims to balance additional resources expended with the respective benefits achieved. The MRG accordingly allow for differentiation regarding the required accuracy in the monitoring of major and minor sources. Table 1 in Annex I sets minimum requirements for cost-effective monitoring for different activities, sizes of installations and fuel types that Member States should apply in permitting the installations. Minor sources which emit 2.5ktonnes or less per year or that contribute 5% or less to an installation's annual emissions can be monitored using lower tiers. The same applies to streams of pure biomass. Minor sources that emit 0.5ktonnes or less per year or that contribute less than 1% of total annual emissions of an installation can be monitored using a no-tier estimation method.

3.5.1 Complexity and information

The EU ETS MRG are complex, but not to the point of being clear through prescriptive requirements. They leave important decisions to be taken at Member State level, which can lead to discussions about interpretation. A good example is that there is flexibility about the required tier level, which defines the detail an installation has to go into to meet the requirements. In principle the choice is based on the ability of the analysis to be done in a cost-effective manner. However, there is no clear definition of cost effectiveness, so it is possible that different Member States will place quite different burdens on similar types of facilities. Boundaries, definitions and coverage are also sometimes unclear in both conception and application, e.g. the requirement to include biomass facilities despite their theoretical carbon-neutrality.

There are a number of ways Member States have found to deal with uncertainties and

[7] Reproduced from the 'Answers to Frequently Asked Questions on Commission Decision 2004/156/EC of 29 January 2004 establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC. Version: 2 March 2005'

information problems. These include discussion among important players; development of templates, websites, and helplines; assistance from government to do baseline surveys; and issuance of explanatory national legislation.

Future improvement of the system is possible, though one should bear in mind that the main reason the guidelines are complex is that reality is complex. Additional guidance could cover issues like what is 'cost effective' and how this is judged, the maintenance of meters, and how to assess uncertainty. These points needn't be regulated as part of legislation, but simply require co-ordination. A European list of frequently asked questions may also help, and could be produced by the Commission.

3.5.2 Emissions factors

There is an increasing level of specificity through the tier levels with respect to emissions factors (i.e. tCO_2 emitted/tonne of fuel). At the most basic level, Tier 1, standard figures provided by the Intergovernmental Panel on Climate Change (IPCC) are acceptable. At level 2a, national factors are acceptable. This information should in principle be available through the national reporting Member States have done to the UNFCCC (United Nations Framework Convention on Climate Change). In practice, various Member States have used a range of approaches, with some difficulties finding detailed information, and some finding inadequate figures because they are out of date. As the factors for inclusion in the third national communications should be done by the end of 2005, most Member States feel it would be worthwhile to ensure consistency and accuracy for both that and the EU ETS.

3.5.3 Linkage to IPPC and EPER

IPPC covers similar facilities to those in the EU ETS. While there is no requirement to overlap any monitoring and reporting activities among the two, information about activities at a facility under EU ETS has to at least be coded with both the IPPC codes under the European Polluting Emissions Register (EPER), as well the codes under the common reporting format for the UNFCCC.

Member states are taking different approaches to the integration of ETS with IPPC and EPER. Most have no link, some share some data, and others are quite integrated. The efficiency of making a link depends in large measure on how Member States have organised their systems, and most feel it is an issue tackled best at national level.

3.5.4 Ensuring requirements can be and are fulfilled

Introduction of the EU ETS is not done without a good understanding of whether it will work in practice – there must be, among other things, a realistic chance that covered facilities will be able to comply with the guidelines, and that verifiers are able to do their jobs properly. Perhaps the most important tool from the regulator's point of view is permitting, together with the monitoring plan that is submitted as part of the requirement to obtain a permit. This supplies the information needed to assess the ability of a facility to undertake monitoring and reporting sufficiently. On that basis there can be extra effort dedicated to providing more information, or more inspection and enforcement attention, as needed. Similarly, as discussed in section 3.6 below, verifiers must also be accredited – once this process is complete, there is significant

reliance by regulators on their professionalism.

3.5.5 Uncertainty

There are provisions in the MRG for dealing with uncertainty in the measurement of emissions. Selection of tier levels is the main source of uncertainty, given that lower levels are more general estimates than higher ones. Specifying tier levels, and having them approved, constitutes uncertainty analysis for the purposes of the Directive, unless an operator chooses to supply measured data, in which case a more developed uncertainty analysis is required.

Accepting the choice of tier level and the uncertainty analysis for measured data puts a burden on competent authorities to understand the implications of uncertainty. This is not an easy task, and some Member States find it may require extra guidance. Some regulators are turning the equation around to specify accuracy rather than uncertainty, or providing more detailed national guidelines.

3.5.6 Smaller operators

Around half of the installations covered by the European system emit less than 25,000 tonnes of CO_2 per year, representing a relatively small proportion (less than 5%) of quotas, whereas around a third of the installations are responsible for the vast majority of emissions. Nevertheless they are all part of the same system. The wide gap in size between the smallest and largest installations is reflected in their likely financial and administrative capacity to undertake monitoring and reporting. The tier approach is designed to alleviate some of the difficulty of calculating emissions with facility-specific data, and some Member States feel this is sufficient flexibility for them.

Nevertheless smaller operators may have some difficulty, and most Member States would argue for some additional flexibility. This does not mean they are necessarily to go without monitoring and reporting - it may be possible to reduce fees paid for verification by allowing it to be done by qualified individuals rather than certified specialist firms; or to allow pooling of smaller firms; or to provide very specific requirements for them that are then checked less frequently. All of these are considered options for the future.

3.6 Verification

Under the terms of the EU ETS, third party verifiers are hired by the operator, much as accountants are, to confirm compliance with the monitoring and reporting plan. Because regulators depend on the ability and integrity of verifiers for the proper functioning of the system, ensuring they do their job well is an important aspect of the EU ETS. There are two main aspects to current discussions on verification among regulators - agreeing any standard verification procedures, and agreeing how verifiers are to be accredited.

Member states are creating verification standards on different bases - national legislation interpreting the Directive, the International Emissions Trading Association (IETA) protocol, European Accreditation guidance, or environment ministry

standards.

Box 3.6: Accrediting verifiers[8]

Verifiers, certifiers of systems and products, testing and calibration laboratories and inspection organisations must need to demonstrate their competence. They do this by being accredited by a nationally recognised accreditation body.

Accreditation delivers confidence in certificates and reports by implementing widely accepted criteria set by the European (CEN) or international (ISO) standardisation bodies. The standards address issues such as impartiality, competence, repeatability and reliability; leading to confidence in the comparability of certificates and reports across national borders. Governments have confidence in testing and certification and verification in support of regulatory functions.

Accreditation means that evaluators (i.e. testing and calibration laboratories, certifiers, verifiers and inspection bodies) have been assessed against internationally recognised standards to demonstrate their competence, consistency, impartiality and performance capability.

It is the ability to distinguish between a proven, competent and consistent evaluator that ensures that the selection of a laboratory, verifier, and certifier or inspection body is an informed choice and not a gamble. Accreditation means the evaluator can show to its customer that it has been successful at meeting the requirements of international accreditation standards.

Because verifiers are the clients of the operator and not regulators themselves, there need to be adequate safeguards that they have the authority and independence to get the information they need. The operator is the verifier's customer and communication with authorities is via the operator, so feedback is somewhat indirect. Direct communication with regulators is limited to information activities like workshops and websites. Several Member States allow the verifier to suggest improvements, derive data with the methodology and do materiality checking.

Co-operation of operators with rigorous verification is ensured in various ways - by threat of withholding verification, as a condition of obtaining a permit condition, or by legislative requirements. Verifiers themselves are bound to the terms of their accreditation, which is the main insurance of their credibility.

As the EU ETS is a pan-EU system, there are not meant to be barriers to verifiers from other countries operating in any Member State. In principle the requirements are mostly just notification, but also include proof of local knowledge such as language and local legislation.

Emissions allocations have been determined from estimates of baseline emissions levels - in some Member States these levels have also been verified, which has proved a useful and informative exercise.

Verification requirements is an area where the Directive leaves quite a bit up to Member States to fill in details. While national guidelines are being developed, most Member States would welcome more guidance from the Commission, as well as harmonisation of procedures through other channels such as IETA and the European Verification Network, bearing in mind compatibility with CEN standards. Peer

[8] IETA, "Guidelines for an accredited verification system of the greenhouse gas emissions within the EU Emissions Trading Scheme, 28.4.2004"

reviews and harmonisation of accreditation of verifiers is then a second step, which would, among other things, assist in the ability of verifiers to work across borders.

3.7 Compliance

Compliance with the Directive may or may not be guaranteed by verification. Verification is designed to check that monitoring procedures are properly in place and have been applied according to the monitoring and reporting plan, which should, in principle, mean compliance. Some Member States therefore do not plan extra inspections by environmental auditors. At the other extreme, some Member States are planning to inspect all installations in the first phase. Others plan to visit a small number based on risk, or as part of regular inspections for other environmental compliance reasons.

About half of the MS are completing an inspection protocol, with some varying the scope of inspections based on operator characteristics. Inspections are generally separate from verification visits, and show a wide range of integration with IPCC: some have no links, while others will inspect CO_2 emissions on an IPPC visit.

At the moment we are too early in the system to have much experience with compliance issues. Member states agree that for the future, the likelihood of compliance would be enhanced by having a more relaxed timetable for submission of Monitoring and Reporting (M&R) plans. It is considered too early to think about harmonising inspection protocols, but sharing practice would be beneficial. The development of guidance on inspections should be considered in the future.

3.8 Enforcement

There is little experience with enforcement difficulties this early in the EU ETS, as indeed no offences have yet been noted. However, a range of approaches to enforcement is being developed across Europe. Anticipated penalties include fines, suspension of a permit, suspension of transfer rights and even closure of the installation. A potentially innovative aspect is the use of a permit database with links to the registry.

The ‘excess emissions penalties’ (as set out in Article 16 of the Directive) are to be collected by an environment agency, a trading authority, a central ministry or another competent authority. Only in one country is it anticipated that money raised from these penalties will go directly to cover compliance activities, and in another it will be put partially in an environmental fund; otherwise the money will go to the treasury.

Member States agree that enforcement is a national issue with diverse approaches possible, but where information about national practices would be helpful. Enforcement is relatively harmonised in the Directive, and the priority should be on ensuring complete enforcement rather than harmonised sanctions.

3.9 Registries

No Member State identified a technical link between the permitting system and the registry, although this was considered to be an aspiration for some. The rationale

behind this was the need to update the latter in the event of changes in the permit, be they only minor or major.

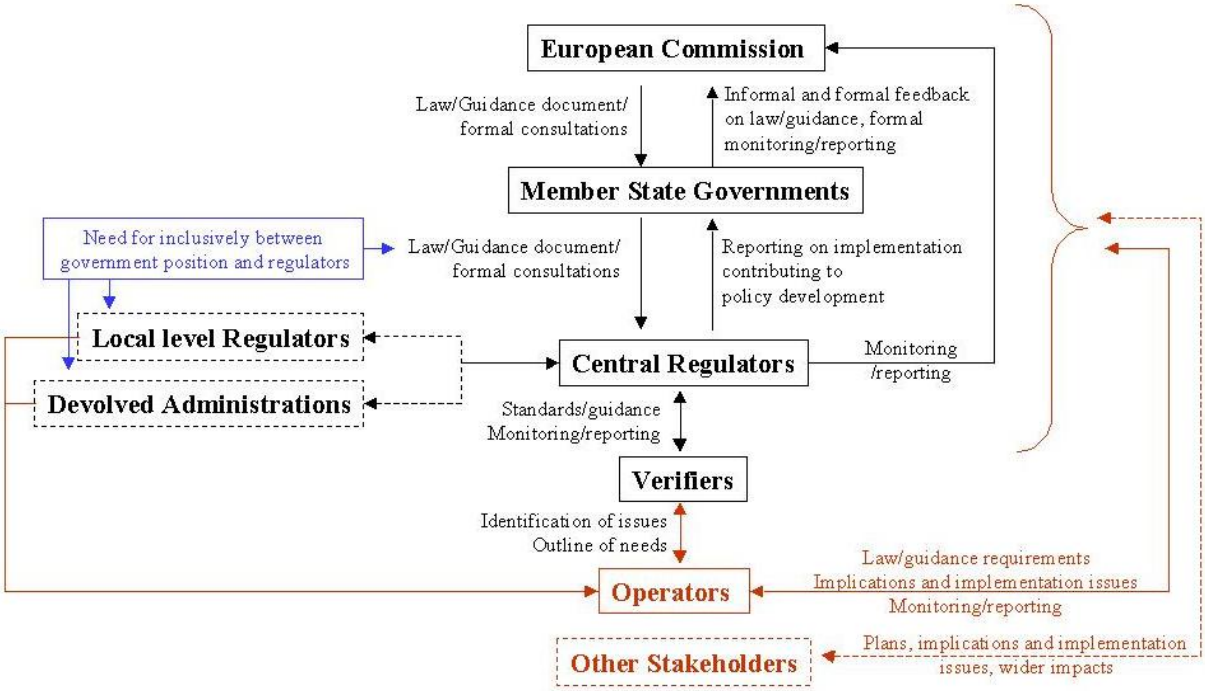
Various liabilities had been identified in relation to the registry. These focused on technical problems, particularly if the transfer of allowances was delayed or prevented for some reason, and data security and accuracy. One Member State also identified potential conflicts between the regulatory authority's duties as the administrator of the registry and money laundering and fraud legislation. The liabilities were addressed through *inter alia* the terms and conditions that all registry users have to abide by and requiring appropriate indemnities and limiting liability through, for example, national legislation. Given that the use of the registry is still in its early stages, it is too early to say whether the approaches taken to addressing liabilities will prove to be sufficient.

The strength of the entry authorisation is also key to the security of the registry. Most Member States required a username and a password, although some had, or were going to introduce, a stronger user authentication based on banking software (e.g. Sweden and Finland) or smartcards (Netherlands). A registry account was only opened when the regulator was satisfied that the applicant was who they said they were, so the proof of the name of the individual applying, along with relevant company information was needed to open an account.

Whilst the Directive allows each Member State to develop its own registry, a number were using registries purchased from another country, e.g. Ireland had purchased the registry developed in the UK. Other Member States noted that the development of registries within different countries involved the duplication of a lot of effort, which could have been saved if the registry had been developed at the European level. However, given that there are already different systems in place, there is now little need for EU-level co-ordination, although good practice could usefully be shared.

3.10 Communication

Diagram 3.1: Communication links needed to ensure the effective regulation and implementation of the EU ETS



3.11 Communication and Consultation

Implementing an emissions trading scheme is a complex process which requires the co-ordination of many different activities and buy in from numerous different parties. Therefore, communication is an essential element of implementing a scheme, and it is important that this is effective within and between each of the regulatory layers – see Diagram 3.1 for details of the many different types of communication required.

Communication should be clear and easy for all to access. In order to generate a functioning trading scheme it is important that everyone buys into the process and understands the basics of trading as well as their regulatory responsibilities. One element key to the implementation of the EU ETS, in the majority of Member States, has been the use of electronic resources in order to facilitate the reaching of a wider audience and speed up the regulatory processes such as the issuing of allowances and permits. When asked to identify what has been innovative about communication in relation to the EU ETS most Member States highlighted the use of electronic communication especially the use of websites and email response services – see box 3.9.1. Many also pointed to the use of a broad range of communication channels as being important.

Box 3.7: Details of electronic communication methods and their merits

All Member States surveyed used electronic tools to communicate with stakeholders specifically email and the Internet. The experience of the use of these tools was positive, with a feeling that they resulted in timesavings. For some new Member States (Czech Republic) this proactive use of the web and email

communication with industry is not common practice and this flexible method of communication was very much welcomed by companies.

Regarding the use of the internet, many created pages dedicated to emissions trading which sat within their environment ministries website or on the regulators site (Ireland, Czech Republic). Others (Sweden) created a dedicated site e.g. www.utslappshandel.se or in Germany www.dehst.de. These sites were felt to be 'an excellent way to post background information, guidance and electronic forms' and 'are frequently consulted by industry'. In some Member States installations obtain their initial information from the web.

Both regulators and companies also very positively received email enquiry services. Many set up dedicated emails to which companies can send questions. It was generally felt these worked well and are a good way to manage enquires, enabling regulators to have a record of enquires. In addition the email service resulted in time savings as responses to similar questions could be collated.

Member States commented that communication with industry is important to the success of emissions trading and must be proper and effective. In order to identify the most effective way of implementing a scheme consultations should be undertaken with operators and other stakeholders. This raises awareness amongst these groups regarding the scheme and their responsibilities within it. It also allows regulators the opportunity to understand what problems may arise as a consequence of these changes. It is considered good practice to involve industry early on in the scheme's development to enable problem solving and for them to develop some ownership of the final trading system. There seem to have been three key methods used by Member States to co-ordinate communication with industry.

1. The development of working groups or groups of key industry representatives. These have provided and worked with regulatory authorities advising them on the methodologies, piloting ideas, trialing forms etc.
2. Approaching industry and trying to gain a broad understanding by holding discussion with sectoral associations, asking for questionnaire responses etc
3. Less targeted communication via seminars, workshops and conferences, group emails to all involved in the EU ETS advertising for participants in the media e.g. on the web and in newspapers.

Considerable efforts have been made in all Member States to communicate with industry and most felt that the response from industry has been positive and enthusiastic. It was felt that on the whole there have been few negative comments re the communications systems.

'They came, they listened and we listened'

It is also important to maintain communication links during a scheme's operation; the majority of Member States are planning to do this via similar methods to those outlined above. Some felt that there is a need to address the issue of gaining buy in from small/medium enterprises (SMEs) in the future.

It has been generally acknowledged that levels of communication with industry have been high. However, there has been a more mixed approach to communication between regulators and other stakeholders. Some regulators have not been proactively engaged with the wider community. The majority of Member States relied on their

Internet resources to inform the public and responded to requests from non-Government organisations (NGOs). Some have held meetings and public consultations.

3.12 Permitting and Allowance Application, Permitting and Reporting

As outlined above the use of electronic systems is deemed to result in time savings. Member States have relied on electronic systems to varying degrees during the implementation of the EU ETS in order to facilitate the permitting/allowance allocation process, the registry, and the development of monitoring and reporting systems. Many felt that they would like to increase the use of such resources in future. However, the formats used by different Member States vary. Many used emails to receive completed applications for allowances and permits and website from which the forms for these procedures could be downloaded.

The level of uptake of the use of electronic systems varied between Member States, as did the effort by Member States to promote this style of working. The majority employed electronic systems for the application for and issuing of permits (although in some cases a hard, signed copy was also required). In several Member States levels of electronic permit applications were very high at between 95% and 100%. Many felt that the use of these resources had been more successful then they had originally expected despite initial scepticism from some industry representatives.

Despite the high levels of usage of electronic applications for the submission of permit applications, few Member States are currently issuing permits electronically – some Member States are undecided as to whether go down this electronic route. It seems that there are particular reasons for this lack of uptake, including the need to have signed/stamped paper documents. Regarding operator reporting, the majority of Member States are still considering what might be the best way forward, and whether this should be electronic – many feel that this would be the best way if an effective system can be found.

Box 3.8: Example of the use of electronic resources for permitting, allocation, monitoring and reporting

The Environment Agency for England and Wales has developed a number of electronic resources to facilitate permitting. All permit applications are received via an electronic template. From this template, the details are imported to a permitting database from which permits are generated and issued electronically. Monitoring reports will also be received electronically, and again the details can be stored on the permitting database. Applications for allocations from the new entrant reserve are also received electronically and management of the reserve is carried out using an electronic spreadsheet. Future considerations on how electronic resources might be developed include integration of the permitting database with the new entrant spreadsheet and possibly the EU ETS registry.

3.13 Confidentiality and the Public Availability of Information

In order to allow public scrutiny of the implementation of legislation Member States are required to allow public access to information. In terms of the EU ETS this can and has caused issues in terms of ensuring confidentiality for operators. So these requirements have been addressed by publicising National Allocation Plans, hence making allocations public, and many have plans to make permits publicly available.

The prime tool used for publishing public information is the Internet. Some Member States do have confidentiality clauses, although, these are applied limitedly. Most are working on a case-by-case basis making specific information confidential but only after very careful consideration.

3.14 Institutional Issues

When setting up an emissions trading scheme, based on the experience from the EU ETS, there appears to be no 'best' way of developing the institutional infrastructure. Member States have adopted a structure that suits their current systems and cultural ways of working best. Some Member States have developed departments within existing institutions to organise the regulation of the scheme while others have created designated emissions trading authorities while still others have devolved some responsibilities to local level authorities. However, what does appear to be important is the organisation of those dealing with the scheme, their visibility, easy access to them, the co-ordinated action of individuals within the team and others involved in the scheme's development e.g. governments. In order for all these needs to be met it is important that the infrastructure is clearly defined. Under the EU ETS the majority of Member States have enshrined in their transposing legislation the responsibilities of different groups, and it is considered good practice to enshrine in law the institutional structure. Another issue that came to light is that the development of an emissions trading scheme is initially resource intensive for the regulator. It is therefore important that realistic levels of resources are provided in order to get the scheme up and running and to ensure that permitting/allocation systems are set up in an effective way – this is likely to save on resources during the longer term running of the scheme.

Box 3.9: Development of a National Emissions Authority versus working with existing infrastructure

In Germany, the decision to set up a dedicated central emissions trading authority (i.e. German Emissions Trading Authority of the Federal Environmental Agency, DEHSt) was taken as a result of the perceived importance of the new mechanism for climate protection. In addition, the system had to reflect the special needs of the federal structure of the country, where the effective implementation and enforcement of environmental laws usually are devolved to the 16 federal states. As an effective ETS requires – at least at national level – a regulatory practice that is as uniform as possible (especially in terms of allocation and enforcement), it was uncertain – if not even unlikely – that the 16 different federal state environmental authorities could provide this uniformity. Furthermore it was regarded as more cost-effective to pool the task of implementing the EU ETS at one (new) central authority than to divide it among the 16 federal state environmental authorities, which would all have had to establish new ETS-departments within their existing authorities. In the light of these considerations, the DEHSt has become the central responsible authority for the application for allowances, allocation, checking emissions reports, enforcement of penalties, reporting and the national registry. The federal state environmental authorities are mainly responsible for the issuing of the ETS permits and the inspection of the fulfilment of the monitoring and reporting requirements. The reason for this is that the federal state environmental authorities are already responsible for the issuing of the IPPC permits and that according to the German Greenhouse Gas Emissions Trading Act (TEHG) the ETS permits are integrated into the IPPC permitting regime.

In the Netherlands, the existence of a national authority responsible for issuing EU ETS permits was based on the desire to create a common approach to compliance and enforcement under the scheme. This differs from the Dutch approach to IPPC, in which permitting is devolved to provinces and municipalities, which take different approaches.

In Sweden, a governmental Commission on Flexible Mechanisms initially suggested that a new authority should be set up for administering and developing the emissions trading scheme. The reason

was that EU ETS is a new and important policy instrument and a designated authority would signify its importance. However, after consideration by the parties concerned, the Swedish Government proposed that the administrative tasks relating to emissions trading should be managed by existing authorities instead of a new authority. This proposal was later approved by the Swedish Parliament. One reason not to establish a National Emissions Trading Authority was the lack of time for implementing the scheme. In addition, the cost-effectiveness of a designated authority was questioned, as its workload was considered to vary substantially over time, and the competences needed were available in existing authorities that already had responsibilities closely related to the new tasks.

One clear issue that has arisen for many, although not all Member States, is how to define the relationship between the regulator and the verifier. The verifiers have a vital role in ensuring that the scheme functions effectively and equitably. However, there are concerns amongst regulators that systems to ensure the quality of verifiers and hence, confidence, on the part of the regulator need to be improved. Member States felt that important issues in need of addressing at an EU level were the need for harmonisation of the verification process and the accreditation of verifiers. It was also felt that there is a need to monitor the experiences in relation to verification during early phase I and come together to learn from experiences. The European Commission was also asked to clarify the roles of the verifier, regulator and their interlinkages.

3.15 Charging and Funding

It is important to the development and running of the scheme to have effective systems for funding. Resources can be contributed centrally or costs can be recovered by charging those operating within the scheme or through the auctioning of allowances. The cost of administering the EU ETS varies considerably between Member States, however, as noted above it is important to note that administration, especially in the initial phase of the scheme, is resource intensive for the regulator and takes a considerable length of time. There are numerous different levels of cost recovery in Member States with some charging operators for 100% of the administration burden while others have charged nothing, preferring to recover costs by auctioning. The success of this latter approach can not yet be identified as Ireland is the only Member State adopting this methodology and the auctions had, at the time of writing, not taken place. One comment that was made in relation to charging for permit applications, was that in the absence of a fee Member States tended to receive poorly completed submissions. It was felt that charging would reduce this. One point in relation to charging, deemed important by all Member States, was the need to charge non -permit holders for the use of the registry. This was felt necessary due to the administrative burden imposed and also to avoid spurious activity within the trading system. The levels of charging vary depending on the Member State.

Box 3.10: Approaches to charging

What services are charged for?

- Most Member States charge a fee for the issuing of permits.
- Fees are charged for major changes to the permit.
- Fees are charged for inspections and accreditation.
- Most Member States charge administration fees for account holders in the registry; several Member States also charge a one off fee for opening a registry account; while others make a charge upon the transferring allowances.
- Some Member States had not made up their minds what exactly to charge for in Phase I, but are considering for phase II.

What is the money used for?

- Development, set up of and managing the scheme.
- Costs associated with managing the Registry – specifically in relation to personal account holders.
- Assessing Monitoring and Reporting plans.
- Cost of permitting.
- Administering new entry reserves.

Member States intend to continue to monitor practice in relation to charging and the impact of having a variety of charging systems.

4 Conclusions

Links with other Legislation

1. Consideration needs to be given to potential overlaps with legislation targeting similar sources of pollution, e.g. legislation targeting emissions of conventional pollutants, or even greenhouse gases if these exist. Possible overlaps, include:

    a. The scope of the legislation;
    b. The definition of the installations involved;
    c. The permitting process;
    d. Monitoring and reporting; and
    e. Inspections.

    However, experience with the EU ETS suggests that there are pros and cons to, for example, integrating the permitting system, to the extent that different EU Member States have chosen different approaches.

Definitions and Scope of the Directive

2. If the scope of the ETS does not coincide with that of existing legislation, the regulatory authorities need sufficient time to identify and permit all the emission sources.
3. The definition of installations covered by an emissions trading scheme needs to be more precise than that used in other command and control legislation targeting similar sources.
4. Experience with the EU scheme suggests that a large proportion of the installations covered by the scheme emit a relatively small proportion of the emissions, as they are relatively small. Engaging operators of these installations, in particular, takes a lot of regulatory effort. Attention should be given to ensuring that the activities included in the scheme do not require a disproportionate amount of effort on behalf of the regulatory authority compared to their emissions. For example, the inclusion of a *de minimus* threshold based on emissions could be considered.

Allocations

5. From a regulatory perspective, some argue that the existence of a new entrants reserve causes many problems to the extent that it would be better if such a reserve did not exist.
6. If a new entrants reserve does exist, a common approach to the allocation of allowances for new entrants should be adopted to avoid the risk of market distortions arising from different approaches in different countries.
7. Even though it is difficult to define the 'closure' of an installation, at the minimum the approach taken should be harmonised in order to avoid the risk of market distortions subsequently arising. However, if the regulatory system puts the onus on the operator to prove that an installation is operational, 'closure' might not need a definition.

8. The harmonisation of other procedures, such as the allocation of allowances to existing installations and the modelling of business as usual scenarios, would also help to reduce the potential for market distortions.

Permits

9. The choice as to whether the GHG emissions permit is integrated with other permits targeting pollution from similar sources is based on a number of reasons, including the perceived complexity of the system and national historical legislative and regulatory considerations. Whichever approach is taken, there is a need for transparency and flexibility.

Monitoring and Reporting

10. M&R guidelines are complex because it is a complex issue – but there is a need for more clarity that can be provided by both Member States and in future work by the Commission, such as a list of answers to frequently asked questions along the lines of the ones that the Commission has been producing.
11. Cost-effectiveness, boundaries, definitions and coverage are not specified prescriptively in the Directive, which causes some uncertainty and may lead to differences between Member States.
12. Emission factors are a concern in many countries, as these are out of date.
13. If the M&R guidelines are not amended before the second phase, alternative ways, such as through IMPEL, could be sought to address outstanding implementation issues.
14. Information provision has helped Member States clarify requirements: development of templates, websites, and helplines; assistance from government to do baseline surveys; and issuance of explanatory national legislation.
15. Some Member States are linking IPPC and ETS data, but tend to feel there are specific national circumstances guiding the decision whether or not to do so.
16. The permitting process, the terms of permits and the potential revocation of permits are the main means regulators have to ensure that operators will comply with M&R guidelines.
17. Uncertainty analysis is complex and the limits of what is needed are not clear. Some Member States turn it around to specify reporting accuracy rather than uncertainty.
18. Some Member States feel that the tier system is enough flexibility to accommodate smaller operators, but most feel there is a need for easier, lower cost rules for them, which could include use of qualified individuals for verification, allowing pooling, or providing more prescriptive guidelines that are then checked less often.

Verification

19. There was a consensus that two aspects of the verification process needed harmonising: verification procedures and the accreditation of verifiers.
20. Member States are creating verification standards on different bases - national legislation interpreting the directive, the International Emissions Trading Association protocol, European Accreditation guidance, or environment

ministry standards. Harmonisation using common methods like these is considered important.

21. There is limited direct contact between verifiers and regulators, meaning much depends on ensuring accreditation procedures select qualified verifiers.
22. Baseline verification has been a useful exercise in the Member States where it has been done.

Compliance

23. Member States are planning everything from no inspections to inspections of all facilities in the first phase; another option involves basing inspections on risk, or including them in planned inspections for other reasons.
24. The likelihood of compliance would be enhanced by having a more relaxed timetable in relation to the submission of M&R plans.
25. While harmonising inspection protocols is considered unnecessary, sharing best practices could be useful.
26. The development of guidance on inspections should not be ruled out in the future.

Enforcement

27. Anticipated penalties include fines, suspension of a permit, suspension of transfer rights and even closure of the installation.
28. A potentially innovative aspect is the use of a permit database with links to the registry.
29. While most Member States plan to give collected penalties to the Treasury, options include using them to cover compliance activities, or in contribution to an environmental fund.
30. Information about practices among Member States would be helpful, but priority should be on ensuring complete enforcement rather than harmonised sanctions.

Registries

31. The development of registries at the national level has resulted in a lot of work being duplicated within the Member States, although some countries have purchased registry software developed elsewhere. Consequently, when implementing similar ETS, attention should be given to reducing the potential duplication of effort that might result from devolving essentially technical tasks, such as the development of the registry.
32. Although experience has yet to reveal whether the ways in which the liabilities have been addressed are appropriate, it seems sensible to have a secure authentication procedure, such as using banking software or smartcards.
33. Systems should be in place to ensure that amendments to permits are reflected in other systems related to the operation of the EU ETS, such as the registry.

Communication

34. Clear and effective communication is essential in order for an emissions trading scheme to succeed.

35. There are many different layers of communication, which need to be in place in order to ensure that issues are brought to light and problems solved.
36. The involvement of industry is important and should be undertaken at the earliest possible opportunity.
37. Experience from the EU ETS has shown it is important to use a wide variety of communication methods and amongst these electronic communication is important.
38. The use of electronic resources in order to facilitate the permitting, allocation, monitoring and reporting processes has been more effective than initially expected and many Member States are intending to role this out further. It was felt to result in timesavings.
39. It was not considered necessary for overarching harmonisation on communication, but sharing experience and some standardisation would be useful.

Institutional Issues

40. Infrastructure to support emissions trading should be clearly and well defined.
41. There are no strict rules regarding the structure of the institutional set up – all that is important is that it works effectively and that it fits with existing systems.
42. It is important that the regulator is visible, easy to access and that activities are well co-ordinated within the regulatory body, between them and with other institutions.
43. There is a need to clarify the role between verifier and enforcement authority.

Charging and Funding

44. Regulators must be resourced effectively to ensure that they can complete their duties effectively especially during the intensive scheme set up period.
45. Different approaches to charging have been taken with one Member State adopting the approach of auctioning to recover costs.
46. There is a need to charge non-permit holders to hold registry accounts to reduce the risk of spurious activity.

5 Recommendations and Action Plan

Definitions and Scope

1. In relation to the EU ETS, guidance is not enough to address the definitional problems in the Directive – an amendment to the Directive is needed.
2. If there were to be an amendment to the Directive, there would be support among some regulatory authorities for the inclusion of a *de minimus* opt out provision based on emissions, while also allowing for Member States to compulsorily include installations if they so desire. Further work would be needed to identify the appropriate level of the *de minimus* threshold, which should take into consideration issues such as proportionality and cost-effectiveness. There is a need to consider how best to approach small installations in the Directive, generally (see Action 4, in the table below).
3. However, it is recognised that it would be difficult to amend the Directive without opening up other issues, which is something that all parties would be unlikely to wish to do, given that the second phase of the EU ETS starts in 2008.
4. Given these problems, Member States' regulatory authorities will be developing a paper on the problem of definitions to feed into the ongoing reviews of the Directive (see Action 1, in the table below).

Allocations

1. Given that the EU ETS has a new entrants reserve, there is a need for a common EU approach to identifying new entrants and to allocating their emissions. The Commission's revision of BAT reference document on energy efficiency is perhaps an opportunity in this respect.
2. Regulatory authorities need to explain better why the existence of a new entrants reserve is such a problem from the regulatory perspective. With this in mind, the group will develop a document on this to feed into the ongoing reviews of the Directive (see Action 2, below).
3. Given the problems arising in defining the 'closure' of an installation, the EU should aspire to move towards a common approach to closure and the treatment of allowances allocated to closed installations. With this in mind, IMPEL should undertake some work on this area (see Action 3, below).
4. There is a need to consider how best to approach small installations in the Directive, generally (see Action 4, below).
5. There is a need for greater transparency to, and possible harmonisation of, approaches taken to 'Business as usual' (BAU) modelling. Regulatory authorities should encourage their respective governments to talk to the Commission about taking this forward.

Allowances and permits

6. The integration (or not) of GHG permits with those issued under the IPPC regime needs to be kept under review as the ETS develops.

Monitoring and Reporting Guidelines

7. IMPEL should decide on priorities that need to be addressed within the M&R Guidelines and communicate these to the Commission in an attempt to encourage an amendment to the Guidelines (see Action 5a, below).
8. IMPEL should support the Commission's use of Frequently Asked Questions and encourage development of these to address priorities.
9. IMPEL should develop guidelines on various aspects of monitoring and reporting, e.g. accuracy, cost-effectiveness and uncertainty (see Action 5b, below).
10. Emission factors need to be addressed, but work is ongoing elsewhere, so the IMPEL emissions trading working group should wait and see before taking any action (see Action 6, below).
11. There needs to be special provision for small operators in relation to monitoring, reporting and verification. This group could develop guidelines on the treatment of small sources, e.g. ceramics (link with other action on small sources) (see Action 4, below).

Verification

12. IMPEL should contribute to the harmonisation of verification procedures by possibly evaluating the verification reports (see Action 7a, below).
13. IMPEL should take forward the accreditation of verifiers (see Action 7b, below).

Compliance and Enforcement

14. IMPEL could share information on current practice on
    a. Inspections and their purpose;
    b. The levels of sanctions; and
    c. Good methods of enforcement

    with a view to possible harmonisation later (e.g. Phase II) (see Action 8, below).

Registries

15. There is a need to review the Registry Regulation later in the year in light of experience from the operation in the first phase.
16. This group could usefully share experience in relation to the registry, particularly in relation to prevention of fraud and terms and conditions, and also be fed back information on discussions regarding the registries in other fora (see Action 9, below).

Communication

17. There is a need to develop a standardised approach for M&R reporting forms (see Action 5c, below).
18. IMPEL could share experience on practice in communication, e.g. other forms of (electronic) communication.

Institutional Issues

19. The Commission should clarify the respective roles of the verifier and enforcement authority in the review of the MRG.

Charging and Funding

20. IMPEL could share experience through the ETS group, as and when they have something interesting and useful to say (see Action 10, below).

PROPOSED ACTION PLAN FOR IMPEL EMISSIONS TRADING GROUP*

Aspect of the Directive	**Actions**	**Deadline**	**Responsible**
1. Definitions and scope	o Identification of practice (some in questionnaires); o Bring together issues; o Highlight the problem; o Propose solutions; o Decide where to take these.	End of May 2005 to feed into WG3 meeting in June	UK to put together a think piece on the issues will require consultation with the whole group
2. New Entrants/allocation methodology	o Identify, list and demonstrate problems relating to these.	End of May to feed into WG3 meeting in June	Italy to co-ordinate
3. Closure	o Identify and collate MS approaches; o Identify any real differences and potential problems; o Decide if/how this group should address these, also address how you turn the responsibility around from the MS defining closure to the company proving that it has been operating.	End of December 2005	Ireland
4. Small installations	o Some info in questionnaires; o Identify what each MS considers to be small and why (including those not present).	End of May, so that can feed into the MRG review	Germany
5a. Monitoring and Reporting Guidelines	o Collate and distribute information in questionnaire responses; o MS to input into the Commission's current consultation; o Decide on priorities for MRG review and communicate to the Commission.	Consultation closes on 15 April (also stakeholder discussion on 12 May) To be completed by end of May, so that can feed into the MRG review	Netherlands – Chris Dekkers will be participating in the stakeholders discussion anyway
5b.	o Develop guidelines on various aspects of	Tbd – longer term;	Netherlands lead; with

	monitoring and reporting	internal project plan needed	UK, and possibly Germany, Italy and Sweden
5c.	○ Standardised M&R emissions reporting form	End of April 2005 to circulate version and finalise by end of May	England and Wales (Ormonde Joel)
6. Emissions factors	○ Collate issues from the questionnaires	Await outcome of stakeholder dialogue and then decide how/if the group should take it forward	tbd
7a. Verification	○ To be taken forward by the Commission, in its action plan	In the next 18 months; e.g. evaluate verification reports next June?	Netherlands could be involved
7b.	○ Take forward the harmonisation of the accreditation of verifiers	Tbd	tbd
8. Compliance and Enforcement	○ Need more 'practice' on ○ Inspections and their purpose ○ the levels of sanctions ○ good methods of enforcement	Share practice in the medium term, e.g. at next meeting	tbd
9. Registries	Ongoing issue; this is often discussed elsewhere, e.g. WG 3	Possibly discuss at the next meeting once have more experience	CR volunteered to feed back to this group from other WG
10. Charging and funding	Share practice, as appropriate	At future meetings	

**This draft action plan was based on discussions at the IMPEL Workshop on Identifying Good Regulatory Practice in Relation to the EU Emissions Trading Scheme, held in London on 15 and 16 March 2005.*

ANNEX 1: INSTITUTIONAL SET UP IN THE MEMBER STATES

Member State	Key*	Allocation of allowances for new entrants	Administering the new entrant reserve	Auctioning (if applicable)	Permitting	Reviewing/ approving monitoring plans	Reviewing annual monitoring reports	Verification	Baseline identification /verification	Inspection	Enforcement	Maintaining the registry	Developing the registry	Information provision to industry	Information provision to the public
England and Wales	**1.**	Regulators	Environment Agency, England & Wales (for the UK)	DTI/DEFRA	Regulators	Regulators	Regulators	Private companies that are accredited	Private companies that are accredited	Regulators		Environment Agency, England & Wales (for the UK)	DEFRA/Environment Agency	DEFRA/DTI/Regulators	DEFRA/DTI/Regulators
	2.	DTI/DEFRA – decide the total amount in the New Entrant Reserve and the types of new entrant. 'FES (Consultants) – who provide advice on operating the benchmarking spreadsheet	FES – Will provide technical support for their spreadsheet.	Not yet resolved	None	None	None	UKAS accredit verifiers to verify emissions. Regulators receive verified data from the operator	Only UKAS/Verifiers/Defra	None although use information from verifiers reports to operators to target inspection.		Work with other Member States that have the UK-developed registry.	As above	None	None
	3.	DTI/DEFRA/Regulators worked together to develop the policy and the approach through a working group.	FES will provide technical support to the Regulator. Government then acts as arbiter in appeals.	Not yet resolved	Through regular Competent Authority meetings.	N/A	N/A	National meetings take place between the Accreditation body, Verifiers and Regulators.	Meetings between Defra/UKAS/ Verifiers/Industry.	N/A		Work with other Member States through the company (GRETA)	Work with Defra through project management.	Government and Regulators meet through Competent Authority meetings. 'Involve industry through industry-led Emissions Trading Group (ETG)	Consistent with responsibilities for administering the scheme.

Member State	Key*	Allocation of allowances for new entrants	Administering the new entrant reserve	Auctioning (if applicable)	Permitting	Reviewing/ approving monitoring plans	Reviewing annual monitoring reports	Verification	Baseline identification /verification	Inspection	Enforcement	Maintaining the registry	Developing the registry	Information provision to industry	Information provision to the public
Scotland	**1.**	Regulators	EA for UK	DTI/Defra	Regulators	Regulators	Regulators	Verifiers	Verifiers	Regulators and verifiers but not together!	Regulators	EA for UK	EA and Defra	Defra/DTI/SE and regulators	Regulators
	2.	DTI/Defra etc decide amount in NER	Other regulators	Not yet resolved	Operators! (With contentious issues agreed amongst other UK regulators)	Consultants, M&R Interpretation group	None and interpretation Group for contentious issues	Operators	As above plus Defra	Operators	None	Operators with access available to other competent authorities	Regulators kept in loop	Operators working with us to provide exemplars etc	Defra/SE
	3.	National agreement	SEPA to be copied Scottish information and SEPA to determine allowances for Scottish Operators and be involved in NER interpretation Group	Not yet resolved	Through regulatory CA meetings etc.	Initial agreement of approach and common exemplars made available	Through group liaison	Forum for EA and verifiers exists. SEPA informed of decisions.	As above	Combination of local and specialist knowledge.	N/A	Work with other EU states.	Defra at the moment with EA managing project	Government and regulator competent authority meetings and industry stakeholder groups/for a etc.	Consistency
Finland	**1.**	Council of State - Government	Ministry of T&I		Emissions Trading Authority	Emissions Trading Authority	Emissions Trading Authority	Verifiers, Emissions Trading Authority	Ministry of T&I	Emissions Trading Authority	Emissions Trading Authority	Emissions Trading Authority	Emissions Trading Authority	Ministry of T&I ^Emissions Trading Authority	Ministry of T&I ^Emissions Trading Authority
	2.	'Ministry of T&I prepares													

Member State	Key*	Allocation of allowances for new entrants	Administering the new entrant reserve	Auctioning (if applicable)	Permitting	Reviewing/ approving monitoring plans	Reviewing annual monitoring reports	Verification	Baseline identification /verification	Inspection	Enforcement	Maintaining the registry	Developing the registry	Information provision to industry	Information provision to the public
	3.														
Netherlands	**1.**	Government	Government			Emission authority	Emission authority	Independent verifiers. However for the first period companies may request the VBE to carry out the verification	VBE	Emission authority	Emission authority	Emission authority	Emission authority	Government and Emission authority	Government and Emission authority
	2.	*Government and advisors on energy efficiency*	*Government and advisors on energy efficiency*					Other verifiers can be contracted by companies, if these want to							
	3.	*Review by the public requires that government takes subsequent policy decisions. 'Basic calculation is done by advisors*													
Czech Republic	**1.**	MoE – Ministry of Environment	MoE	No	MoE	MoE	to be decided	authorised independent verifiers	none	Czech Inspectorate	Czech Inspectorate MoE	Operator: Electricity Market Operator	OTE	MoE	MoE

Member State	Key*	Allocation of allowances for new entrants	Administering the new entrant reserve	Auctioning (if applicable)	Permitting	Reviewing/ approving monitoring plans	Reviewing annual monitoring reports	Verification	Baseline identification /verification	Inspection	Enforcement	Maintaining the registry	Developing the registry	Information provision to industry	Information provision to the public
	2.	MIT – Ministry of Industry and Trade	MIT	No	MIT CEI – Czech Environmental Institute CHMI – Czech hydrometeorological institute	Czech Hydrometeorological Institute, Czech Ecological Institute, Czech Inspectorate	to be decided	To by specified	none			MoE – competed author			
	3.	Methodology is approved to be decided by both bodies	to be decided	No	MoE organises the process of assessing and issuing permits are prepared by assessing organisation. Approval of final permit by MIT is needed. Permit is issued and signed by MoE. MIT approves each permit too.	Assessment is done according to activity by MoE, CHMI, CEI and CIZP	to be decided	To be specified	none	According to internal procedures – to by specified	Not surrendering allowances by 31.3. is handled by MoE. Operating installation without permit, change in use not notified to MoE, monitoring emissions in contradiction with the emissions trading legal provisions are dealt by CIZP.	Written agreement between OTE and MoE	Savings system implemented	Meeting with industry stakeholders	Web site

Member State	Key*	Allocation of allowances for new entrants	Administering the new entrant reserve	Auctioning (if applicable)	Permitting	Reviewing/ approving monitoring plans	Reviewing annual monitoring reports	Verification	Baseline identification /verification	Inspection	Enforcement	Maintaining the registry	Developing the registry	Information provision to industry	Information provision to the public
Sweden	**1.**	SEPA	SEPA	---	County administration boards (CABs)	County administration boards (CABs)	SEPA	Accredited verifiers		Accredited verifiers	SEPA	SEA	SEA	SEPA and SEA	SEPA and SEA
	2.	SEA; NUTEK	SEA; NUTEK	---	SEPA	SEPA									
	3.	SEPA, SEA and NUTEK prepare decisions in a specific council. SEPA decides on allocation		---	SEPA co-ordinates the CABs, and has issued a specific regulation	SEPA co-ordinates the CABs, and has issued a specific regulation									
Portugal	**1.**	Ministry of Environment (Environmental Institute)	Ministry of Environment (Environmental Institute)	------	Ministry of Environment (Environmental Institute)	Ministry of Environment (Environmental Institute)	Ministry of Environment (Environmental Institute)	Accredited verifiers	Economy and Environment Ministry (joint work group)	Ministry of Environment (Inspectorate General for the Environment)	Ministry of Environment (Inspectorate General for the Environment and Environmental Institute)	Ministry of Environment (Environmental Institute)	Ministry of Environment (Environmental Institute)	Ministry of Environment (Environmental Institute)	Ministry of Environment (Environmental Institute)
	2.	Ministry of Economy (General Direction of Geology and Energy)	Ministry of Economy (General Direction of Geology and Energy)		Ministry of Economy (General Direction of Geology and Energy)					Environmental Institute and other authorities	Ministry of Economy (General Direction of Geology and Energy)				

Member State	Key*	Allocation of allowances for new entrants	Administering the new entrant reserve	Auctioning (if applicable)	Permitting	Reviewing/ approving monitoring plans	Reviewing annual monitoring reports	Verification	Baseline identification /verification	Inspection	Enforcement	Maintaining the registry	Developing the registry	Information provision to industry	Information provision to the public
	3.	The General Direction of Geology and Energy receives the request and can promote meetings with the industrial sectors or operators together with de Ministry of Environment and proposes a way of acting. The Environmental Institute makes the final decision. .			The General Direction of Geology and Energy receives the request and can promote meetings with the industrial sectors or operators together with de Ministry of Environment and proposes a way of acting. The Environmental Institute makes the final decision.					All the authorities that take knowledge of an infraction must inform the Inspectorate General for the Environment					
Ireland	**1.**	Irish EPA	Irish EPA	Irish EPA	Irish EPA	Irish EPA	Irish EPA	Independent Verification bodies	Irish EPA	Irish EPA	Irish EPA	Irish EPA	Irish EPA	Irish EPA	Irish EPA
	2.			Not determined				Irish National Accreditation Board				Hosting by outside body	Software purchased from DEFRA in the UK		

Member State	Key*	Allocation of allowances for new entrants	Administering the new entrant reserve	Auctioning (if applicable)	Permitting	Reviewing/ approving monitoring plans	Reviewing annual monitoring reports	Verification	Baseline identification /verification	Inspection	Enforcement	Maintaining the registry	Developing the registry	Information provision to industry	Information provision to the public
	3.							Irish National Accreditation Board engaged by the EPA				Hosting contract between the Irish Environmental Protection Agency and hosting company.			
Poland	**1.**	Local authorities and Administrator of the System	Administrator of the System	Administrator of the System	Local authorities	Local authorities	Auditors	Auditors			Ministry of the Environment	Administrator of the System	Administrator of the System	Administrator of the System	Administrator of the System
	2.														
	3.														
Germany	**1.**	DEHSt	DEHSt		Competent authorities of the federal states	Competent authorities of the federal states	Competent authorities of the federal states and DEHSt	Independent verifiers and organisations accredited for verification	Independent verifiers and organisations accredited for verification	Competent authorities of the federal states	Competent authorities of the federal states and DEHSt	German Emissions Trading Registry as part of DEHSt	DEHSt in co-operation with private partners.	DEHSt and competent authorities of the federal states.	DEHSt and competent authorities of the federal states.
	2.							Supervision by the competent authorities							
	3.						Reviewing different parts of the annual emissions reports				Enforcement takes place as an annex to the competencies in each case.				
Hungary	**1.**	Not decided yet	(NIENW)	Ministry of Finance	NIENW	NIENW	NIENW	private entity; NIENW	MoEW	NIENW	NIENW	NIENW	Licence bought	NIENW; MoEW	NIENW; MoEW

Member State	Key*	Allocation of allowances for new entrants	Administering the new entrant reserve	Auctioning (if applicable)	Permitting	Reviewing/ approving monitoring plans	Reviewing annual monitoring reports	Verification	Baseline identification /verification	Inspection	Enforcement	Maintaining the registry	Developing the registry	Information provision to industry	Information provision to the public
	2.			MoEW					MoET	MoEW; MoET					
	3.														
France	**1.**	Ministry of ecology	Ministry of ecology	-	Préfets (local level)	Ministry of ecology	Ministry of ecology	Ministry of ecology	Ministry of ecology	Ministry of ecology	Ministry of ecology	Ministry of finance + ecology	Ministry of finance + ecology	Ministry of ecology	Ministry of ecology
	2.			-	-					-	Préfets, Tresor Public	Delegated to Caisse des Dépôts et Consignations (CDC)		-	-
	3.			-											
Italy	**1.**	National Competent Authority for the implementation of directive 2003/87/EC (NCA)	NCA	N/A	NCA	NCA-APAT	NCA-APAT	NCA-APAT	NCA-APAT	NCA-APAT	NCA-APAT	APAT	APAT	NCA-APAT	NCA-APAT
	2.	Agency for Environmental Protection and Technical Services (APAT)	APAT		APAT	Still to be defined	Still to be defined	Still to be defined	Still to be defined	Still to be defined	Still to be defined			Still to be defined	Still to be defined

Member State	Key*	Allocation of allowances for new entrants	Administering the new entrant reserve	Auctioning (if applicable)	Permitting	Reviewing/ approving monitoring plans	Reviewing annual monitoring reports	Verification	Baseline identification /verification	Inspection	Enforcement	Maintaining the registry	Developing the registry	Information provision to industry	Information provision to the public
	3.				APAT has processed all electronic requests of authorisation to emit GHG. Built a database. NCA has analysed electronic data synthesis, check paper information when necessary, and indicated to APAT which installations to authorise.	Still to be defined	Still to be defined	Still to be defined	Still to be defined	Still to be defined	Still to be defined			Still to be defined	Still to be defined

** Key:*
1. Organisations ultimately responsible for…
2. Others involved
3. How these organisations work together

ANNEX 2: INTERNET SITES

Country	Relevant internet sites
Czech Republic	www.env.cz www.chmi.cz
Germany	www.umweltbundesamt.de/emissionshandel
France	
Ireland	www.epa.ie/Licensing/EmissionsTrading/
Italy	http://www.minambiente.it/Sito/settori_azione/pia/att/pna_c02/pna_c02.asp
Hungary	
Netherlands	
Poland	
Portugal	
Finland	
Sweden	http://www.utslappshandel.se/
UK	http://www.environment-agency.gov.uk/business/444217/590750/590838/?version=1&lang=_e

ANNEX 3: CONTACTS FOR FOLLOW-UP

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