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**COMMISSION STAFF WORKING PAPER**

**Impact Assessment**

*Accompanying the document*

**Proposal for a Regulation of the European Parliament and of the Council  
on a mechanism for monitoring and reporting greenhouse gas emissions and other  
information at national and Union level relevant to climate change**

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Disclaimer

This report commits only the Commission's services involved in its preparation and does not prejudice the final form of any decision to be taken by the Commission.

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## List of abbreviations

CO <sub>2</sub>	Carbon dioxide
CRS	Creditor Reporting system
CTC-N	Climate and Technology Centre and Network
DAC	Development Assistance Committee (under the OECD)
DG	Directorate-General
DG CLIMA	Directorate-General for Climate Action
DG ENV	Directorate-General for the Environment
EEA	European Environment Agency
EC	European Commission
EF	Emission factor
EMSA	European Maritime Safety Agency
E-PRTR	European Pollutant Release and Transfer Register
ESD	Decision No 406/2009/EC (or "Effort Sharing Decision")
ETS	(European) Emissions Trading System
EU	European Union
GHG	Greenhouse gas
F-Gas	Fluorinated greenhouse gas
GWP	Global Warming Potential
HWP	Harvested Wood Products
IA	Impact Assessment
IPCC	Intergovernmental Panel on Climate Change
IMO	International Maritime Organization
ISG	Inter-Service Steering Group
ISPS	International code for the security of ships and port facilities
JRC	Joint Research Centre
LULUCF	Land use, land use change and forestry
ISG	Inter-Service Steering Group
MARPOL	International Convention for the Prevention of Pollution From Ships (abbreviation for marine pollution)
MMD	Monitoring Mechanism Decision
MS	Member States
MRV	Measurement, reporting, and verification
Mt	Million tons
NEC	National emissions ceiling
NF <sub>3</sub>	Nitrogen trifluoride
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
QA/QC	Quality Assurance / Quality Control
SG	Steering Group
TACCC	Transparency, Accuracy, Comparability, Consistency and Completeness
TEC	Technology Committee
UNCLOS	United Nations Convention on the Law of the Sea
UNFCCC	United Nation Framework Convention on Climate Change
WG	Working group

# **1 Procedural issues and consultation of interested Parties**

**Lead DG:** DG CLIMA

**Agenda planning /WP reference:** 2011/CLIMA/006

## **1.1 Impact Assessment Steering Group (IASG)**

Work on the impact assessment was carried out by a European Commission Inter-Service Steering Group (ISG) set up by DG CLIMA which met four times. The following Directorates-General (DGs) of the European Commission were invited to participate in the work of the group: DG ENER, DG ENV, DG ENTR, Secretariat-General (SG), Legal Service (SJ), DG ESTAT, DG JRC-ISPRA, DG AGRI, DG RTD, DG ELARG, DG MOVE, DG ECFIN, DG MARE, DG DEVCO, and the European Environment Agency (EEA). The minutes of the relevant meetings can be found in Annex A.

## **1.2 Consultation of the Impact Assessment Board (IAB)**

The impact assessment (IA) report was submitted to the IAB on 20 May 2011. The IAB issued a positive opinion on 27 June 2011 acknowledging that the IA report provides a basis for decision-making but that it should be improved in a number of important aspects.

The IAB indicated that the report should better present the general background /policy context and explain the problems and the main drivers of change in clear and simple language. In this respect, the problem definition section of this report was extensively amended and restructured to provide clear description of the current monitoring system, the problems and gaps of this system have been detailed and the existing compliance issues highlighted. Special references to lessons learned and experiences gained were also made. The language was also further reviewed and simplified throughout chapter 2. Finally, the objectives section was also redrafted to more clearly indicate the scope and goals of the proposed revision.

The IAB also recommended that the results of any ex-post evaluation should be included in the report. The report now includes a separate subsection referring to the relevant studies for ex-post evaluation highlighting their main conclusions.

The IAB further asked that the report provide a better justification for change to the EU monitoring requirements at this stage given that similar UN reporting requirements are under development. In the problem definition section relevant explanations are now provided pointing to the reasons that indeed it is now opportune to proceed with the revision of the EU monitoring requirements.

The IAB requested that the report better justify the added value of additional EU-level reporting in particular relating to measures for financial and technical support and climate change adaptation. The problem definition section was revised to better provide such justifications but also the section on subsidiarity has been significantly expanded to better present the added value of reporting in particular in the areas identified by the IAB. Proportionality is also further addressed in the comparison of options chapter with regards to each preferred option.

The IAB also recommended that the report should explain why the imposition of new reporting requirements on MS does not give rise to additional burden for industry and to provide a better assessment of the impact on industrial sectors including SMEs and on individual MS. The problem definition section was redrafted to make clear the current scope of the MMD and of the proposed revisions and in this respect clarify why indeed there is no impact on industry or SMEs. The section on

industry/SMEs impacts in the administrative burden chapter was also significantly expanded to present the relevant arguments as they also relate to specific revisions proposed. It has not been possible to provide further details in the IA report on individual MS as the related uncertainties were considered too high.

Finally, the IAB recommended that the reports should better integrate different stakeholder views throughout the text. In the comparison of options section, such views were presented for the preferred options.

## **1.3 Consultation and expertise**

### **1.3.1 Online public consultation and website**

In addition to the expert meetings and workshops, a wide online stakeholder consultation covering all aspects of the planned revision of Decision 280/2004 ("Monitoring Mechanism Decision" or "MMD") was also launched from 07.03.2011 to 29.04.2011. The on-line questionnaire was accessible through DG CLIMA's and the "Your Voice" website. The questionnaire was made available in all official languages and care was taken to inform relevant stakeholders.

### **1.3.2 Outcome of the online public consultation process**

The data collected through the online stakeholder consultation suggest a keen interest of EU citizens in climate change information and support the further improvement of reporting in this area, in particular with regard to the comprehensiveness and transparency of the information collected. Overall, respondents found that despite a relatively good amount and quality of information and data on climate change there is still scope for improvement and the majority of respondents considered that enhanced reporting requirements in all of the areas considered in this impact assessment would be meaningful. A summary of the opinions expressed is presented in Annex B. The results of the consultation are also made available on the relevant Commission website<sup>1</sup>.

### **1.3.3 MS consultation**

Two workshops, a series of technical and thematic expert meetings and a number of projects (see Annex B) were conducted in 2009, 2010 and 2011 to inform MS on the revision of the MMD. In these meetings, MS agreed overall that there is a need to revise the MMD to take into account domestic and international developments as well as lessons learned through its implementation, however, they were concerned about the resulting administrative burden.

*Administrative burden/costs:* Seven MS (Finland, Germany, Hungary, Netherlands, Slovakia, Spain, Sweden) volunteered to provide information on administrative burden/costs. These MS were consulted twice by questionnaires, however, only 5 of them (Finland, Germany, Hungary, Netherlands, Sweden) provided answers to the second questionnaire. The low response rate to the second questionnaire is mostly due to the fact that the questions dealt primarily with new provisions that are to be introduced in the MMD thus MS found it difficult to estimate the potential administrative burden. As a follow-up, and in accordance with the advice of the IASG, MS were further contacted by both phone and email in an effort to gather additional data or to further clarify the information received. This iterative process led to the final administrative burden data that underpin this impact assessment.

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<sup>1</sup> [http://ec.europa.eu/clima/consultations/0008/index\\_en.htm](http://ec.europa.eu/clima/consultations/0008/index_en.htm)



## 1.4 Ex-post evaluation of the MMD

The MMD was revised in 2004 mainly incorporating the reporting requirements under the Kyoto Protocol into EU legislation. In this process, implementing provisions in Commission Decision 2005/166/EC were elaborated for the first time. Since then 6 years of experience have been gained in the implementation of both decisions at the EU level. During this time, the EC has commissioned 5 projects (see below) with a view to evaluate and assess various aspects of the MMD implementation and to ensure that in moving forward any experiences and lessons learned are taken into account and that meaningful improvements are proposed.

These 5 projects indicated among others that there are a number of areas where the MMD could be improved. These improvements range from relatively simple ones related to clarifying the logistics of submissions, to more complex ones related to improved and harmonised reporting on policies and measures and projections, to enhancement of synergies with reporting under other legal instruments, to the urgent need for adding reporting requirements to address new challenges in the area of climate change. As a result, and in view of all the latest developments in the field of climate change, the Commission has decided that it would be appropriate to revise the MMD and its implementing provisions.

- "Assessment of GHG methodologies for projections" aiming at improving the methodologies used by MS for projections;

Some of the findings of this project were that:

- MS' projections improved considerably in terms of completeness in recent years but MS' reports differ in depth and scope due to lack of adequate guidance.
- Consistency of reporting would improve, if a number of key general assumptions for projections would be agreed at EU level for use by all Member States.
- The harmonization of reporting schedules for projections under different international requirements would strongly help to improve the comparability of projections.
- To enhance consistency it would be useful to develop specific guidance on the requirements for each projection scenario.
- Updating of projections should be sufficiently frequent to take into account recent policy developments and to enhance accuracy with regard to the scope and intensity of policies.
- Both Member States and the Commission should advance the GHG inventory system to a more complex integrated reporting system that includes reporting on policies and measures and projections. Such an integrated reporting system would ensure a consistent planning and consistency of methods used for projected emissions estimates.

- "Ex-post quantification of the effects of policies and measures" to develop suitable methodologies for the ex-post quantification of the impact of policies and measures;

This project found a large variation in the level of experience between different MS, of which there were three groups: those with well developed capacity and expertise in ex-post evaluation, those with some expertise in ex-post evaluation but in a more ad-hoc way (for example, had experience in evaluating a few individual policies); and those with limited or no experience in ex-post evaluation of climate change policies. In broad terms the EU-15 tended to have more experience in ex-post

evaluations and more often had formalised monitoring and evaluation systems in place than the EU-12.

This project recommended that the MMD include specific provisions on the need for the ex-ante appraisal and ex-post evaluation of policies impacting on GHG emissions and the regular revision of such appraisals and evaluations accompanied by a relevant report to the Commission. The project also recommended that a requirement be introduced for the establishment at both the national and the EU level of a system for policy evaluation and appraisal.

- "Streamlining climate change and air pollution reporting requirements" to identify the inter-linkages between the monitoring and reporting requirements of the various pieces of legislation in the fields of air pollution and climate change;

This project revealed that the problems that stakeholders encounter when reporting GHG emissions or emissions from air pollutants arise from some of the specific requirements of individual instruments and logistical barriers to fulfilling them.

The key problems identified were:

- Duplicated reporting;
- A lack of clarity in - and interoperability - between datasets reported;
- Missing and inaccurate data.

MS reported that improvements in the following areas would help:

- Clearer terminology and definitions across instruments;
- Stronger co-ordination of the QA/QC activities across instruments;
- Changes to instruments that would allow greater integration of reporting (e.g. one database);
- Guidance to support national level reporting and data gathering;
- Improved review and verification activities.

- "Assistance with the revision of the MMD" to take into account lessons learned and eliminate obsolete requirements;

- "Assistance with the revision of the MMD taking into account the Effort Sharing Decision" to consolidate the recommendations from the four other projects and address the requirements of the Climate and Energy package.

The results of these two last projects are reflected in section 2.2 which addresses the problems and gaps in the current system and problems related to implementation.

## **2 Problem definition**

Because of concerns with the growing threat of global climate change from increasing concentration of greenhouse gases (GHG) in the atmosphere, both at the international and at the EU level a series of mitigation policies and actions have been planned or are under implementation. In this context, the establishment of a solid monitoring, evaluation, reporting, and verification framework will be important so as to enable the EU to:

- § monitor the implementation of an action/policy and to monitor (or measure) its results
- § report on progress in implementation of its commitments and on any results achieved

§ to verify at the end whether “all went according to plan”.

The EU has already committed to continue to lead the way in combating climate change, independent of the developments at the international level, by adopting the Climate and Energy package in 2009. As the Kyoto Protocol commitment period comes to an end in 2012 it is imperative that the EU now moves seamlessly with the implementation of its domestic commitments as set out in the package. The MMD is the instrument for the implementation of the legal obligation that was foreseen in the package as well as to ensure monitoring of the progress in implementation of the commitments agreed under the package. Therefore, stalling its revision would mean backtracking on a commitment already made at EU level. In addition, even if not all the details of the international system post-Kyoto have been elaborated yet (although everyone is in agreement that they should build as much as possible on the existing system under the Kyoto Protocol), a number of decisions have already been made that set out the main axes and parameters for future reporting. These driving parameters can already be considered now and will be incorporated in the revised MMD with specific details and particularities to be captured in implementing provisions/delegated acts later on.

In this respect, the MMD is being revised so as to take into consideration lessons learned/experience with the implementation of the MMD over the last 6 years as well as new monitoring and reporting requirements arising a) from implemented or planned legislation at the Union level; b) from international decisions; or c) from a combination thereof, while ensuring the timeliness, transparency, accuracy, completeness, comparability, and consistency of EU and MS reporting.

The MMD covers GHG emission reporting at the national aggregate level and the revision of the MMD will in particular focus on addressing requirements linked to reporting on non-ETS emissions under the Effort Sharing Decision. The revision will also specifically address reporting on greenhouse gas emissions from maritime, aviation and land use, land-use change and forestry (LULUCF), again at the national aggregate level as well as reporting on other climate change information such as on policies and measures and projections, on financial and technology support provided to developing countries, and on adaptation.

## **2.1 Current monitoring and reporting framework under the MMD and links to the UNFCCC and the Kyoto protocol**

### **2.1.1 General description**

Decision 280/2004/EC concerning a mechanism for monitoring EU greenhouse gas emissions and for implementing the Kyoto Protocol and its implementing provisions (Decision 2005/166/EC)<sup>2</sup> are the main monitoring, reporting, and review instruments in the EU with regard to GHG emissions. The reporting covered under the MMD has primarily been reporting by the EU and its MS pursuant to the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol.

Under the UNFCCC and the Kyoto protocol, both the Commission, on behalf of the EU, and the MS have reporting obligations. These are:

- a) to report annually on their GHG emissions (annual GHG inventories)

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<sup>2</sup> Commission Decision 2005/166/EC of 10 February 2005 laying down rules implementing Decision No 280/2004/EC of the European Parliament and of the Council concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol (OJ L 55, 1.3.2005, p. 57)

The annual GHG inventories are based on existing aggregated statistical (activity) data at the national level and follow UNFCCC guidelines (national level reporting, not industry level reporting). They cover the 6 greenhouse gases and greenhouse gas emissions from all sectors (energy (including transport), industrial processes, solvents, waste, agriculture, and LULUCF) and are based on methodologies established under the IPCC (Intergovernmental Panel on Climate Change). In the annual inventories, emissions from international maritime transport and international aviation are reported as a memo item and do not count towards compliance.

The Union inventory is a compilation of the information and data reported by MS every year in January and March.

Once the inventory reports are submitted to the UNFCCC (April), they undergo a review process that lasts approximately one year. This review process assesses the degree of compliance with the reporting requirements under the UNFCCC and the Kyoto protocol and also makes suggestions for improvements.

b) to report every 4 years a wider set of climate-related information and data

The national communications require reporting on a country's national circumstances, actual emissions, policies and measures, projected emissions, financial and technology support provided to developing countries, adaptation, research and systematic observation, and education.

The national communications submitted by countries are again being reviewed by the UNFCCC for compliance with the existing requirements under the UNFCCC and the Kyoto Protocol and with a view to enable improvements.

The national communication prepared by the Commission on behalf of the EU is largely based on Commission level data (except for projections) but also draws on MS reported data as needed so as to more clearly demonstrate the important interactions between national and EU level action.

The MMD currently includes all reporting requirements related to GHG inventories but only covers reporting on projections, policies and measures (including all underpinning information) with relation to the preparation of the national communications, albeit at a higher frequency (reporting in the MMD is every 2 years).

Based on the information submitted by the MS to the Commission (annual and projected emissions, policies and measures), the Commission prepares annually a progress report towards its commitments under the UNFCCC and the Kyoto Protocol which is communicated to the European Parliament and the Council.

## **2.2 Problems/gaps in the current system and lessons learned from implementation**

Experience with the implementation of the MMD has shown that certain reporting requirements did not deliver as expected (e.g., indicators requested), or the information was not used as anticipated thus these requirements would need to be amended to ensure that the reporting is meaningful and purposeful. A number of other requirements have become obsolete as time has passed.

Studies commissioned over the last few years have found that several legal instruments (eg. EU ETS, EPRTR, NEC directive) require the monitoring and reporting of emissions data but, when taken

together, the body of information they provide is patchy and datasets are difficult to cross-compare. This inconsistency adds uncertainty, and makes it difficult for the EC to quantify the emissions that are captured by these different policy instruments. As a consequence, there are a number of areas where reporting under the MMD could be made more coherent and complimentary so as to, in the long-term, avoid duplication of efforts and related burden.

Finally, as the science on climate change has evolved, data on GHG emissions have been collected and the political dimension of climate change has become more and more prevalent, it has become clear that the current reporting system is not adequate. For example, international maritime and aviation emissions which in the current system are only reported as memo items are now very important emissions sources and their share of emissions keeps increasing drastically making it imperative that action be taken and that their emissions be closely monitored. Financial and technology support to developing countries, areas where the EU had only minor commitments under the UNFCCC are now main components of a global deal on climate and again require close monitoring and reporting. The same is true for adaptation which in the past had small significance as the impacts of climate change were not fully appreciated and now is on an equal footing with mitigation as it is clear that even if the emission reduction commitments are fulfilled this will not be enough to avoid the inevitable consequences of climate change.

### ***Compliance***

The implementation of the existing MMD has been linked to a relatively high rate of non-compliance cases indicating that there are areas where the effectiveness and efficiency of the existing monitoring and reporting system could be improved. Although, at the beginning this was mostly due to the lack of experience on the side of the MS. As experience with implementation grew and MS became more and more familiar with the reporting requirements the number of cases of non-compliance was reduced by almost half. Non-compliance related in particular to the reporting on projections, and policies and measures (~ 1/3 non-compliant MS) where the data reported by the MS in these areas have been frequently insufficient and not adequately transparent, in particular with regard to the methodologies used. This lack of transparency made it difficult to compile a consistent set of information at EU level. On the other hand, in the area of the reporting on annual emissions the number of cases of non-compliance has been less than 1/5 of all the MS in the last couple of years.

It is clear that reporting on projections and policies and measures is more complex than reporting on GHG emissions, there is no proper methodological guidance and it is closely linked to political considerations at the national level. This makes compliance difficult. However, it is also clear that the reporting on annual GHG emissions is far more stringent and structured and of a higher frequency thus enabling better compliance. There is a national system supporting reporting on GHG emissions, there are checks performed at the EU level, there are annual detailed technical reviews under the UNFCCC and a strong compliance system and finally reporting is frequent which ensures that improvements are continuously made and capacity is not lost from one reporting cycle to the next. These are important lessons learned through the implementation of the MMD and it's important that they be taken into consideration in devising new reporting requirements as part of the MMD revision.

## **2.3 New requirements arising from EU implemented or planned legislation/actions**

### **a) The Climate and Energy package**

The Climate and Energy package, in particular Decision 406/2009/EC of the European Parliament and of the Council on the effort of MS to reduce their greenhouse gas emissions to meet the EU's greenhouse gas emission reduction commitments up to 2020 ("Effort Sharing Decision" or "ESD")<sup>3</sup> and the Directive 2003/87/EC as amended by Directive 2008/101/EC and Directive 2009/29/EC (hereinafter the "revised ETS directive") introduced new requirements as regards monitoring and reporting for MS, which need to be incorporated in the revision of the MMD so as to enter into effect. These instruments have also identified areas where action at the EU level would be necessary but where there is currently not adequate data or not accurate enough data collected at EU and MS level.

### ***Effort Sharing Decision***

Article 6(5) of the ESD states that the European Commission shall, where appropriate, make proposals to amend the MMD to ensure *faster, efficient, transparent and cost-effective* monitoring, reporting and verification of greenhouse gas emissions. In addition, the ESD establishes an annual compliance cycle, which requires that the reporting and review of GHG emission inventories be organised in such a way so as to allow the determination of compliance with the ESD at the end of each reporting year.

The current reporting system relies largely on aggregated statistical data at the national level which become available within set delays. Thus there is not much scope for making the actual reporting of emissions faster and more efficient. However, there is scope through the revised MMD to shorten and make more efficient the annual review process which is currently conducted under the UNFCCC and which may take more than a year to be completed ( from the moment of inventory submission) due to resource constraints and a heavy administrative process under the UN.

*Recalculations:* One of the issues addressed during the review process of a GHG inventory are any recalculations that a country has made to previously submitted GHG emission estimates. Such revisions, or *recalculations*, can generally occur under two separate circumstances: a) when improved methodologies or statistics become available (case 1), b) changes are made in the international monitoring and reporting rules (case 2).

The impact of such revisions on the reported GHG emissions with respect to the annual efforts required for MS under the ESD should be considered and the MMD can set the relevant framework for such consideration.

***Distinguishing between ETS and Non-ETS sectors:*** Article 6 of the ESD requires Member States to report projected progress towards meeting their obligations under that Decision, including information on national policies and measures and national projections. As the ESD only applies to the GHG emissions that are not covered by the EU ETS, it is necessary that the MMD is amended to ensure that MS distinguish in the reporting of policies and measures and projections between those policies and measures targeting the ETS sectors covered by the revised ETS Directive and those targeting the non-ETS sectors covered by the ESD. As it is possible that measures target both sectors, a third category of policies and measures that target both legal instruments would be necessary.

***Reporting on auctioning revenues:*** Directive 2008/101/EC amending Directive 2003/87/EC so as to include aviation activities in the scheme for greenhouse gas emission allowance trading within the Union contains provisions on the use of auctioning revenues, on reporting on the use of auctioning

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<sup>3</sup> The ESD lays down for each **Member State binding annual targets for the period 2013-2020** for greenhouse gas emissions outside the scope of the EU Emissions Trading System. About 55% of the total EU-27 greenhouse gas emissions are covered by the ESD. The most important emitting sectors are transport (about 30% of total ESD emissions), buildings and services (25%), and agriculture (15%).

revenues by the Member States and on the actions taken in relation to the auctioning of aviation allowances pursuant to Article 3d(1) or (2) of Directive 2003/87/EC to monitor that 100 per cent of those revenues or an equivalent amount have been used for the purpose of one or more of the actions referred to in Article 3d(4) of Directive 2003/87/EC.

The revised MMD will need to enable reporting on auctioning revenues in accordance with the agreed rules without seeking to amend them.

**Maritime transport:** In the current system, emissions related to international maritime transport are only reported as a memo item in the GHG inventories based on fuel sales in MS and tend to be of very low or inconsistent quality. In addition, these data may not capture all relevant GHG emissions which has made it difficult for MS and/or the sector to understand the impact of policy measures in this area. Finally, the share of maritime emissions has drastically increased over the last few years making it imperative that reporting is improved and good quality data be collected to monitor the development of these emissions.

The increasing trend of maritime emissions and their overall share has prompted the International Maritime Organization (IMO) to start exploring appropriate mitigation actions to address those emissions. At the EU level these same considerations have led to the introduction in the Climate and Energy package of a recital stating that *"In the event that no international agreement which includes international maritime emissions in its reduction targets through the International Maritime Organisation has been approved by the Member States or no such agreement through the UNFCCC has been approved by the Community by 31 December 2011, the Commission should make a proposal to include international maritime emissions according to harmonised modalities in the Community reduction commitment, with the aim of the proposed act entering into force by 2013. Such a proposal should minimise any negative impact on the Community's competitiveness while taking into account the potential environmental benefits."* (recital 3 of the ETS Directive, recital 2 of the Effort Sharing Decision).

In order for effective measures to be proposed on maritime it is important that the underpinning database be significantly enhanced. This would ensure that a situation be avoided where a measure is proposed without there being a clear understanding of the implementation aspects and complexities, and where the outcomes would be hard to quantify as there would be no clearly identified baseline. An inclusion of a framework requirement in the MMD at this point could expedite the establishment of a solid framework for MS reporting once the design of the measure applicable to vessels has become clear. Finally, a proactive approach has the benefit that if relevant measures for vessels are defined by the International Maritime Organization (IMO) or at the EU level then the MS will benefit from a monitoring and reporting requirement which effectively compliments those implemented measures.

**Aviation:** In addition to CO<sub>2</sub>, aviation has an impact on the global climate through releases of nitrogen oxides, water vapour and sulphate and soot particles. These are complicated to evaluate, as they depend not only on emissions but also on other parameters such as trajectory, time of the day, etc. but important as was outlined by the Intergovernmental Panel on Climate Change (IPCC). The IPCC has estimated that aviation's total climate impact is some 2-4 times that of its direct CO<sub>2</sub> emissions alone (excluding the potential impact of cirrus cloud enhancement).

In accordance with recital 19 of Directive 2008/101/EC, all climate impacts of aviation should be addressed to the extent possible. In the current reporting system, only CO<sub>2</sub> emissions from aviation are accounted for reflecting to some extent the scientific uncertainty associated with non-CO<sub>2</sub> impacts. However, scientific uncertainties aside, it is clear that such impacts have drastically been increasing

over the past years and are projected to continue to do so. Thus it is imperative that a precautionary approach be followed. Introducing a reporting requirement in the MMD on such impacts would not only highlight the importance of such impacts but, at a later stage, would also enable the Commission to explore as appropriate options for mitigation.

***b) The Europe 2020 strategy***

The Europe 2020 strategy, the new integrated economic policy strategy for growth and jobs, includes the European and national emissions limitation targets as headline targets. In this context, accurate and recent emissions data should allow the European Council to monitor the progress towards the European and national emissions limitation targets and to promptly react if necessary. The current system, with a two (respectively three) years delay between the moment emissions occur and the moment the corresponding national inventory is submitted (respectively reviewed), should then be improved.

***c) LULUCF***

LULUCF is part of the current reporting requirements but with a limited scope which does not take into consideration all the reporting items needed to meet the requirements currently being discussed under the UNFCCC. In addition, there is a pending Commission proposal to include the sector in the EU's reduction commitment, which may lead to similar or additional reporting requirements as those discussed under the UNFCCC. To ensure coherence with the international requirements and with the legal act to be adopted at the EU level it is important that the issue be addressed in the upcoming revision of the MMD.

***d) Adaptation***

The EU's White paper "Adapting to climate change: Towards a European framework for action" stipulates that there is a need for building a stronger knowledge base on adaptation. As well as trying to combat climate change, there is also a need to adapt to its inevitable consequences. The costs of adaptation for Europe are estimated at approximately €16 billion/year by 2030. Individual national studies imply even larger adaptation costs, particularly for flood protection. When scaled up to the European level these national studies suggest costs of tens of billions/year. The current reporting guidelines under the UNFCCC only contain a very generic requirement for countries to provide in their national communications every 4 years an outline of their adaptation actions and information on the expected impacts of climate change. Experience has indicated that the current reporting frequency may not be adequate to make informed policy decisions, in particular, as it does not ensure that systems are put in place for such information to be collected in a systematic manner ensuring quality, completeness and comparability.

Introducing a reporting requirement in the MMD would enable the collection of up-to-date information on a more frequent basis and would significantly contribute to identifying reporting gaps and subsequently enabling improvements. Sound up-to-date information would help to: 1) assess the vulnerability of MS and prepare them to address adverse climate impacts; 2) maintain an EU database on adaptation actions (EU Clearinghouse Mechanism); 3) understand how advanced MS are in adapting to climate change; and 4) allow to better target adaptation strategies at the EU level, and to disseminate best practices.



## 2.4 New requirements arising from international decisions under the UNFCCC

At the Conference of the Parties (COP) under the UNFCCC in Copenhagen (COP 15), the Union and the Member States committed to providing significant fast-start and long-term climate financing and technological support to developing countries.

At COP 16 in Cancun, countries agreed (paragraph 40 of Decision 1/CP.16) that each developed country under the UNFCCC shall enhance reporting on the provision of financial, technological and capacity-building support to developing country Parties. Enhanced reporting is essential for the recognition of the Union's and the Member States' efforts in fulfilling their commitments. Decision 1/CP.16 also established a new Technology Mechanism with a view to enhance international technology transfer. This Mechanism should ensure that robust up-to-date information on technology transfer activities to developing countries is made available.

**Climate finance:** With respect to the EU's public climate finance, there are three main channels where public climate finance is being reported to some extent: a) UNFCCC National Communications (every 4 years), b) OECD DAC CRS database, c) EU level Fast Start Finance reports to the UNFCCC in May 2011, 2012, and 2013. However, none consistently captures all of what might be considered "climate finance". Moreover, the actual application of existing guidelines still varies significantly within the EU due also to a difference in the status of the MS, both as regards membership to OECD's Development Assistance Committee (OECD DAC) (only EU-15 are members and report on climate ODA according to DAC guidelines) and as to their UNFCCC status (12 new MS are non-annex II and have lighter reporting requirements on finance in their national communications). Besides the fact that reported information has often been found incomplete, not adhering to the relevant international guidelines and not being comparable, as the EU and the MS all have the obligation to report to the UNFCCC, reporting inconsistencies between the EU and the MS have also been noted. These problems have often led to severe criticism by other countries that the EU and its MS are not fulfilling their commitments. This situation needs to be resolved.

**Technology support:** On technology support, if at all covered in the existing reports (eg. national communications, every 4 years), there is a limited level of information on the technologies covered in cooperation projects. The information suffers from inconsistencies and lack of standardised definitions. Again, as for finance, the actual application of existing guidelines (eg. national communication) still varies significantly among MS. In addition, while the international discussions on technology cooperation still suffer from a lack of robust information on technology cooperation action, at COP16 in Cancún, new mechanisms for technology transfer were established<sup>4</sup>. Details on how these mechanisms will be operating are still under development but it is already clear that their agreed functions will trigger enhanced reporting and information sharing on technology cooperation.

Transparency and comprehensiveness on the type and amount of financial and technology support provided is essential to ensure the EU's visibility, the efficient delivery of the EU's climate message and to build trust with our partners. The revision of the MMD will provide an opportunity to set out requirements to increase the comparability and consistency of reporting in these areas through the establishment of common rules, methods and formats to the extent possible and will enable the clear identification of gaps and subsequent improvements. Only on the basis of a systematic, common

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<sup>4</sup> The Technology Mechanism with the Technology Committee (TEC) under the UNFCCC, and the Climate and Technology Centre and Network (CTC-N).

approach to reporting on support will the EU be able to demonstrate its compliance with its obligations under the UNFCCC and ensure its credibility.

## **2.5 How would the problem evolve, all things being equal?**

The continuation of the MMD in its current form is used as the baseline option in this impact assessment. If the MMD were not revised then among other:

- a) existing cases of non-compliance with domestic and international requirements would persist for a number of MS,
- b) improvements in quality, completeness, timeliness of information would be limited to those stipulated/motivated at the international level,
- c) the EU would not be able to deliver on its domestic commitments,
- d) the EU would have limited capacity to address new international commitments in a consistent and comparable way, and finally,
- e) the design of meaningful and effective policy actions would be impaired due to lack of adequate underpinning data and information.

Through the evolving nature of the climate policy landscape and the experiences gained, many possibilities for improvement and alignment of MS reporting have been identified and a number of new policy instruments have been devised (e.g., Climate and Energy package) or are under preparation (e.g., LULUCF). The effective implementation of these instruments requires the establishment of an effective monitoring and reporting system. Should such a system not be put in place, then the new or envisaged policy objectives will remain largely empty and unfulfilled.

Although the MS have gone a long way in introducing domestic legislation to address existing and future requirements, these can only go so far in supporting the overarching existing and future policy initiatives and objectives which have been set at the EU level so as to maximize their efficiency and effectiveness. In addition, the EU has existing international commitments and is in the process of taking on additional enhanced commitments. If the monitoring and reporting system at the Union level is not significantly enhanced it will not have the ability to respond to the increased domestic and international reporting requirements and obligations and the existing weaknesses and problems identified above would remain.

## **2.6 Does the EU have the right to act?**

### **2.6.1 Treaty basis**

The legal basis for the legislative proposal is Article 192(1) TFEU. The legislative proposal pursues a legitimate objective within the scope of Article 191(1) TFEU, namely, combating climate change (mitigation and adaptation). The purpose of the legislative proposal is to improve the availability of information for Union policy and decision making and the coordination and consistency of EU and MS' reporting under the UNFCCC. This objective pursued cannot be achieved by less restrictive means than the legislative proposal. Even so, the general division of responsibilities between the Union and the MS with regard to monitoring and data collection and reporting as established under the MMD are not affected by the proposed changes compared to the current situation.

### **2.6.2 Subsidiarity**

In order for EU action to be justified, it is also necessary for the subsidiarity principle to be respected:

- a) *Transnational nature of the problem (necessity test)*

The transnational nature of climate change is an important element in determining whether EU action is necessary. Domestic action alone would not allow the compliance against the internationally agreed commitments and would also not suffice for the fulfilment of the objectives and the achievement of the targets set under the ESD. It is therefore necessary that the EU creates the enabling framework for addressing international and EU requirements, ensuring harmonised reporting to the extent possible. Improvements to the reporting efficiency, which require co-ordination across a range of instruments, and the timeliness and quality of EU reporting under the UNFCCC which is associated with the compilation of data from all 27 MS, also require EU level coordination.

*b) Effectiveness test (added value)*

Besides the fact that most of the proposed revisions arise from existing or upcoming EU and international requirements, action at EU level would produce clear benefits compared with action at the level of MS by reason of its effectiveness. As the overarching commitments are made at the EU level, it is more effective to develop the required reporting instruments at the EU level. In addition, overcoming the identified problems, such as quality and timeliness of EU and MS' reporting, requires the co-ordination of data and methods across all EU27 MS which can be carried out more effectively at the EU level.

Experience in particular, with the required reporting on GHG emissions to the UNFCCC has shown that the MMD has largely contributed in both facilitating and enforcing good quality reporting. The additional checks and analysis of MS data enabled by the MMD has led to better quality reporting to the UNFCCC, has helped to proactively assist MS in fulfilling their commitments and has also largely contributed to limiting non-compliance cases under the UNFCCC. The added level of compliance enforcement through the infringement procedures of the Commission has also been instrumental in this respect.

It is expected that by enabling reporting through the MMD on yet new areas covered by the UNFCCC such as reporting on finance and technology support will also have similar significant benefits. MMD reporting will enable a more detailed assessment and appreciation of the available MS data, will ensure that gaps and weaknesses are clearly identified and concrete action is taken to address those as these are two very important areas of reporting with regard to the EU's international credibility. In addition, MMD reporting will ensure at least some common minimum standards for reporting of this information which so far has been reported in a rather inconsistent way. Finally, the application of the infringement procedures will also be important in ensuring that any remaining issues are dealt internally within the EU as opposed to the UNFCCC where the political implications could be significant.

With regard to reporting on adaptation the MMD will have similar benefits to those mentioned above with the added advantage that it will also enable best practice sharing. As adaptation is a common problem for all EU MS centralizing the reporting of information will be instrumental in understanding adaptation needs, but also in identifying best practices as well as gaps that could be addressed either through action at the EU level or through cooperation among the MS themselves.

### **3 Objectives of EU initiative**

The revision of the MMD will not change its nature. The revised MMD will continue to strictly be a monitoring and reporting instrument aiming at ensuring that the EU and its MS are able to provide

good quality, timely information to underpin the commitments that were made either domestically or internationally through other legal instruments with regard to climate change.

However, what the MMD revision will strive to do will be to ensure that compliance with all requirements and commitments is ensured internally within the EU and that cases of international non-compliance or criticism are avoided to the extent possible. In order to achieve this, the aim will be, based on the lessons learned and experience with implementation, to build a well-structured robust monitoring system which includes the necessary checks, sets suitable reporting frequency and provides for the formats and guidance needed.

The MMD revision will also aim at ensuring that the monitoring and reporting framework put in place is adequate to deal with the reporting requirements linked to new policy developments. Climate change policy is fast evolving, thus the monitoring and reporting system needs to have enough flexibility to address such new developments and avoid that too frequent revisions be made which can be detrimental for compliance.

### 3.1 General policy objectives

The general objective is, through *timely, and transparent, accurate, complete, consistent, comparable (TACCC)* reporting at EU and MS level, to:

- (a) support the EU and the MS in meeting their commitments under the UNFCCC,
- (b) support the EU and the MS in meeting their domestic mitigation and adaptation commitments,
- (c) support the effective development of EU policies.

### 3.2 Specific and operational objectives

§ *Implement the reporting and review requirements of the ESD and the EU ETS Directive*

- Operational objectives:
  - § Establish a review and compliance cycle under the Effort Sharing Decision;
  - § Incorporate the reporting requirements for the use of auctioning revenues of the revised ETS Directive;

§ *Enhance the current monitoring and reporting framework so as to meet the needs of future EU and international legislation*

- Operational objectives:
  - § Establish monitoring and reporting requirements for international maritime transport;
  - § Establish reporting requirements for non-CO<sub>2</sub> climate impacts from aviation;
  - § Establish reporting requirements on climate change adaptation;
  - § Establish additional reporting requirements on LULUCF;

§ *Enhance EU and MS reporting on financial and technology support provided to developing countries ensuring adherence to international commitments under the UNFCCC*

- Operational objective: Specify reporting requirements on financial and technology support provided to developing countries;

§ *Enhance consistency of reporting under the MMD with the reporting under other legal instruments in the EU targeting air pollutants*

- Operational objective: Establish links with the reporting of GHG emissions under the EU ETS, the reported information under the E-PRTR, the NEC Directive and the F-Gas Regulation;

§ *Enhance reporting taking into account lessons learned from past implementation*

- Operational objectives
  - § Improve reporting on projections, policies and measures;

§ Improve the preparation of the national inventory report;

### **3.3 Consistency with other policies**

The revision of the MMD:

- § contributes to the overall objectives of the Climate and Energy package to reduce global GHG emissions, is consistent with the individual legal instruments adopted as part of the package, and aims at advancing the implementation of additional policies in areas not yet sufficiently covered by the package;
- § is in line with the discussions under the UNFCCC on a future MRV system both in terms of the issues proposed to be covered and in terms of the reporting areas selected for enhancement;
- § is in line with the Europe 2020 strategy which includes emissions limitation commitment as one of its headline target and which requires that updated and recent information is made available with regard to climate change action so as to enable progress monitoring of the MS and the EU;
- § is in line with the simplification and better regulation objectives of the EU, as the revision takes into consideration lessons learned through its implementation and the feedback received from stakeholders. The revision aims at dealing with weaknesses and problems identified and at simplifying reporting requirements, as applicable, while new requirements introduced are aligned with and have thoroughly taken into consideration existing reporting streams and information.

## **4 Policy options**

### **4.1 Establishment of an EU review and compliance cycle under the Effort Sharing Decision**

*Option 1:* No internal review at EU level. Rely on current UNFCCC review. ("no policy change")

*Option 2:* An internal inventory review at the European level is implemented for target setting purposes (initial review) while the EU continues to rely on the inventory review under the UNFCCC, as in the current MMD, for the annual compliance cycle under the ESD.

*Option 3:* Establish a "light" EU-level annual review and compliance cycle for the implementation of the ESD and a comprehensive initial review. (The annual review would be performed in a shorter time frame with mostly automatic checking routines supplemented by an analysis of the previous UNFCCC review reports, building on existing checks and procedures currently carried out by the European Environment Agency (EEA) under the MMD). ("Light review")

*Option 4:* Establish a comprehensive EU annual review process and compliance cycle for the implementation of the ESD along with a comprehensive initial review. This review would be mirrored after the UNFCCC review but in a shorter time-frame to allow for a compliance assessment during the calendar year. ("Comprehensive review")

*Option 1* was discarded at an early stage because it would make the implementation of the ESD impossible. The Commission needs reviewed inventory data in order to set the initial targets in time for the start of the compliance period in 2013. The current UNFCCC review system takes about 12 months from the time emissions data is reported to the UNFCCC (in April each year) until the time MS receive the final UNFCCC emissions inventory review reports (i.e. March/April of the following year). Thus the UNFCCC timing will deliver review results too late to allow for a compliance assessment at the end of the same calendar year, and also too late to enable the determination of

annual emission allowances by 2013 as required under the ESD. In addition, the ESD requires a number of specific checks to be performed that are not covered by the UNFCCC review. For these reasons, relying only on the current UNFCCC inventory review system is not an option for the ESD annual compliance cycle.

*Option 2* was discarded at an early stage because the annual review under the current UNFCCC system would be completed too late to allow for compliance assessment at the end of each calendar year. There is also the uncertainty limited to the future of the Kyoto Protocol review post-2012, and the need for specific checks for the purpose of the ESD. For these reasons, relying only on the current UN inventory review system is not an option for the ESD compliance cycle.

**Suboptions related to the treatment of recalculations resulting from methodological or data improvements in the annual reporting, review and compliance cycle (case 1):**

*Suboption A1:* MS are not allowed to recalculate their inventories. No effect on targets and compliance.

This sub-option was discarded at an early stage as the UNFCCC guidelines require that MS recalculate their inventories in an effort to continuously ensure the best emission estimates. If the EU were to follow this option, then this would lead to significant administrative burden as MS would be preparing two separate reports one with recalculations for the UNFCCC and one without for the EU.

*Suboption A2:* Methodological changes are allowed for annual emissions reporting but the determined annual emission allocations remain fixed. Recalculations in an actual inventory submission due to updated data or methodologies that change inventory estimates submitted in previous years are not taken into account after compliance was determined for a particular year. This option is similar to the reporting and compliance system under the Kyoto Protocol, under which targets cannot be recalculated but recalculations of annual inventories are allowed until compliance has been assessed. ("Recalculations not taken into account")

*Suboption A3:* MS are allowed to recalculate their inventories due to annual methodological or data improvements as per usual practice but these recalculations will have no retroactive effect on compliance, nor will they lead to a recalculation of determined annual emission allocations. The quantitative effects of recalculations for previous years would only be estimated during the final year of the period 2013 to 2020. Any deviation (either positive or negative) resulting from the recalculated time-series would be carried over to the post-2020 period so that MS may have to compensate a deficit or may take advantage of a surplus. ("Recalculations taken into account at the end")

**Suboptions related to the treatment of recalculations resulting from a change in the reporting rules at the international level (case 2):**

*Suboption B1:* MS continue applying the existing (as of 2011) reporting rules regardless of any future changes in international rules. No recalculations and no effect on targets and compliance ("No recalculations")

*Suboption B2:* A provision is included in the MMD, allowing the Commission to consider the change and recalculate the targets, if and as required at the time that the international rules change, while already having defined now in delegated acts the principles of recalculating the targets. ("Consideration of recalculations possible")

## **4.2 Incorporate the reporting requirements for the use of auctioning revenues under the revised ETS Directive**

The revised ETS Directive has clearly specified that the additional reporting requirements related to the use of revenues from auctioning of allowances shall be reported in the reports submitted under the MMD<sup>5</sup>. Preliminary assessment has shown that this reporting is only linked to small administrative burden (in the range of €32,000 for the EU-27) thus it is not further analyzed in the present impact assessment.

## **4.3 Establish reporting requirements for emissions from international maritime transport**

*Option 1:* Continue with current monitoring and reporting of GHG emissions from domestic and international maritime transport in GHG inventories without establishing the basis for collecting improved underlying data. ("no policy change")

*Option 2:* Establish detailed monitoring and reporting requirements for MS. (This option would include defining the basis for monitoring (fuel consumption, distance travelled etc.), the criteria for the allocation of emissions to MS (based on flag, most port visits, ship owner, ship manager, territorial waters etc.) and the administrative details related to reporting (report annually to port authority using existing radio or satellite systems, report biannually to a defined competent authority using pre-defined template, report on every port visit etc.). ("Detailed reporting requirements now")

*Option 3:* Establish the basis for new monitoring and reporting guidelines allowing for the detailed provisions to be adopted in future legislation through comitology once a measure has been adopted by the IMO or proposed by the EU. ("Framework now, details later")

## **4.4 Establish reporting requirements related to the non-CO<sub>2</sub> impacts of aviation on the global climate**

*Option 1:* Continue with current reporting of GHG emissions from domestic and international aviation in GHG inventories limited to CO<sub>2</sub> emissions. ("no policy change")

*Option 2:* Require that MS report on the non-CO<sub>2</sub> climate impacts of aviation by multiplying the CO<sub>2</sub> impacts by a pre-defined factor. (This factor could be established by the Commission and changed by the Climate Change Committee to reflect the latest scientific results.) ("Multiplier Approach")

*Option 3:* Require that MS report the non-CO<sub>2</sub> climate effects of aviation based on detailed models. ("Modelling approach")

*Option 4:* Adopt new reporting requirements for the non-CO<sub>2</sub> effects of aviation for MS based on a two-tiered system. (Under this option, those Members States which reported more than 3% of the total EU CO<sub>2</sub> emissions from aviation would report the non-CO<sub>2</sub> effects of aviation based on detailed models. (Currently, this would apply to France, Germany, Italy, the Netherlands, Spain and UK which are jointly responsible for approx. 80% of the CO<sub>2</sub> emissions.) All other MS could report using detailed models but, if not feasible, they could use the multiplier approach instead. ("Tiered approach")

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<sup>5</sup> The use of the reports submitted under Decision No 280/2004/EC for the reporting of the auctioning revenues is not specifically provided for the "aviation" allowances in Article 3d(4), nevertheless, for consistency will be implemented accordingly.

## 4.5 Establish reporting requirements on adaptation

*Option 1:* Continue with current reporting on adaptation in MS' national communications under the UNFCCC and use this information for EU purposes. ("no policy change")

*Option 2:* Require that MS comprehensively report on an annual basis on their climate change impacts, vulnerability and adaptation actions. (This option would cover among other the observed and projected impacts per sector, the assessment of key vulnerabilities per region and per sector, the existing national and/or regional adaptation strategy and implemented and planned measures, information on strategies and on bilateral and multilateral projects on adaptation and the respective budget allocated.) ("Comprehensive reporting")

*Option 3:* Require that MS report on an annual basis on their implemented and planned climate change national adaptation actions. (In this option an indicative list of information to be reported would be provided). ("Reporting on actions")

## 4.6 Establish additional reporting requirements on LULUCF

*Option 1:* Continue with current reporting on LULUCF. ("no policy change")

*Option 2:* Establish revised reporting requirements for LULUCF activities, based on information from the ongoing international negotiations (in addition to existing reporting requirements), in the following areas ("Detailed requirements now"):<sup>6</sup>

- § Estimate and report emissions and removals from forest management activity on a mandatory basis
- § Estimate and report data on emissions from the harvested wood products pool (mandatory)
- § Estimate and report emissions and removals from rewetting and drainage<sup>7</sup> (voluntary)
- § Estimate and report emissions and removals subject to "force majeure"<sup>8</sup> (voluntary)
- § Updating of forest management reference level values based on new data or methodological improvements

*Option 3:* Establish the basis for new reporting guidelines allowing for the detailed provisions to be adopted in future legislation once relevant measures have been adopted at the EU level or internationally. (Effectively, this means that the scope of reporting would be determined through the co-decision procedure of legislating on the role of LULUCF in the EU's GHG emission reduction commitment whilst the technical details would be established through delegated acts ("comitology") within the framework agreed by the European Parliament and Council.) ("Framework now, details later")

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<sup>6</sup> The detailed elements are based on a draft decision under the Kyoto Protocol

<sup>7</sup> Rewetting and drainage" is a system of practices for rewetting and draining on land with organic soil that covers a minimum area of 1 hectare. The activity applies to all lands that have been drained and/or rewetted since 1990 and that are not accounted for under any other activity as defined in this annex, where drainage is the direct human induced lowering of the soil water table and rewetting is the direct human-induced partial or total reversal of drainage;

<sup>8</sup> Events beyond the control and not materially influenced by the country including a demonstration that no land use change has occurred on lands subject to force majeure events, a demonstration that the occurrences were beyond the control of the Party, a demonstration of efforts taken to rehabilitate the lands subject to force majeure events, a demonstration that emissions associated with salvage logging were not excluded (e.g. the identification of all lands, incl. their geo-referenced location, year and type of force majeure; that no land-use change has occurred on lands subject to the provisions; that the events / occurrences were beyond the control of, and not materially influenced by, the MSs during the commitment period by demonstrating efforts to manage or control, where practicable, the occurrences that led to the applications of the provisions; that demonstrates efforts taken to rehabilitate the carbon stocks on the lands subject to the provisions; and showing that emissions associated with the salvage logging were not excluded from accounting, see FCCC/KP/AWG/2010/CRP.4/Rev.4 for more information).



#### **4.7 Establish reporting requirements on financial and technology support provided to developing countries**

*Option 1:* Continue with current reporting of financial and technology support to developing countries through MS' national communications under the UNFCCC without separate reporting requirements at EU level. ("no policy change")

*Option 2:* Require MS to voluntarily report information on financial and technology support provided every 2 years based on the national communication guidelines. ("Voluntary reporting")

*Option 3:* Require that MS report on an annual basis through streamlined formats the financial and technical support provided to developing countries building on the existing national communication guidelines but requiring more comprehensive information on technology programmes and the use of methodologies developed within EU for reporting on financial support and indicators for financial flows of the OECD Development Assistance Committee (DAC). ("Comprehensive reporting")

#### **4.8 Enhance consistency with other legal instruments in the EU targeting air pollutants**

*Option 1:* Deal with reporting requirements in the MMD and other legal instruments separately and do not streamline the reporting under different instruments. ("no policy change")

*Option 2:* Establish requirements to report on the consistency of information between the reporting under the MMD and the reporting under the EU ETS, the E-PRTR, the NEC Directive and the F-Gas Regulation and to report on the QA/QC checks conducted to ensure consistency across the different legal instruments (including on the share of ETS emissions). ("Report on consistency")

*Option 3:* Establish a requirement that MS' existing inventory national systems are amended to allow access to data resulting from other reporting instruments (e.g., ETS, EPRTR, NEC) and consequently that inventory data is also being made available for reporting under other reporting instruments. ("Amend national system")

*Option 4:* Establish a requirement that the data reported via other instruments be used directly, such as EU ETS, EPRTR, F-Gas Regulation, NECD, by aligning reported pollutant data via reconciling the: disaggregation, contents, procedures, tools and formats they use/define.

Option 4 has been discarded at an early stage as the EU ETS, the E-PRTR and the F-Gas regulation have a different scope and coverage of emission sources and from a technical point of view the direct use of these emissions would violate the IPCC GHG inventory reporting guidelines.

#### **4.9 Enhance reporting taking into account lessons learned from past implementation**

*Option 1:* Keep existing reporting guidance under the MMD and the implementing provisions and rely on the methodological guidance specified under the UNFCCC. Pursue changes of the reporting guidance under the UNFCCC. ("no policy change")

*Option 2:* Require annual reporting and further specify type of information/data to be reported, and/or the relevant formats ("Streamline formats")

*Option 3:* Further specify methodological guidance for the effects of policies and measures and the preparation of GHG emission projections. ("Harmonize methodologies")

*Option 4:* Require the establishment of a national system for reporting on projections, policies and measures <sup>9</sup> (along similar main principles as for that established for GHG inventories) ("Establish national system")

## 5 Analysis of impacts

General considerations on the likely environmental, social and economic impacts<sup>10</sup>

### *Environmental impacts*

The MMD is being revised to increase the EU's environmental performance:

- a) through ensuring the availability of better quality and more complete data and information (data quality/completeness),
- b) through enabling better compliance with domestic and international targets, commitments and requirements (compliance with domestic and/or international commitments), and
- c) through enabling further future policy actions in this field to be designed, developed and implemented (further policy development/implementation).

The environmental impacts have been assessed for each of the proposed options based on a combination of the three criteria above as applicable<sup>11</sup>.

### *Assessment of simplification potential and compliance aspects*

Policy options are also assessed, as applicable, for coherence with the better regulation objective that EU legislation should be made simpler and more transparent. Compliance aspects of the options in question are also assessed<sup>12</sup> to the extent feasible, with particular focus placed on identifying potential obstacles and incentives to compliance at the national level.

### *Economic impacts*

The MMD is an instrument through which domestic and international reporting requirements are implemented. These requirements are at the national level, hence the main economic impacts linked to the revision of the MMD relate to the administrative burden that public authorities at the MS level would incur once these changes were implemented.

The assessment of the positive or negative effects on administrative burden on public administrations resulting from the revision of the MMD were primarily based on the mapping of the introduction of new, or suppression of existing, information obligations and data collected by the MS. The burden was then quantified on the basis of the EU "Standard Cost Model".

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<sup>9</sup> The objective of the national system, as known under the Kyoto protocol is to guarantee the preparation of an annual greenhouse gas inventory, which complies with the quality criteria set for the inventories, and its reporting to the secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) and the Commission of the European Union. The national system produces the emission and background data of the inventory. Included are also the archiving of the data used in emission calculations, the publication of the results, participation in inventory investigations and the quality management of the inventory.

<sup>10</sup> It needs to be noted that the impacts linked to many of the areas (not for aviation or international maritime transport) addressed in the MMD revision were assessed when the Climate and Energy Package was adopted. The impact assessment is contained in the Commission staff working document on the impact assessment document "accompanying the Package of Implementation measures for the EU's objectives on climate change and renewable energy for 2020" (SEC (2008) 85/3) and its annex SEC (2008)85) Vol II.

<sup>11</sup> Ratings: + or – is used to denote positive or negative impacts respectively, = signifies no impact, +/- low impact, ++/--, medium impact, +++/--- high impact).

<sup>12</sup> Ratings used: LL: low likelihood, ML: medium likelihood, HL: high likelihood.

### ***Social impacts***

The proposed options will have minor social impacts, if at all, thus these are not specifically addressed. The question that seems most relevant to answer with regard to social impacts is whether the presented options make the public better informed on climate change issues. The revision of the MMD should strive to ensure the availability of better and more comprehensive information on climate change-related issues, and the public's access to available information, main long-term goal being to help further raise awareness on climate change issues.

### ***Impacts on employment, industry, SMEs***

The reporting covered under the MMD is reporting from the EU and its Member States to the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. It covers 6 greenhouse gases and greenhouse gas emissions from all sectors (energy, industrial processes, LULUCF, waste, agriculture, etc) and is based on methodologies established under the IPCC (Intergovernmental Panel on Climate Change) and existing aggregated statistical (activity) data at the national level. The reporting under the MMD is to be contrasted with reporting under the ETS Directive which covers reporting from companies to Member State authorities and is directly based on data collected by industry.

As the reporting requirements of the MMD are set at the national level based on the IPCC methodologies and existing statistical data, the main impacts will be on national public authorities which are the ones responsible for gathering and analyzing the relevant data and producing the reports required under the MMD. The revision will not necessitate additional data collection, there are no direct or indirect reporting requirements imposed on SMEs or industry and the proposed changes will not have any impact on the administrative burden of ETS installation operators or any other industrial players, thus no such impacts are included in our analysis. It should be noted that the reporting requirements as regards financial and technology support, and adaptation also do not impose any obligations on companies and rather refer to national authority level reporting.

In addition, it needs to be noted that the only requirement linked to the ETS directive that is being implemented under the MMD is that linked to the reporting on auctioning revenues by Member States, where the MMD will simply provide the appropriate template for that reporting to take place along the principles already agreed upon in the climate and energy package. This does not impose any obligations and costs on companies, as this is mainly directed to treasuries/finance ministries and in substance is no different than many other existing reporting obligations in financial and monetary affairs.

As regards reporting on international maritime transport emissions, the revision only establishes the basis for such reporting (enabling framework) within the MMD without prejudging the underpinning detailed reporting rules to be established at a future stage. Should at that stage these rules require further data collection the related burden will be addressed in a separate impact assessment. Any resulting burden will greatly depend on the mitigation instrument decided upon as well as on the reporting methodology chosen. It needs to be noted that enabling collection of sound data, is the sine qua non for good policy-making. Establishing an enabling framework for data reporting with regard to maritime transport is also a necessary step to enable robust future impact assessments when ultimately concrete policy proposals are brought forward.

On the non-CO<sub>2</sub> climate impacts of aviation, the proposed modelling approach would again be based on available statistical data (notably those collected for air traffic management inter alia, the 4-

dimensional flight route, aircraft and engine types, fuel burn and 4-dimensional atmospheric conditions) and again would not require further data collection. The multiplier-approach is based on data already currently reported and would involve a simple multiplication.

Based on the above it is also clear that the MMD will not have any impacts on employment either.

## **5.1 Administrative burden calculation: methodology**

The EU Standard Cost Model was used to assess the administrative costs on public authorities in the Member States through defining the costs for the various information obligations imposed by the revision of the MMD. The administrative burden was estimated for the preferred option and when possible also for the other options covered in this impact assessment. In applying the cost model both recurring and one-off administrative costs were taken into account. The assessment of the administrative burden focuses on public administrations as these are the ones expected to incur any additional costs resulting from the revision of the MMD. The quantification of the burden was done with the help of the "Administrative Burdens Calculator" and the "EU database on Administrative Burdens". The information obligations and the required actions were identified in accordance with the impact assessment guidelines.

The approach used to assess the administrative burden was to sample the estimated costs within different Member States, and then to scale these results up to an EU level. Seven MS (Finland, Germany, Hungary, Netherlands, Slovakia, Spain, Sweden) volunteered to provide information on administrative burden/costs. These MS were consulted twice by questionnaires. The questionnaires outlined each of the problems associated with the current MMD, together with the required actions. Member States were then requested to estimate the frequency of a required action. A case by case approach was used to appropriately deal with the data reported for each action and any observed outliers.

Only 5 Member States (Finland, Germany, Hungary, Netherlands, Sweden) provided answers to the second questionnaire. The low response rate to the second questionnaire was mostly due to the fact that the questions dealt primarily with new provisions that are to be introduced in the MMD thus MS found it difficult to estimate the potential administrative burden. As a follow-up, and in accordance with the advice of the IASG, MS were further contacted by both phone and email in an effort to gather additional data or to further clarify the information received. This iterative process led to the final administrative burden data that underpin this impact assessment.

In measuring the baseline administrative costs there is an implicit assumption that the MMD is fully implemented by all MS. An analysis of the baseline scenario has been performed with a view to understand the degree of compliance with the existing MM Decision requirements. Thus, the final estimated impact on administrative burden might underestimate the actual costs faced by some MS if they currently do not comply with the reporting obligations under the existing MM Decision.

## **5.2 Specific impacts of the policy options**

### **5.2.1 Establishment of an EU review and compliance cycle under the ESD**

***Option 3: Establish a "light" EU-level annual review and compliance cycle for the implementation of the ESD and a comprehensive initial review.***

*Environmental impacts*

Compliance with domestic commitments: The ESD has established the notion of an annual compliance cycle. In this context, it is required that reporting by the MS, and then the review and compliance assessment be completed within the same calendar year. This option supports the implementation of the ESD as it ensures that: a) the Commission has conducted the review process of the reported information in a timely manner for determining the annual emission allocations for each MS (as per article 3.2 of the ESD), and b) that the annual compliance process is also completed in the shortest delays possible. This option would also have the advantage of increasing the performance of the EU in relation to its GHG mitigation targets as non-compliant MS would be detected at an early stage and would hence, be able to swiftly develop and implement additional mitigation measures to ensure compliance and the overall achievement of their target for 2020. However, this option might not be adequate should the review system under the Kyoto protocol were to cease to exist or was significantly altered.

Data quality/completeness: This option has the disadvantage of not providing the Commission with in-depth reviewed data for assessing compliance. A "light" annual review would be less thorough than the current review under the UNFCCC and could overlook problems in the reported information and data that could potentially be picked up during the UNFCCC review. Also there may be a loss of credibility in the EU's environmental performance if the EU review were perceived as less stringent than the UNFCCC review.

#### *Economic impacts*

Administrative burden: A "light" annual EU-based review system would impose an additional administrative burden on the EU and the MS without having the advantage of securing a comprehensive review for the EU in case the UNFCCC/Kyoto review system ceased to exist. No indications for the specific costs of this option were requested from MS because these administrative costs cannot be quantified without knowing the detailed checks to be conducted. However, based on the cost data collected for a desk-review (which would be more comprehensive) it was estimated that this "lighter" option consisting primarily of enhanced automatic checks would lead to a very limited additional administrative burden in the range of €15,000-30,000 (recurring costs) for the EU27. This option would also lead to additional administrative costs for the EEA, estimated at an annual cost of €360,000, compared to the current system of annual quality checks under the MMD.

***Option 4: Establish a comprehensive EU annual review process and compliance cycle for the implementation of the ESD along with a comprehensive initial review.***

#### *Environmental impacts*

Compliance with domestic commitments: Same as option 3, this option would ensure that the EC could rely on reviewed data in time for target setting purposes, that the annual compliance cycle would be kept short as needed by the ESD, and that the overall performance of the EU with respect to its climate targets would increase. This option as it advocates for a comprehensive review, would also ensure that no matter what happens with the review system under the UNFCCC, the EU would continue to fulfil seamlessly the requirements of the ESD.

Data quality/completeness: This option would also ensure the equal treatment of the MS and would reduce the risk of inconsistencies on how the review is conducted for each MS. This option would overall ensure the environmental integrity of the process through high quality and consistent review outcomes for both the initial and annual reviews, and by assuring the availability of robust data and information for the compliance assessment.

### *Economic impacts*

**Administrative burden:** The implementation of an EU review system might imply the risk of duplicating to a certain degree the UNFCCC review and imposing an additional administrative burden at both the EU and the MS level. However, it would at the same time reduce the burden linked to the UNFCCC review as a significant part of the work that this review would require at both the MS and the EU level, would in essence already have been conducted during the EU review. It should be noted that even if an EU-based review system would require additional administrative resources for the Commission, the EEA and the MS, the final amount would depend on whether the current UNFCCC/Kyoto review system would continue to exist post-2012 and on its scope and rigour. Should the current Kyoto Protocol review system cease to exist, a self-standing EU review system would have to be implemented in any case so as to fulfil the requirements of the ESD.

The administrative burden for the EU27 per year was estimated in the range of €50,000 to €100,000 for a desk review (including benefits to approximate the lower administrative burden during the subsequent UNFCCC review) with a negligible part of this cost being one-off and linked to the need for the MS to familiarize themselves with the relevant process. An in-country visit, if this was deemed necessary, would entail additional costs in the order of €10,000 for the MS in question. This option would also impose additional administrative burden on the EEA in the order of €1.2 million.

	<b>Environmental Impacts</b>	<b>Administrative burden</b>
Option 3	+	€5,000-30,000
Option 4	+++	€50,000-100,000

**Suboptions related to the treatment of recalculations, resulting from the annual methodological or data improvements, in the annual reporting, review, compliance cycle("case 1"):**

**Suboption A2:** Methodological changes are allowed for annual emissions reporting but the determined annual emission allocations remain fixed. Recalculations in an actual inventory submission due to updated data or methodologies that change inventory estimates submitted in previous years are not taken into account after compliance was determined for a particular year.

### *Environmental impacts*

In this option, the resulting emission changes due to methodological and data improvements in annual reporting are not taken into account in the annual compliance assessment under the ESD. This could put in question the credibility of the EU's system.

### *Economic impacts*

**Administrative burden:** This sub-option does not create any additional administrative burden as, in the case of data or methodological improvements, MS are required by international rules to recalculate their emissions.

**Suboption A3:** MS are allowed to recalculate their inventories due to annual methodological or data improvements as per usual practice but these recalculations will have no retroactive effect on compliance, nor will they lead to a recalculation of determined annual emission allocations. The quantitative effects of recalculations for previous years would only be taken into account in the assessment of the final year of the period 2013 to 2020. Any deviation (either positive or negative) resulting from the recalculated time-series would be added to the emissions so that MS may have to compensate a deficit or may take advantage of a surplus.

### *Environmental impacts*

This option ensures that the resulting emission changes due to the methodological and data improvements in annual reporting are taken into account in the final compliance assessment under the ESD, leading to transparency and credibility of the EU's environmental performance.

### *Economic impacts*

Administrative burden: This sub-option does not create any additional administrative burden as, in the case of data or methodological improvements, MS are required by international rules to recalculate their emissions.

**Suboptions related to the treatment of recalculations, resulting from a change in the reporting rules at the international level, in the annual reporting, review, compliance cycle ("case 2"):**

***Suboption B1:* MS continue applying the existing (as of 2011) reporting rules regardless of any future changes in international rules. No recalculations and no effect on targets and compliance.**

### *Environmental impacts*

This option would ensure that the level of effort set at the beginning of the commitment period remains unchanged for each MS. However, this option could also lead to inconsistencies between EU and UNFCCC reporting in case of changes in international reporting during the ESD commitment period. Such inconsistencies between the two systems could put in question the EU's credibility and in doubt its environmental performance.

### *Economic impacts*

Administrative burden: No additional administrative burden is envisaged, provided there are no changes in international rules. Should the international reporting rules change during the commitment period, this option would lead to the preparation of two inventories for MS, one following the current rules for ESD purposes and the other following the new ones for UNFCCC purposes. This would entail significant administrative burden for the MS.

***Suboption B2:* A provision is included in the MMD, allowing the Commission to consider the change and recalculate the targets, if and as required, at the time that the international rules change, while already having defined now in the implementing provisions the principles of recalculating the targets.**

### *Environmental impacts*

This sub-option has the advantage of providing the EU with the flexibility to adapt the best to the international developments while also having the opportunity to more thoroughly examine how these may impact EU policy implementation and take the relevant decision while ensuring environmental integrity (eg., should the international reporting rules change in the last year of commitment, the costs, resulting environmental benefits, and legal considerations, may in fact support a continuation of the current rules for a limited time period).

### *Economic impacts*

Administrative burden: This sub-option would ensure that no unnecessary additional administrative burden is imposed on MS through duplication of reporting.

## **5.2.2 Establish reporting requirements for emissions from international maritime transport**

### ***Option 1: No policy change***

### *Environmental impacts*

Data quality/completeness<sup>13</sup>: This option makes it difficult to get comprehensive data on maritime-related emissions as it continues with the current reporting of GHG emissions from international navigation as a memo item in GHG inventories without improved underlying data, frequently based on an uncertain separation of fuel consumption between domestic and international navigation and on bunker fuel sales which are also linked to some extent to uncertainties. Unlike the aviation sector, maritime vessels don't regularly or necessarily take on fuel when visiting a port. This means that continuing to use an "upstream" approach as currently used for the memo item, creates a high degree of uncertainty on the country-by-country allocation of GHG emissions.

Future policy development/implementation: As the IMO have found that up to 50% of the emissions from the sector could be mitigated at negative cost, an improved understanding of these emissions will benefit the climate and will likely create efficiencies for the sector as well. This option would delay addressing emissions from the maritime sector.

### ***Option 2: Establish detailed monitoring and reporting requirements***

#### *Environmental impacts*

Data quality/completeness: The current monitoring and reporting requirements for this sector are not sufficiently accurate nor detailed enough to facilitate measures to reduce emissions. This option has the benefit of creating a broader understanding of the emissions from this sector.

It is the preference of the EU that measures for this sector be adopted by the IMO (failing that, a measure to include these emissions in the EU target should be proposed by the Commission). However, as the detailed design of an IMO measure is not yet fully elaborated and related crucial design elements such as: the scope of the requirement (limited by vessel size or type), and the determination of the administering MS (how the emissions are allocated and to whom they are reported (based on number of port visits, flag, ship manager) etc, have not yet been determined, there is a risk that such a detailed elaboration at this point in the MMD would conflict with the eventual design agreed at the IMO and could create inconsistent reporting.

Future policy development/implementation: This option provides for an early start of collection of fuel consumption and emission data from maritime vessels thus enabling early policy development.

#### *Other impacts*

Compliance: This option would create new data collection and reporting obligations thus compliance, at least until all the necessary structures are put in place, might be difficult. Compliance could in particular be jeopardized if the requirements established at the international level were to be different.

#### *Economic impacts*

Administrative burden: It is clear that such a requirement would create a new data collection and reporting obligation and an additional burden for the administering MS of the vessels which are required to report emissions. Depending on the design of the requirement, the burden could be significant. Additional administrative burden for the MS and/or vessels covered could also result from this option as it could lead to inconsistencies as mentioned above with the requirements of the IMO.

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<sup>13</sup> In all sections of this document, data quality refers to the transparency, the accuracy, the consistency and the comparability of the information reported (TACCC).



***Option 3: Establish the basis for new monitoring and reporting guidelines allowing for the detailed provisions to be adopted in future legislation through comitology once a measure has been adopted by the IMO or the EU.***

This option involves inserting a provision in the revised MMD to adopt, through delegated acts, any changes in the requirements on reporting of data related to international maritime transport once an international agreement is reached at IMO or once EU legislation on the inclusion of emissions from international maritime transport in the EU's commitment to reduce GHG emissions by 2020 has been approved.

*Environmental impacts*

Data quality/completeness: Same as for option 2, given that the current monitoring and reporting requirements for this sector are not sufficiently accurate nor detailed enough to facilitate measures to reduce emissions, this option has the benefit of introducing an enabling reporting framework that will allow in the near future a broader understanding of the emissions from this sector.

Future policy development/implementation: Given that this option implies action only once international or EU legislation is in place, it would ensure that all necessary arrangements are introduced once there is clarity at the domestic and/or international level of the exact measures and requirements. The option would also ensure that legal requirements are met and that emissions in MS are transparently presented. It is important that this is done through delegated acts so that the necessary changes can be swiftly implemented once future legislation is in place and so that all monitoring and reporting is defined by the MMD also in the future. By implication, the scope/framework of reporting would effectively be decided by a co-decision procedure whilst the technical details of such reporting would be decided through specific provisions of the MMD.

*Other impacts*

Compliance: Compliance could be difficult as there would eventually be new reporting requirements for this sector, however, compliance is better assured compared to option 2 as the reporting requirements would be linked to a concrete mitigation measure at the domestic or international level.

*Economic impacts*

Administrative burden: This option would also create a new data collection and reporting obligation and an additional burden for the administering MS and some point in the future, but the detailed administrative and economic impact of this option cannot be determined at this stage. Quantitative additional administrative burden for vessel operators and MS can only be specified on the basis of detailed monitoring and reporting guidelines which are not yet available. Preliminary consultation of the MS indicate, that the administrative burden among MS could vary significantly (from low to high) and strongly depends on the MS' current monitoring systems for vessels. MS would have an opportunity to voice support or concern on the principle of introducing mandatory reporting requirements for international maritime transport through the revision of the MMD. If these were agreed, the detailed proposal, to be adopted through comitology, would be preceded by an impact assessment to determine the burden associated with various design options. The proposal would be based on measures agreed through the IMO or proposed by the EU in accordance with Recital 3 of the revised ETS Directive. The proposal will also abide by the principles of environmental integrity and transparency, and will strive to ensure coherence with the commitments made and to minimize administrative burden. By engaging with MS through comitology with allowed scrutiny by Parliament,

the crucial requirement for the monitoring and reporting of these emissions would be aligned with an IMO proposal if one were forthcoming.

	<b>Environmental Impacts</b>	<b>Compliance</b>	<b>Administrative burden</b>
<b>Option 1: no policy change</b>	- -	na	na
<b>Option 2: Detailed reporting requirements now</b>	+	ML	- - -
<b>Option 3: Framework now, details later</b>	+ + +	HL	-

**5.2.3 Establish reporting requirements related to the non-CO<sub>2</sub> impacts of aviation on the global climate**

*Option 1: No policy change*

This option does not fulfil the needs of directive 2008/101 which requires that all climate impacts of aviation should be addressed to the extent possible. Currently this is not possible as only CO<sub>2</sub> and air pollution emissions from aviation are monitored and reported.

*Option 2: Require that MS report on the non-CO<sub>2</sub> climate impacts of aviation by multiplying the CO<sub>2</sub> impacts by a pre-defined factor.*

*Environmental impacts*

Data quality/completeness: The multiplier approach will not directly help to increase the certainty or the accuracy linked with the information available on the non-CO<sub>2</sub> impacts of aviation, although in the long-term bringing attention to these emissions is likely to spark an interest at the MS level in increasing the type, amount and quality of information available.

Compliance with domestic commitments: This option would largely address the needs of directive 2008/101 which requires that all climate impacts of aviation be addressed to the extent possible.

*Other impacts*

Compliance: This is a simple and straightforward option (eg., multiplication of CO<sub>2</sub> emissions by a factor of two) so compliance will not be an issue.

*Economic impacts*

Administrative burden: This option would introduce a new reporting requirement on non-CO<sub>2</sub> impacts from aviation. Due to the simplicity of the proposal administrative burden is also not an issue and estimated at €24,000 per year (recurring costs) for the EU27.

*Option 3: Require that MS report the non-CO<sub>2</sub> climate effects of aviation based on detailed models.*

*Environmental impacts*

Data quality/completeness: This approach leads to the most accurate reporting of non-CO<sub>2</sub> impacts of aviation by MS. On the other hand, the accuracy improvements in the data reported by some of the smaller MS which have low emissions related to aviation may improve overall accuracy only to a small extent due to high modelling uncertainties. The scientific uncertainty about the climate impacts of non-CO<sub>2</sub> emissions will also only be partly addressed.

Compliance with domestic commitments: This option would largely address the needs of directive 2008/101 which requires that all climate impacts of aviation be addressed to the extent possible.

*Other impacts*

Compliance: It might be difficult, in particular for some of the smaller MS to comply with such an obligation as they may not have the models or underlying modelling capacity to perform this exercise and they would need to develop this over the years. It may also be difficult for some of the smaller in area MS to develop appropriate modelling approaches (due to the modelling requirements).

*Economic impacts*

Administrative burden: This option would introduce a new reporting requirement on non-CO<sub>2</sub> impacts from aviation and the added administrative burden for MS is significant as the required models will have to be sourced and managed by all MS. If the costs for 6 MS are in the range of €1.5 million (see option 4), this cost could reasonably be expected to be a lot higher, in the order of €6.75 million, if all the MS were to be requested to use models, and dependent on the size of the MS which would make a modelling approach more or less complex. However, the administrative burden would significantly decrease as the cost provided above is linked to the actual development of a new model (one-off cost). Once the model was developed then the recurring costs would be linked to the collection of data and production of new data and would be significantly lower, although still higher than for options 2 and option 5.

***Option 4: Adopt new reporting requirements for the non-CO<sub>2</sub> effects of aviation for MS based on a two-tiered system (use of multiplier for some MS and modelling for others).***

*Environmental impacts*

Data quality/completeness: Although, the overall scientific uncertainty about the climate impacts of non-CO<sub>2</sub> emissions might only still be partly addressed. This option allows for a high degree of accuracy for the majority of reported emissions (80%) in the EU as the countries responsible for those emissions would need to base their reporting on modelling approaches.

Compliance with domestic commitments: This option would largely fulfil the needs of directive 2008/101 which requires that all climate impacts of aviation be addressed to the extent possible.

*Other impacts*

Compliance: This option takes into consideration the level of importance of MS emissions in this exercise, and requires modelling by those MS which are also most likely to have in place models to estimate such emissions due to their significance. However, compliance for those MS required to use models could still be a problem.

*Economic impacts*

Administrative burden: This option would introduce a new reporting requirement on non-CO<sub>2</sub> impacts from aviation and this option would have a significant impact on those MS required to use detailed modelling as the estimation and reporting of non-CO<sub>2</sub> impacts of aviation would require the inclusion of the 4-dimensional flight route, aircraft and engine types, fuel burn and 4-dimensional atmospheric conditions. This modelling is complex and would require continuous data collection. The overall estimated costs at the EU level for the two-tiered approach would be in the order of €1.52 million (mostly one-off costs as mentioned above linked to the development of the necessary model). The administrative burden would decrease after the models are established and ongoing reporting would be-come less costly, but still higher than for option 2.

	<b>Environmental impacts</b>	<b>Compliance</b>	<b>Administrative burden</b>
<b>Option 1: no policy change</b>	-	=	=

<b>Option 2: Multiplier Approach</b>	+	<b>HL</b>	<b>€24,000</b>
<b>Option 3: Modelling approach</b>	++	<b>LL</b>	<b>€6.75 million</b>
<b>Option 4: Two-tiered approach (multiplier for some MD modelling for others)</b>	+++	<b>ML</b>	<b>€1.52 million</b>

## 5.2.4 Establish reporting requirements on climate change adaptation

### *Option 1: No policy change*

#### *Environmental impacts*

Data quality/completeness: Although MS already have reporting requirements under the national communications in the UNFCCC context, and under the Floods and the Water Framework Directive and despite the fact that some MS have established national platforms for disaster risk reduction, reporting and monitoring of adaptation actions is still at a very early stage of development and the information remains largely scarce, non-coherent and incomplete.

Future policy development/implementation: This option would not allow assessing available data sources, identifying data gaps and uncertainties and addressing the policy needs on adaptation adequately. The revision of the MMD is an opportunity to include specific provisions to allow for the reporting of progress on adaptation in MS, with the objective of providing an evaluation of the extent to which MS are implementing some form of adaptation actions and to identify how current and planned adaptation actions are mainstreamed into other key sectoral policy areas.

***Option 2: Require that MS comprehensively report on an annual basis on their climate change impacts, vulnerability and adaptation actions.***

#### *Environmental impacts*

Data quality/completeness: This option would significantly increase the availability on climate change impacts, vulnerability and adaptation activities publicly available (including within industry and at the local level), and hence increase information for citizens, stakeholders, municipalities, regional entities and would contribute to better information of the public in an area where the public can strongly be affected in the future. However this option would not have a significant effect on the comparability of the reported information.

Future policy development/implementation: The information provided would form a particularly good basis for analysing vulnerability/risks at all levels, including at sub-national level. This approach would also allow for more coherence and the development of integrated policy approaches on all components of adaptation, including on impacts and vulnerability.

This option would also help support the needs of the EU Clearinghouse Mechanism, in which a natural platform for the dissemination and comparison of national adaptation actions would be provided.

Compliance with domestic commitments: This option would overall be consistent with the principles of the EU strategy on adaptation outlined in the White Paper on adaptation. This option would also be coherent with current reporting under the UNFCCC.

#### *Other impacts*

Compliance: Compliance by MS could be difficult at first given the breadth of information to be provided and the high reporting frequency, although some familiarity with the information obligation would be there, as a similar set of information on climate change impacts and adaptation actions is

reported in the national communications under the UNFCCC. In addition, the information provided should not be expected to drastically change annually and compliance should improve over time.

*Economic impacts*

Administrative burden: This option would introduce a new reporting requirement at EU level with a higher level of detail and disaggregation of information than the reporting in the national communications and with a higher reporting frequency. It would be linked to the highest administrative burden for MS to collect information and could potentially lead to some duplication of efforts with other information channels at the international (UNFCCC), national or at the EU level. Benefits would occur for the reporting of national communications under the UNFCCC because the additional EU information could be directly used under the UNFCCC. First estimates indicate that outsourcing costs linked to this reporting requirement could be in the range of €800,000 to €2.35 million while direct administrative costs for the EU27 could be about €450,000 (part of these costs are one-off costs linked to the need for MS to familiarize themselves with this obligation and to train staff but these costs vary significantly from one MS to the other (as much as ~5% to ~60% of the total costs)). The total annual costs for the new reporting requirement would amount to €1 to €2.24 million taking into account the benefit for the production of the national communication. Administrative, and in particular, outsourcing costs are expected to decrease over the years as experience with reporting is gained.

***Option 3: Require that MS report on an annual basis on their implemented and planned climate change national adaptation actions***

*Environmental impacts*

Data quality/completeness: Although this option would limit reporting to adaptation actions, it would have the benefit of being more focused in one important area of reporting, enabling MS to better focus their efforts in providing complete, transparent and accurate information on adaptation actions. This option would also lead to the provision of better and more complete data and information to the public.

It would also allow more time to agree at the EU level on the degree of harmonisation needed on monitoring of impacts, methods for vulnerability/risk assessments and of assessing adaptation actions.

Compliance with domestic commitments: This option would overall be consistent with the principles of the EU strategy on adaptation and consistent with reporting under the UNFCCC

*Other impacts*

Compliance: Compliance by MS would be easier as reporting would be focused on only one area which is also less complex to report on, than the ones on vulnerability and impacts.

*Economic impacts*

Administrative burden: This option would introduce a new reporting obligation at EU level, but it would have a significantly lower administrative burden than option 3 because it is limited to reporting on adaptation actions and would also lead to some benefits for the reporting of national communications. The estimated administrative burden without taking into account co-benefits for the national communication preparation would be about €120,000 (part of these costs are one-off costs linked to the need for MS to familiarize themselves with this obligation and to train staff but these costs vary significantly from one MS to the other (as much as ~5% to ~60% of the total costs)).

	<b>Environmental impacts</b>	<b>Compliance</b>	<b>Administrative burden</b>
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<b>Option 1: no policy change</b>	-	=	=
<b>Option 2: Comprehensive reporting</b>	+++	LL	€1 to 2.24 million
<b>Option 3: Reporting on actions</b>	++	HL	€120,000

## 5.2.5 Establish additional reporting requirements on LULUCF

### *Option 1: No policy change*

#### *Environmental impacts*

Compliance with domestic/international commitments: This option is essentially a "non-option"; if no provision is introduced in the MMD to enable further reporting on LULUCF, this will very likely lead to a further revision of the MMD in the future as there is high certainty that the reporting provisions in a future international agreement will change. In addition, the EU is preparing a legislative proposal in this area that would necessitate additional reporting

### *Option 2: Establish detailed revised reporting requirements for LULUCF activities, in line with the likely outcome of the international negotiations under the UNFCCC*

#### *Environmental impacts*

Compliance with domestic/international commitments: The reporting items of this option would address the additional requirements for reporting stemming from a future international agreement and, at least partially, those of future EU legislation. However, and whilst there is a good understanding of what a final agreement would look like, the absence of an agreement and the exact implementation of an EU act on LULUCF makes it difficult to predict the exact reporting requirements. Thus, at this point in time, applying this option could result to inconsistent domestic and international reporting requirements and could prejudice the outcome of the EU's proposal while at the same time it would not ensure that domestic or international commitments are met or fulfilled.

#### *Other impacts*

Compliance: This option would create new data collection and reporting obligations thus compliance, at least until all the necessary structures are put in place, might be difficult. Compliance could in particular be jeopardized if the requirements established at the international level or through an EU mitigation instrument were to be different.

#### *Economic impacts*

Administrative burden: From the information provided by MS it is difficult to assess which costs are one-off and which ones are recurring. This largely depends on the level of preparedness of reporting by each MS and can vary significantly from one MS to the next. Some of the one-off costs highlighted by MS in their response were those related to training employees and familiarizing with the new reporting requirements.

<b>Sub-elements</b>	<b>Administrative burden (€)- EU 27</b>	<b>Comment</b>
Report emissions and removals from forest management activity on a mandatory basis	€344,000	Reporting would be mandatory Only relevant for 12 MS. No costs assumed for MS already reporting on FM under the KP.
Report data on emissions from the harvested wood products pool	€286,000 for EU-27 per year within a range of € 238,000 to €333,000.	The provided estimates imply high methodological tiers. However, MS could also rely on default values which would significantly lower the cost.

Sub-elements	Administrative burden (€)- EU 27	Comment
		Indeed, this pool is unlikely to be important for MS with small forests and the default approach could be applied in those cases. However, it should also be noted that the data availability may already be good in those countries that responded to the questionnaire (SE, FI). Costs will be higher at the start of the new obligation and are likely to drop in subsequent years, but the implementation of higher tier approaches will incur costs at similar level during a number of years.
Report emissions and removals from rewetting and drainage	€85,000	Voluntary. Activity does not occur in all MS due to soil conditions. Costs if MS elect this activity. Costs could be fully related to the implementation of additional requirements under the UNFCCC.
Report emissions and removals subject to “force majeure” events	€20,000	Voluntary and only applicable after force majeure events, compensated through preferential changes in accounting of emissions and removals
Updating of forest management reference level values	€32,000	Voluntary, but likely to occur frequently because of recalculations (due to methodological improvements)
<b>Total EU-27</b>	<b>€610,000 to €710,000</b>	Reflects only mandatory activities, some activities only for a limited number of MS

***Option 3: Establish the basis for new reporting guidelines allowing for the detailed provisions to be adopted in future legislation once relevant measures have been adopted at the EU level or internationally.***

This option involves inserting a provision in the revised MMD to adopt, through delegated acts, any changes in the requirements on reporting of data related to LULUCF once an international agreement is reached or EU legislation on the inclusion of LULUCF in the EU's commitment to reduce GHG emissions by 2020 has been adopted. Importantly, and by implication, the scope / framework of reporting would therefore be decided by a co-decision procedure through the adoption of legislation on LULUCF whilst the technical details of such reporting would be decided through specific delegated acts in the MMR. The delegated acts would abide by the principles of environmental integrity and transparency, and would strive to minimize administrative burden while ensuring coherence with the commitments made. This option would likely imply at that point in time reporting along the same sub-elements as Option 2.

#### *Environmental impacts*

Compliance with domestic/international commitments: This option implies action only once international or EU legislation is in place, and ensures consistency as all necessary changes related to LULUCF would be introduced once there is clarity at the domestic and/or international level of the exact measures and requirements on LULUCF. Implementation through comitology rather than co-decision will allow the necessary changes to be swiftly implemented as well as safeguard proportionality (changes in the process will be proportional to the changes proposed).

The option would also ensure that legal requirements are met and that changes in emissions and removals in MS are transparently presented.

#### *Other impacts*

Compliance: Compliance could be difficult as there would eventually be new reporting requirements for this sector, however, compliance is better assured compared to option 2 as the reporting requirements would be linked to a concrete outcome at the domestic or international level.

*Economic impacts*

Administrative burden: Option 3 although it envisages similar new reporting requirements as option 2, to be introduced at a later stage, it could result to overall less administrative burden for MS because it would ensure that no inconsistencies be introduced with respect to decisions made at the domestic or international level.

	<b>Environmental impacts</b>	<b>Compliance</b>	<b>Administrative burden</b>
<b>Option 1: no policy change</b>	- - -	=	=
<b>Option 2: Detailed requirements now</b>	+ +	<b>ML</b>	<b>€610,000 to €710,000</b>
<b>Option 3: Framework now, details later</b>	+ + +	<b>HL</b>	<b>&lt; €610,000 to €710,000</b>

Note: In option 2 the total administrative costs do not reflect the voluntary requirements.

**5.2.6 Establish reporting requirements on financial and technology support provided to developing countries**

*Option 1: No policy change*

*Environmental impacts*

Data quality/completeness: Current reporting of information on finance and technology support to developing countries is included in national communications under the UNFCCC every 4 years, the OECD DAC indicators and also most recently captured through reporting on fast-start finance provided to developing countries. However, it often lacks transparency, completeness, comparability and consistency and has proven barely adequate to inform the international discussions and to underpin the EU and MS commitments, thus the option of no EU action is no longer considered appropriate.

Compliance with domestic/international commitments: The agreement under the UNFCCC achieved at the Cancún conference foresees enhanced reporting on financial and technology support by developed countries thus MS reporting on finance and technology support will need in any case to be enhanced, and the option of continuing with the current reporting framework will not be adequate. In addition the EU has made a concrete commitment to provide financial and technology support to developing countries, which it will need to support with concrete data and information.

***Option 2: Require MS to voluntarily report information on financial and technology support provided every 2 years based on the national communication guidelines.***

*Environmental impacts*

Data quality/completeness: This option due to its voluntary nature could be expected to result in incomplete, inconsistent and not comparable reporting as experience shows that only few MS would be willing to take on this extra administrative burden if not mandatory. In addition, the current reporting practices among the EU-15 and EU-12 MS differ significantly thus this option would not lead to comparable, and consistent information and would not make possible an aggregation at the EU level. Same as for option 1, the current situation would basically continue leading to a significant lack of robust information on technology cooperation action and finance provided by the EU to MS and would not reflect the need for enhanced reporting in this area.



Compliance with domestic/international commitments: This option would ensure that more information is made available on the issue of financial and technology support and would be consistent with regard to the reporting frequency with the new agreement under Cancun which calls for reporting every 2 years. On the other hand, this information would not be sufficient to inform the international debate on EU action in these two areas.

#### *Other impacts*

Compliance: For the EU-15 this option would represent relatively limited challenges. The option implies no introduction of new standards or reporting formats or qualitative changes in what is already being provided, but simply implies that the information provided through the national communications would be coordinated and compiled at EU level. For the EU12 producing and submitting such information (outside the Fast Start reporting) is not standard practice, therefore meaningful compliance with national communication guidelines would result in a need to develop country specific practices and capacities. As the option is voluntary it is unlikely that the many MS would prioritise this and ensure compliance.

#### *Economic impacts*

Administrative burden: This option would add a new reporting obligation at EU level, reflecting the commitments made under the UNFCCC. The estimated burden for the EU-27, if all MS were to voluntarily report, would be about €65,000 with the majority of these costs being recurring costs. As the international guidance on biennial reporting is not yet elaborated, an EU implementation of this requirement prior to an agreement under the UNFCCC is likely to cause additional administrative costs and there is a small likelihood that the EU guidance would be inconsistent with the international guidance in some areas.

***Option 3: Require that MS report on an annual basis through streamlined formats the financial and technical support provided to developing countries building on the existing national communication guidelines but requiring more comprehensive information on technology cooperation programmes and the use of methodologies developed within EU for reporting on financial support (Fast Start reporting template used in the context of Monterrey donor accountability reporting 2010) and Rio Marker indicators for financial flows of the OECD DAC.***

#### *Environmental impacts*

Data quality/completeness: The additional reporting on financial support provided and technology cooperation in defined formats will considerably increase the transparency, consistency, and comparability of the information available for developing countries on the support activities by the EU and its MS. Building from the existing DAC guidelines and the methodology developed within the EU for the purposes of tracking fast-start financing flows of the EU MS, the EU would be able to further harmonise its reporting and provide more consistent and standardised data to the international community.

Compliance with domestic/international commitments: As the new Technology Mechanism will necessitate frequent reporting to the UNFCCC (at least annual) having frequent updated information on EU action in the area of technology transfer, in particular on which technologies have been employed in cooperation projects will become even more important over time in ensuring compliance with our commitments and also the completeness of the EU reporting.

Overall, increased transparency and completeness of reporting within the EU would also facilitate improved and more effective positioning on financial and technology issues in the context of the

UNFCCC negotiations and would enhance the EU's ability to contribute very concretely to the international development of MRV of climate financing both under the UNFCCC and the OECD DAC.

*Other impacts*

Compliance: Since Copenhagen the EU has worked to produce transparent reports on its Fast Start Finance pledges. This information has been compiled at EU level and since 2011 the data compilation task has been carried out by the Commission based on a reporting template developed on the basis of OECD reporting practices. This option would imply broadening the use of the template to cover all climate financing and further standardisation of data at EU level. Given the significant steps already implemented, it is assumed that compliance will not be difficult for MS. New MS (Annex II Parties under the UNFCCC) do not have the same mandatory requirement to provide financial support to developing countries and hence might in general face more difficulties with compliance. Some challenges may also be associated with the introduction of private financing flows in the context of the reports due to the lack of clear definitions and confidentiality concerns.

*Economic impacts*

Administrative burden: Variations in current reporting practices are often due to the different ways that financial and technology support to developed countries is tracked at national level. There are in particular significant differences to be observed between the EU-15 and EU-12. The harmonization of reporting and use of detailed streamlined formats may therefore require changes at the national level in the way that financial support to developing countries is tracked, reported and categorized, in particular by the EU 12 MS, resulting in higher costs and administrative implications. The additional administrative burden related to the requirement to use DAC indicators will be small for those 14 MS that already report this information to the OECD. The total burden due to the use of common methodologies and formats was estimated at €65,000 per year for EU27. The estimated burden for the EU27 due to general reporting on financial and technology support on an annual basis is estimated to entail double the burden linked to biennial reporting and would be about €130,000. The total administrative burden for this option is estimated at €195,000 for EU27 with the majority of these costs being recurring costs and a small part, linked to familiarizing with the information requested, would be one-off costs.

	<b>Environmental impacts</b>	<b>Compliance</b>	<b>Administrative burden</b>
<b>Option 1: no policy change</b>	- - -	=	=
<b>Option 2: Voluntary reporting</b>	+	ML	€65,000
<b>Option 3: Comprehensive reporting</b>	+++	ML	€195,000

**5.2.7 Enhance consistency with other legal instruments in the EU targeting air pollutants**

***Option 1: No policy change***

*Environmental impacts*

Data quality/completeness: Option 1 would continue business as usual and thus lead to limited improvements to the consistency of reported GHG emissions and activity data in inventories with emission estimates and activity data from other legal instruments. Data consistency would depend on MS' willingness to implement QA/QC checks and the EU-27 estimates will remain connected with higher uncertainties and their credibility could be questioned.

*Other impacts*

Simplification: In addition, this option would not lead to simplification of current reporting and reduction of burden that would occur if the reporting systems were better aligned.

#### *Economic impacts*

Administrative burden: QA/QC activities are already important requirements in the guidance on national inventory systems under the Kyoto Protocol and in the EU. If MS do not perform appropriate QA/QC checks across different data sources, they are likely to be obliged to implement such QA/QC checks ad hoc in a very short time period as a response to the UNFCCC review process which could create more costs than continued domestic QA/QC activities.

***Option 2: Establish requirements to report on the consistency of information between the reporting under the MMD with the reporting under the EU ETS, the E-PRTR, the NEC Directive and the F-Gas Regulation and to report on the QA/QC checks conducted to ensure consistency across the different legal instruments (including share of ETS emissions).***

#### *Environmental impacts*

Data quality/completeness: This option improves the data uncertainty, consistency and the credibility of the EU's emission estimates under different legal obligations as it encourages the cross comparison and use of the same pools of activity data.

#### *Other impacts*

Compliance: Most MS already perform QA/QC checks between GHG inventories and ETS emissions as reported in their national inventory reports. The UNFCCC inventory review often required such QA/QC checks if not performed by MS on a voluntary basis. Therefore MS will be able to implement this provision in a straightforward way.

Simplification: This option could lead to simplification of reporting at MS level in the long-term as the checks performed and the additional reporting on consistency would help identify those areas where information is currently not reported efficiently or effectively and would increase the use of common data and sources.

#### *Economic impacts*

Administrative burden: This option would mainly strengthen an existing obligation. Many MS already implement consistency checks between the inventory estimates and the verified emissions under the EU ETS (as indicated in the EC national inventory report) therefore this additional requirement is already partially addressed by most MS on a voluntary basis or due to recommendations from expert review teams under the UNFCCC. The additional administrative burden is therefore considered to be small. Also many MS have systems in place already that ensure that the same data and methods are used for reporting across legal instruments. This requirement would result in costs of €145,000 (EU27) for the additional reporting requirements while specifically the requirement to report on the share of the ETS emissions in inventory emissions would result in costs of €380,000, leading to total costs in the order of €525,000 for EU27 per year (recurring costs). These costs do not include the simplification benefits that would occur over time as MS will be increasingly using the same sources and data to fulfil reporting across various legal instruments.

***Option 3: Establish requirements that MS' existing inventory national systems are amended to allow access to data resulting from other reporting instruments***

#### *Environmental impacts*

Data quality/completeness: Inventory compilers still face problems in getting access to more detailed information reported by installations to competent authorities under the EU ETS. This option would facilitate access to relevant data for both air pollution and climate change reporting and would lead to greater consistency and credibility of the information presented.

*Other impacts*

Compliance: Many MS already have enabled access to ETS data for their inventory agencies and for others such EU legal requirement will support the national implementation as also frequently requested by the UNFCCC review. Therefore compliance with this requirement is not expected to be difficult for MS.

Simplification: This option could also lead to avoid doing double work as information would only be collected once and then used as appropriate to fulfil reporting requirements under different instruments.

*Economic impacts*

Administrative burden: This option would strengthen the existing obligation to establish national inventory systems. It would however be linked to higher administrative burden at the beginning for some MS who would need to put in place the necessary institutional structures, legal provisions or memoranda of understanding to allow such access to data. Confidentiality concerns are also an issue which, however, could be addressed by carefully drafting the provisions for making available the requested data at Member State level. However, this would concern only few MS in which access to data may be difficult for the inventory compilers while in most MS cooperation is already implemented. The additional one-off administrative burden is estimated to be in the range of € 380,000 with only small "maintenance" costs in the long run but additional benefits.

	<b>Environmental impacts</b>	<b>Simplification</b>	<b>Compliance</b>	<b>Administrative burden</b>
<b>Option 1: no policy change</b>	-	--	=	<b>Potential costs if lack of QA/QC is raised by UNFCCC review</b>
<b>Option 2 :Report on consistency</b>	++	++	<b>HL</b>	<b>€525,000 (not including simplification benefits)</b>
<b>Option 3: Amend national system</b>	+++	+++	<b>HL</b>	<b>€380,000</b>

## 5.2.8 Enhance reporting taking into account lessons learned from past implementation

### *Option 1: No policy change*

*Environmental impacts*

Data quality/completeness: The "no action" option is highly likely to result in only minor if any improvements in reporting by the MS, especially as enforcement at the international level is limited to reporting of actual emissions.

*Other impacts*

Compliance: In this option the cases of non-compliance with timelines and guidance and the low quality of the information reported will largely persist.

Simplification: This option would signify that known weaknesses and complexities of reporting would persist and potential for simplification and improvement would be ignored.

***Option 2: Require annual reporting and further specify type of information/data to be reported, and/or the relevant formats***

This option would require changes to a number of specific elements of the MM linked to both the reporting of policies and measures and the preparation of the national inventory report.

*Environmental impacts*

Data quality/completeness: Specifying the type and format of reported data will help to ensure the consistency, completeness, transparency of the data and information reported as it will be clearer to the MS what it is that they are requested to report and in what form. This will in turn make it easier to compile and analyze this data at the EU level and present them in a user-friendly way to all relevant stakeholders. This option would also make compliance checking easier and would also enable MS to have a better overview of where the gaps are in their reporting and more work needs to be done. This option addresses in a limited way the issue of comparability of information as it does not specify the methodologies that need to be followed in the derivation of the data.

Compliance with domestic/international commitments: This option ensures coherence with both the Climate and Energy package which requires the transparent reporting of ETS and non-ETS related data and information, and with the existing and emerging requirements under the UNFCCC to enhance the reporting on actual emissions, projections, policies and measures.

*Other impacts*

Compliance: Overall, compliance should not be an issue as this option will introduce requirements that were already complied with on an informal basis by the majority of the MS. The reporting of information at a more frequent basis will help ensure that the most up-to-date information is always available to the Commission and will help address the requirements of the Europe 2020 strategy.

Simplification: This is an area where simplification is enabled through removing obsolete requirements, addressing areas where reporting was not effective, and clarifying reporting requirements (e.g., by removing reporting on problematic indicators).

*Economic impacts*

Administrative burden: This option does not add a new reporting obligation, but clarifies and supports the implementation of existing provisions and it increases the frequency of reporting. This option will not impose a significant burden on MS as a number of them were already sending updated data to the Commission annually and annual reporting does not necessarily imply the production of new data unless relevant. The estimated burden for the EU27 taking into account the simplification potential would be €980,000 to €1.3 million (mostly recurring costs with small one-off costs linked to training and familiarizing with the reporting obligation) and would address improvements and changes linked to both actual and projected emission reporting and to policies and measures.

***Option 3: Further specify methodological guidance for the effects of policies and measures and the preparation of GHG emission projections.***

*Environmental impacts*

Data quality/completeness: This option would involve the EU specifying the actual methodologies to be used by MS in reporting their projections and the effects of their policies and measures. This option

would ensure the highest degree of comparability and consistency of the data and information reported.

Compliance with domestic/international commitments: This option ensures coherence with both the Climate and Energy package which requires the transparent reporting of ETS and non-ETS related data and information, and with the existing and emerging requirements under the UNFCCC to enhance the reporting on actual emissions, projections, policies and measures.

#### *Other impacts*

Compliance: This option would very likely be linked to high rates of non-compliance at least at the beginning as MS would struggle to familiarize themselves with these methodologies and replace their own.

Simplification: It also needs to be taken into consideration that unlike reporting of actual emissions the methodologies available for reporting of both projections and the effects of policies and measures are fairly complex and not as advanced and their implementation could vary significantly. This option would not, at least at a first stage, lead to any simplification, although in the long run harmonization at the EU level would entail benefits.

#### *Economic impacts*

Administrative burden: This option would add new obligations because MS would need to use specifically designed methodologies. Imposing the use of specific methodologies also provides less flexibility to MS than they currently have, would require that MS change their established methods and systems and therefore would be associated with a higher level of administrative burden.

#### ***Option 4: Require the establishment of a national system for reporting on projections, policies and measures***

This option would go beyond the specification of reporting templates and methodologies and require MS to set up a national system for reporting projections and the effects of policies and measures. A national system for projections and policies and measures would clearly define the responsible institutions, processes, data flows, data management, and quality assurance processes for policy evaluation and appraisal.

#### *Environmental impacts*

Data quality/completeness: MS have national systems in place for the preparation of their annual inventories. These systems have proven very effective in ensuring the long-term sustainability of the inventory process and the consistent improvement of the inventory work. Similar long-term benefits would be expected if such systems were to be established for the reporting on projections, policies and measures.

Compliance with domestic/international commitments: This option ensures coherence with both the Climate and Energy package which requires the transparent reporting of ETS and non-ETS related data and information, and with the existing and emerging requirements under the UNFCCC to enhance the reporting on actual emissions, projections, policies and measures.

#### *Other impacts*

Compliance: With respect to compliance, MS should not encounter difficulties as the establishment of the system means in essence formalizing relations, institutional arrangements and data flows that already existed.

Simplification: This option could lead in the long-run to simplification of the efforts made by MS in reporting in the field of projections, policies and measures. Currently, reporting despite the existing guidance and timelines is done largely on an ad hoc basis, leading to relatively high rates of non-compliance. Once a system is established and roles and responsibilities are defined, the reporting process should become simpler.

#### *Economic impacts*

Administrative burden: This option strengthens the already existing systems by formalizing existing institutional structures and processes. A formulation of such a national system is likely to require a great deal of organisation and coordination efforts made at first and would be linked to significant one-off costs, although once in place the costs of maintaining the system in operation would be expected to be limited. The estimated one-off costs linked to this option at the EU level are in the order of € 290,000.

	<b>Environment al impacts</b>	<b>Compliance</b>	<b>Simplificati on</b>	<b>Administrative burden</b>
<b>Option 1: no policy change</b>	=	=	- - -	
<b>Option 2: Streamline formats</b>	++	<b>HL</b>	++	<b>€980,000- €1.3million</b>
<b>Option 3:Harmonize methodologies</b>	+++	<b>LL</b>	-	<b>Higher than for option 2</b>
<b>Option 4:Establish national system</b>	+++	<b>ML</b>	+++	<b>290,000</b>

## **6 Comparing the options**

This assessment presents a multi-criteria analysis for the identified policy options including quantitative information in some areas, in particular the related administrative costs as well as a qualitative analysis for other impacts. The following criteria have been used for the comparison of the options: a) effectiveness of the option in relation to the objectives, b) efficiency of the option in achieving the objectives, c) coherence of the option with the overarching EU objectives, strategies and priorities.

The ratings used in the table below are: = no effect, low (L), medium (M), and high (H).

### **6.1 Establish a review and compliance cycle under the Effort Sharing Decision**

Option 3 is linked to a relatively small administrative burden and is in line with the EU's commitment to have an annual compliance cycle, however, it would not be as effective in delivering the objective of high environmental performance and of equal and transparent treatment of the MS and given its cost would not be efficient either.

*Option 4* is the preferred option. This option is related to high administrative burden, but also to the highest effectiveness in achieving the objective of ensuring the environmental integrity of both the process and of the implementation of the ESD. It would increase the overall performance of the EU with respect to its climate targets. It would ensure equal treatment of MS and provide a robust basis both for the annual review and compliance assessment and for the initial review. It is also coherent with the objectives of the ESD which require that the annual reporting, review and compliance cycle is completed during the same *calendar* year and determination of annual emission allocations is in time for the start of the compliance period in 2013. This option is also proportional as under the ESD compliance is to be determined at EU level. MS have expressed some concerns with regard to this option as this option could, if not properly set out, replicate to some extent the UNFCCC review process. These concerns can best be addressed when establishing the detailed requirements for this

option which again is considered as the only suitable given the EU's unilateral emission reduction goals.

For the sub-options related to recalculations, *sub-option A3* that takes into account inventory recalculations without changing compliance decisions already taken for previous years together with *sub-option B2* (allowing the Commission to consider recalculations if international rules change) achieve the best rating as again they ensure the effective implementation of the ESD and consistency with international commitments. Suboption A2 would not be as effective as it would put in question the credibility of the EU's environmental performance.

	<b>Effectiveness</b>	<b>Efficiency</b>	<b>Coherence</b>
<b>Option 3: "Light" review</b>	<b>L</b>	<b>M</b>	<b>M</b>
<b>Option 4: Comprehensive review</b>	<b>H</b>	<b>M</b>	<b>H</b>
<i>Suboptions A</i>			
Suboption A2: Recalculations not taken into account	<b>L</b>	<b>na</b>	<b>n.a</b>
Suboption A3: Recalculations taken into account at the end	<b>H</b>	<b>na</b>	<b>n.a</b>
<i>Sub-options B</i>			
Suboption B1: No recalculations	<b>L</b>	<b>L</b>	<b>L</b>
Suboption B2: Consideration of recalculations possible	<b>H</b>	<b>H</b>	<b>H</b>

### 6.2 Establish monitoring and reporting requirements for maritime transport

Option 1 although it does not entail any costs, it is not coherent with the EU's political commitment to take appropriate action to limit emissions from this sector, nor does it effectively contribute to the objective of ensuring comprehensive, and transparent reporting.

Option 2 would be coherent with the EU's obligation to address emissions from the maritime sector, however, this option would run the risk of not being effective as it would introduce requirements that could prejudice or be inconsistent with the requirements resulting from the policies envisaged at the EU and/or at the international level. In this respect, it would also not be efficient as MS would need to spend significant resources to implement new reporting systems which could indeed lead to good quality reporting but which might need to be revised. Stakeholders have also expressed similar concerns with regard to this option.

Option 3 is the preferred option as, similar to Option 2, it is coherent with the need to enable actions to reduce emissions from the maritime sector but would enable a swifter implementation of the monitoring and reporting requirements [once the legislative framework has been approved](#). It is effective as it enables detailed reporting requirements to be established with regard to the maritime sector ensuring this way that reporting in this area will be enhanced and it is also efficient in that it avoids imposing at this stage undue burden on the MS by requiring them to put systems in place which they may need to amend again in the near future. This option is also proportional as it does not go beyond what is necessary at present to enable appropriate future action.

	<b>Effectiveness</b>	<b>Efficiency</b>	<b>Coherence</b>
<b>Option 1: no policy change</b>	<b>L</b>	<b>L</b>	<b>L</b>
<b>Option 2: Full reporting requirements implemented now</b>	<b>M</b>	<b>L</b>	<b>M</b>
<b>Option 3: Framework now, details later</b>	<b>H</b>	<b>H</b>	<b>H</b>



### 6.3 Establish reporting requirements for non-CO<sub>2</sub> climate impacts from aviation

Option 1 may not entail any administrative burden but is not coherent with the provisions of Directive 2008/101 which stipulates that all climate impacts of aviation should be addressed to the extent possible, nor is it effective in achieving the objective of ensuring enhanced reporting in this area.

Option 2 is linked to very small additional administrative costs, is coherent with Directive 2008/101 but is not as effective in ensuring that the objective of accurate, transparent reporting is fully achieved as the resulting data will be linked to potentially significant uncertainties. Thus despite the low administrative costs this option is not considered to be as efficient.

Option 3 is also coherent with EU policy and is the most effective in fulfilling the objective of ensuring that good quality, comprehensive data is being reported, however, it does entail significant administrative burden for the MS. Hence, same as option 2 it is not considered to be efficient.

Option 4 combines the benefits of options 2 and 3 and is the preferred approach although same as options 2 and 3 does not fully address the issue of scientific uncertainty linked to these impacts. Stakeholders have also expressed some concerns in that this option does not ensure comparable reporting. However, this option is coherent with EU policy and is effective in that it ensures that a step forward is made in enhancing reporting by the most significant EU emitters. This option is also considered to be the most efficient and is proportional as it leads to less administrative burden than option 3 (although significantly more than option 2) but it places most of the burden on the MS that are responsible for the majority of the impacts and thus there is every interest to have them produce better and more comprehensive data.

	Effectiveness	Efficiency	Coherence
<b>Option 1: no policy change</b>	L	L	L
<b>Option 2: Multiplier Approach</b>	M	M	M
<b>Option 3: Modelling approach</b>	H	L	M
<b>Option 4: Tiered approach</b>	H	M	M

### 6.4 Establish reporting requirements on climate change adaptation

Option 1, although not linked to administrative burden, is not effective in addressing the need for better and more complete information on adaptation nor is it coherent with the EU's white paper on adaptation which advocates building a stronger knowledge base in this area since sound data is vital in the development of climate policy.

Option 2 is coherent with the white paper on adaptation and would be effective in enhancing the current knowledge base on adaptation, although it would not be effective in ensuring the comparability and the comprehensiveness of the information reported as compliance with such broad requirements could be difficult, in particular since adaptation monitoring and reporting in MS is still at an early stage. This option is also not very efficient as it would entail significant administrative burden.

Option 3 emerged as the preferred option. This option is coherent with the White Paper on adaptation since it enables the EU to further take forward its implementation by providing crucial reporting on the progress of adaptation actions undertaken by MS. This option would also be more effective than option 2 as MS would be more likely to comply with these more streamlined requirements and would allow for time to agree on the level of harmonisation needed on monitoring of adaptation actions. This option is linked to lower administrative burden than option 2 and thus is overall more efficient.

Finally, this option is proportional as the proposed reporting intensity is the minimum required to enable meaningful action in this area. This option also goes further in addressing the views of those who are concerned with unnecessary, duplicative reporting.

	<b>Effectiveness</b>	<b>Efficiency</b>	<b>Coherence</b>
<b>Option 1: no policy change</b>	<b>L</b>	<b>L</b>	<b>L</b>
<b>Option 2: Comprehensive reporting</b>	<b>M</b>	<b>L</b>	<b>H</b>
<b>Option 3: Reporting on actions</b>	<b>H</b>	<b>H</b>	<b>H</b>

**6.5 Establish additional reporting requirements on LULUCF**

Option 1 is not effective as it has too limited a scope and would fall short of the objective of comprehensive, good quality reporting in this area while it would also not be coherent with the EU's domestic and international commitments.

Option 2 may in principle be coherent with the broadened scope of reporting needed to underpin the achievement of the EU's 2020 targets and to highlight the environmental, social and economic benefits of LULUCF, and may appear effective in meeting the objectives of good, comprehensive reporting. However, in practice, it might result in inconsistencies with the approaches under discussion at the EU or at the international level and could result in further (re)adjustments of the legislation once an EU legal instrument has been adopted or an international agreement has been reached. It is also linked to significant administrative burden which makes it overall not very efficient.

Option 3 is the preferred option. This option would ensure coherence with future policy developments as it aims at extending the scope of reporting to exactly meet the needs of future international and EU legislation. It is also more effective as it foresees that in reaching the objective of good, comprehensive reporting. This option is also more efficient as it would not involve unnecessary costs and would ensure even if at a slight later stage the fulfilment of both domestic and international commitments. Finally, this option is proportional as it takes into consideration the on-going developments and only ensures that the basic reporting framework can be established.

	<b>Effectiveness</b>	<b>Efficiency</b>	<b>Coherence</b>
<b>Option 1: no policy change</b>	<b>L</b>	<b>L</b>	<b>L</b>
<b>Option 2: Detailed requirements now</b>	<b>M</b>	<b>L</b>	<b>M</b>
<b>Option 3: Framework now, details later</b>	<b>H</b>	<b>H</b>	<b>H</b>

**6.6 Establish reporting requirements on financial and technology support provided to developing countries**

Option 1 would not be able to ensure compliance with our international obligations and would also not contribute to enhancing both MS and EU level reporting.

Option 2 would lead to enhancement of reporting and would be in line with our international obligations. However, the comprehensiveness, comparability and consistency of the information received could not be ensured given the voluntary nature of this option. This option is, however, linked to relatively limited additional administrative burden and hence relatively efficient.

Option 3 is the preferred option as despite the administrative burden and the small risk for some duplication of reporting, it is expected to lead to greater, not only comprehensiveness, but also consistency and comparability of reporting, fully in line with our international commitments and obligations, especially, as reporting needs on financial support have become a crucial element in international negotiations and can only be met on a sustained basis with availability of up-to-date

information and data for the whole EU. This option is also proportional given the extent of the EU's and the MS' international commitments. As provision of financial support is within MS competence there is, however, some concern expressed with regard to the introduction of a reporting requirement at the EU level.

	<b>Effectiveness</b>	<b>Efficiency</b>	<b>Coherence</b>
<b>Option 1:no policy change</b>	<b>L</b>	<b>L</b>	<b>L</b>
<b>Option 2: Voluntary reporting</b>	<b>L</b>	<b>M</b>	<b>M</b>
<b>Option 3:Comprehensive reporting</b>	<b>H</b>	<b>M</b>	<b>H</b>

## **6.7 Establish coherence with other legal instruments targeting air pollutants**

Option 1 is not effective as it would not lead to better reporting and is also not coherent with the EU's policy objectives for ensuring better regulation and simplification, as this option would not take into consideration the lessons learned from the implementation of the MMD, nor the simplification potential of the MMD.

Option 2 would be consistent with the EU policy on simplification and in accordance with the objectives of more transparent and consistent reporting, however it would be linked to significant administrative burden.

Option 3 is also linked to significant administrative burden but ensures that instead of symptomatically addressing the problems encountered with MS reporting, it goes to the root of the problem attempting to put in place the structures that will both ensure long-term simplification and streamlining of efforts and reduction of costs. This option would also ensure long-term compliance.

A combination of options 2 and 3 would be the preferred option as option 3 will ensure long-term certainty and performance, and option 2 will ensure that in the short-term there is better data and that understanding is built of the existing linkages among different legal instruments. This combination of options has also appeared as a preferred one in workshops conducted with MS experts.

	<b>Effectiveness</b>	<b>Efficiency</b>	<b>Coherence</b>
<b>Option 1:no policy change</b>	<b>L</b>	<b>L</b>	<b>L</b>
<b>Option 2 :Report on consistency</b>	<b>M</b>	<b>M</b>	<b>H</b>
<b>Option 3:Amend national system</b>	<b>H</b>	<b>M</b>	<b>H</b>

## **6.8 Enhance reporting taking into account lessons learned from past implementation**

Option 1 which represents the continuation of the baseline scenario could indeed continue to bring some benefits, however, these would be limited, delivered at a slow pace, and would not reflect the increased needs linked to both our domestic and international commitments.

Option 2 will increase the transparency, consistency, comparability of information provided but would only indirectly contribute to increasing the completeness and accuracy of the reported information. This option may be linked to relatively high administrative burden but is quite efficient as it encompasses a wide range of improvements. It is also largely coherent with domestic and international commitments which require enhanced reporting.

Option 3 would be effective as it would lead to increased data quality and completeness. It would also be coherent with our domestic and international commitments but it would not very efficient as the benefits would come at significant costs for the MS.

Option 4 is also linked to significant administrative burden but ensures that instead of symptomatically addressing the problems encountered with MS reporting, it goes to the root of the problem attempting to put in place the structures that will ensure long-term simplification of efforts, increased compliance and an eventual reduction of costs.

The preferred option is a combination of options 2 and 4. This combination also ensures proportionality, in particular, given the emphasis at the international level on enhancing reporting on mitigation actions and projections. Option 2 addresses a large number of shortcomings of the current MMD and helps improve the consistency of the information provided by MS. Option 4 ensures that an appropriate enabling framework is put in place that will ensure long-term delivery of good quality information.

	<b>Effectiveness</b>	<b>Efficiency</b>	<b>Coherence</b>
<b>Option 1: no policy change</b>	<b>L</b>	<b>L</b>	<b>L</b>
<b>Option 2: Streamline formats</b>	<b>M</b>	<b>H</b>	<b>H</b>
<b>Option 3: Harmonize methodologies</b>	<b>M</b>	<b>M</b>	<b>H</b>
<b>Option 4: Establish national system</b>	<b>H</b>	<b>M</b>	<b>H</b>

**6.9 Preferred scenario (combination of all preferred options)**

Main objective of the MMD is to support the EU and its MS in meeting their, domestic and international, commitments and goals, and future policy development, through ensuring transparent, accurate, consistent, comparable, complete reporting. The preferred scenario ensures that these objectives will be met in an efficient and effective way. The overall administrative burden linked to the preferred scenario is in the range of €4-5 million for the EU-27.

Given the uncertainties linked to a future climate regime, the preferred scenario foresees the establishment of an EU level review process of the GHG data submitted by the MS so as to ensure that compliance with the ESD targets is assessed in a comprehensive, transparent, credible and timely manner as foreseen in the Climate and Energy package. With regard to reporting on emissions from international maritime transport and the LULUCF sector where policy discussions, both domestically and internationally, are on-going a prudent approach is followed by ensuring that the MMD provides an adequate framework for establishing the detailed reporting requirements at a later stage when a concrete policy outcome is reached (either domestically or internationally). This way coherence with a future policy framework is ensured and duplication of efforts is avoided while it is also ensured that the EU is able to most efficiently implement the detailed requirements. With regard to the non-CO<sub>2</sub> climate impacts of aviation coherence is again ensured with existing domestic policy which requires that an effort be made to take into consideration its impacts. It has to be noted that the proposal included in the draft Regulation on the non-CO<sub>2</sub> climate impacts of aviation, which requires that the Commission assess biennially those impacts on the basis of the latest available emission data and scientific advancements, differs from those explored in the impact assessment and reflects the useful input received by other Commission services during the interservice consultation process. This new proposal was included in the draft Regulation as it was deemed to ensure coherence with existing Union policy, and to achieve equivalent benefits at a significantly lower administrative burden. With regard to finance and technology support the preferred option of enhancing reporting based on common methods is again coherent with the EU's obligation to provide transparent and complete information on the financial and technology support it has been providing to developing countries and results in limited burden. With regard to adaptation, the annual reporting on adaptation actions will help further define an EU-wide adaptation strategy and will also support the EU Clearinghouse

Mechanism. This is an efficient option as it is linked to limited administrative burden while it also ensures that the EU is better able to address its international reporting obligations. Finally, the preferred scenario also foresees the enhancement of the existing national system in the MS to also address reporting on projections and policies and measures, as well as consistency with other legal instruments targeting air pollutants. This is an efficient way forward as despite the related burden it leads in the long-run to better compliance, simplification of efforts and an eventual reduction of costs. The preferred scenario also foresees better QA/QC provisions and the introduction of streamlined reporting formats and guidance so as to increase the quality and completeness of the data provided and to simplify existing reporting requirements without imposing undue administrative burden.

## **7 Monitoring and evaluation**

As all the policy options relate to monitoring and reporting requirements the completeness, transparency, and adherence of the resulting reports to the domestic and international requirements will in itself demonstrate whether the objectives set have been achieved through the revised MMD.

The reports prepared under the MMD will continue to be assessed at the EU and/or the international level annually, every 2 and/or every 4 years. The assessment of actual emissions will continue to be comprehensive and conducted by experts at both the EU and the international level. The goal of the assessment is to help improve reporting but also to assess compliance with targets and commitments made. The assessment of all other climate data and information is now proposed to be conducted also on an annual basis at the EU level with the focus being on completeness and adherence to existing guidance, while at the international level this assessment will be every 2 and/or every 4 years. Again the assessment is conducted by experts and the goal is again to identify areas for further improvement but also assessment of compliance.

The actors that have been traditionally involved at EU level in the monitoring and evaluation exercise, besides DG CLIMA, are the EEA, the JRC and Eurostat. These same actors will continue to assist in this exercise in the future.

The results of both the EU and the international assessment, besides being used for compliance purposes, have also been used to most effectively direct improvement efforts and capacity building activities at the EU and the MS level. The WG1 on Annual inventories and the WG2 on projections, policies and measures and the implementation of the ESD have played a crucial role in this respect and will continue to be the main instruments to exchange best practices and promote lessons learned among the EU and the MS.

### **7.1 Indicators**

The following indicators were devised that correspond to the general, specific and operational objectives set in this impact assessment:

- § Number of non-compliance cases identified at the EU level or under the UNFCCC;
- § Number of reports submitted on time to the Commission and/or the UNFCCC;
- § The consistency of the EU level reports with those submitted by the EU MS as evidenced through the EU and UNFCCC reviews;
- § The consistency of the emission data reported by MS under MMD and other reporting instruments as evidenced through the EU and UNFCCC reviews;

- § Extent of completeness of MS reports submitted to the Commission and under the UNFCCC when compared to existing requirements;
- § Extent of application by MS of common reporting methodologies and formats with regard to reporting on financial and technology support;
- § Extent of application by MS of domestic and international methodological and reporting guidelines;
- § Extent of completeness of MS reports submitted to the Commission and under the UNFCCC when compared to existing requirements;
- § Extent of application by MS of common reporting practices and formats with regard to projections, policies and measures and actual emissions;
- § Availability of data and information and creation of new information flows in the areas targeted by the revised Decision.

## **Annex A: Minutes of meetings of IASG**

**Minutes: 1<sup>st</sup> meeting of the Impact assessment steering group on the Revision of Decision 280/2004-Brussels, 22 November 2010**

**Invitees: DG CLIMA, DG ENER, DG ENV, DG ENTR, SG, SJ, DG ESTAT, DG JRC-ISPRA, DG AGRI, DG RTD, DG ELARG, DG MOVE, DG ECFIN and the EEA**

**Present at the meeting: DG CLIMA, DG ENV, DG ENTR, SG, SJ, DG MOVE and the EEA**

DG CLIMA opened the meeting with a presentation providing an overview of the issues to be addressed through the Revision of Decision 280/2004 (Monitoring Mechanism Decision – "MM Decision") and providing the relevant background.

In its presentation DG CLIMA noted that the MM Decision was revised in 2004 mainly incorporating the reporting requirements under the Kyoto Protocol into EU legislation. In this process, implementing provisions in Decision 2005/166 were elaborated for the first time. Since then six years of experience have been gained in the implementation of both decisions and a number of significant developments took place in the field of climate change, both domestically and internationally that make imperative the revision of Decision 280/2004.

DG CLIMA highlighted that the Revision of Decision 280/2004/EC and its implementing provisions Decision 2005/166 is also mandated by:

- § The need to implement the Climate and Energy package agreed by the European Parliament and Council in December 2008;
- § Future possible reporting obligations resulting from the ongoing international discussions and negotiations following the Copenhagen Accord; and
- § The need to implement the Europe 2020 strategy which incorporates sustainable growth as one of its 3 key priorities, and the climate energy package targets as one of its 5 headline targets.

DG CLIMA stated that the main objectives of the Revision of the MM Decision will be:

- § To streamline the current reporting framework (EU ETS, NEC Directive, EPRTR, F-gases regulation);
- § To improve the quality, comprehensiveness, timeliness and usefulness of the data reported;
- § To incorporate the new reporting requirements arising from domestic and international legislation (implementation of review and compliance cycle of Effort sharing decision, reporting on finance);
- § To address, to the extent possible, future reporting needs (non-CO<sub>2</sub> impacts of aviation, maritime transport, adaptation, LULUCF).

DG CLIMA informed that in preparing the IA 7 MS will be approached via a questionnaire so as to gather relevant administrative burden information.

In regards to timing, DG CLIMA informed that the presentation of the proposal to the Impact Assessment Board is anticipated in May while the final proposal is expected to be adopted in September.

DG CLIMA's presentation was followed by a "questions and answers" session.

DG ENV noted that in revising Decision 280/2004 coherence needs to be ensured with other legal requirements. DG ENV informed that the NEC Directive review is suspended at the moment but will be coordinated with the review of the air quality legislation in 2013. The option of amending the NEC Directive with regard to its reporting requirements is considered at technical level. Thus there are opportunities to harmonize the MMD with the NEC Directive as well as with the EPRTR.

DG ENV suggested that for the revision of the MM Decision, comitology also be used to allow flexibility in addressing future potential international requirements. DG ENV remarked that international aviation and international shipping are already covered by the NEC Directive and that there could be redundancies in case of new provisions in the MM Decision.

With regard to international aviation DG CLIMA responded that to its understanding the approach to be followed does not overlap with the NEC requirements but that it would further doublecheck this particular issue.

DG MOVE provided preliminary comments to DG CLIMA's presentation and informed that more detailed comments will follow in writing. DG MOVE remarked that the intended scope of the revision is too broad and highlighted the trade-off between enhancing the quality of data and widening the scope of the data collected. Considering the current situation (difficulty to obtain data from MS, timeliness problems, cases of non-compliance), attention should be focused on the quality and consistency of the data collected through the existing reporting requirements. DG MOVE also noted that there was a need to address the discrepancy between energy statistics and emissions reporting (e.g. for inland waterways), and deal with issues such as how to attribute emissions to the end user (e.g. for railways).

DG MOVE noted that in order to be able to obtain route data on maritime emissions, legislation on how to deal with international maritime emissions should be first established. Otherwise the opposition of MS may be strong as data collection is expensive. In regards to aviation, DG MOVE remarked that given the scientific uncertainty on the non-CO<sub>2</sub> impacts of aviation on climate, it is a purely political choice to apply a multiplication to existing emission statistics. Again, in the absence of a Commission decision on how to deal with these impacts, including them in the scope of the revision may be premature. To illustrate the arbitrary nature of this choice, DG MOVE pointed to the inconsistency in DG CLIMA's approach addressing only the non-CO<sub>2</sub> impacts aviation, but not that of shipping.

DG MOVE agreed that more transparency on the reporting on the use of auctioning revenues (with details on how they were invested) and on the project credits used by MS under the Effort Sharing Decision would be useful. Finally, DG MOVE questioned the extent to which doing further work in regards to MS projections is really necessary given that the Commission already makes its own EU-wide projections.

In response to DG MOVE's comments on the scope of the revision, DG CLIMA noted that many of the changes to be incorporated in the revised MM decision reflecting the lessons learned are actually requested by the MS. Other changes are mandated by the Climate and Energy Package for the implementation of which an effort will be made that the existing monitoring, reporting and review system be used as much as possible to avoid duplication of efforts. In regards to the addition of new reporting requirements on, for example international maritime transport, these are considered necessary in establishing a solid basis for future mitigation measures without however pre-empting upcoming political decisions. In regards to aviation DG CLIMA promised to reflect further on the question on the non-CO<sub>2</sub> impacts of the international maritime sector and also informed that a



legislative proposal to address international maritime emissions is included in the 2012 work programme. It was therefore acknowledged that even if the data collection on shipping route-based data was established during the revision, the data would not become available in time for the legislative proposal.

On auctioning revenues, DG CLIMA is of the opinion that there is no need to provide options in the IA as this is a fairly minor issue clearly defined and mandated in the ETS Directive. As concerns the use of comitology indeed an effort will be made to ensure flexibility without compromising the contents of the revised Decision.

With regard to the aviation impacts, the EEA commented that this issue is included in the ETS Directive and would be addressed in a simple manner in the revised decision. On the reporting on the use of auctioning revenues the EEA emphasized DG CLIMA's point that the ETS Directive gives a clear mandate for reporting requirements on the use of auctioning revenues and that the implementation is relatively straightforward thus this is not an important issue for the impact assessment.

The SG questioned the inclusion of reporting on financial support in the revised MM Decision and suggested that this might be better addressed also in the future via the established joint EPC/EFC-working group under the ECOFIN council in view of likely sensitivities of MS to give the Commission a greater role here. The SG noted that DG CLIMA should explore whether some of the envisaged amendments to the MM Decision could be addressed by other instruments. The SG also highlighted that flexibility should be ensured via using comitology, in particular as international monitoring and reporting provisions are yet to be decided. The SG noted that care should be taken in selecting which issues will be included in the revised MM so as to ensure maximum effectiveness of the revision. Quick agreement by the co-legislators and the wide-spread acceptance of comitology would only be likely if the proposal was limited to technical issues of reporting and did not include implicitly fundamental political questions. The SG also noted that given the uncertainty at the international level in regards to monitoring and reporting of GHG emissions maybe the scope of the revision should be narrowed. The SG informed about a framework contract that could be used for the preparation of the IA as regards simplification and the reduction of administrative burden.

On SG's remarks, DG CLIMA responded that reporting requirements on financial support provided are not out of the scope of the existing framework as such reporting is covered by the national communications required under the UNFCCC and the KP but reassured that this would be further checked with the SJ. On a comprehensive MMD review vs. a more adhoc approach, DG CLIMA remarked that the MMD review is needed in any case to implement the Climate and Energy Package and the lessons learned. It presents also an opportunity to include other requirements that will be useful for policy development. In particular, DG CLIMA is of the opinion that the revision of the MM presents a great opportunity to consolidate, under one instrument, as many reporting requirements on climate change related issues, hence ensuring consistency.

DG ENTR asked whether there will be new reporting requirements for ETS installations included in the revised MM.

DG CLIMA specified that there will be no such new reporting requirements incorporated in the MM Decision but that the Decision will attempt to ensure consistency with the reporting under the EU ETS.

In concluding the meeting, DG CLIMA informed that the next meeting will be in January. Prior to this a description of the problem, a list of general and specific objectives and the main options will be sent to the IASG members. The members were also encouraged to provide their feedback on the upcoming revision and respective impact assessment report in writing.

**Minutes: 2<sup>nd</sup> meeting of the Impact assessment steering group on the Revision of Decision 280/2004, Brussels, 11 February 2011**

**Invitees: DG CLIMA, DG ENER, DG ENV, DG ENTR, SG, SJ, DG ESTAT, DG JRC-ISPRA, DG AGRI, DG RTD, DG ELARG, DG MOVE, DG ECFIN, DG MARE, DG DEVCO and the EEA**

**Present at the meeting: DG CLIMA, DG ESTAT, DG ECFIN, SG, DG MOVE and the EEA**

DG CLIMA opened the meeting requesting the adoption of the minutes of the previous meeting and of the agenda for this meeting.

DG ECFIN requested that the wording in the minutes related to the use of auctioning revenues be better aligned with the corresponding legal provision. The minutes of the previous meeting were considered adopted subject to the proposed DG ECFIN modification.

DG ESTAT asked which MS were concerned by the questionnaire on the administrative burden and who the respondents would be. DG CLIMA indicated the list of the 8 MS that will take part in this exercise. The coordinating responsibility for providing responses to the questionnaire will be mainly with officials from environment ministries or from the environmental agencies of the member states that have been contacted

### **Presentation and discussion**

DG CLIMA presented the current state of play for the impact assessment addressing in particular the problem definition, the objectives (general, specific, operational) and the options identified. DG CLIMA also presented an updated timeline for the preparation and submission of the impact assessment and the adoption of the legal text (see meeting documents and the presentation). DG CLIMA's presentation was followed by a discussion among the participants in the meeting.

### Maritime emissions

DG MOVE indicated that the legal basis for monitoring maritime emissions needs to be established before the MM Decision can set out provisions. The technical choices made (e.g. tonnage of ships to be covered) need to be justified. DG MOVE considers that introducing any monitoring and reporting obligation in the revised Monitoring Mechanism decision could prejudice the outcome of the negotiations under the IMO or at EU level. DG MOVE is also concerned by the potential administrative burden for shipping operators and MS.

DG MOVE was also skeptical with regard to the amount of detail that was presented in the draft impact assessment with regard to reporting on maritime emissions. DG CLIMA clarified that after further consideration of previous DG MOVE comments and own work, it has reconsidered its approach with regard to the level of detail to be included in the monitoring mechanism decision on this issue and that this updated approach will be reflected in a future version of the impact assessment. DG CLIMA's new proposal is that detailed monitoring and reporting guidelines be proposed only if an agreement is reached at the IMO or if a policy instrument is proposed at EU level. The reason for including any provision in the revised MM Decision is to allow the Commission to adopt monitoring requirements quickly after the adoption of a relevant measure at IMO or by the Commission. DG

MOVE noted that the most appropriate place for setting out monitoring provisions for maritime emissions is the legislative text based on the prospective IMO agreement or the Commission legislative proposal.

DG CLIMA questioned how much detail should be included in the impact assessment at this stage, if references to reporting of emissions from maritime transport in the legal text remain at a minimum. The rationale would be that the actual detailed impacts would be captured at a later stage when the reporting guidelines on emissions from maritime transport would be developed. The SG indicated that any provisions on maritime emissions should be as concrete as possible so as to make it clear what the intention of the Commission is. If the details of the issue at stake are dealt with at a later stage through a comitology procedure, then DG CLIMA will need to assure that indeed the relevant impact assessment will be carried out at that point. With regard to the current impact assessment text, the SG indicated that the text will need to clarify why the Commission opted to not include further details in the legal text and the impact assessment at this stage. With reference to the options presented in the draft impact assessment the SG indicated that these will need to still capture the variety of parameters that could ultimately be part of the legal text even if the majority of the details is left for a comitology procedure later on.

#### Non-CO<sub>2</sub> impacts of aviation

DG MOVE considers that the use of the multiplier approach would not bring any additional information or improve the existing knowledge base with regard to aviation emissions. At the same time, it is also unclear that MS have sufficient modeling capabilities to comply with some of the policy options suggested in the IA, and how the Commission could assist them with developing a coherent modeling framework. DG MOVE is of the opinion that the existing scientific uncertainties cannot be meaningfully addressed in the revised monitoring mechanism decision.

DG CLIMA argued that including this reporting requirement in the reports submitted by the Member States would help to raise awareness on the true potential impacts of aviation. The need to address this issue was recognised in a recital in the Aviation EU ETS Directive.

DG MOVE commented that as non-CO<sub>2</sub> impacts of aviation were not part of any GHG target of the EU, and therefore the proposal to include them in reporting is not in line with the general objectives set out in the IA. For the sake of completeness, the option of all MS using the multiplier approach needs to be added in the IA.

#### Adaptation

DG ESTAT said that the amount of information that could be collected on adaptation is potentially massive and that care should be taken that this exercise remains manageable.

DG MOVE asked what the purpose of this data collection would be. DG CLIMA indicated that the legal basis and the scope for new reporting requirements on adaptation need to be addressed. The main purpose is to share information on climate change impacts, vulnerability and adaptation among Member States to disseminate best practices in adaptation strategies and to analyse how advanced member states are in mainstreaming adaptation in key sectoral policies and in fulfilling UNFCCC commitments (i.e. budget allocation).

The SG commented that it is necessary to also consider how new reporting requirements would be enforced and that the relevance of having these new reporting requirements in the revised MMD should be duly justified. SG commented that it might very well be that this theme could be better covered under another piece of legislation.

### Finance

DG ECFIN said that finance and technology transfer considerations should be addressed separately in the impact assessment and the legal text. DG ECFIN asked if reporting every 2 years would be sufficient for these particular reporting requirements. DG CLIMA commented that the issue of frequency is under consideration but that in principle a 2-year frequency would be consistent with the requirements of the Cancun agreement. DG ECFIN also recalled that Member States already report on their financial support to developing countries in the annual “Monterrey report”, including climate-related support, and that this should be taken into account in the Impact Assessment, to avoid creating unnecessary additional reporting requirements.

DG CLIMA mentioned that an ongoing project led by unit A2 was looking at this issue in detail.

The SG recalled that inclusion of finance under this piece of legislation would be politically sensitive, as this would increase the Commission's role on finance compared to the current situation, so would need to be argued carefully.

### Other issues

DG CLIMA asked the SG whether a 8-week delay is sufficient for the public online questionnaire and the SG confirmed that indeed this would be sufficient.

### Conclusions

In concluding the meeting, DG CLIMA informed that the draft questionnaire for the online public consultation would be circulated for comments and that the next meetings of the IASG are tentatively planned for end March and mid-May.

**Minutes: 3<sup>rd</sup> meeting of the Impact assessment steering group on the Revision of Decision 280/2004, Brussels, 18 April 2011**

**Invitees: DG CLIMA, DG ENER, DG ENV, DG ENTR, SG, SJ, DG ESTAT, DG JRC-ISPRA, DG AGRI, DG RTD, DG ELARG, DG MOVE, DG ECFIN, DG MARE, DG DEVCO and the EEA**

**Present at the meeting: DG CLIMA, SG**

DG ESTAT could not be present at the meeting but sent a set of comments on the impact assessment in advance of the meeting cautioning against having too open-ended requirements on adaptation, which is indeed a very broad issue on which a wealth of data could be reported. DG ESTAT also informed on some interesting transport-related statistics that will be collected in the future that may be relevant for reporting on maritime and aviation

DG CLIMA presented the administrative burden data collected in preparation of the impact assessment through questionnaires that were sent to those MS that wished to participate in this exercise. DG CLIMA also presented an updated timeline for the revision of the Monitoring Mechanism Decision, and informed on the advances with regard to the options to be included in the draft final legal text and on the first results of the online stakeholder consultation.

With regard to the information presented on administrative burden the SG indicated that further efforts should be made by DG CLIMA to clarify the data that were provided by the MS. Large discrepancies in the collected data should be explored and explained to the extent possible and additional information and/or data should be gathered to the extent feasible in particular in areas where there was a low response rate by the MS. In presenting the administrative burden data in the impact assessment judgement should be exercised on whether averages, ranges or other appropriate means of presentation should be used to better represent the collected information.

Concerning the public stakeholder consultation the SG advised that a short summary should be provided in the main impact assessment text while more detailed results could be provided in an annex.

In presenting and elaborating the options, the text should clearly reflect which are the objectives set and which are the available policy options for these objectives. The wording used in the current draft is confusing. Also in assessing the options, great care should be taken in justifying the "ratings" attributed to each option.

Overall, the SG noted that the audience for the impact assessment is the general public thus the text should refrain from being overly technical. It could be worth considering providing definitions for technical terms in an annex.

On the substance of the provisions to be included in the revised MMD with regard to maritime transport the SG was concerned as to whether it might be early for including relevant provisions in the legal text given that an instrument for action in the maritime sector has not been defined yet.

DG CLIMA responded that there are main principles and reporting structures that could already be put in place without prejudging the form of a future policy instrument. Having a reporting basis already set now would also speed up implementation of future requirements.

On finance the SG commented that the introduction of new reporting requirements should be well justified as this is a field where already a number of reporting requirements exists.

With regard to adaptation, DG CLIMA asked to what extent the costs of inaction should be discussed. The SG replied that in general the impact assessment should be focused on the costs and benefits of the specific monitoring and reporting requirements to be introduced in a revised decision rather than on the costs of the mitigation or adaptation actions as such.

DG CLIMA closed the meeting by informing that the final meeting of the IASG will take place in mid-May.

**Minutes: 4<sup>th</sup> meeting of the Impact assessment steering group on the Revision of Decision 280/2004, Brussels, 16 May 2011**

**Invitees: DG CLIMA, DG ENER, DG ENV, DG ENTR, SG, SJ, DG ESTAT, DG JRC-ISPRA, DG AGRI, DG RTD, DG ELARG, DG MOVE, DG ECFIN, DG MARE, DG DEVCO and the EEA**

**Present at the meeting: DG CLIMA, SG, DG AGRI**

DG CLIMA presented the improvements that were made to the impact assessment (IA) since the previous meeting of the IASG based on the comments received. DG CLIMA highlighted in particular the additional efforts made to gather additional administrative burden data through further contacts with the Member States via phone and email. Also DG CLIMA pointed to the significant improvements made in the analysis and comparison of options chapters which now contain comprehensive information on all options and clearly present the underlying rationale for identifying the preferred option. In these chapters, also tables are now provided so as to increase the user-friendliness of the information presented. DG CLIMA noted that further work was done also in the other chapters of the report in an effort to adhere even closer to the IA guidelines and also to improve the clarity of the text. DG CLIMA also presented the final preferred options and raised its remaining questions with regard to the IA work.

DG AGRI supported the choice made by DG CLIMA with regard to the preferred option on LULUCF reporting. DG AGRI noted the inherent complexities of reporting emissions from this sector and pointed to the fact that although MS have in place the structures to do forest monitoring, the cycle of the carbon changes is 5-10 years and does not coincide with the annual reporting cycle established under the Effort Sharing Decision. DG AGRI mentioned that a particular problem for monitoring in the LULUCF sector is soils because the national inventories are not good enough for many countries. DG AGRI proposed that the specific challenges for the monitoring and reporting of LULUCF emissions and removals should be shortly mentioned in the IA text and informed that it will send some track changes.

DG AGRI asked how LULUCF emissions or removals will be accounted for. DG CLIMA replied that the accounting rules will be decided through the upcoming legal instrument that will cover the LULUCF sector or at the international level under the UNFCCC.

*Adaptation*

DG AGRI asked how the reporting requirements for adaptation relate to the EU adaptation clearinghouse mechanism currently under preparation. DG CLIMA replied that one of the objectives of the reporting requirements for adaptation is to increase the transparency of adaptation information and disseminate good practices. As a consequence, the intention is to publish all the collected information, for example through the EU adaptation clearinghouse mechanism, although the clearinghouse is expected to contain broader information.

*Administrative burden assessment*

DG CLIMA asked whether extrapolation is acceptable in the cases where there is only a limited number of responses for the administrative burden assessment. SG replied that this is dependent on the type of information available. If there is confidence that the data is reasonable then extrapolation could be appropriate with any caveats clearly presented.

DG CLIMA asked how the underpinning information on administrative burden should be distributed between the main body and the annex. SG replied that key figures, caveats and explanations should be present in the main body so that the reader does not need to constantly refer back to the annex.

*General comments*

SG mentioned that the tables in chapters 5 and 6 (analysis and comparison of options) should more clearly specify what each option represents so as to increase their user-friendliness.

SG also mentioned that the ratings introduced in the comparison of options section could be justified a bit further in the underpinning text.

SG proposed to round all administrative burden data in the main text to avoid giving an impression of false accuracy.

If the proposal is unlikely to have an impact on companies and employment, SG proposed that a paragraph to this extent be added in the analysis of impacts chapters.

DG CLIMA asked how much detail should be provided for each option identified. The SG was of the opinion that if the DG has a clear view on the details of the option, these should be provided. SG also emphasized that more emphasis in general should be placed on the policy choices linked to the more significant impact.

SG and DG AGRI asked that, when a comitology procedure is referred to, the principles that will guide any future Commission proposal (e.g. environmental integrity, transparency, cost-effectiveness) be specified.

SG suggested that the draft IA be read by a colleague without prior expertise in this specific field to make sure that it is understandable to the general audience.

SG proposed that DG CLIMA adds a short section at the end of chapter 6 on comparison of options shortly presenting the overall impact of the preferred approach.

DG CLIMA asked what should be included in the annex with regard to the consultation process. SG proposed that the minutes of the 4 IASG meetings be included.

SG suggested that DG CLIMA organises an interservice group to discuss the legal text before launching the interservice consultation.

Overall, the SG was of the opinion that the final draft IA text has greatly improved over earlier versions and is well done. DG AGRI echoed the opinion of the SG.

DG ESTAT sent comments by email also commending on the well-drafted and structured text. DG ESTAT appreciated in particular the improvements made in the adaptation section where it also agrees with the preferred option identified.



## **Annex B – Summary results of online public stakeholder consultation on the Revision of the Monitoring Mechanism Decision (MMD) - Decision 280/2004**

### **General**

29 responses were received to the questionnaire, the majority of which were from private individuals (12) indicating the strong interest of citizens in climate change issues. The remainder of the responses was from industry, private companies, 2 national administrations (Belgium and the United Kingdom), 2 NGOs (including Climate Action Network Europe) and a research institution. The responses originated in 18 different countries one of which outside the EU with the majority of the responses originating in Belgium, France and Spain. There was a fairly even mix of EU-15 and EU-12 respondents to the questionnaire.

The majority of the respondents (24) were "familiar" to "very familiar" with climate change policies and aware that GHG data is collected and made publicly available at the EU (26) and also considered that they are "somewhat" to well informed by public authorities on efforts made to combat climate change (total 25 respondents). However, 19 respondents still considered that there is room for improvement with regard to the amount and quality of information communicated to the public.

The majority of the respondents to the questionnaire indicated that they use at least once a year, if not more often, the databases and reports made available to the public by the European Commission and the European Environmental Agency (EEA) in the context of the monitoring mechanism decision. Most of them consider this information understandable, clear and easy to retrieve and use.

20 respondents declared that they are familiar with the monitoring mechanism decision but only 10 of them have been "directly" (5) or "indirectly" (5) involved in its implementation. From the 24-25 respondents who expressed an opinion on whether the comprehensiveness, reliability and transparency is satisfactory the majority (including the Member States) seemed to "somewhat agree" (most popular response) to "strongly agree" that this was indeed so whereas the NGOs tended to disagree. Views seemed to more widely diverge with regard to the transparency of the data. In any case, the majority of the respondents (70%) agreed that the MMD needs to be improved. Opinions, however, differed significantly as to whether the MMD should be the main instrument to address reporting matters linked to various climate change data and information (8) or whether this should be tackled through various reporting instruments (11) with a slight preference for the latter.

### **Reporting on policies and measures**

Most of the respondents (including the NGOs but not the responding national administrations) indicate that they are not really satisfied with the level of information and the methods used to report on projections, policies and measures. Further elaboration of methods to be used and of reporting formats seem to be highly favoured options for implementation among the respondents.

### **Streamlining**

Most respondents are in favour of streamlining of the MMD enabling streamlining of reporting of all data (actual, projected, policies and measures). A bit more than half of the respondents, including the NGOs but not the two national administrations, also advocate the establishment of a national inventory review process at the EU level to assess the information provided by MS.

### **Climate-change related financial flows**

The majority of the respondents (55%) believe that the information available on climate-related funding is not transparent, easy to access and to compile and believe that including this information in the MMD will have an added value compared to existing development finance reporting. The majority of the respondents, but not the two national administrations, also believe that it would be useful to monitor such flows centrally at EU level.

### **Adaptation**

On adaptation, the majority of the respondents (54%), but not the two national administrations, were of the opinion that reporting should include measures taken at national and regional level along with budgetary allocation while there seem to be little preference for simply providing information linked to a web-based information system. The option of setting a national focal point responsible for adaptation was highly favoured (63%).

### **LULUCF**

On LULUCF the majority of the respondents (59%) were in favour of establishing additional reporting on rewetting and drainage, force-majeure events and harvested wood products.

### **Maritime transport**

There was significant agreement (76%) among respondents that more accurate data on emissions from the maritime sector should be required to facilitate future action to tackle these emissions and 36% believes that the collection and consolidation of related data should be done both at the EU and at the national level with second preferred choice that of having only a central body at EU level.

### **Aviation**

74% of the respondents acknowledge that existing reporting instruments do not provide enough information to enable us to understand the full impact of aviation on the climate.

### **Specific comments provided**

In the comments provided issues raised were among other the need for the revised MMD to allow for flexibility in reporting and for the reporting frequency to reflect the frequency of data and information changes. The need to avoid overlaps with other monitoring, reporting and review streams at both the domestic and the international level was also noted as this could create consistency and comparability issues and could undermine these other processes.

For the reporting of projections, policies and measures, the need for determining basic assumptions and for providing guidance on appropriate methods and formats was noted.

On finance, the need for transparency, for taking into consideration the OECD process, for enabling ex-ante assessment and creating new climate finance lines were some of the issues brought forward.

On international maritime transport and aviation a concern was raised as to whether the EU has the right to regulate. Also opinions varied as to whether these areas are appropriate for inclusion in the MMD, on maritime because decisions are still pending at the international level and on aviation because of the high uncertainties and the existing ongoing scientific processes. Other comments, however, encouraged the collection of fairly detailed data on aviation and advocated for inclusion of the maritime sector so as to enable further action.

On adaptation, generally the information gaps were acknowledged and people felt that this is an area where more information would be useful, there was a commentary advocating the creation of national

adaptation systems. However, another respondent felt that although adaptation is important there is no need for further regulating reporting at the EU level.

Other issues brought forward in the comments were with respect to the need:

- § for transparent information on the use of auctioning revenues;
- § for transparent implementation of the annual emission allowances linked to the non-ETS sectors;
- § for establishment of voluntary reporting frameworks for post 2012 Green investment schemes;
- § to address soil carbon;
- § to have an assessment of the costs of inaction;
- § to create space-based monitoring systems to address both mitigation and adaptation and for the initiation at EU level of a satellite monitoring constellation.

With regard to the reports and tools available reflecting the information captured through the MMD respondents felt that these are not adequately "advertised" and do not reach the European citizens. Further use of media and communication channels could be helpful in bringing this information more effectively back to the public.

## Annex C – Other consultation activities/projects

### Theme specific consultations

*LULUCF:* The European Council and Parliament requested the Commission to assess the possibility to include LULUCF in the 2020 target and make a legislative proposal, as appropriate. This work is ongoing. In this context, an internet-based public consultation was carried out in 2010 to collect views on the opportunities and challenges related to the inclusion of LULUCF in the EU's GHG emission reduction commitment. The majority of stakeholders want LULUCF to count towards the EU's target for 2020, predominantly in addition to the level of efforts that has already been agreed. In the public stakeholder consultation, the majority of respondents suggested that, if included, emissions and removals related to forestry activities should be accounted for on a mandatory basis and also agreed that there is a need for further harmonisation and standardisation between MS in terms of monitoring, reporting and verification of emissions and removals.

*Finance:* In October 2010 the Commission launched a specific study to look into the EU MS' existing monitoring, reporting and verification (MRV) practices for financial support provided to third countries.<sup>14</sup> The study included several case studies and a comprehensive questionnaire that was sent out to all MS. Although the final report will only be ready in August 2011, several observations made in the report were taken into consideration for the revision of the MMD and the preparation of the impact assessment report.

The option of including financing in the scope of the revised MMD was also discussed with EU stakeholders in the context of the need to improve MRV practices at the Joint Working Group of Climate and Finance experts (EPC/EFC) on April 2010. During these discussions the MS expressed some hesitation regarding the added value of the inclusion of financing in the scope of the MMD. In their view many parallel processes were already established and work on-going on their revision (Monterrey process, OECD DAC, National Communications), and the inclusion to MMD might undermine those efforts. However, there was broad acceptance of MRV of finance being an area for improvement at EU level.

*International Maritime Transport:* In February 2011, the first meeting of the European Climate Change Programme (ECCP) working group on ships was convened. The group was set up to provide input to the Commission in its work to develop and assess options for the inclusion of international maritime transport in the EU's GHG reduction commitment should there be no sufficient international agreement addressing these emissions. The input from this meeting shaped the analysis of the policy options considered herein. Significantly the following was concluded at the meeting:

- § There appears to be significant monitoring done for commercial reasons – while there is no standard approach;
- § Log Books and Bunker Delivery Notes are maintained by all relevant ships and contain the information required for ships to monitor CO<sub>2</sub> emissions;
- § Monitoring creates efficiencies and is beneficial for ship-owners, vessel-operators;
- § An adequate level of data accuracy is available;
- § Verification and reporting needs further discussion;
- § Although mandatory GHG monitoring was not successful when initially proposed in the IMO, MS should aim to again propose mandatory emissions reporting.

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<sup>14</sup> AEA, SEI, EcoSecurities "measuring, Reporting and Verifying the provision for financial support by the EU and its Member States", Ref: 070307/2010/575268/SER/A2

*Adaptation:* The possible inclusion of new reporting requirements on adaptation was mentioned in March 2011 during the third meeting of the Working Group on Knowledge Base (WGKB) and during the first meeting of the Indicator Working Group under the WGKB attended by the EEA and various DGs (ESTAT, REGIO, SANCO, ENV, CLIMA). The relevance for the development of a harmonised set of indicators on adaptation in view of the possible inclusion of new reporting requirements on adaptation in the framework of the ongoing revision of the MMD was discussed. It was indicated that there is a need to develop first a methodology on indicators on adaptation before requiring their reporting at MS level, and that it is necessary to also consider how new reporting requirements would be enforced. DG ESTAT stated that the amount of information that could be collected on adaptation is potentially massive and that care should be taken that this effort remains manageable.

### **Projects that underpinned the preparation of the IA and the revision of the MMD**

There have been six projects so far aimed at feeding into the revision of the MMD and its implementing provisions and/or at supporting the relevant impact assessment:

- "Assessment of GHG methodologies for projections" aiming at improving the methodologies used by MS for projections
- "Ex-post quantification of the effects of policies and measures" to develop suitable methodologies for the ex-post quantification of the impact of policies and measures
- "Streamlining climate change and air pollution reporting requirements" to identify the inter-linkages between the monitoring and reporting requirements of the various pieces of legislation in the fields of air pollution and climate change
- "Assistance with the revision of the MMD" to take into account lessons learned and eliminate obsolete requirements
- "Assistance with the revision of the MMD taking into account the Effort Sharing Decision" to consolidate the recommendations from the four other projects and address the requirements of the Climate and Energy package.
- "Assistance with the impact assessment of the revision of the MMD"

## Annex D - Detailed assessment of the administrative burden

### C.1. Establishment of an EU review and compliance cycle under the Effort Sharing Decision

The administrative burden for the establishment of an EU review and compliance cycle under the Effort Sharing Decision must be seen against the background of the baseline scenario: “Continue with reporting of annual GHG inventory information and biennial information to the EU and the UNFCCC and rely on the inventory review under the UNFCCC as under current Monitoring Mechanism Decision.”

*1) Proposed change: Implementation of an EU desk review procedure of Member States’ GHG inventories which is performed in a shorter time frame than the UNFCCC review during which the MS would need to provide feedback to the questions of the review team*

This proposed change is estimated to cause an administrative burden in selected MS as shown in the following table:

MS	Days	Outsourcing [Euro]	Total administrative costs [Euro]	Additional information
Finland	3.4	0	1,130	No additional information
Germany	16.5	6,930	11,830	
Hungary	30	4,000	5,990	No additional information
Netherlands	27	11,000	18,810	7 national experts assumed to be involved in the process
Sweden	0	8,100	8,100	No additional information

The estimates depend on the ways Member States have organized their national inventory system, whether such work is outsourced to consultancy companies and whether MS have a centralized or a federal organization system, they depend on the size of the country and the related size of inventory teams and the number of experts involved in the inventory preparation. Whereas the time indicated by Finland is rather low, around 30 days plus outsourcing costs indicated by the Netherlands and Hungary seems to be rather high.

Member States were grouped into three categories to reflect the differences in the answers received (For Member States that provided answers in the questionnaire these estimates were used without variation):

Large Member States with complex national inventory system: Belgium, Germany, Netherlands (assumption average 15,320 € per year (average of Germany and the Netherlands), low assumption 11,800 €, high assumption 18,800 €)

Member States with a high share of outsourcing: France, UK, Spain, Sweden (average assumption 8,100 € per year (Swedish indication), low assumption 7,500 € per year, high assumption 11,000 € per year)

Medium and small Member States with a less complex inventory system: all remaining Member States (average assumption 3,250 € per year (average of Finland and Hungary), low assumption 1,000 € per year, high assumption 5,660 € per year)

Based on these assumptions total administrative costs for **EU-27 were estimated at €143,000 per year with a range of €98,000 to €199,000 per year. It is assumed that 50% of these costs are benefits for the UNFCCC review because part of the questions that will be raised in this review have already been answered. This assumption leads to average costs for the comprehensive review of €72,000 within a range of €49,000 to €100,000 per year for EU27.**

For the “**light**” review mainly based on automatic checks, it is assumed that the administrative burden is only 30% of a more comprehensive desk review, the resulting costs for the light review are **on average €22,000 within a range of €15,000 to €30,000 per year for EU-27.**

**2) Proposed change: Implementation of an EU in-country review procedure of Member States' GHG inventories during which the Member State would be visited by a review team and during which the MS would need to provide feedback to the questions of the review team**

This proposed change is estimated to cause an administrative burden in selected MS as shown in the following table:

MS	Days	Outsourcing [Euro]	Total administrative costs (Euro)	Additional information
Finland	4.6	0	1,130	No additional information
Germany	36	18,640	29,920	No additional information
Hungary	30	4,000	5,990	No additional information
Netherlands	41	26,000	46,920	7 national experts assumed to be involved in the process
Sweden	0	40,000	40,000	No additional information

The estimates indicated for an in-country review differ even stronger depending on the amount of outsourcing indicated by the Member States. The Finnish estimate is considered as an outlier, given the fact that the number of days indicated by other MS shows a similar range.

Member States were grouped into two categories of EU12 and EU15 to reflect the differences in the answers received related to the overhead costs (For Member States that provided answers in the questionnaire these estimates were used without variation). An average, low and high estimate was calculated with different assumptions. For the average 37 days were assumed. For the low estimate 34 working days and for the high estimate 41 working days. Outsourcing costs for new MS were assumed with €6,000 for the average and for old MS with €22,000.

However, an in-country review of all Member States in one single years over a short period of several months seems impossible from a practical point of view. Therefore it was assumed that each year 4 Member States would be selected for an in-country review. It was assumed that the selection would cover 2 new Member States with lower costs and 2 old Member State with higher costs. These 4 in-country reviews would add on average €38,600 to the administrative burden within a range of €36,600 to 41,000. The total administrative costs of this option for EU27 (including desk reviews for ost Member States and 4 in-country reviews) was estimated in a range of €86,000 to 141,000.

**C.2. Implementation of the revised ETS Directive (Reporting on the use of auctioning revenues)**

The reporting requirements in paragraph 3 of Article 10 of the revised ETS Directive and in second subparagraph of paragraph 4 of Article 3d of that Directive could be addressed via an electronic reporting template to be submitted annually. The reporting template would for example be a table of which each line is an item listed in Article 10 paragraph 3 and the columns could be "allocated revenues for year X in €", "spent revenues for year X in €" and "corresponding activities"

**1) Proposed Change: Report annually the use of auctioning revenues spent in earmarked areas in an electronic format attached to the national inventory report**

This proposed change is estimated to cause an administrative burden in selected MS as shown in the following table:

	Days	Total administrative costs (Euro)	Additional information
Finland	No data	No data	No information received
Germany	4	1,190	If reporting categories are not too detailed only few days are necessary to provide the answers
Hungary	8	7,051	Of which €4,000 is for outsourcing
Netherlands	4	1,000	In the book keeping system not direct relation to the revenues generates and allocations can be made. So

			reporting will be restricted to revenues generated, allocated and spent. For the allocation (miljoenen-nota) and spending (jaarrekening) the documents to the Parliament will be used.
Sweden	No data	No data	No information received

An average number of 5.5 days was assumed for this task taking into account that it will not be very likely that many Member States will need to outsource the compilation of key budget information, but that such information is usually available in ministries for finance/ budget, environment and development assistance. All Member States were estimated based on standard tariffs for gross earnings including overhead resulting in an **average cost of €32,000 for EU-27 per year.**

### C.3. Reporting of emissions from maritime transport

The administrative burden for reporting emissions from maritime transport must be seen against the background of the baseline scenario: “Continue with current reporting of GHG emissions from domestic and international maritime transport in GHG inventories without establishing the basis for improved underlying data.”

This proposed change is estimated to cause an administrative burden in selected MS as shown in the following table:

	Days	Total administrative costs (Euro)	Additional information
Finland	3	700	See sections below
Germany	No data	No data	See sections below
Hungary	5	1,000	See sections below
Netherlands	No data	No data	See sections below
Sweden	No data	No data	See sections below

#### Assessment of administrative burden

	Communicate data to centralized agency	Collection of additional vessel-specific data at seaport
Finland	Small additional burden	Minimal additional burden making use of existing structures
Germany	Moderate additional burden	No information received
Hungary	Small additional burden	No information received
Netherlands	No information received	No information received
Sweden	Significant additional burden if model. Comment: Today activity data are based on a questionnaire monitoring annual deliveries of fuel. The calorific values are based on evaluations conducted by The Swedish Maritime Administration (Sjöfartsverket). Calculating vessel-specific GHG emissions would require establishing a register of each vessel, their nationality and their effects/capacity utilisation etc.	- major additional port resources required to feed into existing structures; - major need to expand existing structures

#### Administrative maritime structure in Finland

The existing administrative structure of national maritime administrations in Finland is:

The Finnish Maritime Administration (and Finnish Transport Safety agency and Ministry of Transport and Communication) host the PortNet system that is used nationwide for vessel traffic in Finland. Each and every ship calling at a Finnish port has to provide information regarding its timetable, route, cargo, any hazardous cargo, waste and maritime fees. It is also possible to give security announcements according to ISPC -instructions. Vessels arrival announcement is required 24 hours before the arrival to the port and cargo announcement 1 hour before arrival to the port. The user interface for the PortNet system is Internet-based. PortNet is a telematic system, where



telecommunications and an information system are combined together. The main user groups for the system are the Customs, Port Authorities, Ship Agents, Stevedoring Companies, Maritime Administration, Vessel traffic operators, and the Frontier guard.

### **Administrative maritime structure in Germany**

The existing administrative structure of national maritime administrations in Germany is based on following regulations:

- Directive 2009/16/EC on Port State Control

The Federal Republic of Germany has to a large degree transferred the implementation of the international conventions in the sector of maritime safety and marine environmental protection, and the ordinances passed in supplement thereof, to the Ship Safety Division ('Dienststelle Schiffssicherheit'), which is a unit within the Accident Prevention and Insurance Association for Transport and Traffic ('Berufsgenossenschaft (BG) Transport und Verkehr'). The statutory framework is provided by the Law on the Government's Functions in the Field of High-Sea Shipping, through which 'BG Transport und Verkehr' is effectively accorded the status of a central federal authority under the jurisdiction of the Federal Ministry of Transport. The Ship Safety Division is performing port state control inspections in Germany according to European Directives 2009/16/EC on Port State Control.

- Directive 2002/59/EC on vessel traffic monitoring

The Central Command for Maritime Emergencies – CCME ('Havariekommando', HK) in Cuxhaven, a joint establishment of the federal government and the German coastal states, operates the German marine casualty management system for the North Sea and Baltic Sea. The Maritime Emergency Reporting and Assessment Centre (MERAC), which is part of the CCME, deals with complex marine casualties off the German coast and is responsible for planning, preparing, and implementing measures to save injured persons, combat pollution, fight fires, provide technical assistance, and carry out salvage operations in order to combat hazards. MERAC also operates Germany's national and international reporting centre for marine casualties and marine pollution in its capacity as the notified National Contact Point in Germany, and the Central Reporting System of Germany for Hazardous and Noxious Goods carried on Sea ('Zentrales Meldesystem für Gefahrgut und Schiffsverkehre der Bundesrepublik Deutschland' (ZMGS)) in connection with Directive 2002/59/EC on Vessel Traffic Monitoring within SafeSeaNet network.

- Directive 2010/65/EC on reporting formalities
- Regulation (EC) No 725/2004 on ship and port security
- Regulations from international conventions such as MARPOL Annex VI (e.g. bunker fuel delivery notes)

The Federal Maritime Agency ("Bundesamt für Seeschifffahrt und Hydrographie", BSH), a subordinate agency to the Federal Ministry of Transport, is the competent authority in Germany for Directive 2010/65/EC on reporting formalities and Regulation (EC) No 725/2004 on ship and port security.

The Federal Maritime Agency is furthermore the administrative authority for implementing environmental protection measures relating to maritime shipping. The statutory framework is the Federal Maritime Responsibilities Act ('Seeaufgabengesetz', SeeAufgG) in conjunction with the MARPOL Convention, Helsinki Convention and Ballast Water Conventions (§ 10 Nr. 2). BSH assist in inspections of the European Commission or International Organizations, to which Germany is a member state, as far as these are required to comply with EU or international regulations within the scope of SeeAufgG (§1 Nr. 15 SeeAufgG). As such, BSH maintains a register of local suppliers of fuel oil according to regulation 18 of annex VI of the MARPOL Convention, and takes on measures to prevent the dispersal of non-native species by ships including the evaluation, authorization and surveillance of ballast water treatment systems.

Certificates according to MARPOL 1973/78 are issued by ‘BG Transport and Verkehr’, i.e., the certificates according to Annex I (regulation 6), Annex II (regulation 6, paragraph 49; regulation 9; regulation 11), Annex IV (regulation 4 to 7) and Annex VI (regulation 6 and 8).

#### **Administrative maritime structure in Hungary, Sweden, Netherlands**

No information received.

### **C.4. Reporting requirements related to the non-CO<sub>2</sub> impacts of aviation on the global climate**

A new reporting requirement on the non-CO<sub>2</sub> effects of aviation for Member States may be proposed where the non-CO<sub>2</sub> impact of aviation would be reported either based on detailed modelling data or based on a multiplier approach on an annual basis in the annual national inventory reports.

#### **1) Proposed Change: Estimation and reporting of non-CO<sub>2</sub> impacts of aviation based on modelling**

In the proposed option those Member States which reported more than 3% of the total EU CO<sub>2</sub> emissions from aviation would report the non-CO<sub>2</sub> effects of aviation based on detailed models. Currently, this would apply to France, Germany, Italy, the Netherlands, Spain and UK which are jointly responsible for approx. 80% of the CO<sub>2</sub> emissions. The other Member States would apply a multiplier to estimate the emissions.

Member States indicated that the estimation and reporting of non-CO<sub>2</sub> impacts of aviation based on the proposed modelling is a costly task. The inclusion of the 4-dimensional flight route, aircraft and engine types, fuel burn and 4-dimensional atmospheric conditions requires complex modelling and continuous data collection. A specific estimation of expenses of such modelling could not be provided by Member States. Currently such model was only developed at EU level, but not at Member States’ level which requires a higher level of detail and stratification which has not yet been implemented. The development costs have been €1.677 million in the EU 5<sup>th</sup> framework programme<sup>15</sup>. It is assumed that a similar budget of €1.5 million would be necessary for an expansion of the model to develop estimates for the 6 member States with the highest shares of CO<sub>2</sub> emissions from aviation in the EU. If Member States would start to develop their own models independently, costs in this order of magnitude could occur in each Member State and it would be important to develop a research project that would use synergies and provide estimates for all relevant Member States. Total administrative costs for the modelling MS and the MS using a multiplier would be at about **€1.52 million**.

#### **2) Proposed Change: Estimation and reporting of non-CO<sub>2</sub> impacts of aviation by using a multiplier**

This proposed change is estimated to cause an administrative burden in selected MS as shown in the following table:

	<b>Days</b>	<b>Total administrative costs (Euro)</b>	<b>Additional information</b>
Finland		No data	No information received
Germany		No additional costs	The estimation and reporting of non-CO <sub>2</sub> impacts of aviation by using a multiplier means an insignificant additional effort. The CO <sub>2</sub> emissions would be calculated as ever and multiplied by the multiplier to include the non-CO <sub>2</sub> impacts.
Hungary	7	390	No additional information
Netherlands		No data	No information received
Sweden		No data	No additional information received

<sup>15</sup> Project cost as reported in EU CORDIS database for project AERO2K in 5<sup>th</sup> framework programme

The use of a multiplier will only add few days of additional work for the calculation and the writing of the respective report section. For all Member States an additional burden of 5 days was assumed and costs were calculated with average The average cost per Member State were estimated by multiplying a tariff (based on average labour cost per hour including prorated overheads) with the number of days required. The average administrative burden for the reporting on the basis of an multiplier was estimated to be **at €24,000 per year for EU-27.**

### **C.5. Reporting related to annual reporting on climate change adaptation**

Only Germany and Hungary provided estimates with regard to the administrative costs for the new biennial reporting on climate change impacts and adaptation. Some Member States could not provide answers as no such reporting responsibility exists at the moment, therefore new responsibilities would need to be designated and training and the compilation of information has to start from scratch. As the requirements would be more detailed than the reporting in the national communication, some Member States could not interpolate estimates from this experience.

<b>MS</b>	<b>Days</b>	<b>Outsourcing [Euro]</b>	<b>Total administrative costs [Euro]</b>	<b>Additional information</b>
Finland	No data	No data	No data	No additional information
Germany	84	30,000	54,900	Outsourcing considered for 2 training workshops on each section of the reporting
Hungary	107	87,000	96,700	No additional information
Netherlands	No data	No data	No data	7 national experts assumed to be involved in the process
Sweden	No data	No data	No data	No additional information

Only two Member States provided estimates for the additional administrative burden for this new area. Some Member States could not provide estimates because no such reporting responsibility exists at the moment, therefore new responsibilities would need to be designated and training and the compilation of information needs to start from scratch. As the requirements would be more detailed than the reporting in the national communication, some Member States could not interpolate estimates from this experience. As both Member States that reported estimates provided a rather close estimate of days necessary for the reporting, the average of 95 days was used for each MS and costs were calculated based on standard tariffs for each Member State. It is very likely that the introduction of a new requirement incurs some outsourcing costs and the outsourcing costs of 30,000 € provided by Germany were used as a minimum and the outsourcing costs provided by Hungary as a maximum for the introduction of this new reporting requirement.

This approach leads to direct **administration costs for Member States of €452,000 € per year for EU-27** and for the introduction of the reporting requirements additional outsourcing costs in the range of **€810,000 to €2,349,000** per year would occur which would give a range of **€1.26 to 2.80 million for EU-27** at least for the first years when the new requirement is introduced. It is assumed that a benefit would occur for the reporting in the national communication which is assumed with 20%. Taking this benefit into account the total costs per year would be in the range of **€1 million to 2.24 million.**

The administration costs indicated do not include the collection of new statistics in the area of climate change impacts or adaptation. A more detailed data assessment based on detailed reporting requirements would need to be conducted by Member States to assess such needs. Some Member States indicated that it would be difficult to compile new statistics due to the general political strategy to reduce the statistical burden.

**2) Proposed change: Report biennially on climate change impacts and adaptation, financial resources provided to developing countries and technology transfer (as per UNFCCC reporting guidelines for national communications).**

An earlier analysis of administrative costs had been conducted for which Member States indicated costs to report the same information as covered in the national communication under the UNFCCC in a biennial frequency to the Commission. These indications include reporting on adaptation and the reporting on financial support to developing countries.

Specific Proposed Change	Types of required action due to change	Information obligation	Central Scenario <sup>1</sup>	
			Costs (€)	Days (per year/MS)
Report on financial and technical support provided to developing countries	Familiarising with the information obligation	Submission of (recurring) reports	28,465	
	Producing new data		66,418	
	Adjusting existing data		66,418	
	Submitting the information to the relevant authority		28,465	
<b>Total EU27</b>			<b>189,766</b>	

As it is unknown how the earlier estimates provided can be differentiated to reporting on financial support and adaptation the amount of information reported in the 5<sup>th</sup> national communication was analysed and a split derived that reporting on adaptation is on average 65% and financial support 35% from the total amount of information reported in both areas. Based on this assumption the estimate derived for EU-27 of €189,766 was split to reporting on adaptation with €123,350 for EU-27 and for financial support with €66,400 for EU-27.

## C.6. Reporting related to LULUCF

The administrative burden for reporting related to LULUCF activities must be seen against the background of the baseline scenario: “Continue with current reporting on land use, land use change and forestry.”

### Summary

The sub-options related to the "Comprehensive reporting option" introduce at least partially additional reporting requirements to the existing ones. In assessing this option, it should be noted that MS are already required to report on emissions and removals in the land categories forest, cropland and grassland, as mandated by the UNFCCC,<sup>16</sup> as well as additional information related to the accounting under the Kyoto Protocol (mandatorily: afforestation, reforestation and deforestation and, voluntarily, any of the elected activities forest management, cropland management, grazing land management and revegetation). It should also be noted that the costs of the implementation of new estimation requirements also depend on the level of methodological tier used by MS and on the current level of reporting capacity. Tier 1 methods are relatively easy to use with existing data, whereas higher tier methods often require additional research and data collection activities and are therefore more costly. It should also be noted that the revisions outlined in this option would involve additional costs only to the extent that they imply mandatory reporting.

For the likely outcome of the UNFCCC negotiations this "incremental" approach has the following implications:

<sup>16</sup> Reporting under the UNFCCC is mandatory for all land categories for which IPCC Good Practice Guidance exists.

1) With regard to forest management, 17 MS have already chosen to elect for this activity in the first commitment period under the Kyoto Protocol and the accounting for these countries will continue in the future. This revised provision does not imply any additional reporting burden for these MS. A significant additional administrative burden would occur for those 10 MS (Austria, Belgium, Luxembourg, the Netherlands, Estonia, Ireland, Latvia, Slovakia, Malta and Cyprus) that have not yet elected forest management as a LULUCF activity under the Kyoto Protocol. No cost indications were provided by those MS that did not yet elect forest management under the Kyoto Protocol. Based on estimates provided by MS that already report on forest management a total additional administrative burden of €345,000 per year for these 10 MS was estimated.

2) Reporting on HWP is currently a voluntary option, therefore MS may also be affected in different ways if it is made mandatory. Reporting in this area could require new modelling activities by MS, however MS could also use standard spreadsheet models and default data which would lower the cost. The additional administrative costs for the reporting on HWP for EU-27 in the first year was estimated in the range of €240,000 to 330,000. These costs include the development of the spreadsheet model and will decline in the subsequent reporting years once the new approach is established.

3) Estimation and reporting of emissions and removals from rewetting and drainage allows to report and account for an area of substantial net removals (rewetting and restoration of previously drained areas) for which some researchers estimate substantial CO<sub>2</sub> removals which are currently not accounted for in GHG inventories. On the other hand an emission source (drainage) would also be included and would ensure more complete accounting of all emissions from the LULUCF sector. The activity will not be relevant in southern MS where no drainage of organic soils occurs and will be limited to those MS choosing to elect the activity. The estimates provided show that the potential administrative costs can vary substantially and are in the range of €85,000 to 455,000 for EU27. The higher estimate includes basic research costs which go beyond the reporting requirements. It can be assumed that MS electing rewetting and removals as new activity will carefully balance the related administrative costs and benefits from the election.

4) Reporting on force-majeure events is a requirement that would only be triggered after, and if such an event occurred and reporting is not a regular or mandatory obligation. Only few MS with strong inter-annual fluctuations of emissions due to forest fires would potentially be able to use this provision. The objective of this new rule is to reduce the burden of emission reductions in countries suffering from natural disasters beyond the control and not materially influenced by MS. The indications for additional administrative costs were rather limited and it was assumed that not more than 2 MS would be able to apply this provision per year. This assumption was estimated to lead to an additional administrative burden of €20,000 per year at the level of the EU-27. However, the application of this provision would be voluntary and it can be assumed that MS will apply this rule only if they stand to have benefits, i.e. that the costs would be fully compensated through the benefits of not accounting for emissions.

5) Updating of forest management reference level values based on new data or methodological improvements is similar to other recalculations of the GHG inventory but requires some extra efforts, because reference levels as baselines are a new concept in the accounting of LULUCF activities. These extra efforts were estimated at €32,000 for EU27 per year.

The costs presented above assume that the EU framework, if established now would accurately mirror, the international framework or the outcome of a future EU proposal, however, in case of inconsistency, it is plausible that Option 2 would involve additional costs to those presented above as

there would be a need to align the revised MMD with the final legislation (EU or international) and would require an update of the implementing provisions linked to the MMD at a later stage. The reporting costs of adopting EU legislation at a later stage for the inclusion of LULUCF in the EU's GHG emission reduction commitment would depend on its exact contents but is likely to be similar or involve additional requirements compared to an international agreement.

***1) Proposed Change: Report emissions and removals from forest management activities on a mandatory basis***

The proposed change is estimated to cause an administrative burden in selected MS as shown in the following table:

	<b>Total administrative costs (Euro)</b>	<b>Additional information</b>
Finland	6,240 – 31,900 (no detailed information received)	30-130 days. If the same calculation as for UNFCCC reporting can be used the activity needs 30 days. If separately and additional calculations are needed, the time need will be much higher, now estimated to be additional 100 days.
Germany	No data	No information received
Hungary	No data	No information received
Netherlands	No data	No information received
Sweden	2,463	Sweden reports FM today and we do only expect minor additional costs. Costs indicated provide for some changes and refinements in the UNFCCC reporting requirements.

For the Member States that already report on forest management under the Kyoto Protocol, no additional administrative costs will occur, as no additional requirements different to the international ones are foreseen in the policy option. The estimates provided by those Member States can be seen as completely related to the implementation of future requirements under the UNFCCC.

With regard to forest management, 17 Member States already elected forest management as an activity to be accounted in the first commitment period under the Kyoto Protocol and the accounting for these countries will continue in the future. This revised provision does not imply any additional reporting burden for these Member States. A significant additional administrative burden would occur for those 10 Member States (Austria, Belgium, Luxembourg, the Netherlands, Estonia, Ireland, Latvia, Slovakia, Malta and Cyprus) that have not yet elected forest management as an LULUCF activity under the Kyoto Protocol. No cost indications were provided by those Member States that did not yet elect forest management under the Kyoto Protocol. It was assumed that the estimated provided by Finland with additional 100 days can be seen as a minimum of administrative effort required to the implementation of the reporting on forest management in these Member States. For the implementation of these requirements at technical level subcontracting to organizations performing the LULUCF calculations will be necessary. For additional subcontracting amounts of € 40,000 were foreseen in EU-15 Member States and € 20,000 in new Member States taking into account lower subcontracting costs in these Member States. As the additional work is related to calculations already performed in current inventories by all Member States 2-3 months of subcontracting work were assumed to be sufficient for the additional information required.

**Based on these assumptions total administrative costs for EU-27 are estimated at € 345,000. (without Malta and Cyprus the costs are €300,000)**

**2) Proposed Change: Report data on emissions from the harvested wood products pool.**

	<b>Days</b>	<b>Outsourcing costs (Euro)</b>	<b>Total administrative costs (Euro)</b>	<b>Additional information</b>
Finland	50	50,000	62,300 (no detailed information received)	50 days. About € 50 000 to improve and develop the national method assuming the implementation of a higher tier approach
Germany			No data	No information received
Hungary			No data	No information received
Netherlands			No data	No information received
Sweden	72	62,000	82,700	Projects for developing improved national EF might be costly, but in this questionnaire Sweden referred to Tier 1. More advanced projections of HWP might be costly but no such plans exist.

As part of the 2006 IPCC Guidelines a standard spreadsheet model was developed by the IPCC. The new reporting requirement requires a much more detailed estimation of carbon contained in different kind of wood products from the domestic market or from imports and the calculation of the duration the carbon will be stored in these products until they will finally decompose or be burnt at which point the carbon is released to the atmosphere. Thus, the detailed reporting on carbon stored in HWPs requires new modelling activities by Member States, however Member States could use the IPCC standard model for the estimation of emissions from harvested wood products and do not need to develop new models. The IPCC model would need to be filled with country-specific data related to annual production, imports and exports of different wood and paper product types and wood specifications and rates at which products are discarded from use. Such elaboration of a detailed model for HWP consistent with IPCC and UNFCCC reporting requirements would be necessary which actually only exists in few countries (Germany, Finland).

It is difficult to estimate an average administrative burden based on only two estimates provided by Member States. Therefore the days indicated by Member States were used and multiplied by average labour costs in Member States to derive an approximated estimate. In some Member States the work would consist in the elaboration of a model using mainly default data (tier 1) and more advanced Member States would use more country-specific parameters. An average of 60 days for the preparation of such model was used within a range of 50 days (as provided by Finland) and 70 days (as provided by Sweden). This assumption would result in approximated € 285,800 of additional administrative costs for EU-27 within a range of €238,100 to €333,400.

**3) Proposed Change: Estimate and report emissions and removals from rewetting and drainage activities**

	<b>Days</b>	<b>Total administrative costs (Euro)</b>	<b>Additional information</b>
Finland	200	41,600 (no detailed information received)	A cautious estimate of the time need to report this activity is 200 days. This is a new activity and at the moment there is no suitable national data and methods available. Also research work is needed to fulfill the reporting requirements.
Germany		No data	No information received
Hungary		No data	No information received
Netherlands		No data	No information received
Sweden	13 plus 13,000	16,730	Projects for developing improved national EF might be

	Days	Total administrative costs (Euro)	Additional information
	€outsourcing costs		costly, but in this questionnaire we refer to Tier 1; We assume that this activity is quite limited in Sweden and will probably not become a key-category.

Estimation and reporting of emissions and removals from rewetting and drainage allows to report and account for an area of substantial net removals (rewetting and restoration of previously drained areas) for which some researchers estimate substantial CO<sub>2</sub> removals which are currently not accounted for in GHG inventories. On the other hand an emission source (drainage) would also be included and would ensure more complete accounting of all emissions from the LULUCF sector. The estimates provided show that the potential administrative costs can vary substantially and the response from Member States is insufficient to provide an average estimate. In the international negotiations a voluntary election of rewetting and drainage is foreseen and taking the experiences from the 1<sup>st</sup> commitment period under the Kyoto Protocol into account, it is likely that only few Member States would elect such activity resulting in additional administrative burden. In addition these activities only occur in temperate or Northern Member States and not in the Mediterranean MS.

An estimate at EU-27 level is difficult due to the lack in response and the difference between the estimates provided. The Finnish response covers research activities which are not part of the original reporting obligation and that the costs therefore may be too high. For the EU27 estimate it was assumed that 5 Member States would elect such new activity and a range was estimated based on the wide range provided. This approach would lead to a range of **€85,000 to 455,000 for EU27 € year** It can be assumed that Member States electing rewetting and removals as new activity will carefully balance administrative costs and benefits from the election. Any additional administrative costs would fully be related to additional reporting requirements under the UNFCCC and would not be specific for EU purposes.

#### **4) Proposed change: Estimate and report emissions and removals subject to “force majeure” events**

	Total administrative costs (Euro)	Additional information
Finland	1,040 – 10,216 (no detailed information received)	5-50 days. If it is possible for a member state to handle forest areas subject to force majeure as part of a forest land, the time need is lower. If member states are obligated to follow these areas separately more effort is needed to fulfill the requirement.
Germany	No data	No information received
Hungary	No data	No information received
Netherlands	No data	No information received
Sweden	12,314	All Forest land is assumed man-aged and therefore it may be difficult to claim “force majeure”. It is also, by nature, difficult to guess costs for events “out of control Risk of for example storms, in-sect attacks and forest fires might be modelled for different management alternatives, but since they are connected to management Sweden will probably not claim “Force majeure” for such events.

As force majeure events will not occur for all Member States at the same time, but will be an exceptional situation, the administrative costs provided by Finland and Sweden were used and it was assumed that 2 Member State would be in a situation to apply these provision per year resulting in an additional administrative burden of about **€20,000 per year for EU-27**.



**5) Proposed change: Updating of forest management reference level values based on new data or methodological improvements**

	<b>Total administrative costs (Euro)</b>	<b>Additional information</b>
Finland	4,160 (no detailed information received)	20 days
Germany	No data	No information received
Hungary	No data	No information received
Netherlands	No data	No information received
Sweden	1,231	1 day and €1,000 outsourcing costs

Updating of forest management reference level values based on new data or methodological improvements is similar to other recalculations of the GHG inventory but requires some extra efforts, because reference levels as baselines are a new concept in the accounting of LULUCF activities and so far do not need to be recalculated. However, the amount of days indicated by Finland seems to be too high for the updating of already existing estimations in which new forest data available in the countries need to be integrated. As the recalculation are performed for the entire spreadsheet models and estimations, the updating of the reference levels can be linked closely to the other recalculations in the sector and few days can be assumed for this purpose. Therefore the Swedish estimate of one day of work was used together with outsourcing costs of €1,000 per country and estimated on the basis of standard labour costs for the individual Member States.

This approach leads to additional administrative costs **at EU level of €31,800.**

**C.7. Reporting requirements on financial and technology support to developing countries**

The administrative burden for reporting on financial support to developing countries must be seen against the background of the baseline scenario: “Continue with current reporting of financial and technology support to developing countries in Member States’ national communications under the UNFCCC without separate reporting requirements at EU level.”

**1) Proposed Change: Biennially report information on financial and technology support to developing countries to the Commission**

Finland	Germany	Hungary	Netherlands	Slovakia	Spain	Sweden	comment
30-90 days in the first and subsequent years (Finland already includes this information in the NC, but not on a biennial basis)	43 days in the first and subsequent years	30 days in the first and subsequent years	50 days in the first and subsequent years	0 days There is not substantive difference between two or 4 years reporting period.	NA	NA	

Under the current UNFCCC National Communications guidelines, Annex I Parties are required to report where feasible, activities related to technology transfer, including success and failure stories. Some MS in the EU27 are not required to report this since they are not an Annex I Party to the UNFCCC.

MS would now have to report this information on a biennial basis rather than every four years as they currently do for the NC. This applies to the EU 15 MS who are Annex I Parties under the UNFCCC. The EU12 MS are currently not obliged to report on climate change impacts and adaptation, financial

resources provided to developing countries and technology transfer therefore it would be require additional staff time.

To estimate the EU27 administrative burden we proposed to split the MS into EU15 and EU12. We will use the average of the reported estimates of Finland<sup>17</sup>, Germany and Netherlands as the best fit for all EU15 MS (51 days per MS). For all EU12 MS we propose to use the average of the highest estimate reported by Finland and the estimate reported by Hungary (60 days). The reason for combining these two values is that Hungary's estimate is considered to be an underestimate relative to the other MS responses and since the EU12 are currently under no obligation to report this information under the current MM it is anticipated that the cost would be higher for the EU12 than the EU15. Slovakia responded that the cost implications would not be different if they have to report biennially or every four year. We do however suggest using a high<sup>18</sup> and low<sup>19</sup> scenario in subsequent years to show the range in values provided (high 61 additional days and low 41 additional days):

Total EU-27, first year central:  $(51 \times 15 \times 201.00^{20}) + (60 \times 12 \times 50.00^{21}) = \text{€}189,765.00$

Total EU-27, subs. years central:  $(51 \times 15 \times 201.00) + (60 \times 12 \times 50.00) = \text{€}189,765.00$

Total EU-27, subs. years low-case scenario  $41 \times 27 \times 134.00^{22} = \text{€}148,338.00$

Total EU-27, subs. years high-case scenario:  $61 \times 27 \times 134.00 = \text{€}220,698.00$

Specific Proposed Change	Types of required action due to change	Information obligation	Central Scenario <sup>1</sup>	
			Costs (€)	Days (per year/MS)
Report on financial and technical support provided to developing countries	Familiarising with the information obligation	Submission of (recurring) reports	28,465	
	Producing new data		66,418	
	Adjusting existing data		66,418	
	Submitting the information to the relevant authority		28,465	
<b>Total EU27</b>			<b>189,766</b>	

As it is unknown how the earlier estimates provided can be differentiated to reporting on financial support and adaptation the amount of information reported in the 5<sup>th</sup> national communication was analysed and a split derived that reporting on adaptation is on average 65% and financial support 35% from the total amount of information reported in both areas. Based on this assumption the estimate derived for EU-27 of €189,766 was split to reporting on adaptation with €123,350 for EU-27 and for financial support **with €66,400 for EU-27.**

**2) Proposed change: Enhance the current reporting by using a consistent format based on indicators for financial flows of the OECD Development Assistance Group (DAC)**

	Days	Total administrative costs (Euro)	Additional information
Finland		No data	No information received
Germany	6	1,800	DAC indicators are already part of existing statistical system and can

<sup>17</sup> The average reported figure for Finland (60 days) is used to derive the EU15 average

<sup>18</sup> High value estimated using the average using the 90 days by Finland excluding response from Hungary for all MS

<sup>19</sup> Low value estimated using the average using 30 days by Finland excluding response from Hungary for all MS

<sup>20</sup> This is the average daily cost of labour in the EU-15.

<sup>21</sup> This is the average daily cost of labour in the EU-12.

<sup>22</sup> This is the average daily cost of labour in the EU-27.

			be compiled from statistics
Hungary	47	42,600	System of DAC indicators not yet in place and no experience
Netherlands		No data	No information received
Sweden		No data	No information received

The administrative burden for all information activities associated with this proposed change will depend on whether the DAC indicator system for climate change (mitigation and adaptation) is already used and implemented by MS. Currently the OECD database on climate change related support indicates that 14 Member States report on the basis of DAC climate change indicators.

For the estimation of costs at EU-27 level it was assumed that the number of days indicated by Germany are applicable to the 14 Member States that already report DAC indicators to the OECD. For the remaining Member States, the amount of days indicated by Hungary were used to estimate the administrative burden. Based on these assumptions the total administrative costs assumed for **EU-27 are €65,500.**

### **C.8. Enhance consistency with other legal instruments in the EU**

The administrative burden for enhancing consistency with other legal instruments in the EU must be seen against the background of the baseline scenario: “Deal with reporting requirements in the Monitoring Mechanism Decision and other legal instruments separately and do not streamline the reporting under different instruments.”

Establish a requirement to report on the consistency of emission information reported under the Monitoring Mechanism Decision with the reporting under the EU ETS, with the reported information in the European Pollutant Release and Transfer Register (E-PRTR), with Directive 2001/81/EC on national emission ceilings for certain atmospheric pollutants (NEC Directive) and the F-Gas Regulation (Regulation No 842/2006) as well as on the quality assurance and quality control checks conducted to ensure consistency across the different legal instruments

***1) Proposed change: Report as part of the national inventory report on the consistency of emission information reported under the Monitoring Mechanism Decision with the reporting under the EU ETS, with the reported information in E-PRTR, with the information reported under the NEC Directive and the F-Gas Regulation (include reporting on share of ETS emissions).***

	<b>Total administrative costs (Euro)</b>	<b>Additional information</b>
Finland	No data	No information received
Germany	No data	No information received
Hungary	4,102	No additional information
Netherlands	No data	No information received
Sweden	No data	No information received

	<b>Days</b>	<b>Outsourcing costs</b>	<b>Total administrative costs (Euro)</b>	<b>Additional information</b>
Finland			No data	No information received
Germany			No data	No information received
Hungary	11	3,600	4,102	No additional information
Netherlands			No data	No information received
Sweden			No data	No information received

Only one Member State provided quantitative estimates for the administrative burden for this option. Many Member States already implemented consistency checks between the inventory estimates and the verified emissions under the EU ETS (as indicated in the EC national inventory report) therefore

this additional requirement is already partially addressed by most Member States on a voluntary basis or due to recommendations from expert review teams under the UNFCCC and the additional administrative burden is therefore considered to be small. Hungary indicated a relatively small amount of days needed for this requirement which confirms with the qualitative assessment above. Therefore an additional amount of 10 days of work were calculated based on standard labour costs for each Member State and an outsourcing amount of 3,600 € as indicated by Hungary was assumed.

**Based on these assumptions the additional administrative costs at EU level are estimated at €144,800.**

**2) Proposed change: Member States' national inventory system (NIS) shall ensure access to data reported by installations and operators under other reporting instruments**

**3) Proposed change: Reporting the share of ETS emissions in the national inventory**

Finland	Germany	HU	Netherlands	Slovakia	Spain	Sweden	Comments
None (Yes, we have access to the data and use it in the inventory, some of the data directly, some for verification.)	300 days in first year and 80 days in subsequent years. (Plant specific information are confidential.)	None	10-100 days in first year and 0 days in subsequent years.	We were proposed the direct cost for software system in first year to €50.000	No data (ETS data is only used for some limited checking of ETS emissions results vs Inventory emissions estimates.)	12 days in first year and 2-7 days in subsequent years (very uncertain, These staff-days cover giving the staff access to the required ETS data. Editing and calculations are not included)	Data very uncertain

The two proposed changes under EU ETS will be discussed together due to their close nature.

**1. Proposed change:** MS shall report the amount of verified emissions reported by installations and operators under Directive 2009/29/EC in each relevant CRF source category of the national GHG inventory. MS should present a table with the verified emissions broken down to CRF categories (MS comments in grey).

Finland	Germany	Hungary	Netherlands	Slovakia	Spain	Sweden	Comments
First year 45 days, subsequent year 10 days (Because the EU ETS data is mostly more aggregated and allocated differently compared to the CRF used in the inventory, it is not currently possible to implement the proposal fully.  We have started a project in which we are looking more closely at this issue.)	100 days in first year and 50 days in subsequent years. (No, but we prepare a system to fit ETS data to CRF category.)	20 to 30 plus € 7.000 to € 10.000 for consulting costs first years, 10 to 15 subsequent year (We would need access to facility level data from the energy statistics provider to ensure consistency.)	80 days in first year and 5 days in subsequent years.	5 days in first year and 5 days in subsequent years (No, only the shares of energy sector and industrial processes sector.)	10 days in first year and 5 days in subsequent years	112-117 days in first year and 9-12 days in subsequent years	Data very uncertain

**Qualitative discussion**

Reporting the share of ETS emissions in the national inventory is a new element within the currently revised EU MM. The majority of member states commented that facility data are currently very

difficult to access due to confidentiality reasons. Three out of seven countries provided an estimate of additional staff days required. The values provided vary significantly between countries ranging from 0 to 300 additional staff days under the first change and 5 to 155 additional staff days under the second change in two tables above. Further clarification with the MS underlined these initial responses. Overall countries are very uncertain about the magnitude of the impact on the overall reporting under the MM of such a proposed change. The main concern is the confidentiality of the facility data.

Other issue raised that were raise are:

- EU ETS data are more aggregated and allocated differently compared to the CRF used in the inventory; it is not currently possible to implement the proposal fully.
- There is not yet an established clear legal base for the national inventory expert to receive data from the EU ETS installations.

Due to the lack of data it is not possible to accurately quantify the impact of the proposed changes related to EU ETS and it is certainly an area Oeko need to consider in their IA of the climate and energy package. For the purpose of the existing project it will be possible to give an indicative estimate using surrogate data together with the MS estimates. The number of additional staff days will be closely linked to the number of facilities covered in the EU ETS for each country. The administrative structure of the national inventory system and the national coordination of the EU ETS will also play a role but can not be taken into account at this stage due to lack of information. We propose to split the countries that provided an estimate into groups based on their CO<sub>2</sub> emissions covered under EU ETS (excluding Aviation) using the latest PRIMES data. For example, Germany indicates that it would take an additional 300 staff days to incorporate EU ETS data into their NIS whereas Hungary already uses EU ETS data. The PRIMES data show that 434 Mt of Germany's total CO<sub>2</sub> emissions are covered within the EU ETS in 2005. Hungary, Netherlands and Sweden captured 25 Mt, 85 Mt and 17 Mt CO<sub>2</sub> under EU ETS respectively in 2005. It is highly unlikely that Member States will require no additional staff costs incorporating EU ETS data into their NIS and thus we will exclude the Hungarian estimate of 0.

For the two changes related to EU ETS emissions we propose to split the MS into three groups based on the amount of CO<sub>2</sub> emissions per MS covered under EU ETS as an indication for the number of facilities within each MS. We propose to use the average number of days of additional staff time provided by Germany, Sweden and Netherlands as the best fit for the MS for the following groups:

- Group 1: We will apply the same number of additional staff days as Sweden (114.5 + 12 in the first year and 10.5 + 4.5 in subsequent years) to all countries with EU ETS CO<sub>2</sub> emissions of less than 50 Mt based on the 2005 PRIMES value (Finland, Hungary, Slovakia, Sweden).
- Group 2: We will apply the same number of additional staff days as the Netherlands (55 + 80 in the first year and 0 + 5 in subsequent years) to all countries with EU ETS CO<sub>2</sub> emissions between 50 and 100 Mt based on the 2005 PRIMES value.
- Group 3: We will apply the same number of additional staff days as Germany (300 in the first year and 80 in subsequent years) to all countries with EU ETS CO<sub>2</sub> emissions above 100 Mt based on the 2005 PRIMES value.

Group 1, first year:  $126.5 \times 17 \times 126.43^{23} = \mathbf{€271,888.00}$

Group 1, subs. years:  $15 \times 17 \times 126.43 = \mathbf{€32,240.00}$

Group 2, first year:  $135 \times 4 \times 98.44^{24} = \mathbf{€53,158.00}$

Group 2, subs. years:  $5 \times 4 \times 98.44 = \mathbf{€1,969.00}$

Group 3, first year:  $400 \times 6 \times 180.00^{25} = \mathbf{€432,000.00}$

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<sup>23</sup> This is the average daily cost of labour of the 17 Member States falling within this group of countries (Malta, Luxembourg, Latvia, Cyprus, Lithuania, Slovenia, Estonia, Sweden, Ireland, Slovakia, Hungary, Denmark, Austria, Finland, Portugal, Bulgaria and Belgium).

<sup>24</sup> This is the average daily cost of labour of the 4 Member States falling within this group of countries (Greece, Romania, Czech Republic and Netherlands).

<sup>25</sup> This is the average daily cost of labour of the 6 Member States falling within this group of countries (France, Spain, Poland, Italy, United Kingdom and Germany).

Group 3, subs. years:  $130 \times 6 \times 180.00 = \mathbf{€140,400.00}$

**Total EU-27, first year: €757,046.00<sup>26</sup>**

**Total EU-27, subsequent years: €174,609.00**

It has to be noticed that software system development and consulting costs for a total of around € 58,500 (software system development costs for €50,000 reported by Slovakia and consulting costs for €7,000-10,000 reported by Hungary) have been separated out and not included in the calculation of the administrative burden above.

We appreciate that the proposed grouping of member States might over or underestimate the costs in some countries but we emphasize that it is only an indicative estimate showing the likely administrative burden these two changes might have.

## **C.9. Enhance reporting by Member States based on lessons learned**

### ***1) Proposed change: Establishment of a national system for reporting projections, and policies and measures***

The table below provides the results of the estimation of administrative costs for the establishment of a national system for the reporting on projections and policies and measures. These administrative costs mainly occur for the activities to establish the system such as the drafting of memoranda of understandings, documents describing the systems and meetings within the administration to establish a more formal agreement to prepare the tasks involved and for a clear definition of responsibilities and costs of such tasks within a Member State. The costs are one-off costs that do no longer occur once the system is established, but the clarification achieved will subsequently reduce the permanent administrative burden as general decisions taken will strongly support the subsequent regular work on projections and policies and measures in Member States.

Specific Proposed Change	Types of required action due to change	Information obligation	Central Scenario	
			Costs (€)	Days (per year/MS)
Enlarge national system to include reporting on projections, policies and measures	Training members and employees about the information obligations	Cooperation with audits & inspection by public authorities	219,894	48.8
	Submitting the information to the relevant authority		73,298	16.3
<b>Total EU-27</b>			293,192	

### ***2) Proposed change: Report projections separately for the ETS-sector and the non-ETS sector***

This proposed change is estimated to cause an administrative burden in selected MS as shown in the following table:

	Days	Outsourcing costs	Total administrative costs (Euro)	Additional information
Finland	5		1,022	No additional information

<sup>26</sup> Resulting from the sum of Group 1, Group 2 and Group 3.

	Days	Outsourcing costs	Total administrative costs (Euro)	Additional information
Germany			No data	No information received, projection estimates are already separated
Hungary	6	20,000	20,502	Drafting the report – this exercise would be outsourced. Each activity would require 2 people for 1 day for consultations etc
Netherlands	35		8,552	Total time: 35 days, not all separate groups in statistics
Sweden			No Data	No information received

For the estimation of total costs at EU-level, the data provided by Hungary were used as typical for the costs for new MS (6 days plus consultancy costs)

MS with advanced reporting on projections such as Germany have already implemented the separation of projections into the two separate areas. For those MS 5 additional days were estimated. For the remaining MS the Dutch indication of 35 days were used for the implementation of the new requirement. The total administrative cost at EU-27 based on this approach was estimated at **€300,500** when the requirement is introduced. For the subsequent years, an average of 5.5 days was used in the calculation as indicated by FI and DE that have implemented such reporting. Therefore follow up costs in subsequent years at EU27 were estimated at €26,000.

### ***3) Proposed change: Report policies and measures separately for the ETS-sector and the non-ETS sector***

This proposed change is estimated to cause an administrative burden in selected MS as shown in the following table:

	Days	Outsourcing costs	Total administrative costs (Euro)	Additional information
Finland	3.5		860	No additional information
Germany	4		1,187	No additional information
Hungary	6	10,500	11,107	Drafting the report – this exercise would be outsourced. Each activity would require 2 people for 1 day for consultations etc
Netherlands	29		7,308	
Sweden			No Data	No information received

The separation of policies and measures into those targeting the ETS sector and those targeting the non-ETS sector or both, is a rather straightforward exercise that does not include additional complicated calculation steps, but mainly some new summation. Therefore the Dutch estimates were discarded as it seems to be an outlier and to take into account some additional work beyond the separation. The average days reported by FI, DE and HU (4.5 days) were used to calculate an EU27 estimate of **€38,000** per reporting cycle. The Hungarian indication of outsourcing costs for drafting the report were taken as exceptional as in general the national systems should ensure that authorities can prepare the relevant reports.

### ***4) Proposed change: annual reporting on GHG projections, policies and measures***

GHG emission projections are mostly prepared in a cycle of approximately 4-5 years based on new energy projections, new agricultural projections, etc). This is a usually very resource intensive task. Apart from the various projects for calculating the projections different ministries/stakeholders at various stages have to be involved, firstly related to the basic projections (energy balance, agriculture), then for the specific GHG emissions projections.

Even if underlying projections are available the reporting of emission projections is resource intensive because there is always new/more detailed information available/mistakes to be corrected etc. Therefore, always a process of coordination and final approval of the projections, sometimes also involvement of ministries/stakeholders, etc (“national system”) is needed before reporting. Therefore it was assumed that annual reporting needs similar resources per year than biannual reporting, even if the underlying projections are not updated.

The total costs for the preparation of GHG projections were not requested from MS and only data from DE were available where a 3 year project for the update of GHG emission projection is outsourced for €440,300. For the related coordination and reporting 200 days for different parts of the administration were assumed leading to total costs of €510,000 for one projection cycle of 4 years and annual costs of €127,000 for one country. For the additional reporting an amount of 20 days was assumed as individual steps of the reporting (e.g. filling of reporting format) were already estimated in option 1 and option 2. For Germany this assumption would lead to additional costs of €6,000, which is 4.7% of the actual costs related to projections.

If additional 20 days for the annual reporting are assumed for all MS, this would lead to additional costs for EU27 of **€95,000**.

**5) Proposed change: Further specify type of information/data to be reported, and/or relevant formats**

Types of required action due to change	Central Scenario
	Costs (€)
Familiarising with the information obligation	65,080
Producing new data	113,133
Adjusting existing data	110,028
Submitting the information to the relevant authority	29,593
Training members and employees about the information obligations	3,383
Retrieving relevant information from existing data	163,849
Filling forms and tables	17,670
<b>Total EU-27</b>	<b>502,735</b>

**Summary table**

Code	Specific Proposed Change	Types of required action due to change	Information obligation	Central Scenario	
				Costs (€)	Days (per year/MS)
<b>Preparation of National Inventory Report (NIR)</b>					
1 A 1	Report NIR in UNFCCC format	Familiarising with the information obligation	Submission of (recurring) reports	13,983	3.1
		Adjusting existing data		41,949	9.3
1 A 2	Specify means of submission of information on historical time series of emissions	Adjusting existing data	Submission of (recurring) reports	no additional costs/days	
1 A 3	MS to list the major changes of the NIR submitted on the 15th January to accompany the final NIR submitted to the Commission on the 15th	Retrieving relevant information from existing data	Submission of (recurring) reports	6,766	1.5



Code	Specific Proposed Change	Types of required action due to change	Information obligation	Central Scenario	
				Costs (€)	Days (per year/MS)
	March				
1 A 4	Report explanations for changes in emissions in successive years	Retrieving relevant information from existing data	Submission of (recurring) reports	5,142	1.1
1 A 5	Report responses to the UNFCCC reviews in a harmonized way	Retrieving relevant information from existing data	Submission of (recurring) reports	1,353	0.3
		Filling forms and tables		451	0.1
<b>Reporting on LULUCF accounting (MM Art. 3(1)(d), IP Art. 3)</b>					
1 A 6	Make LULUCF questionnaire submission mandatory	Familiarising with the information obligation		1,883	0.4
		Retrieving relevant information from existing data		3,766	0.9
		Filling out forms and tables		1,883	0.4
<b>Projections (MM Art. 3(2)(b))</b>					
1 A 7	Report using the reporting template for projections	Familiarising with the information obligation	Submission of (recurring) reports	7,781	1.7
		Retrieving relevant information from existing data		15,562	3.5
		Filling out forms and tables		7,781	1.7
1 A 8	Submit methodology report on projections	Retrieving relevant information from existing data	Submission of (recurring) reports	54,128	12.0
1 A 9	Prepare modelling scenarios using harmonised parameters for fuel and carbon prices	Familiarising with the information obligation	Submission of (recurring) reports	-2,706	-0.6
		Adjusting existing data		-3,789	-0.8
		Producing new data		-4,330	-1.0
1 A 10	Carry out a sensitivity analysis of projections	Adjusting existing data	Submission of (recurring) reports	26,688	5.9
		Producing new data		26,688	5.9
<b>Annual and projected indicators and parameters</b>					

Code	Specific Proposed Change	Types of required action due to change	Information obligation	Central Scenario	
				Costs (€)	Days (per year/MS)
1 A 11	Include new annual and projected emission indicators (e.g., on F-gas regulation)	Familiarising with the information obligation	Non labelling information for third parties	8,119	1.8
		Producing new data		24,357	5.4
1 A 12	Delete those priority/supplementary annual indicators that can be calculated from Eurostat data and emissions reported in the CRF.	Adjusting existing data	Submission of (recurring) reports	-7,142	-1.6
1 A 13	Delete selected mandatory and all voluntary projection parameters	Adjusting existing data	Submission of (recurring) reports	-7,330	-1.6
1 A 14	Delete those priority/supplementary projections indicators that can be calculated from Eurostat data or other data sources.	Adjusting existing data	Submission of (recurring) reports	-6,766	-1.5
<b><i>Policies and measures (MM Art. 3(2)(a))</i></b>					
1 A 15	Report on policies and measures using the reporting template	Familiarising with the information obligation	Submission of (recurring) reports	7,555	1.7
		Retrieving relevant information from existing data		15,111	3.4
		Filling forms and tables		7,555	1.7
1 A 16	Submit methodology report on ex-ante quantification of policies and measures	Retrieving relevant information from existing data	Non labelling information for third parties	62,021	13.8

### National inventory report (NIR) and Responses to UNFCCC review

**Rationale:** The UNFCCC requires the submission of the European Union's GHG inventory report submission by the 15<sup>th</sup> April each year. The EU inventory compilers must process inventory data from all 27 Member States in a short timeframe, based on preliminary inventory submissions by the 15<sup>th</sup> January and complete submissions by the 15<sup>th</sup> March. Currently some elements of the EU's inventory are only compiled for the 27 May resubmission.

**Proposals:** The proposed changes are covering several aspects, e.g. MS should report in accordance with the **UNFCCC annotated outline of the NIR** and also report the responses to the **UNFCCC review** in a harmonized way, for example in a table listing all recommendations from the Expert Review Teams and the ways in which the recommendations were addressed. In addition, MS should report the most important reasons for emission changes between year x-2 and x-3.

Member States proposed in the August workshop that they could provide a list of the **major changes** of the NIR to accompany the final NIR submitted to the Commission, which would enable the EU inventory compilers to more quickly and easily identify changes between the 15<sup>th</sup> January and 15<sup>th</sup> March submissions. Also, in the 15<sup>th</sup> January submission on NIR elements Member State could be required to report on areas where **methodologies** will be updated in the final NIR submission by the 15<sup>th</sup> March.

- 1) **Proposed change:** MS shall report in accordance with the UNFCCC annotated outline of the NIR (MS comments added in grey)

Finland	Germany	Hungary	Netherlands	Slovakia	Spain	Sweden	Comments
Approx 10 days in first year, 1-2 days in subsequent years (Yes, with some minor exemptions)	None	15 days in first year	None	30 days in first year and 5 days in subsequent years	15 days in first year and 5 days in subsequent years	15 extra days for 2011 submission	average estimate: 12,4 days in first year and 1.64 days in subsequent year per MS

The estimated level of administrative burden is relatively low and is broadly consistent across all MS, except Slovakia whose costs are higher. We consider the estimates to have a good level of accuracy given that most MS already report in accordance with the annotated outline – only small improvements are required to ensure full accordance, except Slovakia whose current reporting is less in line with the outline:

Some general comments were also made on this proposed change by the MS, e.g. “The guidance on reporting of KP<sup>27</sup> information is not always clear and in some parts incoherent” and that the LULUCF<sup>28</sup> parts in particular need more work.

- 2) **Proposed change:** MS to report Greenhouse gas emissions by sources and removals by sinks, for the complete time series 1990-year n –2 as CRF Excel sheets and Xml files.

Finland	Germany	Hungary	Netherlands	Slovakia	Spain	Sweden	Comments
None	None	None	None	None	None	None	Average estimate: 0 days per MS

All EU27 MS already submit CRF in xls and xml files. We assume no additional staff day per MS will be required:

- 3) **Proposed change:** MS to include the most important reasons for emission changes between year x-2 and x-3 (MS comments added in grey)

Finland	Germany	Hungary	Netherlands	Slovakia	Spain	Sweden	Comments

<sup>27</sup> Kyoto Protocol

<sup>28</sup> Land Use, Land-Use Change and Forestry

None	None (Incl. in NIR preparation)	None	None	3 days in first year and 2 days in subsequent years	5 days in first year and 3 days in subsequent years	None	Average estimate: 1.14 days per MS in the first year and 0.7 days per MS in subsequent years.
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Most of the MS reported no additional administrative burden associated with this change. Spain already describes changes throughout the NIR; the additional cost reported is to prepare a short list. The additional cost for Slovakia is not explained since they already reports on this so there should not be an additional cost:

- 4) **Proposed change:** MS to list the major changes of the NIR submitted on the 15<sup>th</sup> January to accompany the final NIR submitted to the Commission on the 15<sup>th</sup> March (MS comments added in grey)

Finland	Germany	Hungary	Netherlands	Slovakia	Spain	Sweden	Comments
Approx 1-2 days in first year, 1-2 days in subsequent years (Not in the IIR)	None	4 days in first year, 2 days on subsequent years.	None	1 day in first year and subsequent years	4 days in first year and 2 days in subsequent years	None	average estimate: 1.5 days in first years and 0.9 years in subsequent years per MS

Hungary's report focuses on changes from x-3 to x-2, additional effort required to look at Jan to March changes. While Finland reports major changes on the cover note of the submission, they are not reported in the NIR so there is a small amount of additional effort. The Netherlands indicate that no methodological changes would occur after January. Similarly Sweden indicate that they normally only submit in January.

#### Qualitative discussion covering the proposed changes 1 to 4

The impact of the proposed changes related to the **NIR format and content** are assumed to be minor given that all EU 27 member countries already have to provide the information under the existing MM. The proposed changes are predominately related to changes in the format or templates currently used to submit the information. The responses provided by MS confirm this assumption. Overall, all seven countries already partly follow the proposed changes. However, a small amount of additional time is needed to fully implement the changes to the NIR format and content and UNFCCC responses. All countries reported a single value for the estimated burden associated with the proposed changes indicating a reasonable degree of certainty in the estimates and a good understating of the question.

For the purposes of the impact assessment we suggest to use the average estimate of all provided values (1.5 for the first year and 0.9 for subsequent years) as the best fit for all EU27 countries for these proposed changes.

The average estimates by proposed change are listed in the right hand column in the four tables above. The reported numbers of additional staff days are evenly spread across the seven member states and don't show any particular trends in EU15 or EU12 member states. We do however suggest using an additional high and low scenario to show the range of values provided.

- 5) **Proposed change:** MS shall report the responses to the UNFCCC review in a harmonised way, listing all recommendations from the Expert Review Teams (ERTs) and the ways in which the recommendations were addressed

Finland	Germany	Hungary	Netherlands	Slovakia	Spain	Sweden	Comments
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None	None	None	None	10 days in first year and 10 days in subsequent years	15 days in first year and 8 days in subsequent years	2 days in first year and 1 day in subsequent years	Varied
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### Qualitative discussion

Spain's estimate of additional effort appears high given that Spain provided the EC with a report on the 2010 Inventory on the recommendations of ERTs and how these recommendations had been addressed. Presumably little additional work would be required to put into a standard format/template. Sweden's additional cost is for reporting details of all recommendations (currently not all reported). Slovakia's estimates also appear high given that there is a table in chapter 10 with the recommendations from the expert review and Slovakia's response.

Overall, the responses related to this proposed change, '**Responses to UNFCCC review**', vary amongst the member states. Countries commented that the change in format is not clearly defined by the term 'harmonised way'. According to the existing reporting guidelines Member States already have to report 'any responses to the UNFCCC review of previous national inventories received since the submission of the previous national inventory and information on any recalculations performed'. Thus, the impact of the proposed changes is minor and is predominately related to re-formatting of exiting information. The high number of additional staff days provided by Spain and Slovakia are very conservative estimates and quite likely overestimate the additional time needed to comply with the proposed change.

We propose to exclude Spain and Slovakia, as outliers. The average of data provided is 0.4 additional staff days. For the subsequent years we divide 1 day by 5, resulting in 0.2 additional staff days.

For the high case scenarios, we applied the same methodology:  $(0+0+0+0+2+15+10)/7= 3.86$  for the first year and  $(0+0+0+0+1+8+10)/7= 2.71$  for the subsequent years.

### Annual indicators

**Rationale:** The rationale behind the proposed changes to the annual indicators is related to Annex II of the Implementation Provision that sets out the information to be reported on annual (historical) indicators. The purpose of the requirement was to establish a legal basis for data reported on a voluntary basis to the Eurostat questionnaires. A new Regulation 1099/2008 on energy statistics<sup>29</sup> now provides a legal obligation for reporting of these energy balance data, hence some of the denominators used in the indicators could be taken from Eurostat data, while the emissions data reported by MS in the CRF could be used for some of the numerators. Member States have indicated their preference for the indicators to be streamlined to reduce the reporting burden.

**Proposal:** It is proposed to delete those indicators that can be calculated from Eurostat data and emissions reported in the CRF. It is further proposed to include additional indicators, especially in relation to non-ETS emissions and to the emissions covered by the Effort Sharing Decision.

- 1) **Proposed change:** Delete those priority/supplementary indicators that can be calculated from Eurostat data and emissions reported in the CRF.

Finland	Germany	Hungary	Netherlands	Slovakia	Spain	Sweden	Comments
Between 2 to 3 days <b>saved</b> in first and subsequent	None	2 days <b>saved</b> in first and subseque	5 days <b>saved</b> in first and subsequent years	1 day of <b>additional effort</b> in first years and 2 days	None	None	aver age day saved is 1.58

<sup>29</sup> OJ L 304, 14.11.2008, p.1.

years		nt years		in subsequent years			
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### Qualitative discussion

The proposed change indicates a reduction in scope of the existing reporting requirements which clearly suggests a reduction in staff time needed to compile the annual indicators required under the existing MM. However only 2 MS reported a reduction in staff time. One country reported an increase in staff days. The comments provided by member states indicate that the reduction in scope is not sufficiently explained. The MS do not know the full list of additional indicators proposed under this change. One MS voiced some concern, indicating that ‘the need to report the remaining indicators and the proposed new ones should be carefully evaluated. Only indicators which are required for a specific purpose should be reported. Consistency with inventory and projection indicators should also be considered’. The provided estimates on staff days are very conservative and quite likely overestimate the actual administrative burden because MS do not know the amount of additional data that will be required for the new indicators. Under the existing reporting obligation all member states have to provide all of the priority, additional and supplementary indicators. Hence it can be assumed that no Member States will have to invest in additional staff days to comply with the proposed change. The deletion of certain indicators does not necessarily have to result in a reduction in staff days given that member states have to collect the data for the remaining indicators which can be subsets of larger data sets. Three out of 7 MS reported that they expect to save between 2 to 5 days and 2 countries indicated no savings.

For the impact assessment we suggest to use the average estimate of all values provided (-1.58 days) as the best estimate for each EU27 country. We will however exclude the values provided by member states that show an increase in staff days:

- 2) **Proposed change:** Include indicators on: F-gas regulation: amount filled into new manufactured products (Fire protection systems, Windows, Shoes, Tyres, Magnesium casting (MS comments in grey))

Finland	Germany	Hungary	Netherlands	Slovakia	Spain	Sweden	Comments
NA	unknown	5 days in first and 1 day in subsequent years	0 NL currently do not have the data. Foresee confidentiality issues.	10 days in first years and 5 days in subsequent years	20 days in first years and 10 days in subsequent years	1 day in first years and subsequent years	

### Qualitative discussion

Under this change it is also proposed to include additional indicators on non-ETS emissions (e.g. F gases) and emissions covered by the Effort Sharing Decision. Two Member States commented that it would be difficult to provide data either due to lack of time series data or confidentiality and data access issues. The estimates provided by Member States are within the range of 5 to 30. The scope and data needed for the additional indicators is not explained in enough detailed to enable countries to provide a realistic estimate. Slovakia commented that the information required under the new indicator is partly provided under other reporting mechanism such as the F gas regulation. However, the data availability will differ between member states depending on the data collections mechanism in each country. Thus, it is more difficult to select a specific value from the numbers provided.

We propose to use the average estimate of all values provided (5 days, 10 days, 20 days, 0 days, 1 days) as the best fit for each EU27 MS. In addition, we will give a high and low scenario using the

highest and lowest values to show the range of the data provided to reflect the uncertainty in the estimates:

Central estimate: 7.2 days first year, 3.4 subsequent year

Low estimate: 0.5 days first year, 0.5 subsequent year

High estimate: 15 days first year, 7.5 subsequent year

### Projections (MM Art. 3(2)(b))

The proposed changes relate to the Excel Reporting template for projections, the sectoral disaggregation, timeframe for projections and sensitivity analysis.

**Rationale:** For the reporting of projections a number of changes have been introduced through the work of WG 2 under the Climate Change Committee and these changes should be formally implemented in the revised decisions. Currently there is no guidance with regard to explanations of the projection methodologies or the projected trends. If separate methodological guidance for projections is agreed, the Monitoring Mechanism Decision and implementing provisions can be very general in establishing the requirement to apply the methodological guidance.

**Proposals:** The legal document should include the Excel Reporting template for projections as an annex to the implementing provisions. The reporting years in the implementing provisions should be generalised. The Excel Reporting template results in a harmonized sectoral and source category structure which is essential for the aggregation of Member States' projections at EU level.

- 1) Proposed change - MS shall report information on projections in the “Excel Reporting template for projections” (MS comments in grey)**

Finland	DE	Hungary	Netherlands	Slovakia	Spain	SE	comment
3-4 days first year then 2 days subsequent years. The Excel reporting template used in the 2009 reporting was very elaborate. It covered only partially the required information but had a lot more extra questions in addition to that (these were in most cases marked as voluntary). There is a strong need to update the template according to the changes made to the MM and remove or mark clearly the voluntary parts. Some inputs could be taken directly from the information and reports related to various directives and reporting under article 3(1) (inventories).	No response	8 days first year then 5 days subsequent years.	20 days first year then no days for subsequent years	Commented that they already report using the template so additional days not required.	Commented that they already report using the template so additional days not required.	No response	Most MS use the template at present but the degree of completion is variable so additional effort required to comply fully also varies. This would also be affected by the complexity of a revised template.

### Qualitative discussion

Under the existing MM, many MS already voluntarily report their biennial (every 2 years) projections using the ‘Excel Reporting template for projections’. The mixture in the quality and completeness of the current reporting by MS under the MM support the argument provided in the response to the questionnaire. Many of the MS find the reporting template complex and time consuming. Therefore, it is considered that a simplification of the reporting template would improve the completeness and quality of the submission of this reporting template under the existing MM and that there is a need to do so. A way to simplify the template could be the use of automated systems, for example calculating

projection indicators automatically from projected emissions and indicators and deleting some of the voluntary reporting aspects, as suggested in Oeko 2010<sup>30</sup>.

The use of the 'Excel Reporting template for projections' by all MS would ensure that all the submissions are in a consistent format. This would simplify the further use of the reported data, for example the compilation of the EU27 projections. In addition, it will also increase the transparency of the reported data and reduce room for error or misinterpretation.

The administrative burden is only related to the time required to complete the template, not to produce the projections themselves. There is no difference between the proposed change and the current requirement in terms of the amount of data that has to be reported. Therefore, assuming that the mandatory reporting requirements are kept constant in the revised MM, the administrative burden of the proposed change will be small as MS purely have to report existing data in a different format. However, the cost of the proposed change will significantly rise if the level of detail required in the reporting template will change, for example the level of disaggregated CRF projections reporting. If the complexity of the template is reduced, the additional number of days required would also reduce accordingly.

The estimates provided by the Netherlands in the first year is very high but important to consider as their submission using the reporting template was very incomplete in the 2009 reporting round.

We propose to use the average estimate of 6.9 staff days per MS in the first year (average of 8 days and 20 days for HU and NL and 4 days for other MS) then 4 days per MS in subsequent years. The reported numbers of additional staff days varies greatly across the 7 member states depending on whether they already comply with this proposed change. We use the assumption that the above 7 MS present a fair representative of the EU27's current over compliance. We do however suggest using a high (5 additional days per MS) and low (3 additional days per MS) scenario in subsequent years to show the range in values provided:

- 2) **Proposed Change-** MS shall submit separate information describing the projection methodologies as well as data and assumptions used (MS comments in grey)

Finland	Germany	Hungary	Netherlands	Slovakia	Spain	SE	Comments
First year 24 days then 16-18 days subsequently. The proposed report structure for information on projections contains additional elements compared to the information we provide currently. When there are changes to the methods and the assumptions, they have to be described anew.	NA	10 days first year then 8 days in subsequent years.	2-15 days first year then 1 day subsequent years. Depending on the detail required, which are likely to take place	10 days first year then 10 days subsequent years	NA	NA	Some MS already submit a projections methodology report and include some information in their NC. Relatively high estimates reported by MS of similar order of magnitude with the exception of the lower range for NL.

## Qualitative discussion

<sup>30</sup> 'Assistance with the Revision of the Monitoring Mechanism Decision report', (Oeko 2010)



All MS report their emission projections in either their biennial (every 2 years) EUMM submission or in their National Communication. Therefore it is possible to state that all MS have a methodology to compile projections. Some MS already provide their methodology with the MM or in their NC, although the level of detail varies significantly. Oeko (2010) recommends developing a reporting guideline. Such a guideline developed for the projections reporting, similar to the 'the UNFCCC reporting guidelines for annual inventories' would improve the transparency of the projections modelling used by MS significantly.

In the future, the projection methodology reports could be used to better understand the MS projections, for example, to get a better understanding of the policies considered and whether they reflect the economic downturn. This would enable the EC to obtain a clearer picture of the projected emissions for each MS and the EU-27 as a whole. A better understanding of the projection methodologies currently used by the MS may enable the Commission to better streamline these methodologies when developing such a guideline.

The cost of this proposed change will be largely driven by the complexity of the current projections methodology used by each MS and the extent to which the method is already described for other reporting purposes (voluntary or mandatory). This is in turn partly dependent on the number of sources contributing to the GHG emissions. The higher the number of sources contributing to the total GHG the more complex their projections methodology is likely to be, increasing the administrative burden.

It is possible to conclude from the responses that a substantial number of days would be required by the MS to compile such a report. As the Netherlands indicates, this will be highly dependent on the detail required.

It is difficult to assess which estimate, given by the MS is more realistic. However, the estimates do not vary significantly from MS to MS, indicating a common understanding of the scope of the impact. It is possible to hypothesise that the high Dutch value is more realistic compared to the lower number of additional days required by other MS. One day for subsequent years reported by the Netherlands is also very low. Therefore we propose to use the estimates provided by Hungary and Slovakia for estimating the number of days for subsequent years. Finland's response is considered to be an overestimate, however it should be included in the final cost estimate for the EU27 since some MS will have a more complex methodology and may take longer than others to compile such a report and including a higher estimate would ensure this is reflected.

The analysis of the baseline shows that the majority of these 7 MS already discuss their projections methodology either in a projection methodology report submitted with the biennial (every 2 years) EUMM or within their National Communication submission.

We propose to use the average estimate of 12 staff days per MS (24 days Finland and 10 days for other MS) then 10 staff days per MS in subsequent years (17 days Finland and 9 days for other MS). We do however suggest using a high (11 additional staff days per MS using 18 days Finland and 10 days for other MS) and low (9 additional staff days per MS using 16 days Finland and 8 days for other MS) scenario in subsequent years to show the range in values provided:

- 3) Proposed change** - MS shall report the varying GDP, fuel price and carbon price assumption used in the sensitivity analysis and shall perform sensitivity analysis at sectoral level. In the energy sector energy demand should be varied if it is an exogenous parameter.

Finland	DE	Hungary	Netherlands	Slovakia	Spain	SE	comment
Consulting costs from €10000 to €50000 for first and subsequent years. It is necessary to provide guidance for the sensitivity analysis e.g. how to divide GDP changes to different sectors etc. The uniformity of the starting points of the sensitivity analysis in different sectors and their coordination in the national level takes plenty of resources.	NA	10 staff days in first year then 8 staff days in subsequent years.	1-40 days for first and subsequent years. If you use what you already have is 1 day more. If the commission require new data to be collected it is up to 40.	5 in the first and subsequent years	NA	NA	

Under the current MM, IP Article 10 (2) states that ‘Member States shall undertake a sensitivity analysis of their projections, focused on the key input variables in their projection models.’ However, a list of key input variables is not given, although fuel price, energy demand and GDP are mandatory parameters. As carbon price is not currently a mandatory parameter to be reported, some MS may not use carbon price to compile their projections.

A formal requirement for sensitivity analysis varying these parameters to be carried out will enable the EC to grasp a better understanding of how the parameters influence the outcome of the projections. In addition, it may provide a clearer picture of how the emissions projections may change in the event of extreme circumstances, such as the financial crisis that has just occurred, as we have seen that the biennial (every 2 years) projections currently reported does not capture the emissions path in such event very well, and one of the reasons to is as there is no sensitivity analysis reported.

An average figure for the EU27 is calculated using Hungary’s, Spain’s and the average of Netherlands’ estimates. The high estimate is calculated using the same methodology but based on the Netherlands’ estimate of 40 days and the low estimate is based on the Netherlands’ estimate of 1 day.

We propose to use the average estimate of 11.83 staff days per MS then 8.38 staff days per MS in subsequent years. Please not that as Finland reported consulting costs in the first and subsequent years for €10,000 to €50,000, these costs have been separated out and not included in the calculation of the average. We do however suggest using a high and low (17.67 and 4.67 additional staff days per MS) scenario in subsequent years to show the range in the values provided:

**4) Proposed change - Proposal to delete all of the voluntary projection parameters in point 2 of IP Annex IV (MS comments in grey)**

Finland	DE	Hungary	Netherlands	Slovakia	ES	SE	comments
2 days saved during first year then the same in subsequent years. We have estimated the savings from the reduced number of mandatory parameters. We have reported all mandatory parameters, except the transport and building sector parameters and some voluntary information related to mandatory parameters (e.g. historic values). We have not reported the parameters under heading Point 2	NA	No changes. We do report all the mandatory projections parameters at the moment.	2-3 days in first year then 2 days in subsequent years (no negative sign but considered to be a saving). They currently	2 days saved in first and subsequent years	NA	NA	Consistent response from MS estimating a saving of 2-3 days from deleting the voluntary projection parameters.

Parameters. Recommended. All mandatory parameters for agriculture are reported. Not all voluntary reported. New parameters for N-input are not currently reported. There is a need to differentiate various solid fuels (e.g. coal, peat,..).			report not all parameters but what is available.				
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### Qualitative discussion

As previously highlighted, one of the reasons the current reporting Excel template is too complex due to the high number of voluntary indicators. In many cases the voluntary parameters are not filled out by the MS. Deleting the voluntary indicators from the EUMM may encourage MS to complete the mandatory parameters.

The number of days saved will depend on the current reporting of the voluntary projection parameters. If it is assumed that all voluntary parameters are currently reported then the number of days saved would be significant. This is not a feasible assumption since the reporting of these parameters is only 'voluntary' and not a current requirement. Therefore, it is a realistic assumption to use the average of all estimates provided to calculate the impact on each EU27 MS. The consistency between the estimates reported by the MS supports the use of this methodology.

We propose to use the average estimate of 0.38 staff days per MS saved (an average of the reported values) for the first years then 0.5 days saved per MS for all subsequent years (as an average of the reported values). The reported numbers of additional staff days do not vary greatly across the 7 member states:

- 5) **Proposed change** - MS shall report harmonised parameters for fuel prices and carbon prices and harmonised assumptions. The timeframe for projected parameters would be the same as for projections. (MS comments in grey)

Finland	Germany	Hungary	Netherlands	Slovakia	Spain	Sweden	comments
No change	20 staff days saved in first and subsequent years. Currently the procedure to arrive at energy/carbon price estimations is time consuming. Harmonised values provided by the commission would be appreciated.	8 days in first year then 6 days in subsequent years.	0-50 days. On prices we use various international sources like IEA and DOE, deutsche bank, etc. No problem to use EU data if needed. An extra effort would be to annually update projections with these annually changing data. We now do basic projections only once in 5 years and an occasional update in between.	No change	NA	NA	Significant range in the reported number of days. This is likely to be due to differences in their current projections methodology and procedure.

### Qualitative discussion

The project on projection methodologies noted that it is rather difficult to compare the fuel prices used in GHG projections across Member States because units differ widely; some prices are given in US dollars and others in Euro with different reference years and assumed exchange rates are rarely given. In addition to this, the reported values for the common assumptions (fuel prices, GDP) differ widely across MS (Oeko 2010). The harmonisation of such parameters would ensure consistency of

assumptions across all MS making their projections more comparable. The current reporting requirement does not include the reporting of carbon price assumptions used in the economic models used to calculate projections. As a consequence only a few MS report a value for this assumption.

In the ‘workshop on the Revision of the EC Monitoring Mechanism Decision and Implementing Provisions’, the participants proposed that GDP assumptions should come from national sources and should not be harmonised. For the fuel prices and carbon prices they suggested developing a procedure for how common assumptions are established (Oeko 2010).

If, as suggested, the assumptions to be used for the reporting of the projections will be determined outside of the MS control then the number of additional days required by the MS to include this figure should be relatively consistent across all the MS. Extra number of days may arise for MS that do not currently use the carbon price in their modelling as a parameter. The baseline analysis shows that not many MS report the carbon price assumption used in the projections, although this does not necessarily mean that they do not use the carbon price as a projection parameter.

Germany’s response suggests that harmonised values provided by the commission would reduce the time consuming process required for estimating the energy and carbon price estimates, and assist MS facing problems with unit conversions. The figure provided by Slovakia and Finland of ‘no change’ seem realistic for this proposed change. The estimate provided by the Netherlands can be considered an exception because they currently only run a set of projections every 5 years. For the Netherlands the figure of 0 days is used since this proposed change is not indicating that the projections need to be run more frequently than currently requested. They also indicate that it would not be a problem to use EU data if needed. Hungary’s estimate is included in the average to account for the fact that some MS might not currently use the carbon price and may be required to change their methodology to include the parameter.

We propose to use the average estimate of 2.4 staff days saved per MS<sup>31</sup> in the first year and then 2.8 days saved per MS in subsequent years<sup>32</sup>. Many MS report no change in the days required or saved. The provided estimates are very similar; therefore a low and high estimate is not calculated for this proposed change:

6) **Proposed change-** Delete those priority/supplementary indicators that can be calculated from Eurostat data or other data sources (MS comments in grey)

Finland	Germany	Hungary	Netherlands	SK	ES	SE	comments
We are in favour of deleting all projection indicators. Perhaps it is possible in the future for EEA and/or Commission to calculate relevant indicators from the projections and other information reported by the MS.	As stated above We currently only report the parameters that are readily available as modelling input or results. We do not anticipate the deletion of indicators that can be calculated from Eurostat data or other data sources to have a significant impact on the workload. Nevertheless, we support a decision to get as many parameters from already available sources.	2 days saved in first year then 1 day saved in subsequent years. At the moment, transport indicators take up bulk of the time required.	No specific time consuming indicators. 2-3 days will be saved in first and subsequent years.	NA	NA	NA	1-3 days savings estimated from deleting the indicators that can be calculated from Eurostat and other data sources. A list of which indicators needed to determine a more accurate

<sup>31</sup> Using 8 days additional for Hungary, 20 days saved for Germany and no change for all other MS

<sup>32</sup> Using 6 days additional for Hungary then 20 days saved for Germany and no change for all other MS.

							estimate.
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### Qualitative discussion

These indicators were added in Decision 2005/166/EC to enable Eurostat to establish a legal basis for some of the data that only had to be reported on a voluntary basis to them. Therefore a considerable amount of data was added to the required reporting obligation. MS often argued after the adoption of this decision that some of the data could be directly taken from Eurostat data. The new Regulation (EC) No 1099/2008 of the European Parliament and of the Council of 22 October 2008 on energy statistics (Energy Statistics Regulation)<sup>33</sup> changed the legal basis of the Eurostat data and established a common framework for the production, transmission, evaluation and dissemination of comparable energy statistics in the Community. Therefore some of the required denominators used in the indicators can now be provided by Eurostat. A list of the indicators and energy statistics that can be extracted from Eurostat and the CRF is available in (Oeko 2010).

Sweden indicate in their response related to Decision 280/2004/EC and 2005/166/EC that the requirement to report annual indicators should be deleted. Also, other MS have indicated in the past that they would prefer to streamline and reduce the reporting burden related to indicators (Oeko 2010). The response provided by Finland and Germany in the questionnaire support this view.

The number of days saved from removing some of the indicators depends on the amount of time taken to collect and report the data at the moment. This is likely to depend on the complexity of the economy and administrative reporting structure in each MS. However, as Germany indicates in their response, they only report indicators that are available from the modelling inputs and results. This may be the case for many MS submissions. This is reflected on the fact that MS have reported a relatively low number of days saved as a result of deleting these indicators.

The responses indicate that the MS are supportive of this change. However to estimate a more accurate figure of staff days saved, the MS would require a list of which indicators will be deleted.

We propose to use the average estimate of 1.5 staff days saved per MS as an average in the first year and 1.17 days saved in subsequent years. We do however suggest using a high (1.33 staff days saved per MS) and low (1 day saved per MS) scenario in subsequent years to show the range in values provided:

#### 7) Proposed change- Establishment of a national system for reporting projections, and policies and measures

Finland	Germany	Hungary	Netherlands	Slovakia	Spain	Sweden	comments
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<sup>33</sup> OJ L 304, 14.11.2008, p.1.

Currently no national system for the reporting of projections and policies and measures. We are planning a similar system as the National System of inventories for projections and policies and measures, but is not yet so well defined and structured as regards with GHG inventories.	Currently no national system for the reporting of projections and policies and measures. If this national system were to have the same quality as the national system for the inventories, the effort required for conducting the projections would probably multiply. More precise estimates are difficult to make at this point.	Costs depend on the structure to be established in accordance with a future legal framework but estimated number of 30 days.	Initial cost of 100 days. Yearly; Likely a good national system will lead to quality improvement and improved consistency and thus to some lower cost.	Currently no national system for the reporting of projections and policies and measures. substantial effort to create framework for co-ordination and appropriate participation of all involved bodies. This will probably require governmental approval. It is not possible at this time to exact suggest staff-days for national system preparation, but we expect time and expert consuming work.	Emission projections are reported and elaborated by the same administrative Unit that is in charge of the emission inventory and are both integrated into a national system for which the General Directorate of Environmental Quality and Assessment, Ministry of Environment and Rural and Marine Affairs, is competent.	NA	Responses suggest difficult to quantify the cost of creating a national system for projections and policies and measures. However, comments indicate a substantial effort will be required.
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## Qualitative discussion

Setting up an equivalent national system for projections and policies and measures similar to the historic inventory system would enable the EC to better understand how projections and policies and measures are structured (increase of transparency). This may include aspects such as details of responsible institutions, processes, data flows and data management, QA processes etc for policy evaluation and appraisal. Instead of establishing a parallel system for policy evaluation, this should be integrated into the current national system. Such system does not necessarily require a large degree of detail on responsible institutions or data flows (Oeko 2010).

Responses from the MS suggest that they do not currently have national systems for compiling projections and policies and measures. A formulation of such national system is likely to take a significant amount of organisation and coordination which is reflected in the high number of additional staff days provided by MS. The Netherlands acknowledge that such proposed change would improve the consistency and the quality of the overall reporting of projections.

The cost of the proposed change would depend highly on the current number of institutions involved in the reporting of the projections and policy and measures and their organisational structure.

The majority of the MS estimate that the development of such a national system would require a significant amount of staff days. An average cost of the two reported figures by Hungary and Netherlands is considered to provide the best estimate for the EU27.

We propose to use the average estimate of 65 additional staff days per MS in the first year then the same number of days in subsequent years. We do however suggest using a high (100 additional days per MS) and low (30 additional days per MS) scenario to show the range in values provided.

## Policies and measures (MM Art. 3(2)(a))

**Rationale:** The existing MM Article 3(2)(a) requires Member States to report **quantitative estimates** of the effect of policies and measures on emissions by sources and removals by sinks of greenhouse gases between the base year and subsequent years, including 2005, 2010 and 2015. The legislation currently does not specify whether ex-ante and/or ex-post estimates should be provided, and there is a lack of common procedures for developing quantitative estimates. There is much variation in current reporting by Member States and there is no requirement to report methodologies used, meaning that quantified ex-ante emission reduction effects are not comparable.

**Proposals:** The proposed changes include the extension of the requirement to submit more detailed information on the methodologies and data used to quantify the ex-ante quantitative emission reductions of policies and measures provided in the reporting. A list of policies should be agreed upon, for which a quantitative assessment of the emission reductions effects should be mandatory for all Member States.

- 1) **Proposed change-** MS shall report information on policies and measures in the “Reporting template for information on policies and measures” (MS comments in grey).

Finland	Germany	Hungary	Netherlands	Slovakia	Spain	SE	comments
Currently already report the policies and measures using the template. Difficult to estimate the amount of extra work, depends on how detailed information is needed. At the moment it takes 4 days per sector to fill out and verify the data. The excel reporting template used in the 2009 reporting was very elaborate. It covered only partially the required information but had a lot more extra questions in addition to that (these were in most cases marked as voluntary). There is a need to update the template according to the changes made to the MM and remove or mark clearly the voluntary parts. Some inputs could be taken directly from the information and reports related to various directives and reporting under article 3(1) (inventories). Emission reduction estimations on specific sectoral PaMs shouldn't be asked in the new reporting demands, as it requires substantial additional investments in the compilation of the scenarios (including estimates of the overlap of activities, independent development etc.). Furthermore, estimating the emission reductions in the WM-scenarios is difficult without the WOM-scenarios (which has also its costs).	Already report in this format.	10-12 days in the first year then 5-7 days in subsequent years.	They already report to a limited extent. No additional days required to fill out the template. Assumed that it could be combined with national reporting	Currently already report the policies and measures using the template. Therefore no additional days required.	Many people dealing with these issues are involved in preparing the reports. Very difficult to quantify. Difficult to quantify the staff and the cost in the future. We have just participated in the working group II, doing a presentation about our policies and measures putting in place in the Non-ETS sectors	NA	Responses indicate that many MS already report using template. The degree of completion is variable so additional effort to comply fully also varies. This would also be affected by the complexity of a revised template.

## Qualitative discussion

The current ‘Monitoring Mechanism Reporting Template’ should be split into two templates: one for policies and measures and a separate one for projections. These templates should be a legally required submission as part of the reporting of policies and measures and projections under the EU MM. A clear title of the template should be agreed. The baseline analysis of the seven MS shows that some countries already report the quantified effect of policies and measures using the template however the completeness of the data submitted can be improved significantly.

One MS indicate in their response, that the current excel reporting template is very elaborate and complex and that there is the need to make the template clearer and less complex. It is important to note that not all MS will have a list of quantified ex-ante estimate for all their policies and measures. Therefore, there should be a consideration to reduce the scope of the requirement and enforce the quantification of certain policies and measures to be mandatory as stated in Oeko, 2010.

The key drivers influencing the cost of the proposed change is whether a MS has quantified ex-ante emission savings for policies and measures already. The use of the excel file will not require substantial additional time however the actual process of quantifying the emissions savings from policies and measures can be very time consuming. Spain indicates the difficulty to estimate the time such exercise could potentially take.

The responses indicate that MS are aware of the reporting template and some already use the template. However MS raise their concern that quantification of policies and measures is a complex task.

If all MS use the template it would be less time consuming for the EC to collate the information reported. If the quantification of common coordinated policies and measures as proposed in Oeko (2010) were made into a mandatory requirement then the EC could have a more complete overview of the ex-ante GHG mitigation impact of the policies at the EU27 level.

It is considered that this proposed change is only related to the time required to populate the template rather than the time taken to develop a methodology to quantify the impact of policies and measures.

Therefore, it is considered that in the first year their estimate of 11 days on average is realistic. Finland estimate that it takes 4 days per sector at the moment, and since there 7 sectors this equates to 28 days. This is considered as a very high overestimate. Therefore, we assume that for MS that already comply with the use of the template it takes 6 days as Hungary estimates for MS that already comply and for all MS in subsequent years

We propose to use 6.7 additional staff days per MS in the first year then 6 days per MS in subsequent years. However, this is an uncertain estimate due to the lack of response for this question. We do however suggest using a high (7 additional staff days per MS) and low (5 additional days per MS) scenario in subsequent years to show the range in values provided:

- 2) **Proposed change-** MS shall submit a separate report describing the methodologies and data used to quantify the ex-ante emission reductions of policies and measures. For each policy and measure (or set of policies if several policies and measures were assessed together) such report should address the estimation methodology used, the data and assumptions used and the reference levels /baselines used against which the expected emissions reduction effects were quantified. (MS comments in grey)

Finland	DE	Hungary	Netherl	Slovakia	Spain	SE	comme
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Mainly already collate the information feeding into your methodologies and data used to quantify the ex-ante emission reductions of policies and measures.  100 days in first year and 100 days in subsequent years. This depends on the number and type of policies and measures to be reported and the reporting requirements. This can lead to a significant amount of additional work. It is necessary to take a realistic look on the question of what policies and measures and what information on those policies and measures can be reported and develop adequate tools and guidance. Many policies and measures at national level are a result of implementation of a EU directive, regulation etc., which have their own reporting requirements. There is a need to utilise these reporting to full extent and avoid any overlapping work. This is a new subject which needs additional work. On the other hand, if the projections are made and updated regularly and the methods are created, how and which information should be listed, the compilation of the report could go rather fast. The biggest work lies in any case with the projections.	NA	18-22 days in the first year then 10-12 days in subsequent years. To a certain extent already collate information of data feeding into the methodology to a extent yes, but we use a proprietary format and a uniform new format might require extra effort. The estimated effort would depend on the detail level of the template.	5-10 days in first and subsequent years. Depending on the way it has to be reported, but this is basically available information	They do not already collate the information feeding into your methodologies and data used to quantify the ex-ante emission reductions of policies and measures. The development of specific methodologies for ex ante assessment of the P&M will also require new additional financial costs by external consultants. Estimated to take 30 days in first year and 10 days in subsequent years.	We already work gathering all the information to make projections in order to analyse the future required measures.	NA	Big range in the number of additional days required to report a methodology of the quantification of the ex-ante emissions. This is largely dependent on whether they already collate such information and what the requirement for such report would be.

## Qualitative discussion

At the moment, there is no guidance MS can follow to develop a methodology to quantify the ex-ante impact of their policies and measures. Therefore the available information is incomplete and inconsistent across MS. A methodology report to be submitted by the MS and a guidance to be followed would contribute to improve both these.

The key drivers influencing the cost of the proposed change is whether MS already collate this information and hence whether it is readily available. If MS do not already collate this information, the additional number of staff days will be highly dependent on the current complexity of the institutions involved in calculating the impact of policies and measures and the economic structure which will determine their capacity to develop methodologies and collect data.

A methodology report submit by all MS would increase the transparency of the reported GHG emission savings from the MS.

The MS report a wide range of number of additional staff days. Spain, the Netherlands and Finland state that they already collate some of the information required, however additional days are required to develop specific methodologies to meet the new reporting requirements. Reports such as the NIR

and the NC which currently have to be submitted under the MM require a considerable amount of effort. The impact on the administrative burden depends on the scope of the planned methodology report under this proposed change. The 100 days estimated by Finland is considerably high relative to the other responses. They acknowledge however that once the methodology is developed the compilation of the report could be done relatively quickly in subsequent years. In contrast to this, the Netherlands' estimate is considered as a low estimate since their comment suggests that they already have the capacity to implement this methodology relative to the other MS.

The additional costs presented here should reflect the writing of the methodology report as opposed to the development of the quantification of the policies and measures.

The 100 additional staff days reported by Finland and the 0 additional staff days reported by Spain are taken as outlier values and not included in the calculation of the average. Therefore, we propose to use the average number of staff days (13.75 additional staff days per MS) reported as the best fit for each EU27 country in the first year, excluding Finland and Spain's value which is considered to be an overestimate and underestimates respectively. In subsequent years this decreases to 9.25 additional staff days in subsequent year per MS). We do however suggest using a high (16 staff days) and low (11.5 staff days) scenario in the first year as well to show the range in values provided:

### **LULUCF template (MM Art. 3(1)(d), IP Art. 3)**

**Rationale:** In relation to the **timeframe** to be covered in MS reporting of GHG emissions and removals from LULUCF, Article 3(1)(d) requires reporting for the years between 1990 and the year before last (year X-2). However under the Kyoto Protocol this information is only required for the years 2008-2012.

In the current EU reporting system there is a gap related to the information on LULUCF activities and how credits or debits impact the fulfilment of the Member States' Kyoto targets. An EU **questionnaire** on the use of activities under 3.3 and 3.4 was developed, but the provision of this questionnaire is not mandatory for Member States. However, this information is essential for the assessment of progress to targets and assessment of compliance. For past years this information will be provided as part of the inventory information starting in 2010. Thus, the gap relates to overall assumptions of the contribution of LULUCF activities during the first commitment period. For the 2<sup>nd</sup> commitment period the accounting of LULUCF activities is not yet clear but it is considered likely that a similar system will be used.

**Proposals:** A new approach for LULUCF reporting might soon be developed under a new climate regime. In the meantime, it is proposed to update the current questionnaire and make its submission **mandatory**, as this will not require substantial additional work and would be closest to the existing situation. It is also proposed to correct the requirements in the MM and IP relating to the **timeframe** of information to be reported.

**Proposed change-** MS shall provide information in the EU questionnaire on the use of activities under Articles 3.3 and 3.4 of the Kyoto Protocol on an annual basis with the NIR (MS comments in grey).

Finland	Germany	Hungary	Netherlands	Slovakia	Spain	Sweden	comments
Already respond to the questionnaire. 2 additional days estimated for the first year then 1 day for subsequent years.	Currently do not respond to the questionnaire. Additional days not estimated.	Already responds to the questionnaire. 3 additional days estimated for the first year then 2 days for subsequent years.	Already responds to the questionnaire so 0 additional days estimated.	Already responds to the questionnaire. 2 additional days estimated for the first year then 2 days for subsequent years.	2 additional days for first and subsequent years estimated.  Spain submits the Questionnaire periodically. Some of the questions in the questionnaire are included already in the NIR for the additional information on LULUCF under the Kyoto Protocol. Spain believes that this duplication of information is not needed and should be avoided. The questionnaire should be revised in order to avoid duplication of work, and put the focus on the issues that are not included in the additional information under article 7 for LULUCF.	Already responds to the questionnaire. 1 day additional for first and subsequent years estimated.	Majority of MS responded to state that they already comply with this change. However, the response to the Article 3.3 and 3.4 questionnaire become mandatory it will require an extra 1-3 days per MS.

### Qualitative discussion

In the current MM there is a gap related to the information on LULUCF activities and how credits or debits impact the fulfilment of the Member States' Kyoto targets. A specific questionnaire on the use of activities under 3.3 and 3.4 was developed, but it is no compulsory for MS to complete this questionnaire. However, this information is essential for the assessment of progress with the implementation of the targets and the assessment of compliance. For previous years, this information will be provided as part of the inventory information starting in 2010. Thus, the gap is in particular related to overall assumptions of the contribution of LULUCF activities during the first commitment period.

The baseline analysis indicates that some MS already over comply with this proposed change. The responses from the MS generally support this information. However, it is considered that even if they already comply it takes a certain number of days to complete this questionnaire.

All MS report their LULUCF emissions and removals as part of the inventory. Hence they have some form of system to estimate LULUCF emission estimates. Therefore, the additional cost for this proposed change should be not be high and should be of similar magnitude across all MS.

The responses indicate that the MS do understand the proposed change. However, there is some discrepancy when comparing the responses against our baseline. In this situation, the MS response in the questionnaire is considered to be accurate.

We propose to use the average of reported values provided as the best fit for each EU27 country (1.67 additional days per MS in the first year and 1.33 additional days per MS for subsequent years). Since the reported figures are similar, we anticipate that the low and high values would be very similar hence there is no need for a high or low scenario.

## Annex D – Detailed data from EU administrative cost model

### Establishment of an EU review and compliance cycle under the Effort Sharing Decision

#### Establishment of EU desk review procedure

#### Hungary

Establishment of an EU desk review procedure					Tariff (€ per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	share of activities in total administrative cost	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																	Int	EU	Nat	Reg
No	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group															
1			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Familiarising with the information obligation	public authority	6.9	480.00	55	1	1	1		55	0%	55	1%		100%		
2			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Retrieving relevant information from existing data	public authority	6.9	960.00	110	1	1	1		110	0%	110	2%		100%		
3			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Adjusting existing data	public authority	6.9	2,400.00	276	1	1	1	2,000	2,276	0%	2,276	40%		100%		
4			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Producing new data	public authority	6.9	7,200.00	828	1	1	1	2,000	2,828	0%	2,828	50%		100%		
5			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing forms and tables	public authority	6.9	960.00	110	1	1	1		110	0%	110	2%		100%		
6			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Holding meetings	public authority	6.9	480.00	55	1	1	1		55	0%	55	1%		100%		
7			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	public authority	6.9	960.00	110	1	1	1		110	0%	110	2%		100%		
8			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Submitting the information (sending it to the designated recipient)	public authority	6.9	480.00	55	1	1	1		55	0%	55	1%		100%		
9			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	public authority	6.9	480.00	55	1	1	1		55	0%	55	1%		100%		

14,400.00  
30

Total administrative costs (€) 5,656  
Total administrative burden (€) 5,656  
Administrative costs by origin (€)

0 5,656 0 0

## Netherlands

Establishment of an EU desk review procedure						Tariff (€ per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	share of activities in total administrative cost	Regulatory origin (%)			
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group													Int	EU	Nat	Reg
1			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Familiarising with the information obligation	public authority	31.5	1,440.00	756	1	1	1			756	0%	756	4%	100%			
2			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Retrieving relevant information from existing data	public authority	31.5	1,920.00	1,008	4	1	4			4,032	0%	4,032	21%	100%			
3			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Adjusting existing data	public authority	31.5	960.00	504	2	1	2			1,008	0%	1,008	5%	100%			
4			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Producing new data	public authority	31.5	480.00	252	1	1	1		10,000	10,252	0%	10,252	54%	100%			
5			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing forms and tables	public authority	31.5	480.00	252	1	1	1			252	0%	252	1%	100%			
6			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Holding meetings	public authority	31.5	480.00	252	1	1	1		1,000	1,252	0%	1,252	7%	100%			
7			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	public authority	31.5	480.00	252	1	1	1			252	0%	252	1%	100%			
8			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Submitting the information (sending it to the designated recipient)	public authority	31.5	480.00	252	1	1	1			252	0%	252	1%	100%			
9			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	public authority	31.5	480.00	252	1	1	1			252	0%	252	1%	100%			
10			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Other	public authority	31.5	960.00	504	1	1	1			504	0%	504	3%	100%			

8,160.00

17

Total administrative costs (€) 18,812

Total administrative burden (€) 18,812

Administrative costs by origin (€)

0 18,812 0 0

# Germany

Establishment of an EU desk review procedure					Tariff (€ per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	share of activities in total administrative cost	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																	Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group															
1			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Familiarising with the information obligation	public authority	37	1,440.00	890	1	1	1	1,260	2,150	0%	2,150	18%	100%			
2			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Retrieving relevant information from existing data	public authority	37	960.00	594	1	1	1	840	1,434	0%	1,434	12%	100%			
3			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Adjusting existing data	public authority	37	960.00	594	1	1	1	840	1,434	0%	1,434	12%	100%			
4			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Producing new data	public authority	37	1,920.00	1,187	1	1	1	1,680	2,867	0%	2,867	24%	100%			
5			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing forms and tables	public authority	37	480.00	297	1	1	1	420	717	0%	717	6%	100%			
6			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Holding meetings	public authority	37	480.00	297	1	1	1	420	717	0%	717	6%	100%			
7			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	public authority	37	960.00	594	1	1	1	840	1,434	0%	1,434	12%	100%			
8			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Submitting the information (sending it to the designated recipient)	public authority	37	480.00	297	1	1	1	420	717	0%	717	6%	100%			
9			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	public authority	37	240.00	148	1	1	1	210	358	0%	358	3%	100%			
						7,920.00							6,930.00							
						16.5														
												<b>Total administrative costs (€)</b>	<b>11,827</b>							
												<i>Total administrative burden (€)</i>	<i>11,827</i>							
												<i>Administrative costs by origin (€)</i>		0	11,827	0	0			

# Finland

Establishment of an EU desk review procedure					Tariff (€ per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	share of activities in total administrative cost	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																Int	EU	Nat	Reg	
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group															
1			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Familiarising with the information obligation	public authority	31	96.00	49	1	1	1			49	0%	49	6%	100%		
2			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Retrieving relevant information from existing data	public authority	31	240.00	123	1	1	1			123	0%	123	15%	100%		
3			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Adjusting existing data	public authority	31	240.00	123	1	1	1			123	0%	123	15%	100%		
4			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Producing new data	public authority	31	480.00	246	1	1	1			246	0%	246	29%	100%		
5			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing forms and tables	public authority	31	96.00	49	1	1	1			49	0%	49	6%	100%		
6			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Holding meetings	public authority	31	96.00	49	1	1	1			49	0%	49	6%	100%		
7			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	public authority	31	240.00	123	1	1	1			123	0%	123	15%	100%		
8			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Submitting the information (sending it to the designated recipient)	public authority	31	96.00	49	1	1	1			49	0%	49	6%	100%		
9			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	public authority	31	48.00	25	1	1	1			25	0%	25	3%	100%		

1,632.00  
3.4

Total administrative costs (€) 835  
Total administrative burden (€) 835  
Administrative costs by origin (€)

0 835 0 0

# Sweden

Establishment of an EU review and compliance cycle under the Effort Sharing Decision					Tariff (€ per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	share of activities in total administrative cost	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																	Int	EU	Nat	Reg
No	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group															
1			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Familiarising with the information obligation	public authority	29	0	1	1	1		1,000	1,000	0%	1,000	12%	100%			
2			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Retrieving relevant information from existing data	public authority	29	0	1	1	1		2,000	2,000	0%	2,000	25%	100%			
3			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Adjusting existing data	public authority	29	0	1	1	1		1,000	1,000	0%	1,000	12%	100%			
4			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Producing new data	public authority	29	0	1	1	1		2,000	2,000	0%	2,000	25%	100%			
5			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing forms and tables	public authority	29	0	1	1	1		500	500	0%	500	6%	100%			
6			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Holding meetings	public authority	29	0	1	1	1		100	100	0%	100	1%	100%			
7			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	public authority	29	0	1	1	1		1,000	1,000	0%	1,000	12%	100%			
8			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Submitting the information (sending it to the designated recipient)	public authority	29	0	1	1	1		0	0	0%	0	0%	100%			
9			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	public authority	29	0	1	1	1		500	500	0%	500	6%	100%			

8,100

**Total administrative costs (€) 8,100**

Total administrative burden (€) 8,100

Administrative costs by origin (€)

0 8,100 0 0



## EU27

Assumption 1: large MS and complex inventory system: average 15,320 €/per year (average of amount indicated by DE and NL)

Assumption 2: high share of outsourcing of inventory work: average 8,100 €/per year (SE indication)

Assumption 3: small MS and less complex inventory system: average 3,250 €/per year (average of amount indicated by HU and FI)

MS	Type of inventory system	average cost €/per year	low cost €/per year	high cost €/per year
Belgium	complex system	15,320	11,800	18,800
Bulgaria	small MS, less complex system	3,250	1,000	5,660
Czech Republic	small MS, less complex system	3,250	1,000	5,660
Denmark	small MS, less complex system	3,250	1,000	5,660
Germany	questionnaire provided	11,827	11,827	11,827
Estonia	small MS, less complex system	3,250	1,000	5,660
Ireland	small MS, less complex system	3,250	1,000	5,660
Greece	small MS, less complex system	3,250	1,000	5,660
Spain	high share of outsourcing	8,100	7,500	11,000
France	high share of outsourcing	8,100	7,500	11,000
Italy	small MS, less complex system	3,250	1,000	5,660
Cyprus	small MS, less complex system	3,250	1,000	5,660
Latvia	small MS, less complex system	3,250	1,000	5,660
Lithuania	small MS, less complex system	3,250	1,000	5,660
Luxembourg	small MS, less complex system	3,250	1,000	5,660
Hungary	questionnaire provided	5,656	5,656	5,656
Malta	small MS, less complex system	3,250	1,000	5,660
Netherlands	questionnaire provided	18,812	18,812	18,812
Austria	small MS, less complex system	3,250	1,000	5,660
Poland	small MS, less complex system	3,250	1,000	5,660
Portugal	small MS, less complex system	3,250	1,000	5,660
Romania	small MS, less complex system	3,250	1,000	5,660
Slovenia	small MS, less complex system	3,250	1,000	5,660
Slovakia	small MS, less complex system	3,250	1,000	5,660
Finland	questionnaire provided	835	835	835
Sweden	high share of outsourcing	8,100	8,100	8,100
United Kingdom	high share of outsourcing	8,100	7,500	11,000
<b>Total EU-27</b>		<b>143,350</b>	<b>97,530</b>	<b>198,910</b>
<b>Total taking into account synergies for UNFCCC review (50% of costs saved)</b>		<b>71,675</b>	<b>48,765</b>	<b>99,455</b>
<b>Total if only automatic checks are performed (30% of costs of in-depth review)</b>		<b>21,503</b>	<b>14,630</b>	<b>29,837</b>

## Establishment of EU in-country review

### Hungary

Establishment of an EU in-country review procedure						Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																	Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group															
1			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Familiarising with the information obligation	public authority	6.9	480.00	55	1	1	1			55	0%	55		100%		
2			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Retrieving relevant information from existing data	public authority	6.9	2,400.00	276	1	1	1			276	0%	1		100%		
3			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Adjusting existing data	public authority	6.9	2,400.00	276	1	1	1		2,000	2,276	0%	1		100%		
4			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Producing new data	public authority	6.9	7,200.00	828	1	1	1		2,000	2,828	0%	1		100%		
5			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing forms and tables	public authority	6.9	960.00	110	1	1	1			110	0%	1		100%		
6			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Holding meetings	public authority	6.9	480.00	55	2	1	1			55	0%	1		100%		
7			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	public authority	6.9	960.00	110	2	1	2			221	0%	2		100%		
8			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Submitting the information (sending it to the designated recipient)	public authority	6.9	480.00	55	1	1	1			55	0%	1		100%		
9			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	public authority	6.9	480.00	55	1	1	1			55	0%	1		100%		
10			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Copying (reproducing reports, producing labels or leaflets)	public authority	6.9	480.00	55	1	1	1			55	0%	1		100%		
11			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Other	public authority	6.9		0	1	1	1			0	0%	1		100%		

16,320

4,000.00

34

Total administrative costs (€)

5,987

Total administrative burden (€)

66

Administrative costs by origin (€)

0 5,987 0 0

## Sweden

Establishment of an EU in-country review procedure					Tariff (€ per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group														
1			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Familiarising with the information obligation	public authority	36	0	1	1	1		1,000	1,000	0%	1,000		100%		
2			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Retrieving relevant information from existing data	public authority	36	0	1	1	1		10,000	10,000	0%	1		100%		
3			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Adjusting existing data	public authority	36	0	1	1	1		3,000	3,000	0%	1		100%		
4			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Producing new data	public authority	36	0	1	1	1		6,000	6,000	0%	1		100%		
5			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing forms and tables	public authority	36	0	1	1	1		1,000	1,000	0%	1		100%		
6			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Holding meetings	public authority	36	0	1	1	1		15,000	15,000	0%	1		100%		
7			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	public authority	36	0	1	1	1		3,000	3,000	0%	1		100%		
8			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Submitting the information (sending it to the designated recipient)	public authority	36	0	1	1	1			0	0%	1		100%		
9			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	public authority	36	0	1	1	1		500	500	0%	1		100%		
10			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Copying (reproducing reports, producing labels or leaflets)	public authority	36	0	1	1	1		500	500	0%	1		100%		
11			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Other	public authority	36	0	1	1	1			0	0%	1		100%		

40,000

Total administrative costs (€) 40,000  
 Total administrative burden (€) 1,010  
 Administrative costs by origin (€)

0 40,000 0 0

## The Netherlands

Establishment of an EU in-country review procedure					Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)					
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																Int	EU	Nat	Reg		
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group																
1			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Familiarising with the information obligation	public authority	32	3,360.00	1,764	1	1		1,000	2,764	0%	2,764		100%				
2			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Retrieving relevant information from existing data	public authority	32	3,840.00	2,016	6	1			12,096	0%	6		100%				
3			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Adjusting existing data	public authority	32	960.00	504	2	1		5,000	6,008	0%	2		100%				
4			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Producing new data	public authority	32	1,440.00	756	1	1		15,000	15,756	0%	1		100%				
5			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing forms and tables	public authority	32	960.00	504	1	1			504	0%	1		100%				
6			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Holding meetings	public authority	32	4,320.00	2,268	4	1		5,000	7,268	0%	1		100%				
7			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	public authority	32	960.00	504	1	1			504	0%	1		100%				
8			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Submitting the information (sending it to the designated recipient)	public authority	32	960.00	504	1	1			504	0%	1		100%				
9			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	public authority	32	960.00	504	1	1			504	0%	1		100%				
10			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Copying (reproducing reports, producing labels or leaflets)	public authority	32	480.00	252	1	1			252	0%	1		100%				
11			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Other	public authority	32	1,440.00	756	1	1			756	0%	1		100%				
						19,680.00						26,000.00									
					41																
													<b>Total administrative costs (€)</b>	<b>46,916</b>							
													<i>Total administrative burden (€)</i>	<i>2,780</i>							
													<i>Administrative costs by origin (€)</i>		0	46,916	0	0			

# Germany

Establishment of an EU in-country review procedure					Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)												Target group	Int	EU	Nat
1			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Familiarising with the information obligation	public authority	37	1,440.00	890	1	1	1	1,260	2,150	0%	2,150		100%		
2			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Retrieving relevant information from existing data	public authority	37	4,800.00	2,968	1	1	1	4,200	7,168	0%	1		100%		
3			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Adjusting existing data	public authority	37	2,400.00	1,484	1	1	1	2,100	3,584	0%	1		100%		
4			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Producing new data	public authority	37	4,800.00	2,968	1	1	1	4,200	7,168	0%	1		100%		
5			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing forms and tables	public authority	37	960.00	594	1	1	1	840	1,434	0%	1		100%		
6			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Holding meetings	public authority	37	960.00	594	3	1	1	2,520	3,114	0%	1		100%		
7			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	public authority	37	960.00	594	2	1	2	1,680	2,867	0%	2		100%		
8			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Submitting the information (sending it to the designated recipient)	public authority	37	480.00	297	1	1	1	420	717	0%	1		100%		
9			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	public authority	37	480.00	297	1	1	1	420	717	0%	1		100%		
10			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Copying (reproducing reports, producing labels or leaflets)	public authority	37	0.00	0	1	1	1	1,000	1,000	0%	1		100%		
11			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Other	public authority	37	0.00	0	1	1	1		0	0%	1		100%		

17,280.00  
36

18,640.00

**Total administrative costs (€)** 29,918  
*Total administrative burden (€)* 2,161  
*Administrative costs by origin (€)*

0 29,918 0 0

## Finland

Establishment of an EU in-country review procedure					Tariff (€ per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)												Target group	Int	EU	Nat
1			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Familiarising with the information obligation	public authority	31	96.00	49	1	1			49	0%	49		100%		
2			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Retrieving relevant information from existing data	public authority	31	240.00	123	1	1			123	0%	1		100%		
3			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Adjusting existing data	public authority	31	240.00	123	1	1			123	0%	1		100%		
4			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Producing new data	public authority	31	480.00	246	1	1			246	0%	1		100%		
5			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing forms and tables	public authority	31	240.00	123	1	1			123	0%	1		100%		
6			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Holding meetings	public authority	31	480.00	246	1	1			246	0%	1		100%		
7			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Inspecting and checking (including assistance to inspection by public authorities)	public authority	31	240.00	123	1	1			123	0%	1		100%		
8			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Submitting the information (sending it to the designated recipient)	public authority	31	96.00	49	1	1			49	0%	1		100%		
9			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Filing the information	public authority	31	48.00	25	1	1			25	0%	1		100%		
10			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Copying (reproducing reports, producing labels or leaflets)	public authority	31	48.00	25	1	1			25	0%	1		100%		
11			Cooperation with audits & inspection by public authorities, including maintenance of appropriate records	Other	public authority	31		0	1	1			0	0%	0		100%		

2,208.00

4.6

Total administrative costs (€) 1,130

Total administrative burden (€) 58

Administrative costs by origin (€)

0 1,130 0 0

EU27

Assumption 1: FI considered to be an outlier

Assumption 2: average no of days derived from HU, NL and DE

Assumption 3: outsourcing new MS based on HU, outsourcing old MS based on average of DE and NL

Assumption 4: 4 in-country reviews per year (other MS with desk review), of which 2 in category with high costs and 2 in category with lower costs)

MS	tariff €/ hour	Days No	Outsourcing €/ year	average cost €/ year	Days No	Outsourcing €/ year	Low cost €/ year	Days no	Outsourcing €/ year	High cost €/ year
Belgium	31.3	37	22,000	31,264	34	18,000	26,513	41	26,000	36,265
Bulgaria	2.1	37	6,000	6,619	34	4,000	4,569	41	8,000	8,686
Czech Republic	7.0	37	6,000	8,075	34	4,000	5,907	41	8,000	10,300
Denmark	41.9	37	22,000	34,404	34	18,000	29,398	41	26,000	39,745
Germany	37.1	36	18,640	29,335	36	18,640	29,335	36	18,640	29,335
Estonia	6.8	37	6,000	8,021	34	4,000	5,857	41	8,000	10,240
Ireland	39.4	37	22,000	33,662	34	18,000	28,716	41	26,000	38,922
Greece	18.1	37	22,000	27,351	34	18,000	22,917	41	26,000	31,930
Spain	21.3	37	22,000	28,315	34	18,000	23,803	41	26,000	32,997
France	36.9	37	22,000	32,925	34	18,000	28,039	41	26,000	38,106
Italy	42.2	37	22,000	34,481	34	18,000	29,469	41	26,000	39,831
Cyprus	18.0	37	6,000	11,330	34	4,000	8,897	41	8,000	13,906
Latvia	5.6	37	6,000	7,654	34	4,000	5,520	41	8,000	9,833
Lithuania	5.1	37	6,000	7,523	34	4,000	5,399	41	8,000	9,688
Luxembourg	38.0	37	6,000	17,235	34	4,000	14,324	41	8,000	20,450
Hungary	6.9	37	6,000	8,057	34	4,000	5,890	41	8,000	10,279
Malta	12.3	37	4,000	7,641	34	4,000	7,345	41	8,000	12,034
Netherlands	31.5	37	26,000	35,330	32	26,000	33,943	32	26,000	33,943
Austria	34.0	37	22,000	32,057	34	18,000	27,242	41	26,000	37,145
Poland	8.1	37	6,000	8,390	34	4,000	6,196	41	8,000	10,649
Portugal	16.6	37	22,000	26,921	34	18,000	22,522	41	26,000	31,453
Romania	5.1	37	6,000	7,520	34	4,000	5,397	41	8,000	9,685
Slovenia	15.4	37	6,000	10,547	34	4,000	8,178	41	8,000	13,038
Slovakia	4.8	37	6,000	7,412	34	4,000	5,297	41	8,000	9,564
Finland	30.7	37	22,000	31,095	34	1,130	9,487	41	26,000	36,078
Sweden	35.9		40,000	40,000		40,000	40,000	41	40,000	51,769
United Kingdom	43.2	37	22,000	34,774	34	18,000	29,739	41	26,000	40,155
<b>Total EU-27</b>				<b>567,937</b>			<b>469,901</b>			<b>666,024</b>
<b>Total EU27 taking into account synergies for UNFCCC review (50% of costs saved)</b>				<b>283,968</b>			<b>234,951</b>			<b>333,012</b>
<b>Country visit to 4 MS per year</b>										

		Average	low	high
Category 1	desk review	15,320	11,800	18,800
	in-country	31,264	26,513	36,265
	difference	15,944	14,713	17,465
Category 2	desk review	3,250	1,000	5,660
	in-country	6,619	4,569	8,686
	difference	3,369	3,569	3,026
<b>Total 4 reviews (2 of each categ.)</b>		<b>38,625</b>	<b>36,563</b>	<b>40,982</b>
			49000	100000
<b>Total costs desk review + in coutry review</b>		<b>85,563</b>	<b>140,982</b>	

## Implementation of the revised ETS Directive (Reporting on the use of auctioning revenues)

### Hungary

Report annually the use of auctioning revenues					Tariff (€ per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burden (AC - BAU)	Regulatory origin (%)				
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																Int	EU	Nat	Reg	
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group															
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	6.9	1,440.00	166	1	1	1		3,000	3,166	0%	3,166		100%		
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	6.9	2,400.00	276	1	1	1			276	0%	276		100%		
3			Submission of (recurring) reports	Adjusting existing data	public authority	6.9	1,440.00	166	1	1	1			166	0%	166		100%		
4			Submission of (recurring) reports	Producing new data	public authority	6.9	1,920.00	221	1	1	1			221	0%	221		100%		
5			Submission of (recurring) reports	Filing forms and tables	public authority	6.9		0	1	1	1			0	0%	0		100%		
6			Submission of (recurring) reports	Holding meetings	public authority	6.9	480.00	55	2	1	1			55	0%	55		100%		
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	6.9	960.00	110	1	1	1			110	0%	110		100%		
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	6.9	480.00	55	1	1	1			55	0%	55		100%		
9			Submission of (recurring) reports	Filing the information	public authority	6.9	480.00	55	1	1	1			55	0%	55		100%		
10			Submission of (recurring) reports	Training members and employees about the information obligations	public authority	6.9	1,440	166	1	1	1		3,000	3,166	0%	3,166		100%		

3,840.00

8.0

Total administrative costs (€) 7,270

Total administrative burden (€) 7,270

Administrative costs by origin (€)

0 7,270 0 0



## The Netherlands

Report annually the use of auctioning revenues						Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																	Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group															
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	31.5	240.00	126	1	1	1			126	0%	126		100%		
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	31.5	960.00	504	1	1	1			504	0%	504		100%		
3			Submission of (recurring) reports	Adjusting existing data	public authority	31.5		0	1	1	1			0	0%	0		100%		
4			Submission of (recurring) reports	Producing new data	public authority	31.5		0	1	1	1			0	0%	0		100%		
5			Submission of (recurring) reports	Filing forms and tables	public authority	31.5		0	1	1	1			0	0%	0		100%		
6			Submission of (recurring) reports	Holding meetings	public authority	31.5		0	1		1			0	0%	0		100%		
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	31.5		0	1	1	1			0	0%	0		100%		
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	31.5	480.00	252	1	1	1			252	0%	252		100%		
9			Submission of (recurring) reports	Filing the information	public authority	31.5	240.00	126	1	1	1			126	0%	126		100%		
10			Submission of (recurring) reports	Training members and employees about the information obligations	public authority	31.5	0.00	0	1	1	1			0	0%	0		100%		

1,920.00  
4.0

**Total administrative costs (€)** 1,008  
*Total administrative burden (€)* 1,008  
*Administrative costs by origin (€)*

0 1,008 0 0

## Germany

Report annually the use of auctioning revenues						Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																	Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group															
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	37	240.00	148	1	1	1			148	0%	148		100%		
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	37	240.00	148	1	1	1			148	0%	148		100%		
3			Submission of (recurring) reports	Adjusting existing data	public authority	37	240.00	148	1	1	1			148	0%	148		100%		
4			Submission of (recurring) reports	Producing new data	public authority	37	480.00	297	1	1	1			297	0%	297		100%		
5			Submission of (recurring) reports	Filing forms and tables	public authority	37	240.00	148	1	1	1			148	0%	148		100%		
6			Submission of (recurring) reports	Holding meetings	public authority	37	0.00	0	1	1	1			0	0%	0		100%		
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	37	240.00	148	1	1	1			148	0%	148		100%		
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	37	120.00	74	1	1	1			74	0%	74		100%		
9			Submission of (recurring) reports	Filing the information	public authority	37	120.00	74	1	1	1			74	0%	74		100%		

no information received

1,920.00

4.0

Total administrative costs (€) 1,187

Total administrative burden (€) 1,187

Administrative costs by origin (€)

0 1,187 0 0

**EU27**

Assumption: average no of days (5.5 days) derived from estimate from HU (8 days), NL (4 days) and DE (4 days)

<b>MS</b>	<b>Tariff €/ hour</b>	<b>Days No</b>	<b>Staff costs €</b>
Belgium	31.3	5.5	1,377
Bulgaria	2.1	5.5	92
Czech Republic	7.0	5.5	308
Denmark	41.9	5.5	1,844
Germany	37.1	5.5	1,190
Estonia	6.8	5.5	300
Ireland	39.4	5.5	1,733
Greece	18.1	5.5	795
Spain	21.3	5.5	939
France	36.9	5.5	1,624
Italy	42.2	5.5	1,855
Cyprus	18.0	5.5	792
Latvia	5.6	5.5	246
Lithuania	5.1	5.5	226
Luxembourg	38.0	5.5	1,670
Hungary			7,051
Malta	12.3	5.5	541
Netherlands			1,008
Austria	34.0	5.5	1,495
Poland	8.1	5.5	355
Portugal	16.6	5.5	732
Romania	5.1	5.5	226
Slovenia	15.4	5.5	676
Slovakia	4.8	5.5	210
Finland	30.7	5.5	1,352
Sweden	35.9	5.5	1,579
United Kingdom	43.2	5.5	1,899
<b>Total</b>			<b>32,116</b>

# Reporting requirements related to the full impacts of aviation on the global climate

## Hungary

Establishment of an EU review and compliance cycle under the Effort Sharing Decision					Tariff (€ per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	share of activities in total administrative cost	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																	Int	EU	Nat	Reg
No	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group															
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	7	960.00	110	1	1	1		110	0%	110	29%	100%			
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	7	480.00	55	1	1	1		55	0%	55	14%	100%			
3			Submission of (recurring) reports	Adjusting existing data	public authority	7	480.00	55	1	1	1		55	0%	55	14%	100%			
4			Submission of (recurring) reports	Producing new data	public authority	7	0.00	0	1	1	1		0	0%	0	0%	100%			
5			Submission of (recurring) reports	Filing forms and tables	public authority	7	480.00	55	1	1	1		55	0%	55	14%	100%			
6			Submission of (recurring) reports	Holding meetings	public authority	7	0.00	0	1	1	1		0	0%	0	0%	100%			
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	7	480.00	55	1	1	1		55	0%	55	14%	100%			
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	7	480.00	55	1	1	1		55	0%	55	14%	100%			
9			Submission of (recurring) reports	Filing the information	public authority	7		0	1	1	1		0	0%	0	0%	100%			
10			Submission of (recurring) reports	Training members and employees about the information obligations	public authority	7	0.00	0	1	1	1		0	0%	0	0%	100%			

3,360.00  
7.0

Total administrative costs (€) 386  
Total administrative burden (€) 386  
Administrative costs by origin (€)

0 386 0 0

**EU27**

Assumption: 5 days per Member State needed for multiplier approach.

<b>Member State</b>	<b>Tariff €/ hour</b>	<b>Time days/ year</b>	<b>totals costs per MS €/ year</b>
Belgium	31.3	5.0	1,252
Bulgaria	2.1	5.0	84
Czech Republic	7.0	5.0	280
Denmark	41.9	5.0	1,676
Germany	37.1	5.0	1,485
Estonia	6.8	5.0	273
Ireland	39.4	5.0	1,576
Greece	18.1	5.0	723
Spain	21.3	5.0	853
France	36.9	5.0	1,476
Italy	42.2	5.0	1,687
Cyprus	18.0	5.0	720
Latvia	5.6	5.0	224
Lithuania	5.1	5.0	206
Luxembourg	38.0	5.0	1,518
Hungary	6.9	5.0	278
Malta	12.3	5.0	492
Netherlands	31.5	5.0	1,261
Austria	34.0	5.0	1,359
Poland	8.1	5.0	323
Portugal	16.6	5.0	665
Romania	5.1	5.0	205
Slovenia	15.4	5.0	614
Slovakia	4.8	5.0	191
Finland	30.7	5.0	1,229
Sweden	35.9	5.0	1,435
United Kingdom	43.2	5.0	1,726
<b>Total EU-27</b>			<b>23,813</b>

## Reporting related to biennial reporting on climate change impacts and adaptation

### Hungary

Reporting related to adaptation (biennially)					Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)												Target group	Int	EU	Nat
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	7	4,800.00	552	1	1	1	5,000	5,552	0%	5,552	20%	80%		
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	7	9,600.00	1,104	1	1	1	10,000	11,104	0%	11,104	20%	80%		
3			Submission of (recurring) reports	Adjusting existing data	public authority	7		0	1	1	1		0	0%	0	20%	80%		
4			Submission of (recurring) reports	Producing new data	public authority	7	19,200.00	2,208	1	1	1	20,000	22,208	0%	22,208	20%	80%		
5			Submission of (recurring) reports	Filing forms and tables	public authority	7		0	1	1	1		0	0%	0	20%	80%		
6			Submission of (recurring) reports	Holding meetings	public authority	7	480.00	55	10	1	10	1,000	1,552	0%	1,552	20%	80%		
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	7		0	1	1	1		0	0%	0	20%	80%		
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	7	4,800.00	552	1	1	1	5,000	5,552	0%	5,552	20%	80%		
9			Submission of (recurring) reports	Filing the information	public authority	7	4,800.00	552	1	1	1	5,000	5,552	0%	5,552	20%	80%		
10			Submission of (recurring) reports	Training members and employees about the information obligations	public authority	7	480.00		5	1	5	1,000	1,000	0%	1,000	20%	80%		
11			Submission of (recurring) reports	Other	public authority	7	7,200.00	828	5	1	5	40,000	44,140	0%	44,140	20%	80%		

191  
95.5

51,360.00  
107

87,000

**Total administrative costs (€) 96,660**

Total administrative burden (€) 96,660

Administrative costs by origin (€)

19,332 77,328 0 0

# Germany

Reporting related to adaptation (biennially)					Tariff (€ per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																Int	EU	Nat	Reg
No	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group														
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	37	7,200.00	4,452	1	1	1		4,452	0%	4,452	20%	80%		
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	37	7,200.00	4,452	1	1	1		4,452	0%	4,452	20%	80%		
3			Submission of (recurring) reports	Training members and employees about the information obligations	public authority	37	3,600.00	2,226	1	1	1		2,226	0%	2,226	20%	80%		
4			Submission of (recurring) reports	Producing new data	public authority	37	14,400.00	8,904	1	1	1		8,904	0%	8,904	20%	80%		
5			Submission of (recurring) reports	Filing forms and tables	public authority	37		0	1	1	1		0	0%	0	20%	80%		
6			Submission of (recurring) reports	Holding meetings	public authority	37	3,600.00	2,226	1	1	1		2,226	0%	2,226	20%	80%		
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	37		0	1	1	1		0	0%	0	20%	80%		
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	37	2,880.00	1,781	1	1	1		1,781	0%	1,781	20%	80%		
9			Submission of (recurring) reports	Filing the information	public authority	37	1,440.00	890	1	1	1		890	0%	890	20%	80%		
10			Submission of (recurring) reports	Training members and employees about the information obligations	public authority	37		0	1	1	1	30,000	30,000	0%	30,000	20%	80%		

840  
1.75

40,320.00  
84

**Total administrative costs (€) 54,931**  
 Total administrative burden (€) 54,931  
 Administrative costs by origin (€)

10,986 43,945 0 0

**EU27**

Assumption: 95 days staff cost per MS

Assumption: low and high level of outsourcing costs

<b>MS</b>	<b>tariff</b>	<b>Days</b>	<b>Staff cost</b>	<b>Outsourcing low cost</b>	<b>Outsourcing high cost</b>	<b>Total costs low estimate</b>	<b>total costs high estimate</b>
	<b>€ hour</b>	<b>No</b>	<b>€ year</b>	<b>€ year</b>	<b>€ year</b>	<b>€ year</b>	<b>€ year</b>
Belgium	31.3	95	23,785	30,000	87,000	53,785	110,785
Bulgaria	2.1	95	1,589	30,000	87,000	31,589	88,589
Czech Repub	7.0	95	5,328	30,000	87,000	35,328	92,328
Denmark	41.9	95	31,847	30,000	87,000	61,847	118,847
Germany	37.1	95	28,223	30,000	87,000	58,223	115,223
Estonia	6.8	95	5,190	30,000	87,000	35,190	92,190
Ireland	39.4	95	29,942	30,000	87,000	59,942	116,942
Greece	18.1	95	13,739	30,000	87,000	43,739	100,739
Spain	21.3	95	16,213	30,000	87,000	46,213	103,213
France	36.9	95	28,051	30,000	87,000	58,051	115,051
Italy	42.2	95	32,047	30,000	87,000	62,047	119,047
Cyprus	18.0	95	13,684	30,000	87,000	43,684	100,684
Latvia	5.6	95	4,247	30,000	87,000	34,247	91,247
Lithuania	5.1	95	3,910	30,000	87,000	33,910	90,910
Luxembourg	38.0	95	28,847	30,000	87,000	58,847	115,847
Hungary	6.9	95	5,282	30,000	87,000	35,282	92,282
Malta	12.3	95	9,347	30,000	87,000	39,347	96,347
Netherlands	31.5	95	23,955	30,000	87,000	53,955	110,955
Austria	34.0	95	25,823	30,000	87,000	55,823	112,823
Poland	8.1	95	6,137	30,000	87,000	36,137	93,137
Portugal	16.6	95	12,635	30,000	87,000	42,635	99,635
Romania	5.1	95	3,903	30,000	87,000	33,903	90,903
Slovenia	15.4	95	11,674	30,000	87,000	41,674	98,674
Slovakia	4.8	95	3,624	30,000	87,000	33,624	90,624
Finland	30.7	95	23,351	30,000	87,000	53,351	110,351
Sweden	35.9	95	27,270	30,000	87,000	57,270	114,270
United Kingdo	43.2	95	32,799	30,000	87,000	62,799	119,799
<b>EU27</b>			<b>452,443</b>	<b>810,000</b>	<b>2,349,000</b>	<b>1,262,443</b>	<b>2,801,443</b>
<b>Benefit for national communication (20% because only every 4 years and less comprehensive)</b>							
<b>EU27 including benefit</b>			<b>361,955</b>	<b>648,000</b>	<b>1,879,200</b>	<b>1,009,955</b>	<b>2,241,155</b>



## Reporting related to LULUCF activities

### 1) Proposed Change: Report emissions and removals from forest management activities on a mandatory basis

Assumption 1: staff costs 100 days for MS that do not account for FM in 1st CP

Assumption 2: outsourcing costs of 40,000 €for EU15, 20,000 €for EU12

MS	Tariff	Days	Staff costs	Outsourcing costs	Total
	€/ hour		€	€	€
Belgium	31.3	100	25,037	40,000	65,037
Bulgaria	2.1				
Czech Republic	7.0				
Denmark	41.9				
Germany	37.1				
Estonia	6.8	100	683	20,000	20,683
Ireland	39.4	100	3,940	40,000	43,940
Greece	18.1				
Spain	21.3				
France	36.9				
Italy	42.2				
Cyprus	18.0	100	1,801	20,000	21,801
Latvia	5.6	100	559	20,000	20,559
Lithuania	5.1				
Luxembourg	38.0	100	3,796	40,000	43,796
Hungary	6.9				
Malta	12.3	100	1,230	20,000	21,230
Netherlands	31.5	100	3,152	40,000	43,152
Austria	34.0	100	3,398	40,000	43,398
Poland	8.1				
Portugal	16.6				
Romania	5.1				
Slovenia	15.4				
Slovakia	4.8	100	477	20,000	20,477
Finland	30.7				
Sweden	35.9				
United Kingdom	43.2				
<b>Total - EU27</b>			<b>44,071</b>	<b>300,000</b>	<b>344,071</b>
<b>Total without Cyprus &amp; Malta</b>			<b>41,041</b>	<b>260,000</b>	<b>301,041</b>

2) Proposed Change: Report data on emissions from the harvested wood products pool.

Sweden

LULUCF: Emissions from harvested wood products pool						Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burden (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																	Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group															
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	36	4,800.00	2,872	1	1	1		10,000	12,872	0%	12,872	100%			
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	36		0	1	1	1			0	0%	0	100%			
3			Submission of (recurring) reports	Adjusting existing data	public authority	36		0	1	1	1			0	0%	0	100%			
4			Submission of (recurring) reports	Producing new data	public authority	36	24,000.00	14,360	1	1	1		50,000	64,360	0%	64,360	100%			
5			Submission of (recurring) reports	Filing forms and tables	public authority	36		0	1	1	1			0	0%	0	100%			
6			Submission of (recurring) reports	Holding meetings	public authority	36	480.00	287	1	1	1		1,000	1,287	0%	1,287	100%			
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	36	480.00	287	1	1	1		1,000	1,287	0%	1,287	100%			
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	36		0	1	1	1			0	0%	0	100%			
9			Submission of (recurring) reports	Filing the information	public authority	36		0	1	1	1			0	0%	0	100%			
10			Submission of (recurring) reports	Training members and employees about the information obligations	public authority	36	4,800.00	2,872	1	1	1			2,872	0%	2,872	100%			

34,560.00

72

Total administrative costs (€)

82,678

82,678.4

Total administrative burden (€)

82,678

Administrative costs by origin (€)

82,678

0

0

0

## Finland

LULUCF: Emissions from harvested wood products pool					Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																Int	EU	Nat	Reg
No	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group														
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	31		0	1	1			0	0%	0				
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	31		0	1	1			0	0%	0				
3			Submission of (recurring) reports	Adjusting existing data	public authority	31		0	1	1			0	0%	0				
4			Submission of (recurring) reports	Producing new data	public authority	31	24,000.00	12,280	1	1		50,000	62,280	0%	62,280	100%			
5			Submission of (recurring) reports	Filing forms and tables	public authority	31		0	1	1			0	0%	0				
6			Submission of (recurring) reports	Holding meetings	public authority	31		0	1	1			0	0%	0				
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	31		0	1	1			0	0%	0				
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	31		0	1	1			0	0%	0				
9			Submission of (recurring) reports	Filing the information	public authority	31		0	1	1			0	0%	0				

no detailed information received

Total administrative costs (€) 62,280

Total administrative burden (€) 62,280

Administrative costs by origin (€)

62,280 0 0 0

## EU27

Assumption 1: Days needed between 50 (indicated by FI) and 70 (indicated by SE), average estimate 60 days

MS	Tariff €/Hour	60 days	50 days	70 days	60 days	50 days	70 days
		Hours No	Hours No	Hours No	Costs €	Costs €	Costs €
Belgium	31.3	480	400	560	15,022	12,518	17,526
Bulgaria	2.1	480	400	560	1,004	837	1,171
Czech Republic	7.0	480	400	560	3,365	2,804	3,926
Denmark	41.9	480	400	560	20,114	16,762	23,466
Germany	37.1	480	400	560	17,825	14,854	20,796
Estonia	6.8	480	400	560	3,278	2,731	3,824
Ireland	39.4	480	400	560	18,911	15,759	22,062
Greece	18.1	480	400	560	8,677	7,231	10,124
Spain	21.3	480	400	560	10,240	8,533	11,947
France	36.9	480	400	560	17,716	14,763	20,669
Italy	42.2	480	400	560	20,240	16,867	23,613
Cyprus	18.0	480	400	560	8,643	7,202	10,083
Latvia	5.6	480	400	560	2,682	2,235	3,129
Lithuania	5.1	480	400	560	2,470	2,058	2,881
Luxembourg	38.0	480	400	560	18,219	15,183	21,256
Hungary	6.9	480	400	560	3,336	2,780	3,892
Malta	12.3	480	400	560	5,904	4,920	6,888
Netherlands	31.5	480	400	560	15,129	12,608	17,651
Austria	34.0	480	400	560	16,309	13,591	19,027
Poland	8.1	480	400	560	3,876	3,230	4,522
Portugal	16.6	480	400	560	7,980	6,650	9,310
Romania	5.1	480	400	560	2,465	2,054	2,876
Slovenia	15.4	480	400	560	7,373	6,144	8,602
Slovakia	4.8	480	400	560	2,289	1,907	2,670
Finland	30.7	480	400	560	14,748	12,290	17,206
Sweden	35.9	480	400	560	17,223	14,353	20,094
United Kingdom	43.2	480	400	560	20,715	17,263	24,168
<b>Total EU27</b>					<b>285,754</b>	<b>238,128</b>	<b>333,379</b>

### 3) Proposed Change: Estimate and report emissions and removals from rewetting and drainage activities

#### Finland

LULUCF: Rewetting and drainage activities					Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group														
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	31		0	1	1			0	0%	0	100%			
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	31		0	1	1			0	0%	0	100%			
3			Submission of (recurring) reports	Adjusting existing data	public authority	31		0	1	1			0	0%	0	100%			
4			Submission of (recurring) reports	Producing new data	public authority	31	96,000.00	49,120	1	1		41,600	90,720	0%	90,720	100%			
5			Submission of (recurring) reports	Filing forms and tables	public authority	31		0	1	1			0	0%	0	100%			
6			Submission of (recurring) reports	Holding meetings	public authority	31		0	1	1			0	0%	0	100%			
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	31		0	1	1			0	0%	0	100%			
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	31		0	1	1			0	0%	0	100%			
9			Submission of (recurring) reports	Filing the information	public authority	31		0	1	1			0	0%	0	100%			
10			Submission of (recurring) reports	Training members and employees about the information obligations	public authority	31		0	1	1			0	0%	0	100%			
						96,000.00						41,600.00							
						200.0													
													<b>Total administrative costs (€)</b>	<b>90,720</b>					
													<i>Total administrative burden (€)</i>	<i>90,720</i>					
													<i>Administrative costs by origin (€)</i>		90,720	0	0	0	

## Sweden

LULUCF: Rewetting and drainage activities					Tariff (€ per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)								
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																Int	EU	Nat	Reg					
No	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group																			
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	36		0	1	1			0	0%	0	100%								
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	36		0	1	1			0	0%	0	100%								
3			Submission of (recurring) reports	Adjusting existing data	public authority	36		0	1	1			0	0%	0	100%								
4			Submission of (recurring) reports	Producing new data	public authority	36	960.00	574	1	1		2,000	2,574	0%	2,574	100%								
5			Submission of (recurring) reports	Filing forms and tables	public authority	36		0	1	1			0	0%	0	100%								
6			Submission of (recurring) reports	Holding meetings	public authority	36	480.00	287	1	1		1,000	1,287	0%	1,287	100%								
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	36		0	1	1			0	0%	0	100%								
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	36		0	1	1			0	0%	0	100%								
9			Submission of (recurring) reports	Filing the information	public authority	36		0	1	1			0	0%	0	100%								
10			Submission of (recurring) reports	Training members and employees about the information obligations	public authority	36	4,800.00	2,872	1	1		10,000	12,872	0%	12,872	100%								
					6,240.00						13,000.00													
					13.0																			
													Total administrative costs (€)		16,734									
													Total administrative burden (€)		16,734									
													Administrative costs by origin (€)				16,734		0		0		0	

4) Proposed change: Estimate and report emissions and removals subject to “force majeure” events

Sweden

LULUCF: Emissions subject to "force majeure" events					Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group														
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	36	4,800.00	2,871	1	1		10,000	12,871	0%	12,871	100%			
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	36		0	1	1			0	0%	0	100%			
3			Submission of (recurring) reports	Adjusting existing data	public authority	36		0	1	1			0	0%	0	100%			
4			Submission of (recurring) reports	Producing new data	public authority	36		0	1	1			0	0%	0	100%			
5			Submission of (recurring) reports	Filing forms and tables	public authority	36		0	1	1			0	0%	0	100%			
6			Submission of (recurring) reports	Holding meetings	public authority	36		0	1	1			0	0%	0	100%			
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	36		0	1	1			0	0%	0	100%			
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	36		0	1	1			0	0%	0	100%			
9			Submission of (recurring) reports	Filing the information	public authority	36		0	1	1			0	0%	0	100%			

4,800.00  
10 days

10,000.00

**Total administrative costs (€)** 12,871  
 Total administrative burden (€) 12,871  
 Administrative costs by origin (€)

12,871 0 0 0

## Finland

LULUCF: Emissions subject to "force majeure" events					Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group														
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	26		0	1	1			0	0%	0	100%			
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	26		0	1	1			0	0%	0	100%			
3			Submission of (recurring) reports	Adjusting existing data	public authority	26		0	1	1			0	0%	0	100%			
4			Submission of (recurring) reports	Producing new data	public authority	26	24,000.00	10,216	1	1			10,216	0%	10,216	100%			
5			Submission of (recurring) reports	Filing forms and tables	public authority	26		0	1	1			0	0%	0	100%			
6			Submission of (recurring) reports	Holding meetings	public authority	26		0	1	1			0	0%	0	100%			
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	26		0	1	1			0	0%	0	100%			
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	26		0	1	1			0	0%	0	100%			
9			Submission of (recurring) reports	Filing the information	public authority	26		0	1	1			0	0%	0	100%			

no detailed information received

Total administrative costs (€) 10,216

Total administrative burden (€) 10,216

Administrative costs by origin (€)

10,216 0 0 0



5) Proposed change: Updating of forest management reference level values based on new data or methodological improvements

Sweden

LULUCF: Updating forest management based on new data					Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group														
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	36	480.00	287	1	1	1	1,000	1,287	0%	1,287	100%			
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	36		0	1	1	1		0	0%	0	100%			
3			Submission of (recurring) reports	Adjusting existing data	public authority	36		0	1	1	1		0	0%	0	100%			
4			Submission of (recurring) reports	Producing new data	public authority	36		0	1	1	1		0	0%	0	100%			
5			Submission of (recurring) reports	Filing forms and tables	public authority	36		0	1	1	1		0	0%	0	100%			
6			Submission of (recurring) reports	Holding meetings	public authority	36		0	1	1	1		0	0%	0	100%			
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	36		0	1	1	1		0	0%	0	100%			
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	36		0	1	1	1		0	0%	0	100%			
9			Submission of (recurring) reports	Filing the information	public authority	36		0	1	1	1		0	0%	0	100%			

1.00

Total administrative costs (€) 1,287  
 Total administrative burden (€) 1,287  
 Administrative costs by origin (€)

1,287 0 0 0

## EU27

Assumption: 1 day of staff costs and 1000 €outsourcing costs as indicated by SE

MS	Tariff	Hours	Staff costs	Outsourcing	Total
	€/hour	No	€	costs €	€
Belgium	31.3	8	250	1,000	1,250
Bulgaria	2.1	8	17	1,000	1,017
Czech Republic	7.0	8	56	1,000	1,056
Denmark	41.9	8	335	1,000	1,335
Germany	37.1	8	297	1,000	1,297
Estonia	6.8	8	55	1,000	1,055
Ireland	39.4	8	315	1,000	1,315
Greece	18.1	8	145	1,000	1,145
Spain	21.3	8	171	1,000	1,171
France	36.9	8	295	1,000	1,295
Italy	42.2	8	337	1,000	1,337
Cyprus	18.0	8	144	1,000	1,144
Latvia	5.6	8	45	1,000	1,045
Lithuania	5.1	8	41	1,000	1,041
Luxembourg	38.0	8	304	1,000	1,304
Hungary	6.9	8	56	1,000	1,056
Malta	12.3	8	98	1,000	1,098
Netherlands	31.5	8	252	1,000	1,252
Austria	34.0	8	272	1,000	1,272
Poland	8.1	8	65	1,000	1,065
Portugal	16.6	8	133	1,000	1,133
Romania	5.1	8	41	1,000	1,041
Slovenia	15.4	8	123	1,000	1,123
Slovakia	4.8	8	38	1,000	1,038
Finland	30.7	8	246	1,000	1,246
Sweden	35.9	8	287	1,000	1,287
United Kingdom	43.2	8	345	1,000	1,345
<b>Total EU27</b>			<b>4,763</b>	<b>27,000</b>	<b>31,763</b>
<b>Total without Malta and Cyprus</b>			<b>4,520</b>	<b>25,000</b>	<b>29,520</b>

## Enhance comprehensiveness, completeness, consistency and transparency of reporting by Member States

### 1) Proposed change: Report projections separately for the ETS-sector and the non-ETS sector

#### Hungary

Report policies and measures separately for the ETS-sector and the Non-ETS-sector					Tariff (€ per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group														
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	7		0	1	1			0	0%	0		100%		
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	7		0	1	1			0	0%	0		100%		
3			Submission of (recurring) reports	Adjusting existing data	public authority	7	480.00	55	2	1		17,000	17,110	0%	17,110		100%		
4			Submission of (recurring) reports	Producing new data	public authority	7	480.00	55	2	1		2,000	2,110	0%	2,110		100%		
5			Submission of (recurring) reports	Filing forms and tables	public authority	7	480.00	55	2	1		1,000	1,110	0%	1,110		100%		
6			Submission of (recurring) reports	Holding meetings	public authority	7	480.00	55	3	1			166	0%	166		100%		
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	7		0	1	1			0	0%	0		100%		
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	7	480.00	55	1	1			55	0%	55		100%		
9			Submission of (recurring) reports	Filing the information	public authority	7	480.00	55	1	1			55	0%	55		100%		

2,880.00

6

20,000.00

**Total administrative costs (€) 20,607**

Total administrative burden (€) 20,607

Administrative costs by origin (€)

0 20,607 0 0

## Netherlands

Report policies and measures separately for the ETS-sector and the Non-ETS-sector						Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burden (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																	Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group															
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	32		0	1	1	1			0	0%	0		100%		
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	32		0	1	1	1			0	0%	0		100%		
3			Submission of (recurring) reports	Adjusting existing data	public authority	32	7,200.00	3,780	1	1	1			3,780	0%	3,780		100%		
4			Submission of (recurring) reports	Producing new data	public authority	32	4,800.00	2,520	1	1	1			2,520	0%	2,520		100%		
5			Submission of (recurring) reports	Filing forms and tables	public authority	32	1,920.00	1,008	1	1	1			1,008	0%	1,008		100%		
6			Submission of (recurring) reports	Holding meetings	public authority	32	1,920.00	1,008	3	1	3			3,024	0%	3,024		100%		
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	32		0	1	1	1			0	0%	0		100%		
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	32	480.00	252	1	1	1			252	0%	252		100%		
9			Submission of (recurring) reports	Filing the information	public authority	32	480.00	252	1	1	1			252	0%	252		100%		

16,800.00  
35

Total administrative costs (€) 10,836

Total administrative burden (€) 10,836

Administrative costs by origin (€)

0 10,836 0 0

# Finland

Report policies and measures separately for the ETS-sector and the Non-ETS-sector					Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																Int	EU	Nat	Reg
No	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group														
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	31		0	1	1			0	0%	0			100%	
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	31		0	1	1			0	0%	0			100%	
3			Submission of (recurring) reports	Adjusting existing data	public authority	31	480.00	246	1	1			246	0%	246			100%	
4			Submission of (recurring) reports	Producing new data	public authority	31	1,440.00	737	1	1			737	0%	737			100%	
5			Submission of (recurring) reports	Filing forms and tables	public authority	31	240.00	123	1	1			123	0%	123			100%	
6			Submission of (recurring) reports	Holding meetings	public authority	31	96.00	49	1	1			49	0%	49			100%	
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	31		0	1	1			0	0%	0			100%	
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	31	96.00	49	1	1			49	0%	49			100%	
9			Submission of (recurring) reports	Filing the information	public authority	31	48.00	25	1	1			25	0%	25			100%	

2,400.00

5

Total administrative costs (€) 1,228

Total administrative burden (€) 1,228

Administrative costs by origin (€)

0 1,228 0 0

**EU27**

	tariff €/hour	6 days hours	outsourcing €/year	35 days hours	5 days hours	Total €/year
Belgium	31.3	48	20,000	280	40	8,763
Bulgaria	2.1	48	20,000	280	40	20,100
Czech Republic	7.0	48	20,000	280	40	20,337
Denmark	41.9	48	20,000	280	40	1,676
Germany	37.1	48	20,000	280	40	1,485
Estonia	6.8	48	20,000	280	40	20,328
Ireland	39.4	48	20,000	280	40	1,576
Greece	18.1	48	20,000	280	40	5,062
Spain	21.3	48	20,000	280	40	5,973
France	36.9	48	20,000	280	40	1,476
Italy	42.2	48	20,000	280	40	
Cyprus	18.0	48	20,000	280	40	20,864
Latvia	5.6	48	20,000	280	40	20,268
Lithuania	5.1	48	20,000	280	40	20,247
Luxembourg	38.0	48	20,000	280	40	10,628
Hungary	6.9	48	20,000	280	40	20,334
Malta	12.3	48	20,000	280	40	20,590
Netherlands	31.5	48	20,000	280	40	8,826
Austria	34.0	48	20,000	280	40	1,359
Poland	8.1	48	20,000	280	40	20,388
Portugal	16.6	48	20,000	280	40	4,655
Romania	5.1	48	20,000	280	40	20,247
Slovenia	15.4	48	20,000	280	40	20,737
Slovakia	4.8	48	20,000	280	40	20,229
Finland	30.7	48	20,000	280	40	1,229
Sweden	35.9	48	20,000	280	40	1,435
United Kingdom	43.2	48	20,000	280	40	1,726
<b>EU27</b>						<b>300,538</b>

2) Proposed change: Report policies and measures separately for the ETS-sector and the non-ETS sector

Hungary

Report policies and measures separately for ETS and Non-ETS-sector, and those targeting both sectors						Tariff (€ per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)						
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																	Int	EU	Nat	Reg			
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group																		
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	7		0		1	1			0	0%	0		100%					
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	7	480.00	55	2	1	2	1,000		1,110	0%	1,110		100%					
3			Submission of (recurring) reports	Adjusting existing data	public authority	7		0	0	1	0			0	0%	0		100%					
4			Submission of (recurring) reports	Producing new data	public authority	7	480.00	55	2	1	2	9,000		9,110	0%	9,110		100%					
5			Submission of (recurring) reports	Filing forms and tables	public authority	7	480.00	55	2	1	2	500		610	0%	610		100%					
6			Submission of (recurring) reports	Holding meetings	public authority	7	480.00	55	3	1	3			166	0%	166		100%					
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	7		0	1	1	1			0	0%	0		100%					
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	7	480.00	55	1	1	1			55	0%	55		100%					
9			Submission of (recurring) reports	Filing the information	public authority	7	480.00	55	1	1	1			55	0%	55		100%					
						2,880.00						10,500.00											
						6																	
														<b>Total administrative costs (€)</b>		<b>11,107</b>							
														<i>Total administrative burden (€)</i>		<i>11,107</i>							
														<i>Administrative costs by origin (€)</i>				0		11,107		0 0	

## Netherlands

Report policies and measures separately for ETS and Non-ETS-sector, and those targeting both sectors						Tariff (€ per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burden (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																	Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group															
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	32		0	1	1	1			0	0%	0		100%		
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	32	7,200.00	3,780	1	1	1			3,780	0%	3,780		100%		
3			Submission of (recurring) reports	Adjusting existing data	public authority	32		0	1	1	1			0	0%	0		100%		
4			Submission of (recurring) reports	Producing new data	public authority	32	2,400.00	1,260	1	1	1			1,260	0%	1,260		100%		
5			Submission of (recurring) reports	Filing forms and tables	public authority	32	1,920.00	1,008	1	1	1			1,008	0%	1,008		100%		
6			Submission of (recurring) reports	Holding meetings	public authority	32	1,440.00	756	1	1	1			756	0%	756		100%		
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	32		0	1	1	1			0	0%	0		100%		
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	32	480.00	252	1	1	1			252	0%	252		100%		
9			Submission of (recurring) reports	Filing the information	public authority	32	480.00	252	1	1	1			252	0%	252		100%		

13,920.00

29

Total administrative costs (€) 7,308

Total administrative burden (€) 7,308

Administrative costs by origin (€)

0 7,308 0 0



## Germany

Report policies and measures separately for ETS and Non-ETS-sector, and those targeting both sectors					Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group														
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	37		0	1	1	1		0	0%	0		100%		
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	37	240.00	148	1	1	1		148	0%	148		100%		
3			Submission of (recurring) reports	Adjusting existing data	public authority	37		0	1	1	1		0	0%	0		100%		
4			Submission of (recurring) reports	Producing new data	public authority	37	960.00	594	1	1	1		594	0%	594		100%		
5			Submission of (recurring) reports	Filing forms and tables	public authority	37	240.00	148	1	1	1		148	0%	148		100%		
6			Submission of (recurring) reports	Holding meetings	public authority	37		0	1	1	1		0	0%	0		100%		
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	37		0	1	1	1		0	0%	0		100%		
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	37		0	1	1	1		0	0%	0		100%		
9			Submission of (recurring) reports	Filing the information	public authority	37		0	1	1	1		0	0%	0		100%		
10			Submission of (recurring) reports	Other	public authority	37	480.00	297	1	1	1		297	0%	297		100%		

1,920.00

4

Total administrative costs (€) 1,187

Total administrative burden (€) 1,187

Administrative costs by origin (€)

0 1,187 0 0

## Finland

Report policies and measures separately for ETS and Non-ETS-sector, and those targeting both sectors						Tariff (€/per hour)	Time (minutes)	Price (per action)	Freq (per year)	Nbr of entities	Total number of actions	Equipment costs (per entity & per year)	Outsourcing costs (per entity & per year)	Total Administrative Costs	Business As Usual Costs (% of AC)	Total Administrative Burdens (AC - BAU)	Regulatory origin (%)			
If the act assessed is the transposition of one or several acts adopted at another level, insert here the name and reference of that or these 'original' acts																	Int	EU	Nat	Reg
No.	Art.	Orig. Art.	Type of obligation	Description of required action(s)	Target group															
1			Submission of (recurring) reports	Familiarising with the information obligation	public authority	31		0	1	1	1			0	0%	0		100%		
2			Submission of (recurring) reports	Retrieving relevant information from existing data	public authority	31	480.00	246	1	1	1			246	0%	246		100%		
3			Submission of (recurring) reports	Adjusting existing data	public authority	31		0	1	1	1			0	0%	0		100%		
4			Submission of (recurring) reports	Producing new data	public authority	31	480.00	246	1	1	1			246	0%	246		100%		
5			Submission of (recurring) reports	Filing forms and tables	public authority	31	480.00	246	1	1	1			246	0%	246		100%		
6			Submission of (recurring) reports	Holding meetings	public authority	31	96.00	49	1	1	1			49	0%	49		100%		
7			Submission of (recurring) reports	Inspecting and checking (including assistance to inspection by public authorities)	public authority	31		0	1	1	1			0	0%	0		100%		
8			Submission of (recurring) reports	Submitting the information (sending it to the designated recipient)	public authority	31	96.00	49	1	1	1			49	0%	49		100%		
9			Submission of (recurring) reports	Filing the information	public authority	31	48.00	25	1	1	1			25	0%	25		100%		

1,680.00  
3.5

Total administrative costs (€) 860

Total administrative burden (€) 860

Administrative costs by origin (€)

0 860 0 0

**EU27**

<b>MS</b>	<b>tariff €/ hour</b>	<b>Days/ yr No</b>	<b>Costs €/yr</b>
Belgium	31.3	4.5	1,127
Bulgaria	2.1	4.5	75
Czech Republic	7.0	4.5	252
Denmark	41.9	4.5	1,509
Germany			1,187
Estonia	6.8	4.5	246
Ireland	39.4	4.5	1,418
Greece	18.1	4.5	651
Spain	21.3	4.5	768
France	36.9	4.5	1,329
Italy	42.2	4.5	1,518
Cyprus	18.0	4.5	648
Latvia	5.6	4.5	201
Lithuania	5.1	4.5	185
Luxembourg	38.0	4.5	1,366
Hungary			11,107
Malta	12.3	4.5	443
Netherlands			7,308
Austria	34.0	4.5	1,223
Poland	8.1	4.5	291
Portugal	16.6	4.5	599
Romania	5.1	4.5	185
Slovenia	15.4	4.5	553
Slovakia	4.8	4.5	172
Finland			860
Sweden	35.9	4.5	1,292
United Kingdom	43.2	4.5	1,554
<b>EU27</b>			<b>38,066</b>