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**EU policy options for the protection of European  
forests against harmful impacts**

as part of the tender:

Implementation of the EU Forestry Strategy: "How to protect EU Forests  
against harmful impacts?"

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**Disclaimer:**

This report aims at delivering information for the fulfilment of the objectives of the study “Implementation of the EU Forestry Strategy: How to protect EU Forests against harmful Impacts?”. The opinions expressed in this report represent the views of the authors and do not bind the European Commission in any way.

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## Acronyms and Abbreviations

ARD	Afforestation, Reforestation, Deforestation
AGFC	Advisory Group on Forestry and Cork
BAP	Biomass Action Plan
BFH	Federal Research Centre for Forestry and Forest Products
C&I	Criteria and Indicators
CAP	Common Agricultural Policy
CBD	Convention on Biodiversity
CDM	Clean Development Mechanisms
CEPF	Confederation of European Forest Owners
CHP	Combined Heat and Power
CIS	Commonwealth of Independent States
CIS	Common Implementation Strategy
COP	Conference of the Parties
DG AGRI	Directorate-General Agriculture and Rural Development
DG ENV	Directorate-General Environment
DG TREN	Directorate-General Transport and Energy
EAFRD	European Agricultural Fund for Rural Development
EC	European Community
EEA	European Environmental Agency
EFDAC	European Forest Data Centre
EFFIS	European Forest Fire Information System
EFI	European Forest Institute
EFICS	European Forestry Information and Communication System
ESD	Effort Sharing Decision
EU	European Union
FAO	Food and Agriculture Organisation
FAP	EU Forest Action Plan
FAP KA	EU Forest Action Plan, Key Action
FFD	Forest Framework Directive
FLEG	Forest Law Enforcement and Governance
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GHG	Greenhouse Gas Emissions
ICP Forests	International Co-operative Programme on Assessment and Monitoring of Air Pollution
IFF	Intergovernmental Forum on Forests
IPCC	Intergovernmental Panel on Climate Change
IPF	Intergovernmental Panel on Forests
JI	Joint Implementation
JRC	Joint Research Centre



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LEADER(+)	Liaison entre actions de développement de l'économie rurale
LIFE+	new Financial Instrument for the Environment
LULUCF	Land-use, Land-use Change and Forestry
MCPFE	Ministerial Conference for the Protection of Forests in Europe
MS	Member States of the European Union
nBAPs	national Biomass Action Plans
NFP	National Forest Programme
NLBI	Non-legally binding instrument
OMC	Open Method of Coordination
PEOLGS	Pan-European Operational Level Guidelines (for Sustainable Forest Management)
POM	Programme of Measures
POW	Programme of Work
RD	Rural Development
RDP	Rural Development Programme
REDD	Reducing Emissions from Deforestation and Degradation
RES	Renewable Energy Sources
RES-E	Electricity from Renewable Energy Sources
RES-D	Directive on the Promotion of Energy from Renewable Sources
RES-H	Heat from Renewable Energy Sources
SAC	Special Area of Conservation
SBI	Subsidiary Body for Climate Change
SCI	Site of Community Importance
SFC	Standing Forestry Committee
SFM	Sustainable Forest Management
SPA	Special Protection Area
TCD	Trinity College Dublin
UNECE	United Nations Economic Council of Europe
UNFCCC	United Nations Framework Convention on Climate Change
UNFF	United Nations Forum on Forests
WFD	Water Framework Directive

## 0 Executive Summary

Europe's forests offer a plethora of ecosystem services to society, e.g., timber, recreation, biodiversity and carbon storage. Sustainable forest management and conservation measures are applied to ensure the lasting delivery of these services. Forests and forest management, however, face a variety of challenges due to ecological and socio-economic developments, such as climate change and an increasing demand for wood from the bioenergy sector.

Albeit these challenges affect forests all over Europe, no common forest policy exists on the EU level to date. Instead, forest and forestry issues are addressed by several EU policies in the environmental, agricultural and energy fields. The "EU Forestry Strategy" (1998) and the "EU Forest Action Plan" (2006), both of which follow a voluntary approach, aim to improve the coordination of those policies by proposing forest related actions to be carried out by the Commission and by Member States. These instruments do not, however, provide a coherent and binding policy framework.

Against this backdrop, this study examines in detail which environmental challenges may necessitate a Community approach to protect European forests from harmful impacts and develops options for a common EU approach on forest protection.

The study is divided into 2 parts. The first part provides an overview of the current state of European forests as well as relevant threats and challenges regarding European forestry and forest protection. It further discusses existing forest and forest-related policies across the EU. Based on both analyses, need for action is identified. The second part aims to develop and evaluate policy concepts to respond to these needs. Eventually, scenarios for an effective and feasible approach towards better forest protection on the EU level and recommendations for the implementation are provided.

### Forests in Europe: State and Challenges

Europe's forests are, as compared to forests on other continents, intensively managed, rather young and dominated by even-aged stands. They are, however, regionally diverse in terms of tree species composition, growth, and biodiversity. While natural forests rarely occur, very intensively used plantations are not frequent either. Semi-natural forests, shaped by a variety of social demands and forest management types, are most characteristic of EU forests.

The main challenges identified for forests in Europe and the forest sector include climate change, emissions and depositions, changing societal demands that compete with timber production and shifts in the structure of forestry and in timber markets due to further economic globalisation. The demand for forest products and timber in particular plays a major role in the management of many forests, especially in regard to the incomes of forest owners. Societal needs towards forests, however, are very different throughout the EU depending on the country and the region; for instance on the degree of urbanisation.

The mentioned challenges result in impacts on forests, which are perceived as "threats" by different societal groups, if they hamper demanded forest ecosystem services. It can be shown, that 2 dominant perspectives on forests exist throughout the EU. A commodity perspective reflects the perception of threats by timber production oriented forestry, whereas the perspective of forest ecology and nature protection is represented by the amenity-perspective.

The *commodity perspective* particularly considers forest *vitality* (growth) and *stability* ('forest health') as the main preconditions for sustainable timber production. Threats are usually perceived as coming from outside the forest sector (e.g., natural disturbances, insect calamities). This view of forests and forestry highlights forest production and technological and natural science aspects of forest growth and management. In contrast, the *amenity perspective* emphasises the preservation of forests as *naturally dynamic* ecosystems as well as fostering *forest biodiversity*. Threats are regarded as being induced by major trends (e.g.

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climate change), but also as being caused by forest management itself, e.g., by intensive and production oriented forestry. This view of forests and forestry is closely connected with the biological and ecological sciences.

As a result, the needs for action by policy are regarded differently between both perspectives. The main discrepancy relates to the perceived function of sustainable forest management which can be seen as one of the main reasons for the current inconsistency in applying SFM in Europe. While advocates for the commodity perspective seek to improve forest management activities in terms of profitability for forest owners and timber supply for forest based industry, the amenity perspective rather aims to transform forest management in view of enhancing conservation values of forest ecosystems.

### **Forest and forest related policies – current state and policy coherence**

Forests and forest related policies can be divided into different governance levels – international, pan-European, European and national. The latter, however, is not explicitly considered in this study.

Forest policy at the global level is characterised by decade-long disputes regarding the adequate institutional framework for dealing with challenging problems, e.g., deforestation or the concretisation of sustainable forest management. The UNCED, the subsequent negotiations at the Intergovernmental Panel on Forests (IPF), the Intergovernmental Forum on Forests (IFF) and the United Nations Forum on Forests (UNFF) have resulted in various non-binding objectives and proposals for action, but no Forest Convention so far. However, forest protection on an international level is addressed directly or influenced indirectly by other policies such as climate policy (UNFCCC), policies on the conservation of biodiversity (CBD), and even trade policies (WTO).

On the pan-European level, the Ministerial Conference on the Protection of Forests in Europe (MCPFE) is the main political initiative with regard to forest protection. The MCPFE non-legally binding commitments involve 46 European signatory states in and outside of the European Union. Joint activities range from technical cooperation on the development of criteria and indicators for Sustainable Forest Management (SFM) to commitments on strengthening the role of the forest sector for renewable energy production to guidelines for the conservation of forest biodiversity. MCPFE is linked to national forest policies via the advancement of National Forest Programmes (NFPs).

At the EU level, the main instruments that are explicitly designed for forest issues are the EU Forestry Strategy (1998) and the EU Forest Action Plan, which was adopted in 2006 as a result of a communication of the Commission to the Council and the European Parliament in 2005. The 2005 report suggested the need for an EU Forest Action as well as to extensively review the existing Community means and practises to facilitate improved coordination, communication and cooperation between the different policy areas that influence forests and forestry. Moreover a review of the role of the Standing Forestry Committee (SFC) was pursued.

Among the most relevant forest related policies on EU level are the Common Agricultural Policy (CAP), water policy mainly consisting of the Water Framework Directive (WFD) and policy on nature protection, including Natura 2000. Furthermore policies on renewable energies (e.g. the Renewable Energy Directive) lead to a strong increase in the use of biomass (and also wood) for bioenergy applications. In regard to EU climate policy, emissions and removals related to land use, land use change and forestry (LULUCF) are to be included under the "Effort Sharing Decision" (ESD).

Forest monitoring was identified as a crucial cross-cutting element in future forest protection policy. It is currently addressed by different institutions and policies on different governance levels such by the FAO, the UNECE and the EU Habitats Directive.

As an analytical step to identify further needs for better forest protection governance, policy coherence, namely conflicts and synergies within and between forest and forest related

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policies, was analysed. Main conflicts arise from the fact that forest protection measures are widely spread across different policy fields leading to:

- Potentially contradicting policy objectives with similar importance for forests without set priorities,
- Inconsistent enforcement due to partly legally binding, partly financially incited, and mostly voluntary measures, and
- Inconsistent and fragmentary control of objective achievement.

### **Needs for action at the Community level towards better forest protection**

Based on the analysis of threats to European forests and the current structure and deficits in forest and forest related policies, arguments for a more coherent approach for forest protection at the Community level can be derived from ecological, economic and socio-political perspectives. Among the main ecological arguments in favour of a Community approach is the fact that several of the analysed forest threats are of a trans-boundary nature or are significant across whole Europe. For instance, the loss of biodiversity in forests can be regarded as a general European problem. Invasive plant, insect and fungal species are increasingly crossing national state borders and are simultaneously affecting forest ecosystems in many European regions. Forest fires and storms are also increasingly becoming a transnational phenomena.

From the economic perspective, a common approach would have positive effects on the European Common Market by preventing distortion caused by different forest protection standards within the EU Member States. Further, it would help to avoid a 'race to the bottom' between Member States concerning, e.g., forest management and protection standards, in case of increasing economic competition. More specifically, a more coordinated Community approach may help to establish a consistent information basis and to close knowledge gaps regarding the state of and impacts on EU forests in terms of the various demands of European societies.

Politically, a Community approach could help to overcome potential regulatory failures and discrepancies between the fundamental goals of the EU and the currently applied policy measures. As shown above forest protection measures are spread across different EU policy fields often leading to contradictions between pursued objectives as a consequence of unset priorities in policy implementation.

However, it has to be kept in mind, that there are also arguments against a Community approach. For example, it is argued, that the regional characteristics of forestry and forest-based industries are different, resulting in a limited degree to which a detailed regulation can be developed for a more Community-based approach to forest protection policy. On the other hand, forest product markets, forestry and forest-based industries have seen a continuous 'Europeanisation' in the last ten years and European forests are becoming more and more embedded in an international context of socio-economic and ecological developments. Resistance against a more integrated approach is also derived from lacking political intention by some policy-makers, different interest groups and Member States.

### **Options for European forest protection policy**

Based on an expert workshop conducted during the working process of the project, 4 policy options for European forest protection with different degrees of policy changes needed for implementation were developed. The options include:

- Continue and Improve Current Approach
- Forest Monitoring for Europe
- Forest Framework Directive
- Open Method of Coordination

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In a second step, the options were evaluated due to their expected effectiveness for the overall goal of improving the status of European forests and for their feasibility in terms of the time frame of their implementation, the institutional compatibility and their acceptance by relevant stakeholder-groups. In the following, the rationale of the options as well as their evaluation will be briefly summarised.

### ***Continue and Improve Current Approach***

This option builds on the current policy structures outlined above, adjusting some measures and addressing some of the main identified shortcomings in the forest and forest related policies currently applied at the EU level. It thereby acknowledges the current distribution of competences and the main goals of the different policies:

- Subsidiarity and shared responsibility as key principles to be maintained.
- Need for regionally specific approaches and actions in view of different natural, socio-economic and cultural conditions in EU Member States
- Need to improve policy coordination, communication, cooperation and coherence across sectors and government levels.

In order to pursue these objectives, a special inter-sectoral working group or technical working group would be established under the SFC. This working group would be given a clear mandate to generate, coordinate and spread information and organise temporary working groups.

The key element to strengthen coordination and to enforce a mutual learning process would be a Common report on existing national strategies. Such a Common report would highlight best practises for regional, national or bio-geographical forest protection strategies and could thus promote a mutual learning process and enhance the coordination and coherence of existing policies. This Common report would also identify existing deficiencies in the current funding structure and develop a concept for streamlining the funding available from different sources. Furthermore, it might point to overlapping funding structures as well as perverse incentives for forest protection.

### ***Forest Monitoring for Europe***

The option for a European forest monitoring system is developed to overcome the current institutional and functional issues that forest monitoring activities are facing (e.g. different multi-lateral agreements at different levels, fragmented monitoring for quality and quantity of ecosystem goods and services). The option aims at filling the gap between the actual state of forest monitoring and current and future forest (protection) policy and information needs within the EU, providing a permanent, inclusive, harmonised and flexible monitoring system.

The design of the monitoring system is based on a set of principles such as sharing scientifically sound knowledge and overseeing its inclusion as well as priorities ranging from natural to socio-economic and political considerations. Forest monitoring governance relies on an appropriate legal backbone and a regular and systematic source of funding.

The Community level provides for an independent, permanent and stable structure for data gathering, analysis and reporting. Also, at the Member State-level, actual data gathering takes place.

In order to implement the present policy concept, the Commission would:

- Firstly, initiate the identification and filling of monitoring gaps.
- Secondly, support the harmonisation of existing forest monitoring processes at the MS level.
- In parallel, launch a consensus-finding process on policy needs among several different actors as key to creating a solid legal and financial backbone for the monitoring activities. Consultation and consensus building should allow for the

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European forest monitoring to represents a balance between the amenity and commodity needs and interests in the EU.

### ***Forest Framework Directive***

Framework directives are a suitable tool for policy issues in situations where common European objectives and standardisation are seen as beneficial, but where high flexibility regarding implementation is required due to the different natural, socio-economic, cultural and institutional conditions of the Member States. In the following policy option the broad objectives that are defined are legally binding for all Member States within a certain time period. Rules and instruments of the directive can be further specified and adjusted during the implementation process.

The general goal of the Forest Framework Directive (FFD) would be to maintain and restore a 'good status' of all forests in the EU, in light of their social, ecological, and economic importance, and make them resilient against harmful impacts by 2030.

In order to accomplish the main goal, the Directive sets 6 thematic Common objectives.

- Identify and monitor the state of the forests and the threats affecting them
- Ensure the sustainable management of all EU forests in view of their social, ecological, and economic importance
- Stop and reverse the loss of forest biodiversity
- Enhance forest adaptation towards climate change and the mitigation of climate change
- Provide a sustainable financial fundament for multifunctional forest management
- Encourage broad societal participation with forest

These objectives are accompanied by 4 Common forest protection instruments.

- Common Sustainable Forest Management Framework
- European Forest Protected Area Network
- European Payment for Forest Ecosystem Services System
- European Forest Monitoring System

In order to reach the objectives and implement the required structure in a coordinated way, a series of 5 National Requirements would be necessary. As a general rule, the requirements should be broad enough so that they can be adapted to diverse regional and ecological contexts and then can be further specified during the national implementation process.

- National binding SFM minimum standards
- National SFM best practises strategies
- National forest adaptation and mitigation strategies against climate change
- National forest programmes
- Participatory forest planning in public forests

As a complement to this system of Common Instruments and National Requirements, a Common Catalogue of Measures would be developed to facilitate and support on-the-ground implementation of the Directive's objectives and instruments in the Member States.

Measures of the catalogue would be selected by the MS according to national preferences. Various national and regional forest actors would be able to apply for funding when implementing the proposed measures (similar to the forest measures offered in the current EU rural development policy).

Member States compile all activities of implementation in the National Forest Management and Action Plan, which serves as a main tool for both national and subnational implementation and coordination between the Member States and the Commission.

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## **Open Method of Coordination**

Communication, cooperation and coherence of European forest protection policy should be improved by the Open Method of Coordination (OMC) whilst respecting and even encouraging the competence and sovereignty of forest policy in Member States. Through the OMC the different regional and sectoral perceptions of forest threats should be clarified in order to reach a common understanding about needs and ideas for action at the Community and Member State level. The OMC on Forest protection will proceed in 5 steps:

Step 1: Introduction of the OMC for forest policy and start of the process: The Council of Ministers starts the procedure upon agreement of the European Commission and the Commission's proposal.

Step 2: Initial Report: Development of common objectives, measures, guidelines and indicators: An initial report is composed by the Commission in close cooperation with the SFC. Stakeholders (forest and environmental NGOs), Member States and scientific experts need to be integrated in the compilation of the document.

Step 3: Implementation and national reporting phase: Member States reflect on the common objectives, guidelines, indicators and measures outlined by the initial report in view of their existing and planned national forest protection policies. In doing so, Member States will compile a national report based on the guideline included in the initial report.

Step 4: Definition of benchmarks and best practises: Based on the Member States' national reports, the Commission drafts a Joint Report which proposes benchmarks and includes an evaluative chapter. National reports will be reviewed and commented on by the SFC and the Council of Ministers. NGOs are also invited to share their opinions on the joint report. Throughout the course of this process, best practises will be promoted and shared, encouraging a learning process between Member States and forest policy stakeholders.

Step 5: Continuation of the OMC and decision for additional activities at the Community level.

## **Evaluation of policy options**

The evaluation of the policy options focuses on the effectiveness in achieving the policy objectives and the feasibility of their implementation. It is based on 12 expert interviews conducted during the project and their analysis.

Generally, the effectiveness and feasibility of any option is dependent upon how the option is designed in detail. The analysis shows a certain trade off between effectiveness and feasibility, that is, the most effective options are more likely to provoke the highest degree of political resistance. Some general tendencies can be described for the outlined options:

The **Improved Current Approach** to forest protection is, on the one hand, politically feasible as it represents the current political consensus of the Member State. It is, on the other hand, not seen as having any substantial positive effect on the ecological state of the forests as compared to the current situation. The **European Forest Monitoring** provides a feasible option and has support from both the amenity and commodity side of the stakeholder spectrum. It bears a high potential to deliver sound information for informed policy strategies at the Member State or Community levels. It can be seen as a prerequisite for any other policy option than a policy option itself. The **Forest Framework Directive** is the most challenging option. The approach is the most inclusive and integrated; the added value, particularly for the ecological state of the forests, and effectiveness are comparably high. However, a lot of effort will be needed to make this option politically feasible. In general, amenity actors seem to support the option, but commodity actors might have serious reservations as well as some Member States, particularly those with a strongly commodity-oriented forest policy. Thus, going for the FFD will require a high degree of political skill as well as willingness to compromise. The **Open Method of Coordination** for forest protection, eventually, tends to be an ambiguous option. Anticipating possible effects of using this approach for forest protection seems difficult. Those who had a distinct opinion pointed out

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that feasibility might be questionable due to the institutional efforts needed and the unclear outcomes. Mutual learning processes, however, have been characterised as being a likely additionally added value that can be attained by implementing this approach.

### **Policy recommendations**

The rationale of this study is not to recommend a specific policy approach, but to provide ideas for discussions on potential strategic paths that might lead to better forest protection in the EU. Before outlining 3 possible scenarios on how political pathways could be pursued, 2 general issues are discussed. First, to avoid misunderstandings, it has to be restated, that while forest protection policy serves both the commodity and the amenity perspective on prevention of harmful impacts on forests in the future, it is mostly related to environmental aspects of forests and forest management. Forest protection can thus be seen as not replacing, but as a crucial element of overall forest policy that addresses ecological, economic and social aspects of SFM. Second, as for the issue of vertical integration, the relationship between Community actions on forest protection and the MCPFE is paid heed to, particularly as MCPFE currently has started an expert discussion on the potential benefits of legally binding agreements on forest issues at the Pan-European level. It is concluded that the MCPFE attempt and possible actions at the Community level can be seen as mutually reinforcing processes. The MCPFE as an international coordination process virtually provides a toolbox, which participating countries and the Community can make use of in order to design any new approach towards forest protection.

The scenarios presented in the study presume different levels of political readiness for and resistance against major changes in EU forest protection policy. The first scenario, named the “environmental policy framework” is based on the assumption that enough evidence and political support exists to go for a coherent environmental framework for forest protection at Community level. Such a policy process would begin with the writing and acceptance of both a Green and White Paper followed by a co-decision procedure for an FFD under the environmental competences of the EU. For the second scenario, called “policy learning”, the Community might enter into a process that mostly orientates around elements of the “Improved Current Approach” option and the “OMC”, striving for an iterative mutual consultation process with Member States and relevant stakeholders from civil society. This scenario implies that political support is not sufficient to carry through with the procedure outlined in Scenario 1; however, the possibility that the consultation process could be followed by steps similar to those undertaken in Scenario 1 should remain open. In the third scenario, the “selected issues approach”, the Commission might choose specific forest protection issues that are rather uncontested in terms of their severity and causes on different temporal and geographical scales and enter into a similar process as outlined in the scenario 2 and/or 1.

The study concludes by highlighting how different windows of opportunity open on an EU and international level, allowing to strive for one of the presented scenarios.



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# 1 Introduction

## 1.1 Background of the study

Europe's<sup>1</sup> forests offer a plethora of ecosystem services to society, e.g. timber, recreation, biodiversity and carbon storage. Sustainable forest management and conservation measures are applied to ensure the lasting delivery of these services. Forests and forest management, however, face a variety of challenges due to ecological and socio-economic developments. Those challenges result in a variety of biotic, abiotic and directly human induced impacts on forests, which are perceived as threats by different societal groups.

Challenges and threats are addressed by a dense web of forest, climate and environmental policies at international, Pan-European and EU level. These policies are reflected in national and sub-national forest policies in various forms within the European Union. Yet, at the level of the EU, there is no explicit corporate competency for the forest sector given by EU treaties (cf. Chapter 3.3.1 and 5.1.5). Therefore, no official and legally bound forest policy currently exists on the EU level. Forest and forestry issues are, however, addressed by different forest related EU policies in the environmental, agricultural and energy fields. The "EU Forestry Strategy" (1998) and the "EU Forest Action Plan" (2006) aim to improve the coordination of those policies by proposing forest-related actions to be carried out by the Commission and by Member States.

In this context, the European Commission assigned the Institute of Forest and Environmental Policy, University of Freiburg, in cooperation with the Ecologic Institute, Berlin, to carry out the study: "Implementation of the EU Forestry Strategy: How to protect EU Forests against harmful impacts?" in November 2008. The study shall contribute to the requests of the Council and the Commission to review existing ways and means to facilitate coordination, communication and cooperation between different policies which have an influence on forests and forestry within the European Union.

## 1.2 Study objectives

This study aims to examine which specific environmental factors would necessitate a Community approach to protect European forests and to assess options for a Community initiative on forest protection, including preparatory actions. In order to achieve this general objective, the following specific objectives have been formulated:

- Objective 1: To provide an overview of the environmental state of EU forests and threats affecting them
- Objective 2: To review standing environmental policy objectives at international, Pan-European and EU level in relation to EU forests and forest sector
- Objective 3: To identify needs regarding forest protection and possibilities for response at Community level
- Objective 4: To formulate ways and means for the Commission to work towards a Community initiative to protect forests

## 1.3 Methodology and outline

The study is divided into 2 parts. The first part provides an overview of the current state of European forests as well as relevant threats and challenges regarding European forestry and

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<sup>1</sup> In this study, Europe and EU are partially used synonymously. That is, European EU mostly relates to the EU territory. In case the issues addressed are explicitly going beyond the scope of the EU, the term pan-European is used.

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forest protection. It further discusses existing forest and forest-related policies across the EU. Based on both analyses, need for action is identified. The second part aims to develop and evaluate policy concepts to respond to these needs. Eventually, scenarios for an effective and feasible approach towards better forest protection on the EU level and recommendations for the implementation are provided.

Part 1 constitutes the analytic foundation of the study. The actual state of European forests is analysed and presented with a series of data tables addressing both the relevant ecological and socio-economic aspects of forest ecosystems and forestry. Different viewpoints that regularly occur in the forest sector are considered in this study by dividing the analysis into amenity and commodity perspectives regarding the functions and use of forest ecosystems. Trends and challenges for the forests in Europe are outlined within each perspective by consulting recent scientific literature (e.g. scientific publications, dealing with policy and management issues as well as official reports from EU, EEA, FAO, MCPFE, plus EU legislation, etc.). The description of the current state and management of the EU forests is built upon the assessment of a wide range of physical parameters such as forest cover, tree species composition, age, growing stock, different parameters of vitality, etc. A review of additional parameters with direct links to the international processes in environmental policy such as biodiversity parameters, the carbon budget of forests and ecosystem services completes the analysis. This overview allows for the identification and a first prioritisation of the main threats to European forests and thus also of the extent policy action is needed.

Furthermore, policies that have a direct or indirect effect on forests and forestry in Europe are analysed according to the way in which they address forests, focusing on their objectives, instruments and level of implementation. The analysis is based on official documents, legal texts and secondary literature on EU policies and international conventions. The study differentiates between forest policies that deal exclusively with forests and forestry and forest-related policies, such as agriculture and rural development, biodiversity, nature conservation, water, climate and renewable energy policies, which contain measures that have an effect on forestry. All policies are ordered according to different governance levels (international, pan-European and EU level) to highlight the differences in their legal bases. Moreover, in order to identify possible gaps and inconsistencies in addressing forest protection and forestry, the coherence within and between the considered policies is analysed both vertically (across governance levels) and horizontally (among governance levels and policy fields). For this, synergies or conflicts that occur between objectives, instruments and measures of each policy in relation to another are highlighted via a comparative analysis.

As a result, the need for action in order to achieve better EU forest protection can be refined, followed by the first implications for revising existing policies or for new policy approaches. The results gained at this stage of the study were presented and discussed with renowned experts during an expert workshop in order to receive reflective input on the prioritisation of the threats to European forests and on the identified need for action at the Community level. The workshop substantially contributed to the formulation of policy options to respond to and address the identified threats to forests.

In part 2, 4 policy options for a Community approach to the protection of forests against harmful impacts are elaborated in more detail. These options are derived from the outcomes of the workshop. They are further developed through conceptual work and by consulting relevant literature sources on similar policy approaches. As a necessary analytical step, governance modes are introduced and discussed in order to show how and where new policy approaches can be anchored in existing governance structures and how this corresponds with legal preconditions. The analysis is restricted to the governance modes that are relevant to existing EU forest and forest-related policies, namely the regulatory approach, the framework approach and voluntarism.

Once finalised, the policy options were discussed and evaluated via semi-structured telephone interviews with 12 selected experts from research institutions, NGOs, forest

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owners, industries and administrations. The interviews included questions regarding the general strengths and weaknesses of the options, their effectiveness in achieving policy objectives and the feasibility of their implementation. Specific emphasis was placed on the expected acceptance of the policy options by different stakeholder groups. The results of the interviews are, first, summarised in Table 15. Subsequently, they are discussed in more detail and related to the specific issues of effectiveness and feasibility in an evaluation of the policy options by drawing on the issues raised in the interviews (for further details of the evaluation methodology, please see Chapter 6.1).

The report concludes with a recommendation chapter which develops, based on the analytical and evaluative work done before, possible scenarios for a Common European approach toward forest protection, including the required procedural steps and the expected timing for implementation of each of these scenarios.

## 2 Forests in Europe: state and challenges

### 2.1 State and management of European forests

#### 2.1.1 Ecological and socio-economic aspects

In this chapter, the state of Europe's forests is presented based on a display of data addressing both the ecological and socio-economic aspects relevant to forest ecosystems and forestry. The ecological aspects are concretised via 8 parameters and described in a quantitative as well as qualitative way. Similarly, socio-economic aspects are presented according to 3 main features and their relevant characteristics. Generally, the displayed data concerns the aggregate level of the EU and/or Pan-Europe and also gives examples of regional patterns within the concerned parameters. The state of the forest ecosystems in Europe is presented in Table 1 below.

**Table 1: State of the forests in Europe: ecological and socio-economic aspects (European Commission, 2009a; EEA 2008a; FAO, 2007; ICP Forests, 2004; MCPFE, 2007; UNECE/FAO, 2005)**

Ecological aspects							
Forest Cover	Species Composition	Age Structure	Growing Stock	Carbon Budget	Biodiversity; Naturalness	Protected Areas	Growth; Vitality
<b><i>EU (or Pan-European) average</i></b>							
40% (177 Mio. ha) 7% increase since 1990	50% Coniferous 25% Broad-leaved 25% Mixed  30% single tree species dominated forests; 50% forests of 2-3 tree species; 17% forests of 4-5 tree species; 3% forests of 6-10 tree species (MCPFE region)  Slowly increasing percentage of multi-species forests (MCPFE region)  8,1 Mio ha (Pan-Europe, excl. Russia) dominated by introduced species; 10% of that area are dominated by invasive species	87% Even-aged forests	151 m <sup>3</sup> /ha (Pan-Europe, excluding Russia)  Increasing total growing stock	9.8 billion tons of C stored (2005, EU-27)  137 Mio. tons annual storage of C between 1990-2005 (MCPFE Region)  From 2000 to 2005, annual increase in C storage in EU forests was less than 10% of CO <sub>2</sub> equivalent emissions of MS (EU-27)	87% Semi-natural forests  5% undisturbed by man (natural forests)  8% plantations  Often unfavourable habitat diversity & conservation status: only 20% of EU's Natura 2000 forests are in a favourable condition, 30% show unfavourable-inadequate and about 35% show unfavourable-bad conditions  Scarce late development phases; Available dead wood is 10% of naturally expected amount  11 forest mammal species threatened	8% forest biodiversity and landscape conservation area  13% of forest surface designated Habitats Directive sites (EU-27)  Below 2% are strictly protected forest areas	Site productivity and tree growth: Increasing in Northern and Central Europe; Decreasing in Southern Europe  22% damaged or dead forests (crown conditions)  Stable crown conditions; defoliation of oak and spruce, improvements of pine and beech

<b>Exemplary regional patterns</b>							
Increase in rural and mountain areas	Predominantly coniferous forests: Scandinavian and Baltic states	2/3 of the forests in Central Europe are younger than 60 years	Record volume increase of growing stock per hectare in Central Europe		Forest birds populations:	Strictly protected areas in North/Baltic and South-East Europe	
De-crease in densely populated regions	Predominantly broadleaved forests: Southern and Western Europe	Forests aged 1-20 years cover an area twice as large as forests aged 81-100 years in North Europe			Decline in North and South Europe; Stable populations in Western and Eastern Europe	Areas actively managed for conservation in Central, North-Western and South Europe	
<b>Socio-economic aspects</b>							
Ownership structure			State forest organisations		Societal demands		
<i>State property</i>	<i>Communal property</i>	<i>Private property</i>	<i>Integrated</i>	<i>Separated</i>	<i>Economic production services</i>	<i>Ecosystem services</i>	<i>Social services</i>
34%	7%	59%	Regulation & management by single state unit	Regulation by state authority, management by state enterprise	Renewable resources (e.g. timber, berries, game, cork)  Surface area reservoir	Soil, water, climate regulation  Flora, fauna and habitats maintenance	Recreation, information, psychological and human ecological functions
<b>Exemplary regional patterns</b>							
> 70% in Eastern Europe		> 70% in Western/North/South Europe		Some parts of Eastern Europe	Most of North, Central and Eastern Europe		

Table 1 shows that Europe's forests are, as compared to forests on other continents, intensively managed, rather young and dominated by even-aged stands. They are, however, regionally diverse in terms of tree species composition, growth, and biodiversity. While natural forests rarely occur, also very intensively used plantations hardly exist. Thus, semi-natural forests shaped by a variety of social demands and forest management types are the main characteristics of EU forests.

These forests provide a plethora of services to European societies. Space for recreation and tourism, wood for construction and energy, non-wood forest products such as game, berries, mushrooms, resin, cultural heritage and clean air are just a few examples. Other services are providing habitats for plant and animal species, water retention and filtration, protection against erosion and influences on local and global climates (cf. Table 2).

Presently, the demand for forest products and timber in particular plays a major role in the management of many forests, especially in regard to the incomes of forest owners (UNECE/FAO, 2005). Societal needs towards forests, however, are very different throughout

the EU depending on the country and the region, for instance on the degree of urbanisation (cf. Chapter 2.2.2).

**Table 2: Potential ecosystem services from forests (source: Bastian & Schreiber (1994) as cited in BMELV (2001: 31), translated and modified by the authors)**

<b>Potential ecosystem services from European forests</b>	
<b>Services related to economic production</b> (economic functions)	Availability of renewable resources: Timber Bio-mass for energy Resin/cork Wild berries Game Gene pool as a source for biotechnology Availability of space
<b>Services related to the functioning of ecosystems</b> (ecologic functions)	Pedological services (soil) Protection of soils against erosion, dehydration, soil compaction, decomposition of contaminants (filter-, buffer-, transformation functions) Hydrological services (water) Groundwater replenishment/-infiltration Water retention/run-off equalisation Meteorological services (climate/air) Temperature balance Increase of air humidity/evaporation Impact on wind field Carbon sink function Regulation and regeneration of populations and biocoenoses Biotic reproduction and regeneration (self-renewal and -preservation) of biocoenoses Regulation of organism populations (e.g. pests) Conservation of gene pool/habitat functions
<b>Human habitat services</b> (social functions)	Psychological services Aesthetic (landscape) Ethic functions (gene pool, cultural heritage) Information services Importance for science and education Indigenous/traditional knowledge Bio-indication of state of environment Human ecological services Bio-climatic (meteorologic) effects Filter- and buffer functions, i.e. chemical effects (soil/air/water) Importance for recreation and human health (as a complex of psychological and human ecological functions)

### 2.1.2 Sustainable forest management

Sustainable forest management (SFM) is considered to be the guiding paradigm for managed forests within the EU. According to the MCPFE (Chapter 3.2), it can be defined as:

“The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not cause damage to other ecosystems.” (MCPFE, Helsinki Resolution 1, 1993)

Despite the existence of an accepted political understanding and negotiated commitments, the concept of SFM can – from a scientific point of view – still be characterised as a rather vague concept (EGESTAD, 2002; HOGL, 2000; SCHANZ, 1996). Moreover, the defining economic, ecological and social dimensions of the concept (known as the ‘sustainability triangle’) may contradict one another. Within Europe, different paradigms and regional patterns of SFM that emphasise those dimensions differently can be distinguished and linked to different societal demands and expectations, economies and related power constellations in forest policy (Table 3).

**Table 3: Paradigms and regional patterns of sustainable forestry across Europe (EU-27) (adapted from Glück (1994) Volz (2002) as well as from Kankaanpää & Carter (2004), Rametsteiner et al. (2008))**

Paradigm	„Sustained yield“: Sustainable timber production	„Multipurpose forestry“: Multifunctional sustainability	„Ecosystem management“: Ecological sustainability		
<b>Goal</b>	Maximum possible periodic timber yields (in terms of quantity and quality)	Maximum possible periodic yields from sales of 1) timber and 2) other forest services	Improvement and/or maintenance of the ecological state of forest ecosystems		
<b>Constraint and/or premises</b>	<ul style="list-style-type: none"> <li>- Maximum quantity of timber harvest must not exceed periodical prescribed yield</li> <li>- Forest maintenance, deforestation ban, reforestation obligation</li> <li>- ‘Health’ preservation of forest ecosystems</li> </ul>	<ul style="list-style-type: none"> <li>- Maximum quantity of timber harvest must not exceed periodical prescribed yield</li> <li>- Certain amount of forest services (e. g. protection, recreation) must be maintained</li> <li>- Forest maintenance, deforestation ban, reforestation obligation</li> <li>- ‘Health’ preservation of forest ecosystems</li> </ul>	<ul style="list-style-type: none"> <li>- Maximum of forest ecosystem services derived for</li> <li>- Minimum quantity of timber maintained</li> <li>- Advanced standards/criteria and indicators for forest management</li> <li>- Forest maintenance, deforestation ban</li> </ul>		
<b>Regional patterns of SFM paradigm implementation (on continuum from ‘sustained yield’ via ‘multipurpose forestry’ to ‘ecosystem management’)</b>					
<b>Group of countries</b>	<b>Northern Europe, Baltic States and Central Europe</b> Finland, Sweden, Estonia, (Latvia, Lithuania, Austria, Poland)	<b>Western, Central and Eastern Europe</b> France, Germany, Czech Republic, Slovakia, Slovenia, Bulgaria, Romania, (Hungary)	<b>Western Europe (“Atlantic Rim”)</b> Denmark, Ireland, United Kingdom	<b>Southern Europe</b> Greece, Italy, Portugal, Spain	<b>Western Europe</b> Belgium, the Netherlands, Luxembourg
<b>Forest area</b>	Large in relative terms	Mostly large in relative terms, partly parcelled forests	Small, in relative and absolute terms	Parcelled forests	Small, fragmented properties
<b>Importance of forest sector in national economy</b>	Great	Moderate	Little	Little	Marginal
<b>Key forest function(-s)</b>	<b>Wood production</b> (Orientated towards pulp and paper production, as well as raw material industry,	<b>Wood production</b> (Orientated towards raw material production providing for sawmilling- and pulp and paper industry, energetic use)	<b>Wood production</b> (Plantation forestry providing for pulp and paper industry)  <b>Other functions</b> (e.g. protective or protected forests) or products (e.g.	<b>Non-wood forest products</b> (e.g. foliage, berries, game, fuel-wood) and <b>other forest functions</b> (e.g. soil and water	<b>Nature conservation, recreation</b>

	energetic use) Recreation; biodiversity conservation mostly in protected areas	<b>Social and ecological functions</b> (recreation, biodiversity conservation partly integrated in SFM, partly in protected areas)	Christmas trees, foliage) than timber also important  Semi-natural forests for recreation and biodiversity conservation	protection); Low intensity of forestry
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## 2.2 Challenges for European Forests

European forests and their management are facing numerous changes concerning their ecological and socio-economic environments. In the following, some of these challenging trends are described while taking into consideration that most of them are closely interdependent and all of them, including the ecological ones, can be traced back to human activities.

### 2.2.1 Ecological Trends

#### Climate Change

Since 1750, the global atmospheric concentrations of greenhouse gases (GHG) such as CO<sub>2</sub>, CH<sub>4</sub> (methane) and N<sub>2</sub>O (nitrous oxide) have risen well past pre-industrial values due to anthropogenic activities. Between 1970 and 2004, a noted increase of 70% in GHG emissions was observed (IPCC, 2007). GHG emissions are expected to further increase over the next decades.

As a consequence, most climate change scenarios estimate a rise of approximately 2°C in global temperatures by 2050. Also, changes concerning the distribution of precipitation and extreme weather events are likely to occur (AALST, 2006). There are, however, many uncertainties considering the prognosis of climate change. This holds particularly true for the time period after 2050 in which scenarios show great variations. This is due to differences in underlying assumptions concerning worldwide economic growth, the extent to which renewable energies will be used and the success of climate change mitigation policies (IPCC, 2007). Also, the complexity of the climate system with its many different variables interacting in a non-linear manner makes predicting future developments very difficult.

On the one hand, land-use systems and particularly forests can, depending on the applied management, help to sequester or be a source of GHG, therefore potentially playing an important role in the mitigation of climate change. It is estimated that EU forests compensated for approximately 10% of the EU's overall emissions between 2000 and 2005 (MCPFE, 2007). On the other hand, they are directly affected by climate change impacts (IPCC, 2000).

#### Emissions and Depositions

Besides CO<sub>2</sub> emissions and their possible influence on forest growth and vitality in different manners, other major emissions are known to impact forest ecosystems in Europe, including: nitrogen oxides (NO<sub>x</sub>), sulphur dioxide (SO<sub>2</sub>), ammonia (NH<sub>3</sub>), and heavy metals.

Sulphur emissions have decreased since the 1980s due mainly to clean air policies and the decline of 'dirty' heavy industry in Central and Eastern Europe. (REQUARDT et al., 2007; EEA, 2007a) However, accumulations of past depositions beyond the critical load can still be found in 15% of forest ecosystems (EEA, 2007b). The same holds true for heavy metals such as lead, cadmium and zinc (EEA, 2007a; MUFV, 2008). Today, nitrogenous emissions from road traffic, livestock husbandry and atmospheric depositions can be considered as the major drivers of acidification and eutrophication in many European forest ecosystems (EEA,



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2007a). Also, high concentrations of ozone resulting from nitrogen oxide emissions on the ground-level are still a problem in the central and southern parts of Europe, particularly during the summer months (EEA 2008b).

## **2.2.2 Socio-economic Trends**

### Changing societal demands and expectations

During the last decades, society's claims on forest services have turned from a mostly 'commodity' orientated (e.g. timber, fibres, charcoal and foodstuff) perspective towards more 'amenity' oriented demands (cf. Chapter 2.3). Thus, forests are often considered as places for recreation; this is combined with expectations for the provision of the required infrastructure and aesthetic surroundings (KONIJNENDIJK, 2000). Moreover, increased levels of awareness have emphasised that forests are comparatively natural ecosystems and an essential pillar of Europe's biodiversity and that forest management might in parts run counter to the objectives of conserving or enhancing forest biodiversity and experiencing forest naturalness. While this shift in the perception of forests is occurring all over Europe, significant differences exist depending on the region (cf. Table 3) and on the degree of urbanisation. The latter can be traced back to urbanisation processes and the related demographic changes.

On the other hand, the demand for timber for construction, paper, furniture etc. is still high and recent demands for the energetic use of wood have notably increased throughout the EU. Both the development within European societies of an increasingly amenity oriented perspective regarding forests as well as European and globally increasing demands for 'material' forest products are likely to intensify conflicts related to contradicting demands and expectations towards and on forests.

### Economic globalisation and changing demands of the timber industry

Globalisation, taking place in the economic, social, ecologic and cultural spheres, has experienced an additional boost throughout the EU during the last decades, also strongly affecting the European forest sector (RAMETSTEINER et al., 2008).

When looking at the economic aspects of globalisation, it can be noted that European forestry and forest industry has undergone significant changes driven by technological innovations and liberalised markets.

First, a long-term deterioration of the economic viability of forest management in huge parts of Europe took place (UNECE/FAO, 2005). While regional differences throughout Europe remained, this deterioration led to the overall trend of continuously decreasing the number of jobs and the share of the GDP performed by forestry within the EU (cf. Table 3). In recent years, and prior to the economic downturn in 2008 and 2009, however, rising timber prices have resulted in a recovery of the European forestry industry in some regions.

Secondly, an ongoing concentration process of the European timber industry took place. A handful of large enterprises have become very influential in the market, requiring great quantities of timber felling and specialising in commodity goods. Smaller enterprises disappeared or found other niches. While concentration processes in the pulp and paper industry have already been taking place for several years, changes in other forest industry sectors are still in progress. Naturally, the advancement of the concentration process is different across the EU. While the forest industry is highly concentrated in the northern parts of Europe as well as in parts of Central Europe, it is less concentrated and developed in other parts of the Union.

Regarding the further development of demands on the EU forest sector industry, it is difficult to make a good prognosis. RAMETSTEINER et al. (2008) predict, amongst others, that there will be a possible boom in EU saw milling industries, caused by increasing energy prices

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(e.g. wood products for construction need less energy to be produced than steel or concrete) and global demand. Also, there might be a further increase in the production of high-value paperboard and paper in the EU as a result of globalisation.

A prognosis, however, depends on the further economic development/growth of technology, timber and timber product markets (e.g., the degree of integration of the Russian timber market) and markets of substitute goods. Evidence of the ambiguity of future developments stems from:

- the recent global economic crisis, characterised by, e.g., a break-down of global demand and significantly decreasing prices for raw materials and forest products, and
- related shifts in the economic policies of some states, e.g., an increasing ratio of state interventions in the markets and of government expenditures to gross national products.

Another aspect to be kept in mind is the rising demand for bio-energy. On the one hand, this might lead to a competition between the conventional forest industry and bio-energy users for wood raw materials. On the other hand, however, it may offer new opportunities for forest enterprises to sell timber of poorer quality (RAMETSTEINER et al. 2008). It also stabilised timber prices during the recent recession.

#### Changing structures within forestry

Since the 1990s, most European countries have been changing the institutional setting for forest management and protection through the adoption of new laws or the amendment of existing forest-related laws (MCPFE, 2007) as well as through structural transformations of state forest services. These policies and structural changes follow 2 major and often conflicting trends:

(1) Multifunctionalisation ('ecologisation') of forest management and policies: This trend is a result of a paradigm shift within the concept of sustainable forest management, replacing sole timber production ('sustained yield') by 'multipurpose forestry' or even 'ecosystem management' (GLÜCK, 1994; WIERSUM, 1995; VOLZ, 2002; cf. Table 3) and appearing in related changes of forest management and policies.

(2) Economisation and (re-)monofunctionalisation of forest management and policies: This trend can be understood as a result of economic globalisation and manifests itself, inter alia, in the restructuring of national forest organisations in view of optimising profitability (FAO, 2007; MCPFE, 2007; KANKAANPÄÄ & CARTER, 2004) in the context of changing political and market economy developments.

These structural changes in state forest organisations also coincide with important developments in private forest ownership. On the one hand, in most of the new EU Member States, the share of privately owned forest areas has significantly increased through restitution and privatisation processes, resulting in new challenges for forest management: i.e. to deal not only with fragmented and small-sized private forests, but also with the "new" private forest owners' lack of experience or disinterest in sustainable forest management (ANGELOVA, 2007; ANGELOVA & WINKEL, 2007; ANGELOVA et al., 2009). On the other hand, the societal changes described above had a more or less significant effect on the management of privately owned forests all over Europe and especially in Western and Central Europe, particularly when considering the huge majority of small-scale forest owners. While in former times small-scale forest owners were usually rural residents or farmers, they are currently employed mainly in economic sectors other than those in rural economies (NISKANEN et al., 2007; SCHRAML, 2005). This resulted in an increasing diversity of forest management types. The more urban the lifestyles of forest owners become, the more they see forests as a space to experience nature and engage in recreation and leisure activities (SCHRAML et al., 2009; SCHRAML, 2006; ZIEGENSPECK et al., 2004). In some cases, however, private forest owners are not at all interested in their forests and do not even know about the exact location of their inheritance. In reaction, cooperations of private forest owners have been promoted in some

Member States by government programmes which aim at increasing wood mobilisation and the production of forest biomass in Europe to deliver both increased income generation for forest owners and increased timber supply for forest based industry (CEPF, 2008).

### 2.3 Impacts and Threats

The challenges introduced in the previous chapter cause diverse impacts on Europe’s forests. Interestingly, these impacts are evaluated differently – as being positive or negative to forests – by different stakeholders. This means that the question of what is seen as a threat to forests depends on the perceptions of the respective policy actor (EGESTAD, 2002; SCHANZ, 1996; WINKEL, 2007). A *forest threat* is thus an impact on a forest ecosystem that is likely to lead to the deterioration of a part of or of the entire ecosystem services of a forest for the society and, therefore, is experienced as being harmful by society as a whole or by certain societal groups.

At first glance, multiple and rather dynamic interpretations of “threats” and their possible consequences for forest governance can be identified. Based on a literature review, however, 2 distinct patterns of forest-related “threats” can be distinguished in the European context (as well as in other parts of the world, e. g., North America):

1. On the one hand, “threats” are perceived from the perspective of timber production oriented forestry. Such a ‘commodity’-oriented (SABATIER et al., 1995) perspective emphasises the forest economy and forest use.
2. On the other hand, “threats” can be considered from the perspective of forest ecology and nature protection. Such an ‘amenity’-oriented (SABATIER et al., 1995) perspective focuses on forests as habitats as well as places for scenic recreation.

In the European context, several studies on countries such as Austria (HOGL 2000), Bulgaria (SOTIROV, 2009), Denmark (EGESTAD, 2002), Finland (BERGLUND, 2001), Germany (KLINS, 2000; MEMMLER, 2003; WINKEL & MEMMLER, 2004; WINKEL, 2007) and Sweden (ELLIOT, 2000) work out these 2 perspectives and relate them to stakeholder coalitions that compete in political struggles regarding the proper implementation of sustainable management and forest conservation.

Tables 4, 5 and 6 provide a detailed look into this issue. Table 4 analyses different impacts on European forests regarding this dichotomy and identifies different threats that result from those impacts, depending on the perspective.

Table 4 : Impacts on EU forests and resulting threats (Ref. cf. below Table 7)

Impact	Characterisation/ Specification	Evaluation	
		Forest economy perspective 'commodity'-oriented	Forest ecology perspective 'amenity'-oriented
<b>Biotic</b>			
<b>Alien plant species/ trees</b>	For instance, trees planted outside their natural past or present distribution; widespread phenomena within the EU (e.g., spruce in Western and Central Europe, pine in Southern Europe)	<p><b>Mostly positive aspects:</b> backbone of forest industry in the EU, often productive and efficient to manage.</p> <p><b>Threat:</b> comparatively high associated risks (e.g., storm, fire, soil acidification)</p>	<p><b>Positive aspects:</b> might increase diversity if not to extensively planted</p> <p><b>Mostly threat:</b> strongly decreasing natural forest biodiversity if planted in pure stands/in large areas, especially if becoming invasive</p>

<b>Insects and pathogens</b>	For instance, bark beetle gradations	<b>Mostly threat:</b> are considered to be one of the most important threats to forests, particularly in conifer forests, remarkable costs for prevention and control	<b>Mostly positive aspects:</b> are considered to be part of natural dynamic; can create diversity <b>Threat:</b> enforced and 'unnatural' gradations due to human induced impacts on forest ecosystems, e.g., eutrophication and climate change, can be evaluated as threat to forest ecosystems
<b>Game and livestock</b>	For instance, red deer and cattle (particularly in Southern Europe)	<b>Positive aspects:</b> hunting provides additional income for forests owners and enterprises <b>Threat:</b> particularly high game populations cause costs due to devaluation of trees and prevention of forest regeneration, and related prevention and control measures.	<b>Positive aspects:</b> wildlife is a natural element of forest ecosystems. Livestock might increase diversity in forests. <b>Threat:</b> livestock as well as wildlife populations kept in densities above the ecological viability of their habitats are likely to alter forest ecosystems in a way that reduces biodiversity.
<b>Abiotic</b>			
<b>Storms</b>	In the EU, mostly winter storms, particularly affecting conifer forests	<b>Mostly threat:</b> costly due to the destruction of forest (productivity) and devaluation of timber, destabilisation of the remaining forests	<b>Mostly positive aspects:</b> natural disturbance that increases forest diversity and dead wood alike.
<b>Effects of climate change</b>	Particularly changing water and temperature regimes	<b>Positive aspects:</b> in some regions, climate change is likely to increase forest growth, which can be an economic advantage. <b>Threat:</b> in other regions, climate change is decreasing forest growth and related harvesting possibilities. Also, climate change is likely to increase losses caused by disturbances; furthermore, it aggravates risk calculations as basis for strategic decisions of forest enterprises.	<b>Positive aspects:</b> depending on its intensity, climate change might increase diversity in some forest ecosystems. <b>Mostly threat:</b> climate change is likely to change what has been perceived as 'natural dynamic' of forest ecosystems, depending on its intensity, it is likely to decrease biodiversity in many forest ecosystems.
<b>Fire</b>	Particularly in Southern and parts of Northern Europe	<b>Positive aspects:</b> in some boreal forest ecosystems, forest fires are likely to encourage natural regeneration. <b>Mostly threat:</b> depending on its intensity, forest fires are likely to cause enormous losses to forest owners.	<b>Positive aspects:</b> in some forest ecosystems, fires are a natural disturbance and are likely to increase forest biodiversity <b>Threat:</b> depending on forest ecosystem and intensity of fire, forest fires might harm the fundamental functionality of forest ecosystems.
<b>Acidification, eluviation and eutrophication of forest soils</b>	Particularly due to nitrogenous and sulphuric emissions.	<b>Positive aspects:</b> in many forest ecosystems, nitrogen emissions are likely to increase forest growth (Increment), which can lead to an economic advantage. <b>Threat:</b> emissions are likely to enforce soil acidification as well as related long-term losses of nutrients. Thus, they are likely to decrease forest growth and stability and increase economic damages due to disturbances in the long term.	<b>Positive aspects:</b> depending on the ecosystem, emissions can support management strategies to increase forest diversity. <b>Mostly threat:</b> Particularly eutrophication is likely to significantly diminish site diversity and related forest biodiversity and to change natural forest dynamics.
<b>Directly human induced</b>			
<b>Land-use changes (deforestation), fragmentation</b>	Land use changes from forest/forestry to agricultural land, settlements or infrastructure, fragmentation also through infrastructure (e.g. forest roads)	<b>Positive aspects:</b> land-use change might result in higher land-use profitability, forest roads are needed for timber harvest <b>Threats:</b> land-use change decreases productive forest area, fragmentation is likely to increase the risk of disturbances (e.g. storm)	<b>Positive aspects:</b> land-use change and fragmentation can have positive effects on biodiversity in some situations (e.g. due to borderline effects). <b>Threats:</b> in many cases, land-use changes and fragmentation are likely to negatively affect biodiversity and natural dynamics (e.g. species migration).

<b>Forest management</b>	Diverse impacts of forest management on forest ecosystems	<p><b>Mostly positive aspects:</b> forest management is essential in order to fulfil the respective goals of a forest enterprise (particularly timber production).</p> <p><b>Threats:</b> forest management can be insufficient with regard to the goals of the owners and the demands of forest based industry.</p>	<b>Positive aspects &amp; threats:</b> very complex relationship, forest management is on the one hand an important driving factor for forest biodiversity (diversifying forests, artificial disturbances), on the other hand it can also be considered a major threat – depending on the management type and forest ecosystem (cf. Table 5).
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Table 5 gives examples of trade-offs between timber production oriented forest management and nature protection goals in European forests:

**Table 5: Exemplary trade-offs between profit oriented timber production and nature protection (Winkel, 2007: 44-46; adapted)**

Nature protection goals	Rationale	Correlation with timber production
<b>Allow natural differentiation processes</b>	Enabling of evolutionary processes, creation of "special" habitats (biodiversity, aesthetics)	Conflicts and synergies – "biological automation" vs. necessity of silvicultural regulation to improve, e.g., timber quality and forest productivity
<b>Raise quality and quantity of dead wood</b>	Habitat for endangered species, naturalness of forests (limited dynamics), conservation/creation of species-rich and close to nature landscape	Potential antagonism, especially if more and thicker dead wood is required (loss of sales revenues, occupational health and safety, risk of pests and diseases); partial synergies exist (related to timber prices and efficiency)
<b>Creation/conservation of site-adapted native forests</b>	Central criteria of nature protection in forests, closeness to nature as a basis for natural biodiversity, characteristic and beauty of European forest landscapes	Difficult to generalise, partly considerable potentials of conflict (productive, non-site adapted coniferous woods), partly synergies – basically one of the most essential conflicts between nature protection and timber production oriented forestry
<b>Creation/conservation of species-rich mixed forests</b>	Basis for biodiversity, characteristic and beauty of European forest landscapes	Difficult to generalise, potential for conflict existent, mixed forests stands are a challenge for mechanised timber harvest/logistics; but also synergies (stability, diversification, etc.)
<b>Creation of rich structured forest stands (horizontal/vertical)</b>	Basis for biodiversity (abundance of borderlines), characteristic and beauty of forest	Heterogeneous correlation, structured forest stands are partly contradictory to possibilities of optimisation of timber harvest
<b>Conservation of site-diversity</b>	Sites (soil) as basis of diverse forest ecosystems	Potential conflict, if melioration/fertilisation is profitable

Table 6 compares both the 'commodity' and the 'amenity' perspectives introduced in this chapter with regard to the threats to European forests (cf. next page).

In summary, the **commodity perspective** emphasises forest economy and forest use, including socio-economic aspects such as secured property rights and forest based rural development, as a basis for forest protection. In this sense, particular consideration is taken of forest vitality (growth) and stability ('forest health'); threats are usually perceived as coming from outside the forest sector (e.g., natural disturbances, insect calamities). This view of forests and forestry is closely connected to a classical perspective of European forest sciences, highlighting forest production and technological and natural science aspects of forest growth and management.

The **amenity perspective** emphasises the preservation of forests as naturally dynamic ecosystems as well as forest biodiversity. In this sense, threats are instead regarded as being caused by forest management itself, e.g., by intensive and production oriented forestry, but also as coming from the 'outside' (e.g. climate change). This view of forests and

forestry is closely connected with biological and ecological sciences. However, the perspective has its roots in the social sciences and ethics, too.

It should be pointed out that in political and even more so in forest management reality, both perspectives can not always be distinguished as clearly as they have been outlined here and, furthermore, synergies between both perspectives exist (cf. for instance Table 5). Moreover, both perspectives may become mixed up in forest and nature policy governance arrangements (cf. Chapter 3.5) or in the objectives and measures of any individual forest owner. For the purpose of analytical lucidity, however, the differentiation between the above mentioned perspectives serves to provide helpful insights and will be developed further in the following chapter.

**Table 6: Different perspectives on EU forests and related perceptions of threats**

'Commodity'-perspective	Aspects to be considered	'Amenity'-perspective
Resource basis and place of wood production	View of forests	Naturally dynamic ecosystem
Forest owners and enterprises, forest based industry	Groups of greatest concern	All living species including plants and animals, pluralistic society
Forest health/stability, vitality (growth)	Important attributes of forest ecosystems	Forest biodiversity, dynamic and disturbances
Impacts on/within forest ecosystems that harm the profitability of forest production	Threats	Impacts on forest ecosystems that harm forest diversity and natural dynamics
Natural, indirectly and directly human-induced origins	Causes/origin of threats	Indirectly and directly human induced
Forest sciences, economy, technology	Knowledge basis	Ecology, biology, ethics

## 2.4 Needs for action

Clearly, the perspective introduced in the last chapter and the related understanding of forest threats influences the perceived need for forest protection action and the preferences for related governance arrangements. While **forest protection** in this report is generally understood as an integrated approach of (impact) management that regulates threats to forests in order to safeguard ecosystem services, it will be concretised differently against the background of different views: That is, while forest protection as understood from the commodity perspective is first and foremost addressing threats to forest growth and stability, the amenity perspective on forest protection also includes measures that address threats to forest diversity and natural dynamics.

Table 7 aims to provide exemplary ideas on objectives and needs for action related to different perception of threats; it also relates possible measures to the identified needs (cf. next page).

Table 7: Needs for forest action, objectives and possible measures, based on differently perceived forest threats (Ref. and legend cf. below Table)

Objectives and needs for action				
	<b>'Commodity' perspective threats</b>	<b>Possible measures</b>		<b>'Amenity' perspective threats</b>
<b>Alien plant species</b>	Associated risks (e.g. storm, fire, soil acidification)	Increase stability of stands dominated by alien tree species; avoid unintended interactions with other species.  Rather low need for action	<i>Limit extension and spread of alien tree species, avoid unintended interactions with other species</i>  <i>Rather high need for action</i>	<i>Strongly decrease natural forest biodiversity if planted in pure stands/on large areas</i>
		<ul style="list-style-type: none"> <li><i>Prevention of uncontrolled introduction of new species and spread of already introduced species, particularly in Natura 2000 areas.</i></li> <li><b>Monitoring on effects of alien plant species on forest biodiversity and forest stability/growth</b></li> <li><b>Development of concepts of how to further develop forest landscapes that are currently dominated by alien tree species, including socio-economic aspects</b></li> <li><b>Provision of incentives for the planting/creation of mixed stands</b></li> </ul>		
<b>Insects and pathogens</b>	Are considered to be one of the most important threats to forests, particularly conifer forests, remarkable costs for prevention and control	Decrease economic losses caused by devaluation of timber and prevention and control measures; increase stand stability and vitality  High need for action	<i>Prevent 'unnatural' developments related to insects and pathogens</i>  <i>Rather low need for action</i>	<i>Enforced and 'unnatural' gradations due to human-induced impacts on forest ecosystems, e.g., eutrophication and climate change can be evaluated as threat</i>
		<ul style="list-style-type: none"> <li><b>Implementation of adaptive and preventive forest management measures: creation of diversity</b></li> <li><i>Avoidance of non-native tree species monocultures</i></li> <li><b>Provision of incentives or respective silvicultural prevention measures</b></li> <li><b>Monitoring of harmful organisms; installing of an Early-Warning-System</b></li> <li><i>No assistance of control measures in non-native monocultures</i></li> </ul>		
<b>Game and live-stock</b>	Particularly high game populations cause costs due to devaluation of trees and inhibition of forest regeneration, and related prevention and control measures.	Decrease economic losses caused by devaluation of timber as well as prevention and control measures; balance income from hunting/livestock management and forest management  Huge regional differences considering needs for action	<i>Secure adapted game populations and livestock grazing in regard to natural carrying capacities and biodiversity of forest ecosystems.</i>  <i>Huge regional differences considering need for action</i>	<i>Livestock as well as wildlife populations kept in densities above the ecological viability of their habitats are likely to alter forest ecosystems in a way that reduces biodiversity.</i>
		<ul style="list-style-type: none"> <li><b>Monitoring and evaluation of impacts caused by game animals</b></li> <li><b>Application of appropriate hunting/wildlife management</b></li> <li><b>Legal clarification of property rights</b></li> <li><i>Increase carrying capacity of forest ecosystems (structural diversity)</i></li> <li><b>Funding of protecting measures only, if high game/livestock density is not caused by forest management</b></li> </ul>		

Objectives and needs for action				
	<b>'Commodity' perspective threats</b>	<b>Possible measures</b>		<b>'Amenity' perspective threats</b>
<b>Storms</b>	Costly due to the destruction of forests and devaluation of timber, destabilisation of the remaining forests	Decrease economic losses by increasing the stability and resistance of forest  Rather high need for action	<i>None</i>	
		<hr/> <b>Preventive measures:</b> <ul style="list-style-type: none"> <li>• <b>Promotion of mixed and structured forests comprised of native species</b></li> <li>• Reduce rotation periods</li> </ul> <b>Reactive measures:</b> <ul style="list-style-type: none"> <li>• Support for the reprocessing of wind throw</li> <li>• Possibly: timber market interventions in case of severe and extensive storm events</li> <li>• <i>Reduce reprocessing of wind throw and allow for natural forest regeneration</i></li> </ul>		
<b>Effects of climate change</b>	In some regions, climate change is decreasing forest growth and related harvesting possibilities. Climate change is further likely to increase losses caused by disturbances; furthermore, it makes risk calculation, as basis for strategic decisions of forest enterprises, more difficult.	Adapt forests to likely climate change scenarios by, inter alia, increase vitality and stability of forest stands in order to prevent future economic losses and to make use of potential advantages (e.g., by increasing forest growth)  Need for (adaptation) action not easy to estimate, depends on the likely impact of climate change on the respective forest stand	<i>Minimize negative effects of climate change on forest biodiversity, Increase contribution of forests to global and local climate mitigation</i>  <i>Need for (adaptation) action depends on the likely effects on forest biodiversity at the respective forests stands</i>	<i>Climate change is likely to change what has been perceived as 'natural dynamic' of forest ecosystems, depending on its intensity, it is likely to decrease biodiversity in many forest ecosystems.</i>
		<hr/> <b>Preventive measures:</b> <ul style="list-style-type: none"> <li>• <b>Creation of more diverse and thus resilient forest stands</b></li> <li>• <i>Enhancement of conversion of 'climatically critical' stands (e.g., many conifer forests in Western, Central and Eastern Europe)</i></li> <li>• Introduce more climatically robust alien tree species</li> <li>• Shorten rotation periods to increase flexibility</li> <li>• <b>Enforced monitoring to analyse how climate change affects increment, vitality and biodiversity of forests.</b></li> <li>• <i>Creation of protected areas in order to study (and understand) the impacts of climate change on natural dynamics, and also as corridors to enable migration processes.</i></li> </ul> <b>Reactive measures:</b> <i>Active management in severely affected forests stands; possibly active preservation measures to save rare species that will otherwise be lost.</i>		



Objectives and needs for action				
	<b>'Commodity' perspective threats</b>	<b>Possible measures</b>		<b>'Amenity' perspective threats</b>
<b>Fire</b>	Depending on its intensity, forest fires are likely to cause enormous losses to forest owners.	Prevention and combating forest fires in order to avoid economic losses.  Need for action high in concerned regions, particularly in Southern Europe	<i>Prevention and combating of 'unnatural' forest fires</i>  <i>Moderate need for action in concerned regions depending on forest ecosystem and intensity of fire.</i>	<i>Depending on forest ecosystem and intensity of fire, fires might harm the fundamental functionality of forest ecosystems</i>
		<b>Preventive measures</b> <ul style="list-style-type: none"> <li>• <b>Apply adapted forest management measures</b></li> <li>• Construction of forest roads</li> <li>• <i>Conversion of monocultures towards mixed forest stands</i></li> <li>• <b>Monitoring and research activities</b></li> </ul> <b>Reactive measures</b> <ul style="list-style-type: none"> <li>• <b>Support for fire fighting (fire fighters, equipment, infrastructure)</b></li> <li>• <b>Support for reforestation measures</b> (<i>close-to nature, mixed and diverse forests using native species, no support for susceptible alien coniferous monocultures</i>)</li> </ul>		
<b>Acidification, eluviation, and eutrophication of forest soils</b>	Emissions are likely to enforce soil acidification, related long-term losses of nutrients and are likely to decrease forest growth and increase economic damages due to disturbances on the long term.	Reduce loss of nutrients and acidification in order to prevent an increase of forest stability, vitality, and growth  Need for action depends on the effects of emissions on the respective stands (no need up to high need)	<i>Reduce decrease of site diversity and changes of natural dynamics</i>  <i>High need for action to reduce particularly nitrogenous emissions.</i>	<i>Particularly eutrophication is likely to significantly diminish site diversity and related forest biodiversity and to change natural forest dynamics.</i>
		<ul style="list-style-type: none"> <li>• <b>Apply measure outside the forest sector to reduce emissions</b></li> <li>• <b>Monitoring, particularly of nitrogen depositions, including effects on forest growth, vitality, and forest biodiversity</b></li> </ul> <b>Apply adaptation measures <i>with caution</i>:</b> <ul style="list-style-type: none"> <li>• <b>Provision of support for liming</b> <i>in case of high acid depositions and at sites that are not likely to experience significant losses of diversity, no (support for) liming of non-native monocultures as well as in protected areas</i></li> <li>• <b>Support of a conversion of non-native forests types that catalyse acidification processes on already acid sites by site-adapted stands</b></li> </ul>		
<b>Land-use changes (deforestation), fragmentation</b>	Deforestation decreases productive forest area, fragmentation is likely to increase the risk of disturbances (e.g., storm)	Avoid decrease of productive forest area  Low need for action, except some densely populated regions or regions with high pressure of other land users	<i>Avoid fragmentation of forest ecosystems and decrease of forest areas</i>  <i>Rather high need for action particularly related to forest fragmentation by forest roads and skidding trails</i>	<i>In many cases, land use changes and fragmentation are likely to affect biodiversity and natural dynamics (e.g., species migration) negatively.</i>
		<ul style="list-style-type: none"> <li>• <b>Introduce land use planning and environmental assessment</b> <i>also for forest road construction</i></li> <li>• <i>Avoid dense nets of skidding trails</i></li> </ul>		

Objectives and needs for action				
	<b>'Commodity' perspective threats</b>	<b>Possible measures</b>		<b>'Amenity' perspective threats</b>
<b>Forest management</b>	Forest management can be insufficient with regard to the goals of the owners and the demands of forest based industry.	<p>Improve forest management activities in terms of profitability for forest owners and timber supply for forest based industry</p> <p>Depending on the regions; intermediate up to high need for action</p>	<p><i>Transform forest management in view of conserving and enhancing forest biodiversity</i></p> <p><i>Mostly high need for action</i></p>	<p><i>Very complex relationship, forest management is on the one hand an important driving factor for forest biodiversity (diversifying forests, artificial disturbances), on the other hand it can also be considered to be a major threat – depending on the management type and forest ecosystem (cf. Table 5).</i></p>
		<ul style="list-style-type: none"> <li>• <b>Promote and improve sustainable forest management</b> <i>with a particular view on forest biodiversity (ecosystem approach / with a particular view on forest stability and productivity)</i></li> <li>• <b>Establish and improve forest monitoring systems</b> <i>in regard to forest growth/vitality and forest biodiversity</i></li> <li>• <b>Create incentives to overcome obstacles arising from the fragmentation of forest holdings</b> <i>in view of improving sustainable timber production/in view of improving ecosystem management</i></li> <li>• <i>Establish and improve management standards in view of forest biodiversity</i></li> <li>• <i>Establish and improve protected area networks</i></li> </ul>		

**Legend:** Blue: Commodity perspective, *Red and italic:* Amenity perspective, **bold measures:** needed by both perspectives

**References for Table 4 and 7:**

BERGLUND (2001), BÖHLING (1992), CHMIELEWSKI & ROETZER (2001), DOYLE (1999), EEA (2005), EEA (2006), EEA (2007a), EEA (2008a), EEA (2008b), EGESTAD (2002), ELLIOT (2000), EUROPEAN COMMISSION (2001c), EVERS & HÜTTL (2007), FAO (2001), FEEMERS et al. (2003), GENOVESI, & SHINE, (2004), GEF (2002), HARE (2003), HOGL (2000), ICP FORESTS (2004), IPCC (2002), IPCC (2007), KLINS (2000), KNOERZER, et. al (1995), KONOPATZKY (1998), LAMBIN et al. (2001), LASCH et al. (2002), MCPFE (2003), MCPFE (2007), MEMMLER (2003), MOORE (2005), PUTMAN (1996), REQUART et al. (2007), SABATIER et al. (1995), SCHANZ (1996), SCHERZINGER (1996), SCHRÖTER et al. (2005), SPIECKER et al. (1996), SOTIROV (2009), VERKERK et al. (2008), WEGENER & ZIMMER (2001), WINKEL & MEMMLER (2004), WINKEL (2007) & WULF (2003)

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## 3 Forest and forest related policies – current state and policy coherence

### 3.1 International level

Forest policy at the global level is characterised by decade-long disputes regarding the adequate institutional framework for dealing with challenging problems, e.g., deforestation or the concretisation of sustainable forest management. Neither the UNCED nor the subsequent negotiations at the Intergovernmental Panel on Forests (IPF), the Intergovernmental Forum on Forests (IFF) or the United Nations Forum on Forests (UNFF) have resulted in a legally binding agreement on forests (e.g., a forest convention). Thus, the only output of the UNFF debate is a Non-Legally Binding Instrument on all Types of Forests which outlines global objectives for forest policy and measures the conduct of UNFF Member States.

Forest related global environmental policies, which are mostly regulated by international conventions and subsequent documents and decisions on environmental ‘goods’ of the highest global importance (e.g., atmosphere, biodiversity) as well as other international policies, particularly trade policy, affect the policies of subordinate levels in different manners. On the one hand, they sometimes encompass concrete rules and objectives that EU Member States and the European Community have jointly committed to, e.g., the binding emission reduction targets of the Kyoto Protocol. In other cases, they have developed mutually agreed upon normative frames for policy action that subsequent levels consider when developing their respective governance arrangements. Furthermore, and perhaps most importantly, international policies influence subordinate levels by framing policy discourses (e.g., problem understandings, need for action, and adequate problem solutions) and thus delivering different rationales for policy action.

Table 8 describes relevant forest and forest-related policies on an international level. Each process is characterised by its main goal, political rationale, governance tools (including implementation, financing and ‘handling of knowledge’) and management concepts. Furthermore, the understanding of each process concerning the issues of ‘protected areas’, ‘trade in forest products’ and ‘monitoring and control’ is outlined.

Process	Main goal	Responsibilities	Governance				Management Concepts	Protected Areas	Trade in Forest Products	Monitoring and Control
			Basic idea	Implementation	Financing	Knowledge				
UNFF (Non-legally binding Instrument for all types of forests)	Sustainable management of all types of forests	Sovereign states, non-binding commitments	Participation	National Forest Programmes	None; Financing is demanded as implementation of SFM can only be managed by providing additional capital	Exchange of knowledge; transfer of and access to environmentally friendly and innovative technologies	Sustainable forest management	Network of protected forest areas different conservation mechanisms Consideration of representativeness of forests	Promotion of trade in products from legal and sustainable sources	Criteria and indicators shall be further developed and implemented; national reports on voluntary basis
CBD (including Expanded Work Programme on Forest Biodiversity)	Conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources	Sovereign states, binding, but vague commitments  Consideration of special demands of developing countries	Participation, especially of indigenous and local communities, fair and equitable sharing of benefits	Formulation and implementation of National Biodiversity Strategies are given top priority; focus on forests: NFPs have to be considered when implementing the CBD Work Programme for Forest Biological Diversity	General intent: to develop new financing mechanisms; existing mechanism (GEF) supports project focussing on biodiversity; forest projects can be included	Protection and utilisation of traditional knowledge; exchange of information; access to and transfer of knowledge	Ecosystem approach is the core concept; Sustainable forest management shall assume ecosystem approach	Network of protected areas, among them also forest areas, that shall effectively protect at least 10% of the earth's forest types	FLEG, Promotion of trade in products from legal and sustainable sources	C&I of SFM shall be further developed and implemented; development of a classification system for forests; national reports must be presented
UNFCCC	Stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system	Sovereign states, partially concrete binding commitments Common, yet different responsibilities	Implicit mentioning of participation, but weak formulation	Monitoring & reporting on emissions, compliance mechanisms, Kyoto mechanisms, policies and measures left to national states	By means of Kyoto mechanisms: emission trading, CDM, JI; GEF and special funds to support developing countries	Exchange and development of environmentally friendly technologies; exchange of information; public access to information	General commitment to protect and enhance pools; Obligatory accounting: afforestation, reforestation, & deforestation. Optional: forest management	---	---	Implementation reports; National GHG Inventories, strictly regulated
CITES	To regulate international trade in order to protect endangered species	Sovereign states, binding commitments	Cooperation in implementation and control of trade	Trade regulations concerning certain species (ban, respectively regulation by certification)	---	---	---	---	Regulation of trade of threatened animal and plant species	Obligation to record trade of species comprised in the convention; Implementation reports
WTO	To reduce obstacles to international trade, thus contributing to economic growth and development	Sovereign states, strictly binding commitments	Non-discrimination		Preferably free market supervision; limits the use of other instruments	Knowledge as tradable good (intellectual ownership rights)	---	---	Promotion of fair and open trade, products may only be discriminated due to quality, not to production	---

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## 3.2 Pan-European level

The **Ministerial Conference on the Protection of Forests in Europe (MCPFE)** is the main pan-European political initiative with regard to forest protection. It was initiated in 1990 with the first ministerial conference in Strasbourg and represents a voluntary forest policy process based on a series of ministerial conferences with the central objective of establishing sustainable forest management (SFM). The MCPFE non-legally binding commitments involve 46 European signatory states in and outside the European Union. Joint activities range from technical cooperation on data gathering for the monitoring of forest health to commitments on strengthening the role of the forest sector for renewable energy production, to guidelines for the conservation of forest biodiversity.

A core issue of the MCPFE process has been the advancement of National Forest Programmes (NFPs), which were originally developed in the IPF/IFF/UNFF process (Table 8). To date NFPs are explicitly recognised as an important planning tool for national policy making by the EU, UNFF and the World Bank. As a consequence, NFPs are an integral part of the international forest regime and an important tool to linking international and national forest policy (HAUBER et al, 2009). During the Ministerial Conference of 1998 (in Lisbon) Pan-European Criteria and Indicators (C&I) for sustainable forest management were introduced. The C&I are a tool to monitor changes in SFM and serve as a basis for international reporting and for the development of national indicators (MCPFE, 1998). These criteria and indicators were further developed and revised after the Lisbon conference and endorsed during the following Vienna conference in 2003. On a more practical level, Pan-European Operational Level Guidelines for Sustainable Forest Management (PEOLGS) were endorsed also in Lisbon (1998). These frameworks can be voluntarily applied by participating states (for further details see Chapter 3.4).

The last ministerial conference, which took place in Warsaw in 2007, focussed less on biological diversity and more on raising awareness of threats induced by climate change. This shift in priorities has led to a stronger focus on the linkage between the environmental and economic pillar of SFM, recognising the importance of the full economic value of the multiple services provided by forests, for example by addressing the energetic use of wood, the competitiveness of the forest sector and the linkages between forests and water supply. For this conference, the MCPFE Report on "State of Forests and Sustainable Forest Management in Europe 2007" was prepared together with the UNECE and FAO. The data collected for this report uses the improved set of MCPFE Criteria & Indicators (C&I).

Currently, under the MCPFE, discussions have started on the potential added value of and possible options for a legally binding agreement on forests at the Pan-European level. A working group has been established to further elaborate on this issue.

## 3.3 European level

### 3.3.1 Forest policy

From a legal perspective, the treaties establishing the European Union do not explicitly provide for a common EU forest policy. This is due to an exclusion of forest products - with the exception of cork - from the existing EU primary laws on established Common policies (e.g. agriculture). In this regard, the formulation and implementation of forest policy is first and foremost subject to competences of the Member States.

However, there has been a long history of Community actions related to the support of forest policy and protection activities. Most notably, the following 2 EU common schemes should be mentioned: i) the periodic inventory of forest damage and experiments to improve the understanding of atmospheric pollution (Council Regulation (EEC) No 3528/86 on the

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protection of forests against atmospheric pollution), and ii) the monitoring of forest fires and the protection of EU forests from fire (Council Regulation (EEC) No 2158/92 on the protection of the Community's forests against fire).

The first significant attempts towards establishing a more coordinated and coherent European forest policy were made in the mid-1990s during the formulation and resulting aftermath discussions of a legislative proposal for EU forestry strategy being given to the Commission by the European Parliament ("Thomas-Report", 1995). In response to this appeal, the European Commission drafted a comprehensive communication at the end of 1998 to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions outlining a Forestry Strategy for the European Union (COM (1998) 649 final). Due to intense preparation in a short time by the Council Presidency as well as and in view of the Commission's proposal, the **EU Forestry Strategy** was adopted in 1998 (COUNCIL OF THE EUROPEAN UNION, 1998). Despite the requests made by the Commission and the Parliament to adopt a legislative proposal, the EU Forestry Strategy was, however, based on a non-legally binding Council Resolution.

The rationale of this strategy arose from concerns about the lack of coherence and coordination between national forest policies and different forest related EU policies. It emphasises the importance of the multifunctional roles of EU forests and the necessity of sustainable forest management for the conservation and enhancement of biological diversity. Moreover, the Strategy restates the principles of subsidiarity and shared responsibility between the EU institutions and Member States.

In 2005, the Commission presented a communication to the Council and the European Parliament reporting on the implementation of the EU Forestry Strategy (EUROPEAN COMMISSION, 2005). Conclusions in the implementation report included the need for an EU Forest Action Plan for Sustainable Forest Management as well as to extensively review the existing Community means and practises to facilitate improved coordination, communication and cooperation between the different policy areas that influence forests and forestry, including reviewing the role of the Standing Forestry Committee.

The **EU Forest Action Plan (FAP)**, adopted in 2006 for the 2007-2011 period, was the result of a multi-stakeholder process involving, among other things, consultations from the Standing Forestry Committee (SFC)<sup>2</sup>, the Advisory Group on Forestry and Cork (AGFC)<sup>3</sup> and the Commission Inter-Service Group on Forestry.<sup>4,5</sup> The FAP works as a framework which uses existing elements in forestry policy and builds on other EU policies that are related to forest issues such as Natura 2000, the Rural Development Schemes of the Common Agricultural Policy (CAP) and the Biomass Action Plan (BAP).

The actions outlined in the FAP refer predominantly to activities in the areas of coordination (including the exchange of information and experience), communication and research. The SFC, the AGCF and the Inter Service Group on Forestry play a major role in organising and undertaking those tasks. Nonetheless, these groups represent different stakeholders and the implementation of forest policies rely primarily on MS.

The FAP lays out 4 general objectives (EUROPEAN COMMISSION, 2006a):

- Improving long-term competitiveness;
- Improving and protecting the environment;
- Contributing to the quality of life;
- Fostering coordination and communication.

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<sup>2</sup> 27 members from MS; acts as an advisory and management committee for specific forestry measures, ad-hoc consultation group for forestry related issues and a venue for Member States to exchange on experiences and link with the Commission functions.

<sup>3</sup> 49 members from forest owner organisations (public and private), forest-based industries, environmental NGOs, forest trade unions, traders and consumer groups; Representative body. Deals with CAP and socio-economic issues.

<sup>4</sup> Membership: 11 Commissions services. Facilitates cooperation and coordination on forestry related work

<sup>5</sup> Documents available at < [http://ec.europa.eu/agriculture/fore/action\\_plan/sfc\\_experts\\_en.htm](http://ec.europa.eu/agriculture/fore/action_plan/sfc_experts_en.htm)>

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The objectives are accompanied by 18 key actions concretising how the objectives should be achieved. Key actions in the context of forest protection include:

- Facilitate EU compliance with the climate change mitigation obligations of the UNFCCC and its Kyoto Protocol and encourage adaptation to the effects of climate change;
- Contribute to achieving the revised Community biodiversity objectives for 2010 and beyond;
- Work towards a European Forest Monitoring System;
- Enhance the protection of EU forests.

Representing the forestry administrations of the currently 27 EU Member States, the SFC functions as the core coordination and communication platform within the FAP. It operates mainly on the basis of yearly work programmes, joint meetings with the AGFC and the Advisory Committee on Community Policy regarding Forestry and Forest-based Industries. Currently, a mid-term evaluation of the EU Forest Action Plan is being carried out by an external evaluator supported by the Commission and the SFC.

As mentioned above, several other Community initiatives have been operational for a fairly long term period. Some of them related to forest monitoring (e.g., the expired Forest Focus Regulation) will be described in Chapter 3.4.

### 3.3.2 Agricultural Policy

The **Common Agricultural Policy (CAP)** formulates common rules and priorities to be pursued across sectors and rural areas. As forestry is the predominant land-use besides agriculture in rural areas across Europe, the CAP also addresses forests and forestry issues.

The Agenda 2000 CAP reform split up funding for agriculture into 2 pillars: pillar 1 covering market and income support measures and pillar 2 supporting the development of rural areas through national or regional rural development programmes. This reform also resulted in forestry becoming an integral part of the CAP (AGRA CEAS CONSULTING, 2005).

The Rural Development Policy (RD Policy) for the 2007-2013 programming period offers a wide range of rural assistance measures within the following identified priority areas (COUNCIL OF THE EUROPEAN UNION, 2006):

- Improving the competitiveness of the agricultural and forest sectors (axis 1),
- Improving the environment and countryside (axis 2),
- Improving the quality of life in rural areas and encouraging diversification of the rural economy (axis 3),
- Building local capacity for employment and diversification (promotion of the LEADER approach).

Member States are able to choose which measures to include in their national or regional rural development programmes according to their needs.

Many measures supported by axis 2 are directly linked to forestry protection and rehabilitation measures. Axis 2 supports (EUROPEAN COMMISSION, 2006c):

- the promotion of first afforestation of agricultural and non-agricultural land to contribute to the protection of the environment, the prevention of natural hazards and fires, the enhancement of biodiversity as well as to mitigate climate change;
- forest restoration and prevention in forests damaged by natural disasters and fire;
- forest environment payments introduced for voluntary commitments to enhance biodiversity, preserve high-value forest ecosystems and reinforce the protective value of forests with respect to soil erosion, maintenance of water resources and water quality;

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- the establishment of agro-forestry systems that combine extensive agriculture and forestry systems, aimed at the production of high-quality wood and other forest products;
  - non-remunerative investments of forest holders where they are necessary in order to achieve the forest-environment commitments or other environmental objectives;
  - Natura 2000 payments granted to forest holders to help address specific problems resulting from the implementation of the Birds and Habitats Directives.

As direct EU forest funding is inexistent, because of the lack of a specific legal basis, co-financing of RD forestry measures and forest management through the second pillar of the CAP is an essential EU financial instrument for forestry in the EU. Afforestation is the oldest forest related measure of the CAP and still the most important one in terms of its percentage share of EAFRD contributions to forest measures. Afforestation measures were initially introduced as a means to mitigate overproduction in the agriculture sector and to promote alternative use of agricultural land. Since 2000 these measures are also aimed at the promotion of woodland expansion and the integration of more environmental considerations. However, until the 2007-2013 programming period the bulk of rural development funding for forest management focussed primarily on the promotion of timber production and supporting forest owners instead of specifically addressing forest protection issues. In this regard, the European Court of Auditors also suggested that the CAP should place a stronger focus on environmental benefits of afforestation (EUROPEAN COURT OF AUDITORS, 2004).

Other concerns have been raised by the Court of Auditors in its special report on forestry measures within Rural Development Policy (EUROPEAN COURT OF AUDITORS, 2004), namely the vagueness of the concept of sustainable forest management “because it is based on the integration of aims and intentions which can be contradictory”. In its reply the Commission stressed the ‘healthy’ nature that these tensions can have as they lay the foundation for constructive cooperation in search of integrated solutions. In this context, common criteria and indicators of SFM are important to ensure such solutions.

This audit also found insufficient clarity in the distribution of responsibilities between the Commission and the Member States, for instance concerning the assessment of the effectiveness of single forestry projects with regard to initial Community goal setting. While the Commission feels that this is part of the MS’ responsibilities, it also recognises its role to supervise the implementation of national rural development programmes. To this end, the Commission introduced a Common Monitoring and Evaluation Framework (CMEF), which ensures a more homogeneous monitoring and assessment of rural development interventions and thus improves their effectiveness and accountability.

### 3.3.3 Water policy

In response to concerns that water policy was too fragmented, in terms of objectives and implementation, and not effective enough, the **Water Framework Directive** was adopted in 2000 (EUROPEAN PARLIAMENT; COUNCIL OF THE EUROPEAN UNION, 2000). The WFD sets a single framework for the protection of all Community waters with the aim of reaching "good ecological status" by 2015 or by 2027 at the latest. The timetable for implementation combines long term timelines with ambitious requirements. All together 3 management cycles will have been fulfilled, in 2015, 2021 and 2027, in the aim of implementing this Directive. The long term nature of the implementation period alleviates the realisation of significant commitments by the Member States and gives room for the EU to propose further laws to protect against water pollution, so called 'daughter directives'. To this end, the WFD establishes a river basin approach based on natural geography and hydrology instead of according to administrative boundaries. Since the approach raised a number of technical feasibility concerns, Member States agreed on a Common Implementation Strategy (CIS). Furthermore, to ensure enforceability through transparency, public participation is required at each stage of implementation.



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To reduce pressures on waters, the Directive requires Member States to establish a Programme of Measures for each river basin. The programmes must include both basic (minimum requirements such as existing policies) and supplemental measures to mitigate negative impacts on water from various sectors but especially agriculture.

Programmes of Measures (PoMs) must be established by 2009 by the Member States and made operational by 2012. To support Member States in developing their PoMs, the European Commission financed a project compiling a catalogue of measures to tackle agriculture pollution<sup>6</sup>, which also includes forestry related measures such as afforestation of agricultural land. Measures within the PoMs are directly linked with measures under axis 2 of the Rural Development Programme (RDP). As Programmes of Measures are river basin and Member State specific, Member States chose which measures to apply to a water body based on the main pressures identified. As a result, not every river basin will include forestry related measures in their programme but it can still be expected that forest issues will have to be addressed in the headwater regions of many rivers.

### 3.3.4 Policy on nature protection

Article 12 of the EU Forestry Strategy endorses the importance of biodiversity in protected forest areas. **Natura 2000** is the core policy protecting nature and biodiversity. It is an EU wide network of nature protection sites established under Art. 3 of the **Habitats Directive** (COUNCIL OF THE EUROPEAN UNION, 1992b). The network comprises Special Areas of Conservation (SAC) designated by Member States and adopted by the Commission under the Habitats Directive (Art. 4) as well as includes Special Protection Areas (SPAs) designated under the 1979 Birds Directive. The **Birds Directive** (COUNCIL OF THE EUROPEAN UNION, 1979) ensures far-reaching protection for all of Europe's wild birds and identifies 194 species and sub-species as particularly threatened and in need of special conservation measures. Additionally, the Habitats Directive extends the coverage to a much wider range of rare, threatened or endemic species, including around 450 animals and 500 plants. To date, the combined Natura 2000 network is nearing completion, comprising more than 25000 sites and covering around 17% of the total land area of the European Union, including lakes and rivers. Member States also have to dedicate additional sites to complete the network, the so called Sites of Community Importance (SCIs).

Almost 30% of the current designated terrestrial SCIs comprise forest habitats and another 30 % partly contain woodland elements and related species.<sup>7</sup> To help select forest sites for Natura 2000, Member States and the Commission agreed that they should focus specifically on the following:

- forests of native species, forests with a high degree of naturalness
- forests of tall trees
- presence of old and dead trees
- forests with a substantial area
- forests having benefited from continuous sustainable management over a significant period

Article 6 §2 of the Habitat Directive states that Member States shall take appropriate steps to avoid the deterioration of natural habitats, including forests. This requirement has to be considered by all land users within the Natura 2000 network which can also affect the management of forests as nature conservation objectives are higher priority than economic activities. Providing that the present management has helped to create or maintain a forest of high natural value, there is no need to change existing forest management practices on Natura 2000 sites. However, forest management that runs contrary to the conservation

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<sup>6</sup> The Catalogue of Measures can be accessed via the CIRCA website: <http://circa.europa.eu>

<sup>7</sup> EUROPEAN PARLIAMENT (2009)

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objectives might have to be adapted. Yet, the Habitats Directive does not a priori prevent any new activities or developments within a Natura 2000 site from taking place.

Any new plans or programmes that are likely to have a significant effect on a designated site have to undergo an appropriate impact assessment before being implemented (cf. Article 6(3) of Directive 92/43/EEC). If a proposed activity is likely to cause significant damage to a site and all possible alternatives have been exhausted, it may still go ahead only if it is of overriding public interest and if compensation has been foreseen.

Moreover, the Habitats Directive also requires active restoration of selected habitats. To meet these requirements the development of detailed management plans are a helpful tool to achieve biodiversity objectives, and are recommended in the framework of the Directive (cf. Article 6(1) of Directive 92/43/EEC). Furthermore, until now the Commission has outlined non-legally binding guidelines with principles and examples of best practice which highly recommend the development of management plans.<sup>8</sup>

Only indicating the objectives to be achieved through national implementation, a limited number of forest management requirements can be derived from the Directives. It is not possible to foresee specific indications on areas, such as the dimensions of clearings, as these depend on management measures that have to be negotiated on a local level between the authorities in charge and the forestry owners.

### 3.3.5 Policy on renewable energy

In the last years the EU has adopted a series of policy documents and legislative instruments to expand renewable energy use in Europe. Bio-energy, in particular, has been promoted by numerous ways. So far, the main focus has been to replace fossil fuels in the transport sector, but it is often forgotten that biomass combustion for heat and power is the main renewable energy source in the EU. In 2005 woody biomass which includes wood from forests, by-products from wood and paper industries, black liquors, pellets and also wood from short rotation coppices accounted for nearly 86 % of the biomass used for primary energy production in the EU whereas agricultural biomass (including by-products such as straw, crops residues and organic wastes) represented about 14%.

The 1997 White Paper on renewable energy (EUROPEAN COMMISSION, 1997) stressed the importance of securing energy supply while reducing CO<sub>2</sub> emissions and proposed to raise the share of renewable energy sources (RES) from 6% (1995) to 12% of total primary energy production in 2010. The Directive on the promotion of electricity produced from renewable energy sources in the internal electricity market (RES-E) (EUROPEAN PARLIAMENT; COUNCIL OF THE EUROPEAN UNION, 2001) contains an indicative objective to reach a level of electricity generation from renewable sources equalling 22 % of the total EU production of electric power by 2010. Existing studies have indicated that among the different RES currently available, such as hydro, wind, tidal, wave, solar, biomass and geothermal energy, only biomass and wind power have substantial growth potential in the near future. The Directive on the promotion of biofuels (EUROPEAN PARLIAMENT; COUNCIL OF THE EUROPEAN UNION, 2003b) sets a biofuel target at 5.75 % of all gasoline and diesel for transport. Although no similar measures have been proposed for heating applications, enhancing the use of RES-H is covered by other initiatives (e.g. directives on promotion of combined heat and power – CHP - and on energy performance of buildings).

The policy process on energy from renewable sources culminated in December 2008 with the adoption of the EU Climate and Energy Package. Most importantly, the **Directive on the promotion of the use of energy from renewable sources (RES-D)** (EUROPEAN PARLIAMENT; COUNCIL OF THE EUROPEAN UNION, 2009) set an overall binding target for the European Union to achieve a 20% renewable energy share by 2020. It also includes a specific 10% minimum target for the final energy used in road transport to come from

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<sup>8</sup> See European Commission, DG Environment website on [http://ec.europa.eu/environment/nature/natura2000/management/guidance\\_en.htm](http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm) , consulted 22.04.2009.

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renewable energy. With the development of sustainability criteria<sup>9</sup> for biomass used for biofuels and bioliquids, the Directive provides a regulative framework to address the environmental and social concerns about biomass production that have been intensively explored and discussed in the last years. In relation to forest protection, the criteria foresee an exclusion of conversion for biofuel feedstock cultivation in so-called "high biodiversity areas" and "high carbon stock areas (see art. 17 RES-D), including primary forests, nature protection areas and areas with high numbers of endangered species or ecosystems. However, this rather vague definition excludes other areas of high natural value such as semi-natural forests (T&E, 2009), which constitute nearly all of the valuable forests in the EU.

As for the EU Forest Action Plan, key action 4 aims to promote the use of forest biomass for energy generation. The activities set out under this policy are linked to the further research supported by the Biomass Action Plan (BAP) (EUROPEAN COMMISSION, 2005b) which was adopted by the European Commission in 2005. Research activities cover investigations on the feasibility of wood for energy production and the development of new technologies for the production of heat, cooling, electricity and fuels from forest resources.

One of these activities encourages Member States to establish national biomass action plans (nBAPs) that specifically outline what measures will be taken to develop biomass resources and mobilise new biomass resources for different uses.

### 3.3.6 Climate policy

Although adaptation is gaining increased recognition (as reflected in the recent White Paper on Adaptation (EUROPEAN COMMISSION, 2009b), EU climate policy focuses mainly on mitigation. The key delivery instrument is the European Union Emission Trading Scheme, designed for large, industrial point-source installations (ETS), but there are additional policies on renewable energy, energy efficiency, etc. (cf. Chapter 3.3.5). There are currently no specific mitigation policies for land use or forestry at the Community level.

According to a decision in the EU Energy and Climate Change Package adopted in December 2008, the EU is committed to reduce its GHG emissions by 30 % by 2020 (compared to 2005) if other countries commit themselves to reductions of similar magnitude, or by 20 % if such an agreement cannot be reached. The EU considers that in order for the ultimate targets to be achieved, all sectors, including land use, land use change and forestry (LULUCF), must make a contribution. The "Effort Sharing Decision" (ESD) specifies how the effort to reduce emissions outside the sectors covered by the ETS will be shared among MS.

Emissions and removals related to **land use, land use change and forestry (LULUCF)** in the Community are included neither in the ETS nor in the ESD. However, according to the ESD (articles 8 and 9) and ETS (article 28), the Commission shall, within 3 months of the signature of an international agreement, assess ways to include emissions and removals related to land use, land use change and forestry in the Community. On the basis of rules agreed upon as part of an international agreement on climate change, the Commission shall make a proposal, to enter into force upon the approval by the Community of the international agreement, to include emissions and removals related to LULUCF in the Community reduction commitment according to harmonised modalities ensuring permanence and the environmental integrity of the contribution of LULUCF as well as accurate monitoring and accounting.

In the event that no international agreement on climate change is approved by the Community by the end of 2010, the Commission will carry out the above mentioned tasks by mid 2011. Member States may specify their intentions for the inclusion of LULUCF in the Community reduction commitment and, taking this into account, the Commission will, as appropriate, make a legal proposal aimed to enter into force from 2013 onwards.

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<sup>9</sup> In order for bio-energy to count towards EU targets it must adhere to sustainability criteria.

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In either case, the Commission will also assess if the distribution of individual Member States' efforts should be adjusted accordingly.

### 3.4 Forest Monitoring

As forest monitoring programmes have been developed at different governance levels (EU-, pan-European and international level), they are presented separately in this section.

The main objective of forest monitoring is to gather long-term information about the development of forest conditions to allow for political consulting at state, EU and international level. Here, regional comparisons of forests and their functions among states are highly relevant (MOFFAT et al., 2008).

#### Programmes at international level

In response to the growing demand for reliable information on forest and tree resources at both country and global levels, the **Food and Agriculture Organisation (FAO)** initiated **national forest monitoring and assessment (NFMA)** in 2000.<sup>10</sup> In early 2008, countries and the FAO reconfirmed their commitment to prepare the next **Global Forest Resources Assessment (FRA)**, a comprehensive data collection on the state of the world's forests scheduled for release in 2010. Under the FRA 2010 a global remote sensing survey of forests will be undertaken in order to strengthen the capacity of all countries to monitor their own forests.

#### Programmes at Pan-European level

Due to the growing public awareness of the possible adverse effects of air pollution on forests, International Co-operative Programme on Assessment and Monitoring on Air Pollution Effects on Forests (**ICP Forests**) was launched in 1985 under the Convention on Long-range Transboundary Air Pollution of the United Nations Economic Commission for Europe (UNECE). With funding by the European Union, ICP Forests monitored the forest conditions in Europe using 2 different monitoring intensity levels (MOFFAT et al., 2008). The first grid (called Level I) is based on a 16 x16 km trans-national grid, which includes around 6000 observation plots. Level II plots, comprising 800 selected forest ecosystems, are monitored more intensively (ICP FORESTS, 2001, 2008).

In particular, the programme aims at:

- giving a periodic overview of the spatial and temporal variation in forest conditions in relation to anthropogenic and natural stress factors (in particular air pollution) by means of Europe-wide and national large-scale representative monitoring on a systematic network;
- gaining a better understanding of the cause-effect relationships between the conditions of forest ecosystems and anthropogenic as well as natural stress factors (in particular air pollution) by intensively monitoring a number of selected permanent observation plots across Europe
- studying the development of important forest ecosystems in Europe and contributing to other areas like biodiversity, carbon storage and sustainable forestry.

As briefly mentioned in Chapter 3.2, the **MCPFE** developed and continuously improves specific criteria and indicators (C&I) to monitor sustainable forest management.

The criteria are used on a voluntary basis at the national level for forest monitoring and also for wood certification schemes such as the Programme for the Endorsement of Forest Certification (PEFC). The latest review of the implementation of these criteria, through an

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<sup>10</sup> For further information see the National Forest Monitoring and Assessment Working Paper Series: [www.fao.org/forestry](http://www.fao.org/forestry)

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analysis of the state of the indicators, can be found in the MCPFE “State of Europe’s Forests 2007” report carried out together with the UNECE and FAO for the 5<sup>th</sup> Ministerial Conference in Warsaw.

However, standards to record the status of the indicators are not clearly defined and leave a broad margin of interpretation when MS compile their reports on SFM.

The Pan-European Operational Level Guidelines for Sustainable Forest Management (PEOLGS) offer a framework of recommendations and references in the field of forest management and can be voluntarily applied by participating states. The PEOLGS are also used as criteria for PEFC wood certification.

#### 3.4.1.1 Programmes at the EU level

The **Habitats Directive** requires Member States to monitor habitats (Annex I) and species (Annexes II, IV and V) of European interest according to Art. 11. Monitoring has to provide detailed information about the conservation status of bio-geographical regions within and surrounding the Natura 2000 network. Monitoring results of each Member State are then compiled by the Commission (Art. 17 Habitats Directive). These reports are meant to provide a basis for the development of indicators regarding the state of conservation of habitats and species.

In April 2005 the Habitats Committee agreed on preliminary (binding) rules for the assessment and monitoring of the conservation status of species and habitat types of Community interest. Nevertheless, a number of difficulties remain regarding the development of compatible monitoring systems among Member States and within federal systems. This involves inter alia the following aspects:

- Compatible acquisition methods and counting extents
- Intervals of acquisition compatible to the reporting obligations
- Amount of acquisition with the differentiation of rare and common species and habitats, also regarding the cost intensiveness and statistical demands
- Associated design of monitoring programmes, i.e. the acquisition of the same appearances (populations, habitat areas) at every survey to reduce the selection effort and to elevate the accuracy of information

These incompatibility problems also affect the overall analysis of data regarding conservation status and changes in the site-monitoring at national and European level. Furthermore, it hinders the appropriate comparison with favourable reference values of the EU.

From 1987 to the end of 2006, the Council Regulation on the protection of forests against atmospheric pollution (COUNCIL OF THE EUROPEAN UNION, 1986), the Council Regulation on the monitoring of forest fires and the protection of EU forests from fire (COUNCIL OF THE EUROPEAN UNION, 1992a), and the Forest Focus Regulation (EUROPEAN PARLIAMENT; COUNCIL OF THE EUROPEAN UNION, 2003a) assured consistent, obligatory and co-financed forest monitoring by the EU Member States. The Forest Focus Regulation<sup>11</sup> concentrated in particular on protecting forests against atmospheric pollution and fire and ensured the continuation of forest monitoring. It was also adopted to broaden the scope of the monitoring scheme from the protection of forests to include other environmental issues such as soils and forest biodiversity.

In addition to the general ICP monitoring activities, the Forest Focus Programme developed the demonstration programme BioSoil. It provides methods and criteria for harmonized sampling, assessment, monitoring and analysis of the effects of air pollution on forests soils.

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<sup>11</sup> (EEC) No 2152/2003. A related Act is the Commission Regulation (EC) No. 1737/2006 of 7 November 2006 establishing detailed rules for the implementation of Regulation (EC) No 2152/2003 of the European Parliament and of the Council concerning monitoring of forests and environmental interactions in the Community [Official Journal L 334 of 30.11.2006].

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A binding manual on forest monitoring for various sectors and an ICP manual especially for forest soils have been developed within the framework of the demonstration programme BioSoil based on 2 components: soil and biodiversity. The soil part provides methods and criteria to demonstrate the feasibility of performing a systematic forest soil monitoring at a European scale. The biodiversity part aimed to make a forest biodiversity inventory with harmonized information; including forest type classification and biodiversity testing indicators as well as developing a manual to assess the status of forest biodiversity.

Since the adoption of the **LIFE+** Regulation (EUROPEAN PARLIAMENT; COUNCIL OF THE EUROPEAN UNION, 2007) certain activities previously covered by Forest Focus could also be co-financed by the LIFE+ programme on a project basis, inter alia in order to solve future uncertainty about the financing of forest monitoring, database management as well as data analyses and reporting. Following this, an EU-level Forest Monitoring project called FutMon was proposed and co-financed. Its aim is to revise existing forest monitoring under LIFE+ co-financing in the Member States. The project's duration is 2 years (2009-2010) with a total project budget of 34.443.390 EUR<sup>12</sup>. It has to be noted that under LIFE+, there is not an obligation anymore for MS to execute forest monitoring.

### 3.5 Policy Coherence

Since there are a number of international and EU policies addressing forest related issues, coherence between the policies is vital to ensuring sound decision-making and to effectively and efficiently achieving the intended objectives of these policies. Policy coherence can be defined as “the systematic promotion of mutually reinforcing policy actions across government departments and agencies creating synergies towards achieving the agreed objectives” (TCD, 2005).

Using the overall objective of meaningful forest protection within the EU as a foundation, the following analysis elaborates on the main conflicts and synergies within and between forest and forest related policies. The analysis differentiates between **vertical and horizontal coherence**. Vertical refers to coherence between different governance levels (international, pan-European and European Union) and horizontal coherence refers to different policy fields within a governance level (in this paper, the EU level). Lack of coherence can occur in policies in terms of goals (objectives), instruments (measures) and actors/bodies responsible for decision making and implementation.

After providing a summarised overview of all relevant policies in view of forest protection (see Table 9 and 10), some existing tensions or synergies between policies and governance levels are further pointed out and described, following the differentiation between vertical and horizontal coherence. This overview can then be considered and serves as a basis for the following chapters addressing needs and possibilities for action.

Additionally, Annex 9.3 provides an analysis of existing EU level policy means against the needs for forest protection identified in Chapter 2.4. This analysis has been considered in the following sections.

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<sup>12</sup> Lorenz, K. (2007): PowerPoint presentation at the Forest Monitoring Week.

**Table 9: In a nutshell: Important international forest and forest-related policies**

Inter-national governance	Policy field	Objectives	Instruments (with relevance to forest protection)	Relevant actors/ decision makers
<b>UNFF</b>	Forest	Sustainable management of all types of forests	Non-Legally Binding Instrument on All Types of Forests (NLBI), National Forest Programmes (NFP)	Annual meetings of delegations
<b>MCPFE</b>	Forest	Sustainable forest management	NFP, Criteria and indicators, reporting and monitoring activities of states (unclear standards), Working programmes	Ministerial conference of 46 European states, Expert Level meetings
<b>UNFCCC</b>	Climate	Stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.	Land Use, Land Use Change and Forestry (LULUCF) monitoring and reporting as agreed under Kyoto Protocol, IPCC good practice guidance for LULUCF (2003); Obligatory accounting: Afforestation, reforestation, & deforestation. Optional: forest management	Annual Conferences of the Parties (COP) to UNFCCC and MOPs to the Kyoto Protocol, EU delegation consisting of Member States and the EC
<b>CBD</b>	Biodiversity	Conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources	Expanded Programme of Work (POW) on forest biological diversity invites Parties to implement 129 actions, 12 goals and 27 objectives;	Conferences of the Parties (COPs), EU delegation consisting of Member States and the EC
<b>UNECE water convention</b>	Water	Strengthen national measures for the protection and ecologically sound management of transboundary surface waters and groundwaters, prevent, control and reduce water pollution from point and non-point sources	Recommendations on Payments for Ecosystem Services in Integrated Water Resources Management (recognising forests as water-related ecosystems), Guidelines on sustainable flood prevention	Meetings of the Parties to the Convention

**Table 10: In a nutshell: European Union forest and forest-related policies**

Policy field	Overall objectives	Forest-related objectives	Instruments with relevance for forest protection	Relevant actors/ decision makers
<b>Forest (Forest Action Plan)</b>	cf. forest related objectives	<ol style="list-style-type: none"> <li>1. Improving long-term competitiveness;</li> <li>2. Improving and protecting the environment;</li> <li>3. Contributing to the quality of life;</li> <li>4. Fostering coordination and communication</li> </ol>	Informative instruments: so-called Key Actions: Coordination instruments: meetings, workshops, NFPs. Communication instruments: websites, awareness events. Research, JRC	European Commission, SFP, Member States, AGFC, Inter-Service group on Forestry
<b>Agriculture and rural development (CAP)</b>	Treaty establishing the European Community art. 33: productivity, fair standard of living, market stabilisation, food security, reasonable prices.  CAP Pillar 1- market and income support to farmers CAP Pillar 2 - RD: competitiveness, environment, quality of life, local capacity	<ol style="list-style-type: none"> <li>1. RD axis1: Facilitating innovation in forest sector; improving value added of forest products, including support for bio-energy; improving environmental performance of forest products</li> <li>2. RD axis2: Preserving and restoring forests</li> </ol>	Financial instruments: RD national programmes, co-financing (e.g., EAFRD, LIFE+)	DG AGRI, Council of Ministers, Member States, Regions

<b>Water (WFD)</b>	Achieving good ecologic status of all water bodies by 2015	No directly forestry related objectives	Programme of Measures to prevent pressure on water bodies	DG ENV, Member States, Regions
<b>Nature Protection (Natura 2000)</b>	To assure the long-term survival of Europe's most valuable and threatened species and habitats within and outside the Natura 2000 network	Protecting forest habitats and specific tree species	Natura 2000 - SACs, SPAs, SCIs	DG ENV, DG AGRI, Member States, Regions
<b>Bio-energy (Biomass Action Plan)</b>	Reducing GHG emissions, enhancing rural development	Promote biomass use from forest sector for bio-energy	Binding 20% target for RE, binding 10% target for RE in transport sector, nBAPs	DG TREN
<b>Climate mitigation (European Emission Trading Scheme)</b>	Reducing GHG emissions from industrial sources	None at the Community Level	None at the Community level	Member States
<b>Climate adaptation (White Paper)</b>	To improve the EU's resilience in dealing with the impacts of climate change	Increasing the resilience of forests	Proposed action: Update forestry strategy and launch debate on options for an EU approach to forest protection and forest information systems	European Commission (White Paper)

### 3.5.1 Vertical coherence

As it has been pointed out in Chapters 3.1 and 3.2, international and Pan-European policies affect policies at the EU level as well as at the level of the Member States in different manners. Thus, policy levels interact in terms of the rules which have been committed to at the international and Pan-European level and that are implemented at the EU or Member States levels. Furthermore, normative, value-based decisions as well as procedural decisions on the higher levels influence respective decisions on the EU and Member States levels and, eventually, international policies frame the policies of subordinated levels in a discursive manner. That is, they literally give room for and provide the possibility of constructing policy rationales at these levels by providing understanding of problems and potential measures to solve them.

It is important to note, however, that while there are significant differences with regard to the character of international policy instruments (e.g., if they are legally binding, as with the CBD or UNFCCC, or non-legally binding, such as the outcomes of the UNFF or the MCPFE process) international policies usually offer a lot of flexibility for committing parties, particularly regarding policy means.

In this chapter, vertical coherence of policies is provided if policy measures are well adjusted between the global, international, Pan-European and European levels according to commonly agreed upon objectives in the context of a specific policy field. The fields dealt with here cover forest, climate and biodiversity policies at different governance levels. The analysis is based on the comparison of Tables 9 and 10.

In forest policies, there are strong overlaps among objectives and instruments across governance levels. All forest policies, regardless if they are international, Pan-European or European (EU), follow a rather abstract and non-legally binding policy approach and are mainly based on the idea of national sovereignty. They make use of National Forest Programmes and national reporting based on criteria and indicators as an instrument for concrete decision-making and the management of conflicts, thus referring to the national level for developing and implementing forest protection measures. As a consequence, potential synergies occur in the monitoring and reporting duties of the Member States for the different governance levels. However, monitoring and reporting to the UNFF and MCPFE is done on a voluntary basis. The European Union has produced forest data in coordination with ICP under various forest (expired Forest Focus Regulation) and forest related



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monitoring procedures (e.g. Natura 2000), but almost all monitoring and implementation instruments at the national level lack guidance from comparable methodological standards (cf. Chapter 3.4). In terms of policy coherence, one might conclude that global, Pan-European and EU forest policies are coherent in that they only formulate abstractive norms and rules. Thus they delegate the formulation and implementation of forest policy de facto at the national and subnational levels, as well as to other sectoral policies. Consequently, different parties have selected very different approaches for their forest policies, leading to a lack of horizontal coherence in terms of, for instance, the forest policies of different EU Member States.

The CBD promotes the implementation of protected areas as well as sustainable land use, following the Ecosystem Approach. Although the Parties have legally committed to achieving the overall objectives of the CBD, the means are only vaguely formulated. The Expanded Programme of Work (POW) on Forest Biodiversity, for instance, is a process in which parties commit in a non-legally binding manner to work together to achieve the CBD objectives and to conduct joint activities formulated in the Programme. Conclusions should find their way into national forest policies; however, respective reporting to the CBD is not obligatory.

The EU's Natura 2000 network through the Birds and the Habitats Directive is meant to be the decisive contribution of the EU to fulfil its commitment to the CBD. Nevertheless, the Commission admitted in January 2009 that it is "highly unlikely" to meet its objective of halting biodiversity loss by 2010, stemming from the CBDs and UNDP Millennium Development Goal No 7 to significantly reduce the loss of biodiversity by 2010. It can be noted that failing to meet the objective might be a matter of insufficient integration of biodiversity protection across relevant policy fields (horizontal). In that sense, while having established a legally binding framework directive on protected areas, EU biodiversity policy is less successful in implementing the other pillar of international biodiversity policy - the application of the Ecosystem Approach to all types of land management; this is despite the need to integrate the protection of biodiversity in forests beyond protected areas, also emphasised by the MCPFE (MCPFE, 2007). From a policy coherence perspective, however, it can be concluded that the successful implementation of a protected area network and the less successful integration of biodiversity aspects in overall land management somehow reflect difficulties at the global level to concretise the Ecosystem Approach under the CBD.

As it has been described in Chapter 3.3.6, forest emissions and removals are currently not covered by the European Union Emission Trading System (ETS), nor are they included in the effort sharing decision that specifies MS reduction obligations after 2012. However, the Commission has an obligation to review the status of forests in the climate policy regime after the end of 2009, when a new international climate agreement should be agreed upon.

Thus, the use of forestry credits in the EU Emission Trading Scheme is currently only possible through the Flexible Mechanisms directly related to the UNFCCC Kyoto Protocol, e.g., Clean Development Mechanism (CDM) that allows for afforestation and reforestation activities in developing countries to be credited as carbon sequestration, thus not addressing EU forests. Likewise, actual debates on reducing emissions from deforestation and forest degradation (REDD) are promoting an integration of forest protection activities in global emission reduction schemes.

Future synergies between climate policies in the context of forests could arise between international and European endeavours aimed at adapting to climate change. The European Union has recently published a White Paper on climate adaptation in Europe which states the need to increase the resilience of forests in order to minimise the economic risks from climate change, such as storms and droughts (see Table 10). In its current state, adaptation policy on the UNFCCC level is largely restricted to funding the different strategies of developing countries aimed at risk prevention.

In summary, vertical coherence of forest and forest-related policies at the international, Pan-European and EU level can be evaluated as follows. Concerning forest policy, the 'soft' approach of international policy which mainly points to the national level is mirrored on the

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EU level. In biodiversity policy, Natura 2000 echoes the negotiations of the CBD to establish networks of (forest) protected areas, although the implementation of the Ecosystem Approach is not advanced. Regarding climate policy, the EU has been cautious in integrating forest issues in its respective policy frame as compared to the international debate and already existing and upcoming decisions on the issue of forests and climate. This is due to the discussion of related risks (e.g., with regard to the permanency of forest removals and concerns regarding an oversupply of certificates in the European Trading Scheme for Emission Allowances carbon markets (EU-ETS)). However, most Member States have decided to elect forest management under Article 3.4 of the Kyoto Protocol.

### **3.5.2 Horizontal coherence**

Synergies as well as conflicts exist at the EU level, both within policies themselves and among policies, in terms of objective setting, instruments for implementation and actors involved (see Table 10).

The current governance framework for EU forest policy is embodied by the EU Forest Action Plan and is characterised by various 'soft' coordination, advisory and management bodies, such as the Standing Forestry Committee (a coordination and communication platform) which has no regulatory competence over Member States. As demonstrated by Table 10, forest protection is split over a wide range of different EU policies. Indeed, no regulation exists at the EU level that primarily aims to protect forests. This results in very diverging degrees of enforcement of forest protection objectives across many different EU policies (e.g. CAP, the Habitats Directive and the FAP). In the case of Natura 2000, for instance, the European Community has agreed on common binding objectives with regard to designated Natura 2000 areas, which often include forests. The CAP, on the other hand, offers financial incentives to address, inter alia, forest protection issues. Other forest related objectives, e.g., the operationalisation and implementation of sustainable forest management, are only addressed via informal coordination and information processes. This insufficient enforcement is closely linked to a lack of priority setting among different and often competing or even contradicting forest-related and non-related policy objectives.

A corresponding lack of coherence can even be observed within the FAP itself. Aside from aiming for meaningful forest protection, the FAP simultaneously pursues the goal of improving long-term competitiveness within the forest sector. Assuming that forest protection and the conservation of forest biodiversity may lead to constraints in wood extraction and forestry practices (cf. Table 5), protection and competitiveness are at least partially contradicting objectives that either have to be prioritised through political decisions or have to be regulated. Since no prioritisation has been defined between these objectives within the FAP and no common binding commitment has been made in relation to these objectives, relevant actors and decision makers at the MS level are fully flexible to pursue these objectives according to their own preferences and priority setting. Given a situation of increasing economic pressure and competition within the common market (cf. Chapter 2.2.2), this could result in a de facto deterioration of forest management standards.

Similar conflicts between objectives and instruments alike exist within the CAP, dealing primarily with maintaining agricultural productivity, especially by funding the first pillar (direct support and Common Market Organization). The second pillar, addressing rural development, proposes a catalogue of measures. On the one hand, several measures aim to increase the competitiveness of the forest sector and the added value of forestry products. At the same time, there are additional measures supporting the afforestation, restoration and conservation of forests and woodlands. As pointed out above, the choice of measures is left to the discretion of the Member States. This is likely to result in a lack of coherence regarding the factual implementation of forest protective measures through the CAP. The same is true for the proposed Programme of Measures of the WFD in which afforestation measures are among the numerous measures that Member States can choose to implement.

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When different policies are brought together, inconsistencies are likely to occur. For example, it is up to the Member States to choose if they will finance forest protection by using some of the rural development measures in the catalogue of measures proposed by the Community given they are also legally committed to protecting forest ecosystems in Natura 2000 sites. At the level of the Member States, this might lead to a discrepancy between the degree of regulation and the available measures for implementation, a situation likely to hamper forest protection.

Trade-offs between objectives and instruments of different policies impacting forests are evident when comparing the Community's approaches to nature conservation and biomass use for energy production. Conflicts arise between the expanding use of woody biomass for the production of second generation biofuels in light of achieving the binding 10% target for renewable energies in the transport sector and the protection of valuable forest habitats and biodiversity for future generations according to the EU biodiversity strategy and the nature protection directives. If pressure on European forests increases with the rising economic value of forests, woody biomass and forestry products, there is a risk that the conservation value of forests will decrease in relative terms.

In summary, coherence in the EU's forest and forest-related policies is threatened by the following conflicts:

Forest protection measures are spread widely across different policy fields leading to

- Potentially contradicting policy objectives with similar importance for forests without set priorities,
- Inconsistent enforcement due to partly legally binding, partly financially incited, and mostly voluntary measures, and
- Inconsistent and fragmentary control on objective achievement.

Against this backdrop, sound coordination and communication between the various actors (presented in Tables 9 and 10) and their respective activities are crucial to ensuring better coherence between EU forest and forest-related policies. In this context, the Forest Action Plan plays a significant role in steering European forest policy towards increased coherence; however, as it has been pointed out, the objectives are contradictory even within the FAP. Thus, it will be crucial to reflect on the results of the FAP mid-term evaluation in autumn 2009 in terms of policy coherence and the effectiveness of its communication and coordination measures in enhancing forest protection in the EU.

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## 4 Needs for action at the Community level towards better forest protection

In the previous chapters, the state of European forests and the challenges, resultant impacts and their perceived threats were described. Furthermore, the vertical and horizontal coherence of international, pan-European and EU forest and forest-related policies were discussed. As a result, a comprehensive definition of the problem and a clearer understanding, which takes the amenity and commodity perspectives into account, of the underlying causes associated with forest protection in Europe have been offered. Based on these findings, this chapter seeks to ascertain whether or not there is a need for action at the Community level to address these problems and why this is the case. This proves to be a necessary precondition for identifying appropriate policy options for forest protection in Europe.

Drawing on the fundamental principles outlined in the EU Treaties, most notably those of conferral and subsidiarity, arguments both in favour of and against a Community initiative for forest protection can be found. Accordingly, the need for action at the Community level and the added value of a Community approach can be derived by considering (1) the overall **spatial characteristics** of a forest protection problem and (2) its **drivers**, while also taking into account the problem's development over time. Based on these factors, the question of (3) the **level** at which these issues could be most adequately addressed is raised and needs to be discussed. In the following sections, arguments are outlined from **ecological**, **economic** and **socio-political** perspectives. However, the complex interdependencies between the symptoms and causes within all 3 problem perspectives should not be ignored. Our argumentation is supported by referencing evidence that has been described in detail in previous chapters.

### 4.1 Ecological arguments for the need for action at the Community level

When considering the overall nature and scale of forest protection issues from an ecological point of view, one may conclude that several of the analysed forest threats are of a **trans-boundary nature** or are significant across Europe. For instance, the loss of biodiversity in forests can be regarded as a general European problem. As 65% of the forest habitats that are integrated into the Natura 2000 network are found to have either an 'unfavourable-inadequate' or 'unfavourable-bad' conservation status (cf. Table 1) and a number of forest dependent species are threatened, it can be concluded that forest biodiversity is under pressure in most Member States. Thus, a need can be seen for further action at the Community level in order to protect forest biodiversity.

Further biological and abiotic impacts and threats to forests also have a transnational nature. For instance, invasive plant, insect and fungal species are increasingly crossing national borders and are simultaneously affecting forest ecosystems in many European regions (e.g. pine wood nematode in Portugal, Spain; horse-chestnut leaf miner in Eastern, Central and Western Europe; Dutch elm disease in Western and Eastern Europe). Outbreaks of insects and fungal calamities are a constant and ever growing concern across most of Europe. Forest fires and storms are also transnational phenomena. These events occur frequently and affect about 500,000 ha forest throughout southern and some eastern European countries every year. Major storms hit less frequently, but cause significant economic damages to forest stands on a larger scale in several adjacent regions in central, northern and western European countries. Moreover, the acidification, eluviation and eutrophication of forest soils do not only appear on local and regional scales, but instead occur in many Member states due to the transboundary or even transcontinental transport of ozone, fine particles and other pollutants (CLRTAP, 2007). Accordingly, the health and vitality of 20% of the forest stands in Europe are considered to be severely threatened.

In general, many of these biotic and abiotic impacts are an integral part of natural forest ecosystems and thus are indispensable for maintaining the proper functioning of forests as

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well as their diversity. The high degree of intensive management and utilization practices in forests, however, has led to altered natural conditions in almost all European forests. Furthermore, most of the biotic and abiotic impacts are strongly exaggerated by additional anthropogenic factors (e.g., fires and invasive species). Thus, depending on the perspective, these 'semi-natural' impacts are often perceived as transboundary threats (cf. Table 4).

When considering the **main drivers** of the described forest protection problems, it is obvious that some of them have a transnational, European or even global scope (cf. Chapter 2.2). For instance, climate change appears as a mega-trend, cutting across all European regions and imposing major challenges. As a result, changing climatic conditions will (and might have already) reinforce many of the above mentioned ecological impacts and resulting threats to forests. The spread of invasive alien species, for instance, is also caused by a shift in species' natural boundaries due to climate change effects (MOORE, 2005). At the same time, this phenomenon is strongly boosted by liberalized trade and travel. The dynamic quality of air is responsible for transporting highly mobile polluting depositions and thereby impacting soils and plants. Moreover, forest management and land-use practices across Europe either highlight different forest conservation standards in similar bio-geographical regions or emphasise an orientation towards commodity production; surely this does not provide for favourable biodiversity conservation.

As for the **appropriate policy** level to address the issues at hand, the above mentioned properties of forest protection issues must be considered. Thus, at least a common understanding, but ideally also coordinated actions are needed at the Community level when forest protection issues can not be sufficiently addressed only by regional or national actions due to the transnational nature of and causes behind the challenges, impacts and threats. For instance, it is obvious that mitigation actions addressing climate change must follow a transnational, co-operative approach. Taking the European challenge of losing forest biodiversity into consideration, a more coordinated approach at the Community level seems to be justified in order to address this issue. Moreover, a policy on invasive species or air pollution in one Member State is, in the long term, either not effective or is more cost intensive if it is not congruent with the policies of the adjacent Member States. The same holds true if severe forest fires or disastrous storm events strain the capacities of individual countries to manage the likely threats resulting from these events.

However, from an ecological point of view, there are many cases where the specific actions that are suitable for addressing forest protection issues have to be applied with respect to the specific regional or local situations. For instance, strategies enhancing forest biodiversity in managed forests have to take the individual forest ecosystem and the site specific abiotic and biotic factors into account. Bearing this in mind, the huge diversity of European forest ecosystems requires different strategies for concretely addressing many of the aforementioned issues. On the one hand, this limits a coordinated approach in terms of fixed and unified management standards and provides evidence for the idea of a forest protection framework that offers a large amount of flexibility for national and sub-national applications. On the other hand, there are several bio-geographical regions across Europe where forest ecosystems have similar ecological (and socio-economic) properties that would allow for better coordination or common actions between Member States, including pro-active Community involvement.

Nevertheless, the extent to which political coordination in managing ecological issues can be regarded as beneficiary also depends on other economic and socio-political factors (which will be addressed in the following section).

## **4.2 Economic arguments for the need for action at the Community level**

Recalling the previously mentioned findings, several socio-economic trends (i.e., changing societal demands towards forest services and economic globalization) that are affecting the issue of forest protection to different degrees across Europe can be identified. Most of these

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challenges do not only concern individual Member States or even groups of them, but rather have a scope of impact which covers the entire EU. Following an economic perspective, they must be considered closely linked to the issue of a European common market for forest products.

The process of economic globalization has led to an increased 'Europeanisation' of the forest based sector and to greater competition in the European market. Societal demands towards forest services, however, have changed in many European countries from being mostly commodity oriented towards a more amenity perspective. At the same time, the demand for timber is high and continues to rise, especially in regard to bioenergy, which places increasing pressure on forest ecosystems. Consequently, existing conflicts between different services provided by forests are likely to intensify during the coming years (cf. Chapter 2.2.2).

Taking this into consideration, a Common approach towards EU forest protection, particularly regarding forest management standards and forest protected areas, would create some benefits for most of the involved actors. First of all, a Common forest protection policy might avoid or at least notably reduce negative economic effects such as, for instance, a distortion of competition caused by very different forest protection standards within the EU Member States. Second, a Common forest protection framework would help to avoid a 'race to the bottom' between Member States concerning, e.g., forest management and protection standards in the event of increasing demands for forest products and increasing economic competition. If no commonly agreed upon framework exists, macroeconomic austerity pressure (e.g. severe fiscal conditions, stagnating economic situation) within the EU Member States is likely to reduce the quality of forest protection policy measures, e.g. by weakening administrative capacities for implementing existing policies or for formulating future policies or by lowering the environmental regulatory burdens to benefit domestic (forest-based) industries. Additionally, a coherent Common approach, that would also bundle existing policies affecting EU forests and forest protection, would abolish the inconsistent environmental requirements from different EU policies that are likely to be detrimental to the competitiveness of forestry and forests based industries, as compared with other sectors or parts of the world.

In this sense, the **European Common Market** itself is a major argument for a Common approach towards forest protection at the European Community level.

However, there are also economic arguments against a Community approach to forest protection. Thus, it can be argued that the regional characteristics of forestry and forest-based industries are still different enough that the degree to which a detailed regulation can be developed for a more Community-based approach to forest protection policy may be limited. Furthermore, depending on the strictness of a regulation, forestry and forest based industries may be concerned that a Common forest protection policy would hamper their ability to compete in an already difficult economic situation. This holds particularly true for the global competition the European forestry industry has to respond to. In this sense, from an economic perspective, a more coordinated approach must not only pay heed to the Europeanisation of forest product markets, but must also consider the partially globalised character of forest product markets. On the other hand, it is questionable if viewing the non-regulation (and possible de facto lowering) of European standards as an answer to increasing global competition is an acceptable path for European forestry and forest based industry given the level of ecological awareness in European societies.

### **4.3 Political arguments for the need for action at the Community level**

There are also several political arguments in favour of or against a coherent Community approach to forest protection policy.

Regarding the first group of arguments, a Community approach would help to overcome potential regulatory failures and discrepancies between the fundamental goals of the EU and

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the existing situation. First, recalling the analysis of the horizontal coherence of EU forest and forest-related policies, it is obvious that forest protection measures are subject to different EU policy fields; this entails some contradictions within the different policies' objectives that are likely to result in inconsistent enforcement by political instruments. For instance, although Natura 2000 has been implemented, the majority of protected forests are showing an unfavourable conservation status. This is at least partially due to the fact that the available financial resources are not sufficient (e.g. Life+) or that it is mostly up to the political will of the individual MS to make use of the existing funds (e.g. EAFRD); in other words, negative conservation statuses are due to inconsistencies between environmental regulations and funding. Second, while some forest threats are already dealt with by EU policies, other impacts occurring on a transboundary or even European scale are not at all addressed (e.g. climate change adaptation, alien species, game and livestock), or are only insufficiently dealt with (e.g. forest fires). Arguably, many of these policy problems are a consequence of the lack of a coherent Community policy framework for forest protection and the resulting variety of Community policies under different competencies. A coherent approach would offer the opportunity to streamline these policies.

Furthermore, there are other political arguments supporting a Community approach to forest protection. Most of them refer to a discrepancy between the fundamental goals of the European Union and the actual situations. In particular, the ambitious goals of the European Union to achieve sustainable development and effective environmental protection throughout Europe, as laid out in the EU Treaties, can hardly be achieved if no guaranteed level of forest protection exists across the EU. Obviously, forest ecosystems are a significant and integral component of the natural environment providing for the provision of many ecosystem goods and services throughout Europe. The overall lack of a harmonized institutionalisation of forest management standards and the existence of strongly contested forest management practices, e.g., large scale clear-cutting and harvesting ancient forests, are likely to undermine attempts by the EU to achieve its ambitious environmental and sustainability policy goals. In particular, recent assessments provide evidence that the EU will not achieve its high aim of halting the loss of biodiversity, including within forests, by 2010 (EEA, 2009). At the same time, the continuation of divergent or unclear forest management and protection standards may also negatively affect the competitiveness and economic integrity and viability of the EU forestry and forest based industries (see above). Thus, at the end of the day, a lacking Community forest protection policy may not only affect established EU environmental policies such as biodiversity and water protection, but may also affect common market and rural development policies.

Moreover, the ongoing European integration process makes the lack of policy and regulations in one specific policy field problematic for the actors and issues within this field. While an increasing number of regulations regarding the issues might originate from other policy fields, it is likely that the policies will be less coherent and that there will be an overall lack of political importance and 'commitment' by EU institutions and policy actors attached to this field as a consequence of lacking competencies. This is probably resulting in less human and financial resources being invested in the issues at the EU level. It is questionable if such a decline in the relative importance given to an issue can be compensated at the Member States level. Member States will tend to invest their resources in environmental and resource policy issues that are more prominently addressed at the European level. Consequently, a Community approach to forest protection would also strengthen national and regional activities and policies in this field. Moreover, if the current situation continues, further divergence among the forest protection policies of European countries will probably occur. This will most likely increase the economic and political costs of a Community approach, if it should be desired at a later time.

When considering international forest and forest-related policy processes, a more coherent EU forest policy would make the implementation of such processes easier. It would also back the efforts of European delegations to achieve more concrete standards in international forest and forest-related policies, thereby supporting both global forest protection and the

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competitiveness of the EU forestry and forests-based industries. Eventually, in regard to globalisation as well as to credibility issues in international processes, an effective and well communicated European policy for forest protection is likely to improve the image of forest management and forest products and is thus likely to promote the use of EU wood as a truly sustainable raw material.

Last but not least, as far monitoring is concerned, a more coordinated Community approach may help to establish a consistent information basis and to close knowledge gaps regarding the state of and impacts on EU forests in terms of the various demands of European societies. This would support policy making in order to analyse and regulate the impacts of the challenges described. In addition, such an approach would facilitate the reporting commitments of the EU and Member States as parties to international forest and forest-related policy regimes.

However, several political arguments also vie for a continuation of the current approach to forest protection, based first and foremost on Member States' competences and policies. In particular, significantly different regional characteristics exist not only within forestry and forest-based industries, but also in considering different societal and stakeholder demands throughout the EU (cf. Table 3); they are reflected in diverse national forest policy institutions. For instance, the forest policy of some Member States expresses the 'commodity' perspective, while others focus more on the 'amenity' perspective regarding forests. Obviously, these different policies can not be easily represented in a more coordinated EU policy for the protection of forests. In this sense, the actual, pluralistic and multi-level approaches to forests and forest protection policies mirror the pluralistic demands of European societies towards forests. In other words, there has been a lack of overall political will and commitment towards developing a more coherent Community-based approach for forest protection policy; such issues are not easily overcome. Eventually, with regard to some indicators, e.g., forest vitality or forest growth, the existing loosely coordinated approach to forest protection has been quite successful, delegating forest issues to the national level as well as to a variety of forest related policies.

#### **4.4 Resume**

In conclusion, numerous arguments can be found that underline the need to develop a more coherent Community approach to forest protection. At the same time, there are also arguments that support a continuation of the policy status quo, which is actually nothing but the result of the aggregated political will of the Member States throughout the last decades. In this context, however, it is important to consider that some aspects have significantly changed as compared, for instance, to the situation that existed just 10 years ago. First, the 'Europeanisation' of forest product markets as well as of the forestry and forest-based industries has continued. Secondly, European forests are becoming more and more embedded in an international context of socio-economic and ecological developments, challenges and problems such as economic globalization, climate change and climate policy, the loss of biodiversity and global biodiversity policy. In this context, contradictions between different forest demands are increasing as well as the pressure resulting from different forest uses. Thirdly, despite many obstacles, the European integration process continues to take place and has, inter alia, produced new Community policies and directives in the environmental and resource policy fields, regulating biodiversity conservation, water management, rural development, etc. As a side effect, the lack of regulation in the field of forest protection policy is more outstanding than it was just a decade ago. Forests can be considered as one of the few major resources/fields for environmental policy that has not been properly addressed by Community legislation until now; this cannot be explained by significant differences in the characteristics of forest resources as compared to resources such as water systems or agricultural land.

In that sense, a more integrated approach to forest protection policy which respects the diversity of needs and demands as well as political feasibility seems to be reasonable. In the



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following text, 4 policy options for Community initiatives regarding forest protection are outlined. These concepts seek to address the aforementioned arguments by offering policy concepts encompassing underlying rationales, different assumptions about appropriate governance modes and various policy instruments. Given the pro and con arguments identified with regard to a possible Common forest policy in Europe, the 4 options respond to the full range of possible evaluations from both groups of arguments, varying between 'little' (Option 1) and 'strong' co-ordination (Option 3) at the Community level.

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## 5 Options for European forest protection policy

The present chapter seeks to outline 4 policy options for the protection of European forests. These policy concepts comprise justified possibilities for European responses and elements of concrete ways and means towards a forest (protection) policy initiative. The chapter is structured as follows:

In the introductory Chapter 5.1, theoretical insights on and instances of **environmental governance modes** and corresponding **legal basis** applied in European policies are presented.

The bulk of the chapter outlines 4 forest (protection) policy concepts. Accordingly, Chapter 5.2 presents the first policy concept “Continue and Improve Current Approach” and Chapter 5.3 deals with the second policy option “Forest Monitoring for Europe”. Whereas the third policy concept “Forest Framework Directive” is outlined in Chapter 5.4, the last chapter deals with the fourth policy option “Open Method of Coordination on Forest Protection”. Each of these subchapters is composed of a main textual description followed by **graphical illustration and short summary**. A corresponding ex-ante **evaluation** of these policy concepts is given in the next Chapter (6).

### 5.1 EU environmental governance modes and competences

#### 5.1.1 EU environmental governance modes

Community policy fields impacting forests and their management represent different levels and scopes of regulation according to the degree of leeway that they leave to Member States, the broad or specific nature of their objective definition, or by the mandatory character of their implementation. Thus, the existing policy fields are subject to different *governance modes* affecting the policy making process and the implementation of the policy. This implies that particular decision making processes engage certain groups of actors and make use of different kinds of instruments.

In regard to a possible adaptation or redesign of EU forest-related policies in order to strengthen forest protection objectives, it will be helpful to categorise existing governance modes and their characteristic instruments in forest and forest related policies.

Depending on which approach is chosen, different governance modes and their instruments can come into the focus of consideration.

In the following, a **typology** is introduced that offers a categorisation of governance modes according to their use of soft law or legally binding provisions, and to the flexibility that is left in the implementation.<sup>13</sup> These typological categories should not be confused with the actual instruments of secondary legislation of the EU. The theoretical governance modes presented below are initially based on a broader classification of legal and non-legal policy instruments and processes only according to the criteria of flexibility and binding character. The EU policy fields approached in this paper are broadly classified inside of this typology.

The main instruments of secondary legislation of the European Union which can be subordinated in the typology below are as following:

- **Regulation:** a regulation is binding in all its parts, i.e. addressed to all and as such directly applicable in Member States after publication in the official Journal of the European Communities.
- **Directive:** a directive is addressed to the Member States and necessitates to be transposed into national law before being applicable.

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<sup>13</sup> The typology is based on: TREIB, et al. (2005). For conceptual reasons the governance mode “*targeting*” is not included.

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- **Decision:** a decision is aimed at a particular group of actors (specific MS or citizens); it is an individual measure, binding only but directly and in its entirety for that specific group.
  - **Recommendation and Opinion:** both of these instruments do not entail any legal obligation. A recommendation suggests a line of action, whereas an opinion expresses a point of view on a specific matter.

### 5.1.2 Regulatory approach<sup>14</sup>

This mode of governance rests on legally binding provisions, which have been agreed upon in common, prescribing detailed and fixed standards, thus leaving little leeway to Member States in the implementation phase (TREIB et al., 2005). In the EU context it generally corresponds to agreements based on legislative acts in the form of a Regulation. Regulations as such are directly enforceable in the Member States.

The Community defines legally binding and detailed rules which are directly applicable by the Member States. The field of direct support schemes to farmers, for example, in the first pillar of the CAP is directed by a set of common rules defined at EU level and to be implemented as such. The cross compliance mechanism is legally binding in its requirements. Its implementation by farmers in all Member States represents a condition for the obtainment of direct payments. The specific requirements of cross compliance are summed up in a council regulation (COUNCIL OF THE EUROPEAN UNION, 2003). This lack of flexibility can be linked back to the high level of integration of this policy field and to the significant amounts of EU funding that is made available for it.

The case of the EU Rural Development Policy however shows that regulations can also require a more flexible implementation. Based on the Council regulation (No 1698/2005) on support for rural development by the EAFRD, specific measures have been suggested to Member States to help attain broad objectives of rural development according to defined priority areas. The Member States are free to choose which measures they want to support and are also responsible for controlling their further design and implementation. This instrument is also characterised by co-financing through the Community and the Member States; this is in accordance with the high level of discretion left to the Member States.

Other examples of the “regulatory approach” can be found in the former forestry and forest monitoring regulations of 1986 and 1992 but also in the 2003 Forest Focus Regulation, which were directly applicable and legally binding in the Member States (see Chapter 3.3.1 and 3.4). Monitoring activities prescribed by these regulations were subject to co-financing.

### 5.1.3 Framework approach<sup>15</sup>

The framework approach encompasses legally binding requirements of a broad nature, which offer Member States more leeway in implementation. In the EU context, it generally corresponds to agreements based on legislative acts in the form of a directive, defining the common objective to be reached. Directives have to be transposed into national law. Thus it is up to the Member States to decide which rules and instruments they will use to reach the commonly defined objectives.

In most European environmental policy fields the Community sets mandatory targets, which can be specifically or broadly defined, but it is up to the Member States to define or design measures or instruments to achieve these policy objectives. It therefore sets the general framework of the objectives to be achieved across the EU but leaves the MS free to translate these common targets into national law and to adapt the policy instruments to the national or regional context.

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14 ‘Coercion’ mode of governance in the initial typology developed by TREIB, et al. (2005)

15 ‘Framework regulation’ mode of governance in the initial typology developed by TREIB, et al. (2005)

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In the Water Framework Directive (WFD) jointly agreed compulsory environmental objectives are defined at the Community level. The Member States are responsible for composing the Programmes of Measures (POM) to attain status-targets for regional units. The WFD is implemented through a regional approach based on river basin units instead of administrative units. The POM's, defined by the respective River Basin Authority, can contain instruments which can in turn differ in their design and compulsory character.

Compulsory and detailed criteria for the selection of protected areas for the Natura 2000 network are jointly defined at the Community level in the Habitats Directive. Member States are responsible for the implementation of this network according to specifically listed habitat types and species and for drawing up management plans. Non-legally binding guidelines apply for the design of the management measures.

Other examples of the "framework approach" are the directives on renewable energy sources. For instance, the RES-E Directive contains an indicative objective of 22 % of total EU production of electric power by 2010. The Member States are free to decide through which RES type they will achieve this common objective.

The RES-D Directive sets the adherence of bioenergy to sustainability criteria as a conditional requirement for its overall binding target of 20% renewable energy share by 2020, and further includes a specific minimum target for the transport sector.

#### **5.1.4 Voluntarism**

Voluntarism is the opposite of the more traditional top-down coercive modes of governance and is based on broad non-legally binding objectives to be further specified by Member States.

In policy fields in which the Community has not been assigned a clear cut range of competence it can still promote strategies of voluntary inter-governmental coordination and communication of national policies. The aim is to set broad common objectives, share experience and to identify best practises in dealing with similar challenges.

The EU Forest Action Plan (2006) can be understood as a coordination strategy setting broad non-compulsory objectives and reinforcing the role of coordinating bodies such as the SFC and the AGFC to enable a better communication and coherence between the different policy areas that impact forest management. The actions prescribed in the FAP are mostly voluntary and aim to support instruments existing in other policy fields that already have a certain binding effect; it does not mobilise new resources to attain its objectives.

Coordination activities are a precursor to inter-governmental cooperation activities, since through that first process opportunities for cooperation are identified. Processes of openness, participation and coherence are stressed throughout the Open Method of Coordination, National Forest Programmes (NFPs) and the workshops and meetings organised by several actors under the FAP. Initiatives can also be taken from outside of the framework of activities set by the action plan.

Table 11 presents an overview of governance instruments and examples from the policies highlighted in this report. The table shows that some policies cannot be allocated exclusively to one governance mode because they entail different instruments which fall under different governance modes. Especially in the case of directives, a high degree of flexibility appears with the use of more specific provisions (e.g. in annexes of directives) or of voluntary coordination tools to improve harmonisation of the implementation across Member States. In addition, as Member States are free to implement the directives using nationally defined instruments they can also make use of voluntary coordination measures or of more restrictive legislation.

**Table 11 : Modes of governance and instruments for European forest related policies**

<b>Modes of Governance</b>	<b>Instruments</b>	<b>Examples</b>	<b>Policies</b>
<b>Regulatory approach</b>	Fixed, detailed legislation (regulations)	Statutory Management Requirements for cross compliance (Council Regulation (EC) No 1782/2003)	Common Agricultural Policy
	Conditional/targeted subsidies	Direct aid to farmers under certain specific, detailed conditions	Common Agricultural Policy
	Fixed, detailed legislation, to be further specified by MS through transposing into national law	Select Sites of Community Importance and designate Special Areas of Conservation and Special Protection Areas according to certain habitat types and species listed in the annexes of the EU Directives	Habitats Directive
<b>Framework approach</b>	Broad legally binding objectives and timeframe (often in the form of a directive), to be specified by MS through transposing into national law	Achieving "good status" for all waters by 2015	Water Framework Directive
		Overall binding target for the European Union to achieve a 20% renewable energy share by 2020	Directive on renewable energy sources
	Range of policy options to choose from	Rural Development measures presented in Council Regulation (EC) No 1698/2005	Common Agricultural Policy
		Programme of Measures (POM)	Water Framework Directive
	Obligation to develop national action plans or programmes (which can contain voluntary measures)	Obligation to include non-legally binding national Biomass Action Plans to the obligatory national renewable energy action plans.	Directive on renewable energy sources
		Obligation to develop Programmes of Measures (which can contain voluntary measures)	Water Framework Directive
<b>Voluntarism</b>	Broad legally non-binding objectives	Key Actions towards a European forest monitoring system	Forest Action Plan
	Bottom-up/ inter-sectoral participatory/ coordination processes	National Forest Programmes	Forest Action Plan
	Detailed non-legally binding guidelines and principles	Guidelines with principles and best practice examples	Natura 2000
		Promotion of the development of voluntary detailed management plans	Natura 2000

### 5.1.5 Corresponding legal basis

The competences of the EU are derived from the Treaty establishing the European Community (1957) and from the Treaty establishing the European Union (1992). In these Treaties the different areas of common policies, the respective principles for and types of Community competences and the legal basis are specified. Some examples for relevant articles are presented in Table 12.

The EC Treaty defines *exclusive Community competence* and *non-exclusive competence* - mainly *shared competence* between the EU and the MS - the latter being subject to the

principles of subsidiarity and proportionality (KOKKO et al., 2006). For instance, agriculture, trade and common market activities are exclusive competences of the Community; environment and energy are shared competences of the Community and the Member States.

**Table 12: Legal basis for Community competence (extract)**

<b>Relevant treaty articles concerning Community competences and principles (extract from the Treaty establishing the European Community, consolidated version (EUROPEAN UNION, 2002))</b>
<p><b>Article 3 (1):</b></p> <p>For the purpose set out in Article 2, the activities of the Community shall include, as provide in this Treaty and in accordance with the timetable set out therein [...]:</p> <ul style="list-style-type: none"> <li>c) an internal market characterised by the abolition, as between Member States, of obstacles to the free movement of goods, persons, services and capital; [...]</li> <li>e) a common policy in the sphere of agriculture and fisheries; [...]</li> <li>g) a system ensuring that competition in the internal market is not distorted; [...]</li> <li>l) a policy in the sphere of the environment</li> </ul> <p><b>Article 5</b></p> <p>The Community shall act within the limits of the powers conferred upon it by this Treaty and of the objectives assigned to it therein.</p> <p>In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community.</p> <p>Any action by the Community shall not go beyond what is necessary to achieve the objectives of this Treaty.</p>

At present, there is no (explicit) competence for forest policy at the Community level (cf. Chapter 3.3.1), as timber was not included in the list of Annex II of the EEC-Treaty (TREATY OF ROME, 1957).

Yet, EU institutions and decision making processes can have an influence on forestry. Forest issues are to date managed under the direction of several DGs, for instance, Agriculture, Environment, Trade and Industry (cf. Chapter 3.3).

A more centralised competence in EU forest policy can be derived by means of the following existing Community policy areas:

- **EU environmental policy:**  
The articles presented in Table 12 can be regarded, inter alia, as the basic legal provisions establishing EU environmental objectives. Depending on the issues at hand forest protection could be subject to these legal norms. For instance, commitments approved in the context of the United Nations and other competent international organisations, that the Community and Member States shall comply with, may necessitate the need for response at the Community level.
- **The Common Agricultural Policy (CAP):**  
The primary legal provisions on CAP do not provide for a specific reference to forests and forestry. However, “the current CAP has been applied as the legal basis for EU secondary legislation relating to forests” (KOKKO et al., 2006:16) in regard to Community co-funding of forestry activities (cf. Chapters 3.3.1 and 3.3.2).

Building on the competences, the following legislative procedures could lead to a legally binding instrument on EU level (e.g. directive)

- **Green Paper and White Paper:**  
A Green Paper initiative by the Commission presents ideas on particular subject matter and is meant as a basis for discussion on the EU level. The purpose of the

paper is to initiate a consultation process which can in turn result in the production of a White Paper. The White Paper contains measures and proposals for action in regard to the discussed subject. An EU legal initiative can be launched if the White Paper is well received.

- Closer cooperation:

If, in spite of its competences, the EU does not achieve any progress in the different policy sectors on forestry issues, Member States can ask the Commission to establish *closer cooperation* in the sectors referred to in the EC Treaty. [...] Yet, enhanced cooperation may only be used as a last resort when the Council of Ministers has first established that the objectives of such cooperation cannot be attained within a reasonable period by applying the relevant provisions of the Treaties (KOKKO, et al. 2006:9).

**Table 13: Legal basis for Community competence in regard to environmental protection (extract)**

<b>Relevant treaty articles concerning environmental Community principles and objectives (extract from the Treaty establishing the European Community, consolidated version (EUROPEAN UNION, 2002))</b>
<p><b>Article 6:</b> Environment protection requirements must be integrated into the definition and implementation of the Community policies and activities referred to in the article 3, in particular with a view to promoting sustainable development.</p> <p><b>Article 174 (1):</b> Community policy on the environment shall contribute to pursuit of the following:</p> <ul style="list-style-type: none"> <li>• preserving, protecting and improving the quality of the environment;</li> <li>• protecting human health;</li> <li>• prudent and rational utilisation of natural resources;</li> <li>• promoting measures at the international level to deal with regional or worldwide environmental problems</li> </ul> <p><b>Article 174 (2):</b> Community policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay.</p> <p><b>Article 174 (3):</b> In preparing its policy on the environment, the Community shall take account of:</p> <ul style="list-style-type: none"> <li>• available scientific and technical data;</li> <li>• environmental conditions in the various regions of the Community;</li> <li>• the potential benefits and costs of action or lack of actions;</li> <li>• the economic and social development of the Community as a whole and the balanced development of its regions.</li> </ul> <p><b>Article 177 (3):</b> The Community and Member States shall comply with the commitments and take account of the objectives they have approved in the context of the United Nations and other competent international organisations.</p>

## 5.2 Policy concept 1: “Continue and Improve Current Approach”

### 5.2.1 Rationale

To date there is no specific common policy dealing with the protection of European forests. This is seen due to a lack of provisions in the relevant EC/EU primary legal basis. This means that the responsibility for forest policy lies with the Member States. However, several forest-related Community actions, e.g. Community Agricultural Policies and Environmental Policies, as well as measures to improve coordination, cooperation and communication in forest policy, for instance, the Forestry Strategy of 1998 and the Forest Action Plan of 2006, do exist.

Despite the various approaches striving to improve the coordination of forest (protection) policy at the Community level, there are some crucial shortcomings in the current forest policies used within the EU. First, there is a lack of coherence and coordination in regard to the different policies affecting forests. Second, financing for forest (protection) measures are considered to be insufficient, e.g., regarding Natura 2000, the most influential concept for

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forest protection at the Community level. This is, inter alia, due to the fact that Member States spend Rural Development Funding mostly on agricultural measures or, as far as forest management is concerned, on measures to increase the competitiveness of forestry or to enhance rural economic development. Furthermore, funding for forests is divided between different funding systems, resulting in a lack of user-friendliness and causing complex, cost-intensive administrative procedures. Third, there is a lack of coherence, coordination and information exchange between various committees, working groups and different authorities, possibly resulting in coordination problems within different responsible authorities.

Considering this distribution of competences and the above mentioned shortcomings, the current mode of governance in EU forest policy can be summarised by the following characteristics:

- A key objective of EU forest policy is to implement **sustainable forest management** in view of the **multifunctional role** of forests and forestry for society.
- In so doing, **subsidiarity** and **shared responsibility** can be considered as key principles to be maintained.
- Hence, there is a need for **regionally specific approaches** and actions taking different natural, socio-economic and cultural conditions in EU Member States into account.
- There is, however, a need to improve **policy coordination**, communication, cooperation and coherence between different sectors and government levels.

Any approach aiming to improve European forest protection policy will have to take into account the diverse roles that forests play in the perceptions of different Member States. In Scandinavian countries, for instance, forestry is an important economical factor (large and export-oriented timber industry); in Mediterranean countries, however, the focus is instead on non-wood forest products. Hence, the forest protection policies of different Member States follow different approaches and feature very different instruments. Even National Forest Programmes and National Biodiversity Strategies are established in very different manners and are implemented to varying degrees.

## 5.2.2 Aim and Objectives

This approach expands on the main ideas outlined in the shortcomings of the current situation in EU forest policy while keeping the current approach based on the principles of subsidiarity and shared responsibility as its fundamental basis. In doing so, the following objectives can be defined under the main goal of “protecting forests against harmful impacts”:

- To strengthen the **information exchange** between existing working groups, committees, authorities and the Member States in order to enhance a voluntary mutual learning process.
- To increase the **coherence** and **coordination** of existing policies addressing forest protection.
- To adjust and improve the **funding mechanisms** for forest protection and to simplify the funding process.

## 5.2.3 Governance and implementation

### 5.2.3.1 Regionalised approaches and mutual learning

The shared approach towards forest protection, including a particular focus on subsidiarity and regionalised forest protection strategies, is considered to be the guiding principle for this

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option. In this manner, existing forest protection policies of Member States together with the given EU framework (e.g. the Natura 2000 Directives) would continue to be the backbone of the European approach to forest protection policy. In this institutional framework, Member States are encouraged to freely choose their political strategy in order to protect their forests and strengthen the implementation of SFM with regard to the aspects considered to be the most important at the national or regional level.

However, in order to strengthen coordination, a **Common report** would be strived for which is based on voluntary information submissions regarding national strategies and approaches. In this report, **best practises** from different Member States would be highlighted and existing challenges would be outlined (e.g. regarding ecological and socio-economic aspects of forest protection and addressing institutional deficits). The report can be compiled with respect to the key objective “Protection of forests against harmful impacts” referring to the respective key objectives of the FAP. As a result, it might emphasise the best practises for regional, national or bio-geographical forest protection strategies and could thus enhance the coordination and coherence of subsisting policies and, moreover, promote a **mutual learning process**.

Accordingly, different but complementary strategies as well as special regional features will be taken into account and maintained. At the same time, overlapping national or transboundary policy competences as well as policy gaps could be identified. Thus, the report might include a chapter, which, in a bottom up approach, outlines important issues where – from the Member States’ perspectives – the coordination and transparency of the European framework for forest protection would have to be improved.

Eventually, the strategy would on the one hand strive to strengthen the principle of subsidiarity in forest protection policy while on the other hand creating a mutual learning process (i.e. a kind of voluntary competition process on a national or regional level between forest protection approaches). Furthermore, it might lead to a further diversification of forest policies and management paradigms in the sense of “improving the strengths”. This means that regions will further specialise in promoting forest goods or services that are seen as being the most appropriate for the area. Finally, the approach shows, how the policy framework at EU-level can be adjusted, in order to promote the development of appropriate national and regional strategies.

#### 5.2.3.2 Coordination and adjustment of funding

Given the need to increase the coordination of funds used for forest protection (e.g. Life+, Natura 2000, and EAFRD) and to adjust them for more effective forest protection, an overarching **concept for funding forest protection** could be developed as part of the Common report. This concept would aim to streamline the money available from different sources and point out existing deficiencies under the current forest protection funding structure. Furthermore, it might identify overlapping funding structures as well as perverse incentives for forest protection. Eventually, the report would develop recommendations as to how the funding structure could be reformed in order to support successful national and regional forest protection policies in consistence with the Natura 2000 network.

This way, the transparency and applicability of funding could be improved for the user. Moreover, information exchange between forest owners and the EU via forest owner associations could be strengthened, thereby potentially giving more incentive to apply for forest protection funding and, thus, to act accordingly.

#### 5.2.3.3 Institutional Cooperation

To improve the coordination of activities and the multilateral communication between different forest-related institutions and committees, the European Commission and the Member States could establish a special **intersectoral working group/technical working group under the SFC**. The members would represent different interests of the

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environmental and forest sectors. Thus, the group should be comprised of representatives of forest administrations, industry and forest owners, as well as of environmental administrations, NGOs and scientists. This working group would need to be given a clear mandate to generate, coordinate and spread information and organise temporary working groups (subgroups with either thematic or regional expertise, according to the issue in question) of qualified external experts on the relevant topics. Renowned experts could be selected from scientific institutions, NGOs and Member State administrators (from the Environment/Forestry Ministries) and be nominated by the SFC.

#### **5.2.4 Plan for implementation**

Firstly, the previously mentioned working group would be established. Based on its mandate to generate and spread information and to coordinate activities, this group would be the key institution supporting the improvement process. As a first task, the group would compile the report summarising the Member States' national strategies and approaches to forest protection, highlighting best practises and challenges and outlining deficiencies and overlaps in competences. Based on this, it would create proposals and plans for improvement on EU level by outlining and addressing concrete objectives and responsibilities that are to be discussed by the Commission. Furthermore, the group would develop an overarching concept for the improvement of forest funding in the EU. The drafting and review of the report would be done over the course of 2 years.

Approximately 5 years after these activities the intended improvement of the status quo would be evaluated. The outcomes of the evaluation will be discussed by the Commission, the SFC and the AGFC in order to decide if further actions should be undertaken at the Member State and Community levels.

Goal: To address shortcomings found in current EU forest related policies while keeping the present approach based on subsidiarity and shared responsibility as the fundamental basis

Objective 1:  
To strengthen the information exchange between existing working groups, committees and authorities as well as between the Member States in order to enhance a voluntary mutual learning process

Objective 2:  
To increase the coherency and coordination of existing policies addressing forest protection

Community level

Member State level

European Commission

**Establishment of an intersectoral working group/technical working group under the SFC**, that generates, coordinates and spreads information and organises temporary working groups on relevant topics

Member States Governments

Free choice of political strategy to protect forests and strengthen SFM

Member States Governments

Common Report: Review of MS national strategies and highlighting of best practises to enhance coordination and trigger learning process

Proposals for improvements at the Community level including an overarching concept for the improvement of forest funding in the EU

After 5 years: Evaluation of status quo of forest protection in the EU to be discussed in COM, SFC and AGDC in order to decide upon taking further action

Figure 1: Policy concept 1: Continue and Improve Current Approach

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### 5.2.5 Summary “Continue and Improve Current Approach”

Considering the current distribution of competences, the current mode of governance in EU forest policy is characterised by:

- The key objective of implementing **sustainable forest management**
- Subsidiarity and shared responsibility as key principles to be maintained.
- Need for **regionally specific approaches** and actions in view of different natural, socio-economic and cultural conditions in EU Member States
- Need to improve **policy coordination, communication, cooperation and coherence** across sectors and government levels.

The following improvements could benefit the main goal of protecting forests against harmful impacts:

#### ***Regionalised approaches and mutual learning***

Member States are encouraged to freely choose their political strategy to protect their forests and strengthen the implementation of SFM according to national and regional preferences. In order to strengthen coordination and to enforce a mutual learning process, a **Common report** on existing national strategies should be strived for. Such a Common report would highlight best practices for regional, national or bio-geographical forest protection strategies and could thus **promote a mutual learning process** and enhance the coordination and coherency of existing policies.

#### ***Coordination and adjustment of Funding***

This Common report would point at existing deficiencies in the current funding structure and develop a concept for streamlining the funding from different sources available. Furthermore, it might identify overlapping funding structures as well as perverse incentives for forest protection. Based on this, the report would develop recommendations on how the funding structure can be reformed.

#### ***Institutional Cooperation***

In order to improve the coordination of activities and the multilateral communication between different forest related institutions and committees, a **inter-sectoral or technical working group** would be established under the SFC. This working group would be given a clear mandate to generate, coordinate and spread information and organise temporary working groups (subgroups with either thematic or regional expertise, according to the issue in question) of qualified external experts on relevant topics.

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## 5.3 Policy concept 2: “Forest Monitoring for Europe”

### 5.3.1 Rationale

Although ‘forest monitoring’ might be not seen as a policy option for active governance, it has to be considered as providing a fundamental basis for the development of further policy options for forest protection in Europe. Decision-makers, corporate business stakeholders, the scientific community and civil society need to have up-to-date, comprehensive, comparable and reliable data on the state and development of forest ecosystems in order to make informed decisions regarding the formulation, implementation and evaluation of preventive and reactive forest protection policy measures.

There have been long-standing forest-relevant monitoring efforts within several partly interconnected European initiatives that have generated a multitude of observations, assessments and reports. Most notably, the design of monitoring systems and cooperation within the ‘ICP Forests’ and the EU schemes on the protection of Community forests against atmospheric pollution and forest fires (joined and partly extended by the succeeded ‘Forest Focus’ scheme) served as vehicles aiming to meet specific forest policy needs. Moreover, most of the Member States possess perennial experience and traditions regarding the generation of forest resources assessments based on national forest inventories (NFI) and other informational sources (e.g. socio-economic statistics, surveys, studies, mappings of different forests functions or biotopes, etc.).

Despite these significant developments, there are currently several deficiencies which are interfering with the collection of useful forest data at the European level, thus also hampering the executive possibilities of EU decision makers.

To begin with, the collection, interpretation and reporting of data still lack harmonisation and standardisation among the Member States as well as between the Member States and the Community. This is due to significant incongruities in definitions, scope and focus and techniques applied to current forest monitoring practices in different geographical and/or functional settings across Europe. Moreover, various data bases, several information systems and/or platforms at the supranational and international level exist. These approach and handle information on forests for different policy purposes and often do not share information with one another. Secondly, information gaps and problems of data inconsistencies remain. This is especially the case for relatively new forest policy aspects such as the interplay between (the management of) forest ecosystems and climate change, carbon sequestration and biodiversity conservation as well as for soil and water protection, etc. Thirdly, since the expiration of the relevant EC regulations on the monitoring of forests (e. g. Regulations No. 3528/86/EEC; No. 2158/92/EEC and No. 2152/2003/EC), there is actually no formal EU legislation that provides for continuous, obligatory forest monitoring backed by relevant co-funding. Potential monitoring activities could only be operated on non-regular and non-inclusive project applications based on the LIFE+ funding programme. As a consequence, there is no common EU-wide monitoring standard and no coherent EU forest monitoring system. Thus, the current institutional arrangement increases the risk of inconsistent and fragmentary forest-related data and does not provide the basis for a credible, knowledge-based implementation and development of forest (protection) policies in Europe.

At the same time, the Community and Member States should monitor and report policy progress in terms of their protection and sustainable management of forest ecosystems according to several multilateral environmental agreements and forest policy processes. The Community and Member States – being parties to global environmental conventions on climate and biodiversity protection, most notably the UNFCCC/Kyoto Protocol and the CBD – have jointly committed themselves to monitoring and reporting progress over fairly long periods of time. For example, carbon-related reporting on afforestation, reforestation and deforestation is mandatory for both the European Community and the Member States

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according to art. 3.3 of the Kyoto Protocol. In addition, most of the European countries have also elected forest management as an activity according to art. 3.4 of the Kyoto Protocol. Similarly, reporting on achievements towards the committed global target of halting the loss of biodiversity, according to the CBD and its relevant working programmes, makes monitoring forest biodiversity conservation in Europe necessary.

Furthermore, international forest policy initiatives such as the Global forest dialogue (IPF/IFF/UNFF-Process) and the Ministerial conferences on the protection of the forests in Europe (MCPFE), although non-legally binding, demand science-based information on the state and development of forest resources in order to estimate progress towards the stated aim of sustainable management, protection and development of all forest types. Moreover, several EU policies in the fields of nature protection, water management, climate change, energy and rural development intersect in the area of European forests and directly or indirectly refer to forest reporting commitments; forest-relevant monitoring is thus necessary. For example, art. 17 of the Habitats Directive – being the backbone of the NATURA 2000 network – asks for reporting every 6 years on the assessments of the conservation status of each Annex I habitat and each species listed in Annex II, IV and V across their territorial distribution in all 27 EU Member States. Based on national monitoring and reporting, the Commission is obliged to produce a consolidated and aggregated EU report (cf. Chapter 3.4).

Due to those institutional aspects and demands and as a consequence of the fragmented European monitoring arrangement, the knowledge base of the harmful impacts of abiotic and biotic and/or of anthropogenic origin that can threaten forests by reducing the quality and quantity of forest ecosystem services and goods available to European society (cf. Chapter 2) is inconsistent or even lacking in a European scale. Thus, it is not easy or perhaps it is even impossible to describe and evaluate, e.g., the effects of various forest management paradigms applied across the EU on carbon storage or forest biodiversity, given the available data.

In a nutshell, there appears to be a significant amount of **discrepancy** between the **actual state of forest monitoring** and current and future forest (protection) policy and **information needs** within the EU. Thus, it is necessary to strengthen and streamline monitoring activities within the European Union in order to create a **reliable and consistent data basis** for forest (protection) policy activities. In the following sections, a corresponding policy concept on ‘European Forest Monitoring’ is outlined.<sup>16</sup>

### 5.3.2 Aim and objectives

The main aim of this option would be to establish a **permanent, comprehensive, harmonised and flexible European forest monitoring system** in order to understand and measure the various impacts and threats to EU forests, meet monitoring and reporting needs according to international policy commitments, survey the impact of EU forest-relevant policy implementation, and develop EU forest (protection) policy in a science-based and informed manner. In order to achieve this aim, comprehensive, comparable and reliable data on forests would be gathered in a transparent manner. Analysis and reporting should pursue the following **objectives**:

- Improving knowledge about the environmental state of forests and the ecosystem services they provide,
- Understanding the interactions between forests and their changing environment (climate, water, soil, vegetation etc.), as well as related socio-economic developments,

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<sup>16</sup> Publications consulted in a more intensive manner for the development of this policy concept include inter alia Council of the EUROPEAN UNION (2003), FREER-SMITH et al. (2006), MOFFAT et al. (2009), and SAN-MIGUEL-AYANZ et al. (2005)

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- Identifying, monitoring and reporting potentially harmful threats to forests that could have negative impacts in qualitative and quantitative terms,
  - Analysing the protective functions of forests for civil society (e. g. air, soil, water and infrastructure protection; torrent and avalanche control etc.),
  - Evaluating the progress and co-ordination of the EU forest (protection) and forest relevant policies (e. g. Natura 2000, Water Framework Directive, Bio-energy, Rural Development, EU climate change policy, etc.),
  - Reporting on sustainable forest management and specific policy objectives according to international environmental agreements (e. g. climate change, biodiversity conservation),
  - Providing a foundation for EU and Member State credibility in international debates and negotiations on forest protection and sustainable forest management (e.g. global policy initiatives on deforestation, illegal logging etc.), and
  - Informing policy-makers, managers, the scientific community and civil society about the state and development of forests.

### 5.3.3 Priorities and principles

‘European Forest Monitoring’ should help to meet short- and long-term needs and would thus be based on a design comprised of (i) a **consistent network of long-term observations** and (ii) a **flexible system for early-warning** and timely preventive reactions to potentially harmful and/or **new forest threats** by providing first hand information.

‘European Forest Monitoring’ would cover but be not limited to the following **thematic priorities**:

- **Forest resources**: state, development and forest management practices;
- **Climate change** and forests: adaptation, mitigation;
- **Biological diversity** and forests: general status-quo and trends, conservation status and changes of protected forest habitats, wild flora and fauna (e.g. Natura 2000), impacts of anthropogenic factors (climate change, air pollution, management, etc.);
- **Air pollution** and forests: forest ecosystem conditions, impacts on forest vitality, cause-effect relationships; foresights, prevention and management;
- **Wildfires** and forests: status, trends, cause-effect relationships, foresights, early-warning, prevention and management;
- **Protection of soil, water, infrastructure** and forests: status and trends, cause-effect relationships, foresights, early-warning, prevention and management;
- **Socio-economic performance** and forests: production, use and trade of forest commodities (e.g. timber, game, medicinal plants, berries, resin etc.); economic performance and profitability of forestry; employment, work safety and health; recreational and spiritual services provision; and
- Economic, social and political aspects of **forest ecosystem services**: valuation of and willingness to provide and pay for forest ecosystem services.

Furthermore, based on fundamental concepts such as subsidiarity, shared responsibility and proportionality, the current policy concept will have to comply with main **principles**. ‘European Forest Monitoring’ should:

- be based on a systematic and sound **scientific methodology** providing for high validity, reliability and comparability of information;
  - be based on continuous and inclusive **time series** observations;
  - enhance the **information exchange** between the different geographical and functional jurisdictions across Europe, most notably between the Community and
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Member States, among and within the Member States as well as between forest (protection) policy and forest related policy fields (e.g. environment, agriculture, natural resources management, energy, industry, regional development, research etc.);

- be **cost-effective, feasible, flexible** and **user-friendly**;
- avoid data redundancy, strive to use existing **synergies** and minimize the administrative burden; e. g. by bundling and integrating national and sub-national monitoring schemes, and
- fulfil **democratic tenets** such as representation, accountability, accessibility and openness, responsiveness, transparency and participation.

### 5.3.4 Governance

#### 5.3.4.1 Policy instruments

Basically, 'Forest Monitoring' would rest on clear commitments that are backed by an appropriate **legal foundation** at the EU level, most notably, according to the Community and Member States' competences in environmental affairs, as well as to the more specific objectives of the EU Forestry Strategy (1999) and the EU Forest Action Plan (2006). The provision of regular and systematic sources of funding would establish the financial back up needed and serve as incentives for providing harmonised, focussed and consistent monitoring activities. A possible option would be the installation of a **Common financial support scheme**, depending on the available budgetary funds and detailed co-funding arrangements between the EU institutions and Member States.

On the technical side, the main mechanism for implementing the policy objectives stated above would be the establishment of an appropriate 'European Forest Monitoring System' and the establishment of corresponding structures. In the following sections, the system design and a description of how it functions are outlined.

#### 5.3.4.2 Responsibilities and implementation

Obviously, permanent and stable structures responsible for adequate data gathering, analysis and reporting, both at the supranational and national levels, could be seen as important prerequisites for the proposed 'European Forest Monitoring' policy concept. Thus, to enable and especially to manage an EU-wide forest monitoring system, a **Common independent structure** (e.g. agency) could be set up at the European level.

The emerging 'European Forest Data Centre' (EFDAC) at the Joint Research Centre (JRC) could act as the central future structural organisation in charge of 'European Forest Monitoring'. The EFDAC is currently hosting and developing the existing data bases and information systems on forest conditions (Forest Focus Data Platform), forest fires (European Forest Fire Information Systems, EFFIS) and forest resources (European Forest Information and Communication Platform, EFICP). It may also be reasonable to integrate and expand these systems into one harmonised and holistic **European Forest Information System** meeting the data collection, analysis and reporting needs of forests, both for amenity and commodity purposes according to the thematic priorities outlined above.

The activities involved in the areas of data collection and management would be organised and carried out on the ground in the Member States by eligible public and/or private entities designated and authorised through an agreement between the competent national authorities. Forest monitoring activities would be based on **national forest monitoring programmes** in accordance with the EU and national/sub-national policy and institutional frameworks (e.g. forest related legislation, strategies, programmes, action plans).

The backbone of the substantial on-the-site forest monitoring activities could build on a core monitoring framework made up of existing (e. g. Level I, II) and/or newly designated



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representative and intensive observation plots, complemented by national forest inventory sites and data from remote sensing techniques with appropriate ground truthing. In addition, international, European and national monitoring mechanisms might be consulted and/or harmonised in order to avoid any additional administrative burden.

The observations should be based on a network design. Measurable parameters would be developed by a **Scientific Advisory Group** attached to the EFDAC and then approved by the Commission and the Member States. In order to provide holistic forest monitoring, a **Common set of criteria and indicators** would be defined serving as the basis for monitoring and reporting activities. Established or emerging initiatives regarding the development and application of monitoring standards could be used. Concretely, the improved Pan-European qualitative and quantitative criteria and indicators for sustainable forest management (MCPFE, 2002) might be considered as a holistic and promising platform to refer to and to build upon. In addition, several specific monitoring initiatives could be consulted in order to add value and/or close possible gaps in the Pan-European criteria and indicator set. For example, for the purpose of carbon-related monitoring, the Good Practice Guidance for Land-Use, Land-Use Changes and Forestry (IPCC, 2003) might be of primarily relevance. Monitoring aspects relating to biodiversity might benefit from drawing on the first set of European biodiversity indicators – SEBI 2010 (EEA, 2007), and from the newly proposed European forest types classification (EEA, 2006). The latter forest type classification could be used as a meaningful reference in assessing the conservation status of protected forest areas and the overall progress being made towards sustainable forest management.

Eventually, **common manuals** on mandatory and optional parameters, appropriate monitoring methods and techniques, data formats and transmission procedures, rules on intellectual property rights and access to information might be elaborated on in order to secure harmonised monitoring and reporting actions.

The monitoring data gathered at the national level should be submitted to the EFDAC (or the independent agency) in an appropriate amount of time, according to the long-term and short-term policy needs and objectives (demand), and taking into account the state of know-how and techniques (supply). The EFDAC (agency) should manage the data for the purposes and objectives originally set out, most notably for meeting the information needs at the EU and MS levels.

#### 5.3.4.3 Communication, co-operation and co-ordination

The Commission, in cooperation with the Member States, would co-ordinate, monitor, develop and report on the progress of ‘European Forest Monitoring’. In this regard, it might be appropriate to re-vitalise the management and consultative functions of the Standing Forestry Committee. In addition to the experience and expertise of the Member States and the Commission, valuable support could be provided by other Community bodies such as the European Environmental Agency, the Joint Research Centre, Eurostat, and international organisations such as the United Nations Economic Commission for Europe (UNECE), the Food and Agriculture Organisation of the United Nations (FAO), the International Co-operative Programme on Assessment and Monitoring of Air Pollution Effects on Forests (ICP ‘Forests’), the Ministerial Conference on the Protection of the Forests in Europe (MCPFE), etc.

In order to facilitate communication and co-ordination, the EFDAC (agency), in co-operation with the organizations stated above, might periodically issue mandatory policy reports on the state of forest ecosystems and their services in Europe. It might also be in charge of the presentation of a short analysis responding to ad-hoc policy needs expressed by responsible authorities from both the supranational and national levels.

Detailed and/or focused technical information might be further provided by the EFDAC after duly application procedure, including justification initiated by interested actors including: research institutions, business corporations, non-governmental organisations and citizens.

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In addition, a platform for forest data sharing within and between EU institutions and Member States should be designed in order to secure and ease the horizontal and vertical informational flow as well as the two-way communication loops.

#### 5.3.4.4 Duration, reporting and evaluation measures

The implementation of the ‘European Forest Monitoring’ concept will have to be continuous over a large time span in order to obtain and maintain meaningful data to be used for policy and scientific purposes. An indicative duration might be set at at least 10 years for the present policy concept as this is the regular time cycle of repeated national forest inventories, one of the main components of the system. Furthermore, policy research insights have pointed to such a time span as being a meaningful basis for understanding and assessing policy impacts (SABATIER, 1987; WEISS, 1977). However, beside these technical arguments the duration of the monitoring concept should take also into account the regular 7 year EU budgetary periods.

A **long-lasting design**, however, requires regularly reporting the progress that has been made. For the sake of meeting the basic objectives and principles set out above, this policy concept should be subject to **external evaluations** including, as a minimum, a mid-term (after 5 years) and final (after 10 years) review. The main evaluation criteria should correspond to the main principles and thematic priorities that were previously stated. In general, the success and achievements of the ‘European Forest Monitoring’ should reflect its political relevance, scientific foundations and long-term policy effects. The progress reports are to be presented to the Standing Forestry Committee, the Council, the European Parliament and other relevant EU institutions for information, approval and further development. Subject to positive implementation evaluation and/or appropriate adaptations according to future policy needs, the ‘European Forest Monitoring’ concept should be implemented without stopping for longer time periods.

#### 5.3.5 **Plan for policy concept implementation**

In the following section, a general plan for the concept’s implementation is outlined. In short, the support and co-operation of the Member States and EU institutions (Council, Commission and Parliament) are vital in order for the present policy concept to succeed. The early, regular and informed participation of all relevant stakeholders is essential to building trust and promoting policy-oriented learning in order to arrive at common agreements, even after distributional negotiations (see below). In general, the Commission should convince the relevant institutions and interested actors of the merits of this policy concept. In particular, the Commission might undertake the following specific activities:

A first step towards identifying and filling relevant monitoring gaps would be to conduct a **review of existing forest monitoring systems**, initiatives and monitoring standards. Some existing reference initiatives have been stated above. Operational, e.g. collaboration on the development and implementation of an EU-level Forest monitoring system<sup>17</sup> or future research projects funded by the LIFE+ programme might provide good basis for such a review. Secondly, using existing synergies between EU and Member States, the co-ordination and **harmonisation of national forest inventories** should be strived for. It could draw on the experience and insights of COST Action E-43 on the harmonisation of national forest inventories in Europe: techniques for common reporting<sup>18</sup>. National forest observatories should adapt to common monitoring practices and may convert the data coming from regional monitoring into a commonly agreed upon format.

The corresponding legal, financial and technical planning activities should take place within broader, continuous and informed **consensus-finding processes** taking place between the

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<sup>17</sup> For further details see <http://futmon.org>

<sup>18</sup> For further details see <http://www.metla.fi/eu/cost/e43/>

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European institutions (Council, Commission Parliament), Member States and relevant stakeholder groups. Basically, these processes should be directed towards consultations and negotiations between state and non-state actors representing both 'amenity' and 'commodity' statutory mandates and social interests. Ideally, these consultations should be embedded within or supported by 'prestigious professional forums' comprised of experts and scientists representing different scientific backgrounds (SABATIER, 1987; SABATIER & JENKINS-SMITH, 1999; SABATIER & WEIBLE, 2007).

The main aim of the **deliberate** and **inclusive planning** and **operation** of the 'European Forest Monitoring' concept should be to reach a level of professional consensus on forest (protection) policy needs that is based on solid empirical evidence from quantitative and qualitative issues. At best, the identification of overlapping interests in forest monitoring could promote common policy actions. It is obvious, however, that because the incongruities related to issues between the 'amenity' and 'commodity' monitoring perspectives will not disappear during political and/or technical discussions, contested issues should not be excluded from the monitoring agenda. On the contrary, the gathering of additional data and/or specific parameters corresponding to the most contested aspects may shed 'new' light on the issues at hand and thus promote policy-oriented learning within and across the competing perspectives. In the event that the accumulation of relevant knowledge through monitoring does not promote common understanding, the existing cleavages should be identified and articulated in order to be appropriately managed. As a next step, incentives for changing behaviours (compensations, funding, information, training, organizational support, etc.) should be negotiated according to the desired forest (protection) policy goals. Then, performance standards should be formulated and their compliance should be rewarded based on clear and measurable parameters documented via 'European Forest Monitoring'.

As a result of inclusive consultation processes and/or (negotiated) agreements as were stated above, the policy concept regarding 'European Forest Monitoring' should be further developed, specified, and legally and financially backed by appropriate legislative decisions. These agreements should take the legal form of a **European directive** or **regulation**. After this initial formulation stage, appropriate implementation of the present policy concept and corresponding progress reporting should be aimed for as stated above.

Goal: To establish a permanent, comprehensive, flexible and harmonised monitoring system in order to measure and understand the various threats to EU forests and the impacts of EU forest-relevant policy implementation, to meet reporting needs according to international policy commitments, and to contribute to the development of scientifically sound EU forest (protection) policy

### Consolidated objectives

To improve the knowledge of the environmental state of and the ecosystem services of the forests

To understand the interactions between forests and their changing natural and socioeconomic environment

To identify, monitor and report on potentially harmful impacts and threats to forests

To evaluate the progress and the co-ordination of EU forest relevant policies, and to inform scientists, managers, policy-makers & society

To report on SFM and specific policy objectives according to international environmental agreements (e.g. CBD, UNFCCC)

### Community level

Commission, Member States and SFC

- Coordination, monitoring, development & reporting
- Advisory activities & consultations

Monitoring Agency (e.g. EFDAC/JRC), supported by other Community (EEA, Eurostat) or international (FAO, MCPFE etc.) bodies

- European Forest Information System
- Platform for forest data sharing between the EU and the MS
- Aggregation and interpretation of national data
- Periodical policy reports
- Short-term analyses
- Provision of focused information

Scientific Advisory Group

- Common criteria & indicator sets
- Common operational manuals (e.g. methods, techniques)

### Member State level

- National forest monitoring programmes
- National monitoring data management, incl. contracting
- Reporting to EU level

Competent national authorities: e.g. ministries for environment and forests and stakeholder forums

Data gathering from core monitoring network: e.g. existing Level I & II plots, NFI plots, additional observation plots

Executive public agencies (of forest planning and/or monitoring), public (universities, research institutes) and private (planning and consultancy firms, research institutes) contractors

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### 5.3.6 Summary “Forest Monitoring for Europe”

Forest monitoring represents a fundamental part for elaborating forest policies. In this chapter, a policy option for European forest monitoring system is developed to overcome the current institutional and functional issues that forest monitoring is faced with (e.g. different multi-lateral agreements at different levels, fragmented monitoring for quality and quantity of ecosystem goods and services). This vision for monitoring will fill the gap between the actual state of forest monitoring and current and future forest (protection) policy and information needs within the EU, providing a **permanent, inclusive, harmonised and flexible monitoring system**. The monitoring policy concept aims at achieving several concrete **objectives**. In a nutshell, these include (i.) the improvement of the knowledge of the environmental state of and the ecosystem services of the forests, (ii.) the understanding of the interactions between forests and their changing natural and socioeconomic environment, (iii.) the identification, monitoring and reporting on potentially harmful impacts and threats to forests, (iv.) the evaluation of the progress and the co-ordination of EU forest relevant policies, and the information of scientists, managers, policy-makers and the society, and (v.) the reporting on SFM and specific policy objectives according to international environmental agreements (e.g. CBD, UNFCCC).

The design of this vision is based on a set of **principles** such as sharing scientific sound knowledge and inclusion as well as priorities ranging from natural to socio-economic and political considerations. Forest monitoring governance relies on policy instruments such as an appropriate **legal backbone** and a regular and systematic source of **funding** (see the chart above).

As regards the share of responsibilities and implementation, the graph shows, that the **Community level** provides for an independent, permanent and stable **structure for data gathering, analysis and reporting**. Also, at the **Member State-level**, actual **data gathering** takes place. To do so, improved **common indicators** and the creation of **common operational manuals** for monitoring that build on several existing and new tools and initiatives can be used. A close communication and collaboration between the Community and MS level is necessary for a flexible and continuous definition of needs and identification of problems.

In order to implement the present policy concept, the Commission would:

- First, initiate the identification and filling of monitoring gaps.
- Secondly, support the harmonisation of existing forest monitoring processes at the MS level.
- In parallel, install a consensus-finding process for policy needs among several different actors, as key to creating a solid legal and financial backbone for monitoring activities. Consultation and consensus building should allow for the European forest monitoring to represent a balance between the amenity and commodity needs and interests in the EU.

The implementation for this vision involves a **10-year term of operation** with a mid-term review after 5 years. The mid-term and final reviews will be based on the priorities and principles of this policy option. With a successful review and adaptations, European forest monitoring should be implemented in a longer time perspective.

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## 5.4 Policy concept 3: “Forest Framework Directive”

### 5.4.1 Rationale

To date, several Framework Directives<sup>19</sup> have been enacted and implemented within EU policies. Framework directives are a suitable tool for policy issues in situations where common European objectives and standardisation are seen as beneficial, but where high flexibility regarding implementation is required due to the different natural, socio-economic, cultural and institutional conditions in the Member States. Usually, a framework directive is designed in such a way that broad objectives are legally binding for all Member States within a certain time period. These objectives are often accompanied by a set of measures that Member States can choose from in order to achieve the objectives. Rules and instruments of the directive can be further specified and adjusted during the implementation process.

A framework directive and its broadly defined targets and requirements acquire a legally binding character via their transposition into national law and other appropriate policy instruments. Member States commit to the implementation of the directive’s objectives within a certain timeframe.

In this chapter, it is argued that the trans-boundary nature of the trends facing both European forests and the resiliency of their ecosystems (e.g., climate change, invasive species; see Chapter 2) in combination with the common European forest product markets necessitate a cross-national and integrated policy approach at the Community level. An EU Forest Framework Directive (FFD) could prevent inconsistencies and the ineffective range in approaches existing across different policies and Member States while also leaving room for Member States to adjust the implementation of the common objectives to their regional specifications, needs and demands. The FFD would support the regionally adapted sustainable management of forests. Furthermore, it provides a common policy framework, which guarantees that the general objectives and corresponding standards will be tackled at a comparable performance level throughout Europe in order to streamline different levels of forest protection throughout the EU and to avoid a competitive distortion in the common European market resulting from, inter alia, very different ecological standards of forest management. Negative impacts on forests resulting from inconsistent regulations across the EU could be averted, e.g., a threatening trade-off between forest protection issues and the stress of competition could result in a potential ‘race to the bottom’ in the standards for sustainable forest management at the Member State level (see Chapter 4).

Finally, a European FFD could strengthen and modernize European forest policy approaches by guaranteeing both a solid financial basis for forest policy and the inclusion of participatory forest policy processes. Concerning the latter point, a framework directive could guarantee an integrated approach involving various forest stakeholders in order to search for and promote win-win solutions based on sustainable forest management and forest protection. Provided that all of the dimensions of sustainable forest management are adequately considered, the commodity and amenity perspectives on forests outlined in Chapter 2 could be better matched and coordinated. Additional and new funding resources provided by a common approach would create an important incentive for regulating prevailing conflicts on forest protection at the Member State level. Eventually, the FFD could even create new opportunities for rewarding the preservation of forest services by providing a new framework for private investments in forest protection and by extending the market for quality forest products through the creation of a positive image for European forest products.

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<sup>19</sup> Water Framework Directive (2000/60/EC), Waste Framework Directive (2006/12/EC), Framework Directive on Safety and Health at work (89/391/EEC), and the Air Quality Framework Directive (96/62/EC)

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## 5.4.2 Objectives, instruments and requirements

### 5.4.2.1 Main goal and overall structure

Maintaining and restoring a ‘**good status**’ of all forests in the EU by 2030 in view of their social, ecological, and economic importance and making them resilient against harmful impacts could be considered as the general goal of the FFD. This means that all EU forests should by that time reach a status that meets ambitious ecological criteria, responds to the needs of European societies, and allows for the economically sustainable use of forest products. Obviously, a single definition of such a ‘good status’ cannot cover all European forests at the Community level. Therefore, the EU will work on guidance based on forest types as a part of the European Common Sustainable Forest Management Framework (Common SFM Framework) (see below), while further concretisation will be done in national SFM best practice strategies at Member State level. Thereby, it is up to the Member States to define what constitutes the good status of the forests, in line with the guidance provided by the Common framework.

In order to accomplish the main goal, the Directive encompasses 6 thematic **Common Objectives**. These objectives are the main binding reference of the FFD. These objectives are accompanied by 4 **Common Forest Protection Instruments** which serve as instrumental cornerstones during implementation of the objectives on the EU level. A series of 5 **National Requirements** which differ in design and implementation modus between Member States would complement the Common Instruments on the national level. As a general rule, the requirements would be broad enough to be adapted to diverse regional and ecological conditions. Furthermore, a **Common Catalogue of Measures** would be developed to facilitate and support on-the-ground implementation of the Directive’s objectives and instruments in the Member States. This creates a three-pronged approach to ensure the implementation of the common objectives: common structures and networks across the EU (Common Forest Protection Instruments), comparable but nationally defined standards and processes (National Requirements) and selectable measures for local and on-the-ground application of the Directive’s objectives (Common Catalogue of Measures).

The rationale of the objectives and forest protection instruments and requirements is based on different international forest and forest related policy processes (MCPFE, UNFF, CBD and UNFCCC) and on expert knowledge gathered during the course of this project.

Table 14: Goal, objectives and instruments of the European FFD

<b>Main goal:</b>	
<b><i>Maintain and restore a 'good status' of all forests in the EU by 2030 in view of their social, ecological, and economic importance and make them resilient against harmful impacts</i></b>	
<b>Common Objectives</b>	<b>Instruments and requirements</b>
<p>1 Identify and monitor the state of the forests and the threats affecting them</p> <p>2 Ensure the sustainable management of all EU forests in view of their social, ecological, and economic importance<sup>20</sup></p> <p>3 Stop and reverse the loss of forest biodiversity<sup>21</sup></p> <p>4 Enhance forest adaptation towards climate change and the mitigation of climate change<sup>22</sup></p> <p>5 Provide a sustainable financial fundament for multifunctional forest management<sup>23</sup></p> <p>6 Encourage broad societal participation with regard to forest related issues at all levels</p>	<p><b>1 Common Forest Protection Instruments</b> (Community level)</p> <ol style="list-style-type: none"> <li>1) Common SFM Framework</li> <li>2) European Forest Protected Area Network</li> <li>3) European Payment for Forest Ecosystem Services System</li> <li>4) European Forest Monitoring System</li> </ol> <p><b>2 Common Catalogue of Measures</b> (Community level) from which measures for on-the-ground implementation and support would be selected by MS according to national preferences and presented in the National Forest Management and Action Plans. Common measures would be linked to <b>strategic periodic priorities</b> and would ensure a balance of priorities.</p> <hr/> <p><b>National Requirements</b> for the coordinated implementation of the Directive presented in the National Forest Management and Action Plans are</p> <ol style="list-style-type: none"> <li>1) National binding SFM minimum standards</li> <li>2) National SFM best practise strategies</li> <li>3) National forest adaptation and mitigation strategies against climate change</li> <li>4) National forest programmes</li> <li>5) Participatory forest planning in public forests</li> </ol>

Enacting a FFD as a piece of secondary EU legislation has to be related to a legally based EU competence in the matter as fixed by the primary legislation of the Community (see Chapter 5.1.5).

The FFD and its broadly defined objectives, instruments and requirements would obtain their legally binding character at the national level through their transposition by the Member States into national law. The Member States would commit to the Directive by agreeing on a set timeframe for the implementation of the FFD's objectives. Subsequently, they are each responsible for specifying the means of achieving the objectives at national or regional levels while respecting the commonly agreed upon framework of the Directive. This transposition is key to the functioning of any framework directive as it allows national and regional, socio-political and environmental contexts to be considered specifically in the implementation process. In fact, it is the transposition that further determines form and methods applied in order to achieve the common objectives. The implementation of the FFD is executed by the governance level (national, regional or local), which has the competence in the respective Member State. However, the Member State itself remains accountable to the Community for compliance with the Directive's commitments. As a side-effect, the implementation of the Directive would strengthen the competence of national forest administrations which faced

<sup>20</sup> Cf. MCPFE Helsinki Resolution H-1

<sup>21</sup> Cf. MCPFE Resolutions Helsinki/H2, Vienna/V4. EU biodiversity goal

<sup>22</sup> Cf. MCPFE Resolutions Helsinki/H4 and Vienna/V5.

<sup>23</sup> Cf. United Nations (2007): Resolution 62/98 of the General Assembly on Non-legally Binding Instrument on All Types of Forests



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diminishing power and personnel in recent years due to decreasing competences in relation to other sectors such as agriculture, water and nature conservation.

The Commission will check on the implementation progress made by Member States on the basis of national reports (see 5.4.2.5). In case of insufficient progress the Commission could initiate an infringement procedure towards a Member State in order to enforce its compliance with the commitments. As a last resort, the Commission could bring the case before the European Court of Justice.

#### 5.4.2.2 Common objectives

##### **Objective 1: Identify and monitor the state of the forests and the threats affecting them**

Monitoring forests and producing homogeneous and relevant information on the status of all forests in the EU can be seen as the basis for an improved common forest protection policy. Compatible information on threats and their evolution is crucial for designing adequate policy responses and effectively implementing them.

Monitoring should be performed by a **European Forest Monitoring System** established under the framework of the Directive and should, if appropriate, be based on an additional EU regulation.

##### **Objective 2: Ensure the sustainable management of all EU forests in view of their social, ecological, and economic importance**

European forests provide a plethora of functions and various services for European societies. Hence, sustainable forest management in view of social, ecological, and economic importance is needed. Objective 2 is thus reaffirming and concretising the main vision of the EU Forest Action Plan, namely to implement “long-term multifunctional forestry fulfilling present and future societal needs and supporting forest-related livelihoods“. As it has already been pointed out (cf. Chapter 2.3), various abiotic, biotic, and directly human-induced factors influence European forests and forest management alike. Keeping this in mind, a crucial objective of the FFD is to create a framework that supports and improves regionally adapted approaches to SFM in order to deal with those impacts while also providing stronger guidance towards certain commonly accepted criteria for forest multifunctionality in all Member States.

In this manner, the FFD provides a **Common SFM Framework** that is to be concretised at the Member State level. This national concretisation process will result in a set of tangible and **binding SFM minimum standards** that must be implemented in the respective Member State. Furthermore, **national SFM best practises strategies** that act as a major guideline for national forest protection policies will be developed based on the Common SFM Framework.

As a more concrete definition of SFM inevitably uncovers various conflicts that the concept of forest management entails, Objective 2 can only be achieved when the implementation of the Common SFM Framework is done in a participatory manner (cf. objective 6) and supported by a **European Payment for Forest Ecosystem Services System**.

##### **Objective 3: Stop and reverse the loss of forest biodiversity**

The EU Heads of State or Government agreed in 2001 “to halt the decline of biodiversity in the EU by 2010” (EUROPEAN COMMISSION, 2001a) and to “restore habitats and natural systems” (EUROPEAN COMMISSION, 2001b, cf. Chapter 4). This goal contributes directly to the fulfilment of the EU and the Member States’ joint commitments to the CBD. Concerning forests, the decisions of the CBD are also found in commitments to conserve and enhance forest biodiversity which were made in the MCPFE process, namely in the Helsinki (H2) and Vienna (V4) resolutions (MCPFE, 1993 & 2003).

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The core element of achieving this goal is the establishment of a **European Forest Protected Area Network**. To the extent that privately owned land is included in the network, forest owners are reimbursed by the **European Payment for Forest Ecosystem Services System**. Furthermore, while the **Common SFM Framework** and the related national instruments make notable contributions to the achievement of this objective, the achievement of the objective will be reviewed by the **European Forest Monitoring System**.

#### **Objective 4: Enhance forest adaptation towards climate change and mitigation of climate change**

This objective is based on commitments made under the UNFCCC and Kyoto Protocol and the decisions made in the context of the MCPFE concerning the important role of sustainable forest management and forest adaptation in climate change mitigation and adaptation strategies (Helsinki H4 and Vienna V5 resolutions) (MCPFE, 1993 & 2003).

To achieve this objective, forest adaptation and the contribution of forests to the mitigation of climate change are important elements of the **Common SFM Framework**. At the national level, National Forest Mitigation and Adaptation Strategies for Climate Change serve as crucial elements when integrating this objective into national policies.

#### **Objective 5: Provide a sustainable financial fundament for multifunctional forest management**

The FFD represents a new, common approach to forest protection policy within the EU. It thereby provides a number of benefits to society and the forest sector, such as vital forest ecosystems and a common regulatory framework for forest management and production within the EU. However, the objectives cannot be achieved without additional expenditures, mainly due to trade-offs between the different functions of forests. If “amenity” objectives as public goods and services are not marketed and have no economic value per se, then they might not be provided by profit oriented enterprises. For example, the implementation of the European Forest Protected Area Network is likely to cause opportunity costs if other use options, e.g., intensive sustainable yield oriented forest management, cannot be realized in these areas.

In relation to other framework directives such as the WFD, the existing or planned measures of the FFD should be mainly **funded by the Member States** or, if applicable, by regional administrative entities. In order to respond proportionally to the requirements presented by the FFD, however, mobilising **additional Community funding** is crucial for the acceptance of the framework by stakeholders and the Member States. Establishing Community-based funding structures would also increase the legitimacy of common control mechanisms to evaluate the implementation of the objectives.

Thus, a key component of the FFD in its function of recognising and rewarding the multifunctional role of forests is the creation of the **European Payment for Forest Ecosystem Services System**.

#### **Objective 6: Encourage broad societal participation on forest related issues at all levels**

An essential claim of international forest policy is to increase stakeholder and public participation at all levels (cf. MCPFE, 1998 & 2003; UNITED NATIONS, 1992 & 2007) As the main goal of the objective explicitly addresses achieving a ‘good status’ of all forests in the EU by 2030 in view of their social, ecological, and economic importance, it is crucial to intensively involve various societal stakeholders, e.g., forest owners, NGOs, recreational and tourist organizations, forest-based industry, and the interested general public, in the implementation of the FFD. This will be secured through

- The governance structure at the Community level,

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- The governance structure at the Member State level, and, more explicitly, the importance of **National Forest Programmes** or similar instruments in the implementation process, and
  - The required **participation** of stakeholders and general society in **forest planning** for all **public forests** within the EU.

#### 5.4.2.3 Common Instruments and National Requirements

##### **I) Common Instruments at the Community level**

###### 1) Common SFM Framework

The Common SFM Framework that is to be included in the FFD provides a comprehensive framework for SFM within the EU. It is very much orientated towards the set of criteria and indicators that have been agreed upon under the MCPFE (MCPFE consensus), including the Pan-European Operational Level Guidelines (PEOLG) for Sustainable Forest Management. The Common SFM Framework provides a comprehensive set of criteria and indicators as to how sustainable forest management can be concretised at the Member State level, and this must be referred to during the national concretisation process. This includes criteria for the implementation of participatory forest planning in public forests as is required under Objective 6. In an annex, the Common SFM Framework includes a description of a procedure useful in defining best practises and “good status” per forest type at the Community level. Further on, it should provide guidance for the National Forest Adaptation and Mitigation Strategies against climate change by offering adaptation and mitigation guidelines per forest type.

Altogether, the Common SFM Framework provides a large amount of flexibility for Member States to adjust their national SFM policies in view of forest protection. During the implementation process, however, the Member States must guarantee that all forests are managed at least at the level of the SFM minimum standards which are concretised at the national level with respect to the criteria given by the Common Framework. Furthermore, MS should develop National SFM best practises strategies informed by the guidance given in the Common Framework. These strategies serve as an orientation for national forest protection policies well above the minimum standard and provide guidance, inter alia, for the application of the European Payment for Ecosystem Services System. Within this framework, Member States are flexible and are free to apply all of the instruments that are seen as appropriate in order to implement the Common SFM Framework.

###### 2) European Forest Protected Area Network

The European Forest Protected Area Network is built on 2 pillars.

The first pillar consists of the Natura 2000 forest areas that already exist. The Natura 2000 network covers different types of forest habitats that protect the related forest fauna and flora. Forests protected under the FFD should include all forest areas already protected under Natura 2000. The establishment of the European Forest Protected Area Network would, however, envisage strengthening the implementation process of Natura 2000. Thus, measures are taken in the Common Catalogue of Measures regarding how to improve the implementation of the Directive in forest areas. For private land, the European Payment for Forest Ecosystem Services System and the related control mechanisms will notably enforce the implementation process.

The second pillar would be the designation of at least 5% of the forests in the EU as forest wilderness areas by 2030, considering both forest types and forest area per Member State. That is, each Member State commits to achieving an area of 5% of its overall forest area that is strictly protected and excluded from any commercial timber harvest or other forest uses by

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2020. At the same type, at least 5% of each forest type that is represented in the European Union should be protected in the same manner.

The establishment of a European Forest Protected Area network has to be done based on a detailed inventory of forest areas throughout Europe. While all Natura 2000 forests are automatically included in the network, the selection of wilderness areas could be done jointly by the Member States and the Commission in a process similar to the Natura 2000 implementation process. That is, Member States propose areas that are subsequently jointly evaluated and, eventually, the wilderness areas are formally designated by the Member States. These forest wilderness areas must encompass all remaining fragments of primary forests that are still to be found within the territory of the EU. Furthermore, existing strictly protected areas like the core zones of national parks or biosphere reserves, etc. can be listed by the Member States. In addition, new wilderness areas (rewilding areas) will need to be assigned and developed in order to achieve the 2030-goal by the Member States. The Commission and the respective working groups (see Chapter 5.4.3) provide guidance for the selection process and assure that, in the long term, at least 5% of all forest types within the EU will be strictly protected as wilderness areas.

The European Forest Protected Area network is seen as the essential joint contribution of the EU and its Member States towards achieving the CBD target of “having at least 10% of each of the world’s forest types effectively conserved” (CBD, 2008). Its second pillar, the forest wilderness areas, is further based on the resolution of the European Parliament. This resolution stressed the need for providing special funding for reducing fragmentation, carefully managing re-wilding areas, developing compensation mechanisms and programmes, raising awareness, building understanding, and introducing wilderness-related concepts (EUROPEAN PARLIAMENT, 2009).

### 3) European Payment for Forest Ecosystem Services System

The establishment of the European Payment for Forest Ecosystem Services (EPES) is an essential element of the FFD. Its main idea is to perform both a bundling and adjustment of the existing resources and provide significantly increased resources for forests, forest protection, and SFM.

The EPES provides financial incentives for private forest owners to notably raise their forest management practices to well above the minimum standards and to react to forest threats.

Furthermore, it rewards forest owners for providing explicitly public goods. The EPES provides support for a wide range of specific secured functions and services, such as the storage and sequestration of carbon, the provision of clean water to important cities, recreation services, etc. To guarantee the attractiveness of the payments received by forest owners, they should be integrated into a rather flexible framework of rules that strongly reflects the demands of this group.

The EPES should be established jointly by the EC and Member States through co-financing between the Community and Member States, for example as was applied in the context of implementing rural development programmes. Co-financing has been proven to generate a considerable leverage effect (EUROPEAN COMMISSION, DG AGRI, 2008) which can eventually mobilise important private expenditures flowing into the implementation of different measures.

As for the Community share, however, it has already been pointed out that it is necessary for the EPES to provide a notably increased amount of funding resources, as justified by the Common approach to forest protection. This can be provided by drawing on 2 sources. First, it is recommended that a fixed share of EU agriculture expenditure for rural development (EAFRD) or supporting agriculture (EAGF) is redirected to the implementation of FFD measures within the forest sector. This share of funding per Member State could thereby be based on its forest area relative to the combination of other types of land use and the importance of forest production in relation to overall primary production. Second, the

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financing of the EPES could encompass a fixed share of the revenues of the European ETS to be allocated to the EPES. This would be justified by the important role the EU's forests could play in mitigating climate change should adapted management be applied; the amount should be based on scientific data quantifying this contribution by the forests.

Third, the EPES will bundle and integrate other existing tools for financing forest protection (e.g., Life+), if appropriate. Thus, it fundamentally contributes to the transparency and homogeneity of forest funding within the EU.

The EPES would be mainly supported by public money from EU and Member State sources. In the future, however, the EPES scheme could also integrate other players or consumers. This is only possible through important awareness-raising campaigns and through the endorsement of an accurate and flexible pricing mechanism. That is, the EPES includes the development of innovative mechanisms for the financing of forest protection, e.g., a market place for forest protection or a virtual partnership platform, where donors and providers of forest protection measures could be brought together as described by SCHMITT et al. (2009). While this is likely to provide additional money, especially for the more spectacular achievements of the FFD (in particular the European Forest Protected Area Network), it is obvious that even in the future a substantial share of the money will need to originate from public sources.

The financing of the FFD is absolutely crucial for its overall acceptance and feasibility. In order to achieve a transparent and solid financial basis in the implementation process, the EPES should be regulated by an additional EU regulation added to the FFD.

#### 4) European forest monitoring system

This component of the FFD would be comparable to the monitoring system as described in this chapter as a separate policy option (cf. Chapter 5.3).

### **II) Common Catalogue of Measures**

To implement the FFD and the EPES particularly, a concrete scheme of the ecosystem services that are to be financed has to be established at the Community level. This would be done by using the Common Catalogue of Measures (which would be comparable to the existing EAFRD measures (EUROPEAN COUNCIL, 2005) in the field of EU Rural Development Policy). This collection of commonly defined and selected measures would form the common basis from which adequate measures could be selected and/or adapted for on-the-ground implementation at the national level. The proposed measures would be prioritised and sorted according to the different objectives, as well as by periodic strategic priority areas (see Axes of RDPs as a comparable approach).

The measures that have been selected from the Common Catalogue by the Member States should be listed and their national adaptation should be presented in the **National Forest Management and Action Plan (NFMAP)**.

Each MS would have to select measures of their priority following certain balanced proportions. For instance, some measures would be targeted at the establishment of the Protected Forest Network, whereas others would support sustainable forest management. The target groups for the implementation of these forest measures would be forest owners, forest conservation NGO's, the forest industry, foresters, forest users, etc. These actors would have to apply for financing under the measures that have been proposed in the National Forest Management and Action Plan, based on the applicableness to their territory.

### **III) Requirements at Member State level**

The implementation of the Directive's objectives and structural requirements remains in the hands of the Member States. The policy instruments and processes that will be used to that extent by the public authorities are presented in the **NFMAP**, serving as an implementation

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strategy that links national policies to the Community approach. However, it should be ensured that the main idea of the FFD (to seek for a more coherent forest protection policy framework within the EU) is implemented and that the common objectives of the Directive are achieved. In this aim Member States commit to some basic elements that should be applied all over the EU when designing their national implementation strategy. These elements are:

#### 1) National binding SFM minimum standards

Based on the criteria and indicators provided by the Common SFM Framework, Member States would develop a concrete definition of SFM minimum standards that have to be implemented in an effective (binding) manner. The concretisation should be done in a participatory process including all stakeholders that are involved in the issue (see below) and has to respond to all of the criteria and guidance formulated in the Common SFM Framework. Thus, on one hand, the implementation of the Common SFM Framework creates an EU-wide definition of what SFM means for the first time and guarantees harmonised binding minimum standards. On the other hand, MS remain flexible in exactly defining the most appropriate SFM minimum standards for each case, e.g., taking into account different ecological conditions and forest services and products that are regionally important. The existence of and compliance with the concretised SFM minimum standards would be a precondition, inter alia, in order to participate in the EPES.

#### 2) National SFM best practise strategies

MS should gather (at the national or regional level) and compile SFM best practise strategies to serve as a national guideline for forest policy. Those best practises should take into account the threats that have been identified towards forests. They would not follow a binding approach (particularly not in privately owned forests), but would have to be considered in public forest management. Further, they would serve as a main source of guidance for the national EPES implementation. That is, the best strategies would encompass forest management measures that are ideal for, for instance, biodiversity conservation or mitigating climate change, and which might be supported by the EPES or other national forest policy tools.

National SFM strategies targeting regional specific threats would be encouraged without compromising the aim of comparable measures across Member States. As the definition of SFM must be flexible enough to adapt to new scientific evidence or altering political wills, the concretisation of best practises examples could be revised by Member States and stakeholders.

#### 3) National forest adaptation and mitigation strategies against climate change

Member States would develop a National Forest Adaptation and Mitigation Strategy against climate change based on the guidance provided by the Common SFM Framework. This strategy should be based on scientific evidence and should encompass measures to be adopted in order to strengthen the adaptation and mitigation of forests.

#### 4) National forest programmes

The FFD requires a flexible implementation process that offers many opportunities to national stakeholders and experts to solidify the objectives and instruments provided by the FFD in a manner that is appropriate according to the specific national conditions as well as societal and political preferences. Thus, a participatory policy approach is striven for. Further on, the implementation process needs time; thus, a forum has to be established that continuously works on implementation aspects over a longer period. In many countries, National Forest Programmes (NFP) were established to address commonly agreed objectives and standards for national forestry through a continuous participatory processes. It

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is recommended to use and/or revitalise the NFP process, or a similar tool, in order to implement the FFD and develop the FMAP.

### 5) Participatory forest planning in public forests

Member States are flexible in implementing a participatory approach of public forest management as required by the FFD based on existing procedures as well as guidance provided by the FFD annexes.

#### **5.4.3 Implementation and governance structure**

##### 5.4.3.1 EU Level

In order to support the cooperation of Member States in their efforts to implement the FFD, a **network of working groups** bringing together representatives of the Member States, various stakeholder groups, and experts would have to be established. This would be done because a strong involvement of relevant stakeholders offers the advantage of increased resources and of better acceptance of the process, subsequently contributing to the meaningful implementation of the set objectives. It also naturally leads to learning processes which can enhance the efficiency of the implementation through the sharing of knowledge and best practises. The groups would provide practical definitions, guidelines, recommendations, and answers to questions recurring in the implementation process (see WFD Common Implementation Strategy).

For instance, 4 working groups could be established that correspond to the 4 Common Instruments (Common SFM Framework, European Forest Protected Area network, European Payment for Forest Ecosystem Services System, European Forest Monitoring System). The working group on the Common SFM Framework, for example, could compile information delivered by the MS and the European Forest Monitoring System and, based on this, develop recommendations for further implementation. This also includes a continuous science-based consultation about SFM that would allow the system to be flexible enough in its definition and application to react to upcoming threats and challenges.

The Standing Forestry Committee could supervise and coordinate the working groups as a central, informal decision-making board within this network. In that sense, high representatives of national forests and environmental administrations, and the corresponding representatives of the EU Commission would meet regularly under the SFC. Their meetings would act as an effective interface between the promotion of the commonly agreed upon EU objectives and the actual needs or preferences at the national level. They would compile the information provided by the working groups mentioned above and could endorse multi-annual working programmes determining, among other things, which topics should be dealt with by the working groups as well as if additional ad-hoc working groups are needed and what their mandates should be.

The fundamental importance of transparency and consistency within decision-making and implementation processes should be stressed from the beginning. Such aspects should be strived for through participatory processes and parallel information campaigns, ideally comprising an integral part of further national specifications and implementation processes within the FFD.

##### 5.4.3.2 Member State Level

**Forest Management and Action Plans** (NFMAPs, see NRDPs or RBMPs<sup>24</sup>) would serve as the central tool for the implementation of the FFD and for evaluating the progress of Member States. The plans should be developed according to the national distribution of competences

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<sup>24</sup> National Rural Development Programmes, River Basin Management Plans

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and submitted to the European Commission. Guided by clear guidelines (see rural development Common Monitoring and Evaluation Framework<sup>25</sup>) to obtain comparable plans to facilitate the general evaluation of the progress at the EU level, the development of effective national management plans includes:

- An overview of the main functions of and services provided by all national (public and private) forests, i.e. economic, social or ecological,
- Compatible and detailed information on the state of National forests and threats affecting them (see monitoring objective in section 5.4.2.2)
- Correspondingly defined national objectives in line with the FFD objectives
- The presentation of efforts undertaken for the implementation of the National Requirements (see 5.4.2.3.2) and Common Instruments for forest protection (see 5.4.2.3.1).
- Adequate measures selected and adapted for implementation at the national level from the Common Catalogue of Measures.

#### **5.4.4 Reporting and evaluation measures**

The evaluation of the Member States' implementation of the Directive would initially be mainly based on their NFMAs. Additional evaluation data would be provided by the control mechanisms that have to be established during the implementation of the EPES. According to a middle- or long-term perspective, the European Forest Monitoring System would serve to evaluate the progress being made in the implementation of the Directive's requirements and in the effectiveness of the policy in reaching the main goal and objectives.

Rules for reporting, mainly through the NFMAs, would have to be established in one of the articles of the FFD and include the period of reporting, e.g. every 6 years, as well as a clear description of the information which is required e.g. for the assessment of the implementation of the Common Instruments and National Requirements.

The evaluation of the Directive's implementation should be ruled by a rather strict but long-term time frame which offers the possibility of achieving the various objectives in consecutive and complementary phases. These phases would each be accompanied by a new and improved version of the NFMAs. Time frames should distinguish between short-term (up to 6 years), middle range (up to 10 years) and long-term goals (about 18 to 20 years, compare to the time frame set in the main goal of the FFD).

Deviations could occur if economic or social functions were to be affected by the implementation of the Directive. Exemptions on time could therefore be given to certain cases due to technical feasibility, natural circumstances, or disproportional costs for reaching the objectives in the set time frame. The time period for implementation could then be prolonged over the subsequent planning periods.

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<sup>25</sup> For further details see European Commission, DG AGRI website: [http://ec.europa.eu/agriculture/rurdev/eval/index\\_en.htm](http://ec.europa.eu/agriculture/rurdev/eval/index_en.htm),



**Goal: Maintain and restore a 'good status' of all forests in the EU by 2030 in view of their social, ecological, and economic functions and make them resilient against harmful impacts**

**Objective 1:**  
Identify and monitor the state of the forests and the threats affecting them

**Objective 2:**  
Ensure sustainable management of all EU forests in view of their social, ecological, and economic importance

**Objective 3:**  
Stop and reverse the loss of forest biodiversity

**Objective 4:**  
Enhance forest adaptation towards and mitigation of climate change

**Objective 5:**  
Provide for a sustainable financial fundament for multifunctional forest management

**Objective 6:**  
Provide for broad societal participation on forest related issues at all levels

**Community level:**  
SFC & Network of thematic working groups

**Member State level:**  
National Forest Programmes

**Common Forest Protection Instruments:**

European Forest Protected Area Network

European Payment for Forest Ecosystem Services System

Common Sustainable Forest Management Framework

European Forest Monitoring System

Common Catalogue of Measures

**National Requirements:**

National SFM best practice strategies

National forest adaptation and mitigation strategies against climate change

National binding SFM minimum standards

National forest programmes

Participatory forest planning in public forests

**5.4.5**

**National Forest Management and Action Plan**

Figure 3: Policy concept 3: Forest Framework Directive

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## Summary “Forest Framework Directive”

Framework Directives are a suitable tool for policy issues in situations where common European objectives and standardisation are seen as beneficial, but where high flexibility regarding implementation is required due to the different natural, socioeconomic, cultural and institutional conditions in the Member States. In the following policy option the broad objectives that are defined are legally binding for all Member States within a certain time period. Rules and instruments of the directive can be further specified and adjusted during the implementation process.

Maintaining and restoring a ‘good status’ of all forests in the EU by 2030 in view of their social, ecological, and economic importance and making them resilient against harmful impacts is the **general goal** of the Forest Framework Directive.

In order to accomplish the main goal, the directive sets 6 thematic **Common objectives**.

- Identify and monitor the state of the forests and the threats affecting them
- Ensure the sustainable management of all EU forests in view of their social, ecological, and economic importance
- Stop and reverse the loss of forest biodiversity
- Enhance forest adaptation towards climate change and the mitigation of climate change
- Provide a sustainable financial fundament for multifunctional forest management
- Encourage broad societal participation with forest

These objectives are accompanied by four Common forest protection instruments.

- Common Sustainable Forest Management Framework
- European Forest Protected Area Network
- European Payment for Forest Ecosystem Services System
- European Forest Monitoring System

In order to reach the objectives and implement the required structure in a coordinated way, a series of 5 **National Requirements** would also be necessary. As a general rule, the requirements should be broad enough so that they can be adapted to diverse regional and ecological contexts and then can be further specified during the national implementation process.

- National binding SFM minimum standards
- National SFM best practice strategies
- National forest adaptation and mitigation strategies against climate change
- National forest programmes
- Participatory forest planning in public forests

As a complement to this system of Common Instruments and national requirements, a **Common Catalogue of Measures** would be developed to facilitate and support on-the-ground implementation of the directive’s objectives and instruments in the Member States.

Measures of the catalogue would be selected by MS according to national preferences. Various national and regional forest actors would be able to apply for funding when implementing the proposed measures (similar to the forest measures offered in the current EU rural development policy).

Member States compile all activities carried out during implementation into a National Forest Management and Action Plan, which serves as a main tool for both national and subnational implementation and coordination between Member States and the Commission.

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## 5.5 Policy Concept 4: “Open Method of Coordination”

The **Open Method of Coordination (OMC)** in Europe is a voluntary political process offering a framework for coordinating specific national policies of the EU Member States. The method is thus intergovernmental and relies on principles of soft law, such as guidelines, benchmarks and best practises, to enhance cooperation and coordination between the MS.

This new method of governance has been gradually introduced since the end of the 1990s (BORRÁS & GREVE, 2004). Its origins lie in the European Employment Strategy (EES) (TRUBEK & TRUBEK, 2005), also known as the “Luxembourg Process”, having taken place in 1997.

The OMC is thus mainly regarded as an instrument for enhancing the economic growth and competitiveness of the EU by a process that increases coordination and coherence in view of the best national policies within the MS. The OMC is applied in policy areas where the **Commission lacks competences for action** due to a missing legal basis in the European Treaty. In this sense, different forms of the OMC have been implemented in various areas such as, e.g., pensions, immigration policy, information society, enterprise policy, research and development, education and training (cf. KRAEMER et al., 2003; TRUBEK & TRUBEK, 2005, PÜLZL & NUSSBAUMER, 2006)<sup>26</sup>, thus addressing a plurality of policy goals besides economic growth and competitiveness.

The potential effects to be expected from the introduction of an OMC are to<sup>27</sup> :

- achieve a high level of political participation;
- create joint commitment and a competition for best standards;
- link policy areas on EU and MS level in order to achieve a common purpose;
- enhance the cooperation in policy making between MS and EU level
- achieve multi-level stakeholder involvement (public and private); and
- promote cooperative practices, networking and mutual learning possibly resulting in non-binding guidelines (which can still be transposed into the national law of all Member States).

Due to its intergovernmental and voluntary character, the transaction costs occasioned by the OMC are borne by the Member States.

### 5.5.1 The OMC for Forest Protection

Many interpretations and several approaches exist for implementing an OMC, each featuring different numbers of steps. PÜLZL & NUSSBAUMER (2006:39) have developed an approach specifically regarding forest policy that creates a “voluntary coordination process in a fragmented field”. As they point out, some important characteristics of the OMC are the “soft” coordination at the EU level and the triggering of a learning process, while also leaving the competence and sovereignty of forest policy at the Member State level.

### 5.5.2 Rationale and objectives

In this chapter the establishment of an OMC for Forest Protection is discussed. The proposal of the policy option is based on a ‘usual’ OMC as outlined by PÜLZL & NUSSBAUMER (2006), but adapted to the special needs that occur with the issue of forest protection in the EU.

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<sup>26</sup> For discussions to what extent the OMC is a new form of governance please see, amongst others, Scott & Trubek (2002), Radaelli (2003), Regent (2003), Borrás & Jacobsson (2004)

<sup>27</sup> based on Borrás & Jacobsson (2004) and Pülzl & Nussbaumer (2006)

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The main idea of an OMC for Forest Protection is to develop a more **coordinated policy approach** that ensures that forests in Europe are adequately protected against harmful impacts, while also taking the various and regionally differing ecologic, economic and social dimension of forests and forestry into account. That is communication, cooperation and coherency of European forest protection policy should be improved whilst respecting and even encouraging the competence and sovereignty of forest policy of the Member States.

In doing so, the OMC for Forest Protection would **aim** to:

- Clarify the many different regional and sectoral perceptions of forest threats and elaborate on existing national policies at the Community level, and
- Improve the current approach to EU forest policy and identify needs and ideas for action at the Community and Member State level, based on the findings of the abovementioned step.

In order to reach these objectives, the following **sub-objectives** need to be achieved:

- Identify forest threats and assess how they are currently addressed by Member State policies and measures,
- Enhance the multi-level involvement of stakeholders and scientists,
- Enhance transparency when comparing different Member State approaches to forest protection,
- Identify best practises for forest protection at the Member State level and against global benchmarks, and trigger a mutual learning process for other Member States to implement those policies,
- Identify the need for a more integrated Community approach to forest protection.

### **5.5.3 Governance and implementation mechanisms: actors, competences, coordination and instruments/monitoring and evaluation measures**

#### Step 1: Introduction of the OMC for forest protection policy and start of the process

The **Council of Ministers** starts the procedure upon agreement of the European Commission and the Commission's proposal.

#### Step 2: Initial Report: Development of common objectives, measures, guidelines and indicators

In this step, an **initial report** is composed by the **Commission** in close cooperation with the SFC. Furthermore, **stakeholders** (forest and environmental NGOs), **Member States** and **scientific experts** need to be integrated in the compilation of the document. The initial report will contain the following **issues**:

1. A description of impacts on and the resulting threats to European forests, in order to give an **overview of the situation in the European Union regarding forests protection**. This description has to be carried out in a careful manner and should be based on scientific findings and outline different possible interpretations in terms of forest threats, e.g., with regard to different possible perspectives such as the amenity and commodity perspective outlined in this report (cf. Chapter 2). Furthermore, concrete proposals for forest protection objectives and strategies might be added to this part, reflecting a science-based perspective on the threats.
2. A comprehensive **overview of existing policies and international commitments of the EU regarding forest protection**. This should be comprised of commonly agreed upon objectives (categorised, if possible, into short, medium and long-term objectives), guidelines and indicators, as well as potential measures for forest protection. The existing commitments have to be – as proposed by PÜLZL &

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NUSSBAUMER (2006) – derived from already existing documents such as e.g. the EU Forest Action Plan, MCPFE resolutions and other EU and international forest related conventions (e.g. Multilateral Environmental Agreements (MEAs)). The presentation of the agreed upon objectives, guidelines and indicators of forest protection should be completed with a description of the current EU policy instruments that are addressing forest protection issues.

3. A detailed guideline addressed to Member States that provide **guidance on how to compile the national reports** under step 3.

### Step 3: Implementation and national reporting phase

In this step Member States will reflect on the common objectives, guidelines, indicators and measures outlined by the initial report in view of their existing and planned national forest protection policies. In doing so, **Member States** will compile a **national report** based on the guideline encompassed in the initial report. In this national report, they will address the following aspects:

1. The **current situation** in the Member States **regarding forest threats**. In other words, Member States are asked to elaborate on the overall framework conditions of forest management, various impacts on forests and perceived threats.
2. The **current policies** in the Member States dealing with those threats and an outline of the **policy measures that will be taken up in the future** to address the described threats to forests.
3. An **evaluation** of the **existing and currently planned policies** outlining best practice examples as well as major remaining challenges.
4. A detailed **assessment on the needs for supporting actions at the Community level**, including proposals for possible issues for Community (cf. Step 5 below) action based on the questionnaire of the Commission's initial report.

The national Environment and/or Forest Ministries could guide the **composition of the reports**. It is crucial, however, that they give evidence that shows how a broad spectrum of societal and stakeholders' opinions has been integrated in the compilation of the reports. In this manner, the national reporting should be, if appropriate, integrated into National Forest Programmes given that this process stipulates a broad participation of different stakeholders' perspectives on forest policy. Different perspectives, for instance on forests threats and the need for coordinated action at the Community level, should be made explicit in this report; 'minority' standpoints on crucial issues should also be included, e.g. in an extra annex to the national report. In this manner, national experts and scientists from different relevant research institutions should be given an extra section in the report to include their view on threats to forests and the national forest protection policy.

### Step 4: Definition of benchmarks and best practises

Based on the Member States' national reports, the **Commission** will draft a **Joint Report**. This report will contain the following chapters:

1. A comprehensive **analysis of the Member States' statements on forest threats**, based on the national reports, including the opinions of scientists and NGOs, complemented, if appropriate, by additional analyses done by the Commission on the framework conditions, impacts on forests and perspectives on forest threats from a supra-national perspective.
2. A **compilation of Member States' policies regarding forest threats**, including identifying similarities and differences in the structural features of those policies. Additionally, best practice examples are described in more detail.
3. A **subchapter** that identifies relevant **best practises**, drawing on systematic analyses done by or for the Commission on forest protection policies in countries

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outside the EU. This chapter describes, for example, forest protection policies and measures taken in countries such as the US, Switzerland, Costa Rica and New Zealand, respectively, and elaborates on best practice examples that can be derived from these policies.

4. A **comprehensive forest protection policy benchmark system**. The Commission develops a system that is based on both the analysis of the national reports and the analysis of best practises derived from forest protection policies that are being applied in other regions of the world. This is done in accordance with paragraph 37 of the Presidency Conclusions of the Lisbon Council (EUROPEAN COUNCIL, 2000:9); that is, “appropriate, quantitative and qualitative indicators and benchmarks against the best in the world and tailored to the needs of different Member States and sectors as a means of comparing best practice” are established as a comprehensive guideline for Member States’ national forest protection policies.
5. Finally, the Joint Report encompasses an **evaluative chapter focused on the requirements, needs for action and positions of the national reports**, including the potential diversity of perspectives within one national report regarding actions and policies to be taken up at the Community level to address forest protection. This chapter may include conclusions and proposals from the Commission regarding the establishment of demanded options for action, taking the Commission’s own objectives and responsibilities based on the European treaties into consideration.

Both the Joint Report including the proposed benchmarks and the evaluative chapter, and national reports will be **reviewed and commented** on by the SFC and the Council of Ministers. NGOs are also invited to share their opinions on the Joint Report. Throughout the course of this process, best practises will be promoted and shared, encouraging a learning process between Member States and forest policy stakeholders.

#### Step 5: Continuation of the OMC and decision on additional activities at the Community level

Based on the conclusions of the Joint Report and the related discussions between the Commission, the SFC and the Member States, the OMC will delve into the next cycle. **Member States** are asked to evaluate and, if appropriate, **adapt their forest protection policies against the benchmarks** outlined in the Joint Report. Furthermore, Member States will be asked to provide **another national report** after an appropriate period of time (3 to 5 years). In this second national report, various aspects will be updated, including the views on forest threats, the need for forest protection and, if necessary, the need for action at the Community level. Additionally, the second report will contain a meaningful description of how the benchmarks listed in the Joint Report have been adopted in the development of national forest protection measures and will also indicate the progress being made towards the benchmarks, related challenges alternative views and the need for revised benchmarks. These national reports will be reviewed by the Commission and the SFC in a similar procedure as that outlined in step 4; that is, the OMC can continue in a circular manner as long as it is seen as an appropriate tool by both the Member States and the Commission.

Additionally, if the Commission reaches the conclusion based on the national reports that there is enough evidence to take up coordinated measures at the Community level, i.e. a Community approach on forest protection, the Commission can derive proposals for a respective approach in a **White Paper**. This document presents options for supportive policies and measurements at the Community level and might serve as a trigger for legislative action. These options might include, inter alia, proposals for reinstalling comprehensive European forest monitoring and a FFD, respectively.

It should be emphasised that the OMC process is based on the **voluntary commitment of the Member States**. The benchmarks for forest protection policy are developed over the course of the procedure and are non-binding, meaning that there are no legally based means to penalise Member States that do not meet these objectives. However, peer pressure and the previously mentioned “naming and blaming” consequences of the analysis provided in

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the Joint Report by the Commission are likely to effectively create incentives for Member States to invest appropriate resources in this process and to (re-)orient forest protection policy at the Member State level as much as possible given the common benchmarks. In doing so, Member States are likely to achieve a higher degree of coordination in the sense of a more coordinated European approach to forest protection policy, even if no Community competence is derived from such an approach. Most likely, the OMC on forest protection will notably increase the transparency and coordination of European forest policies within the EU. Thus, it will also clearly demonstrate where common grounds exist (in the sense of similar threats, framework conditions and challenges that cannot be appropriately dealt with by national policies of the Member States alone). This might serve as a precondition for the Commission to make a claim on Community competence in forest protection. The OMC will also make clear, where those preconditions are lacking – including the political backing of such an approach by a majority of Member States. In that sense, the OMC also encourages a mutual learning process by both the Commission and Member States in view of the most appropriate European approach to forest protection.

Goal: To develop a more coordinated policy approach which ensures that forests in Europe are adequately protected against harmful impacts, while taking the various and regionally differing ecologic, economic and social dimension of forests and forestry into account

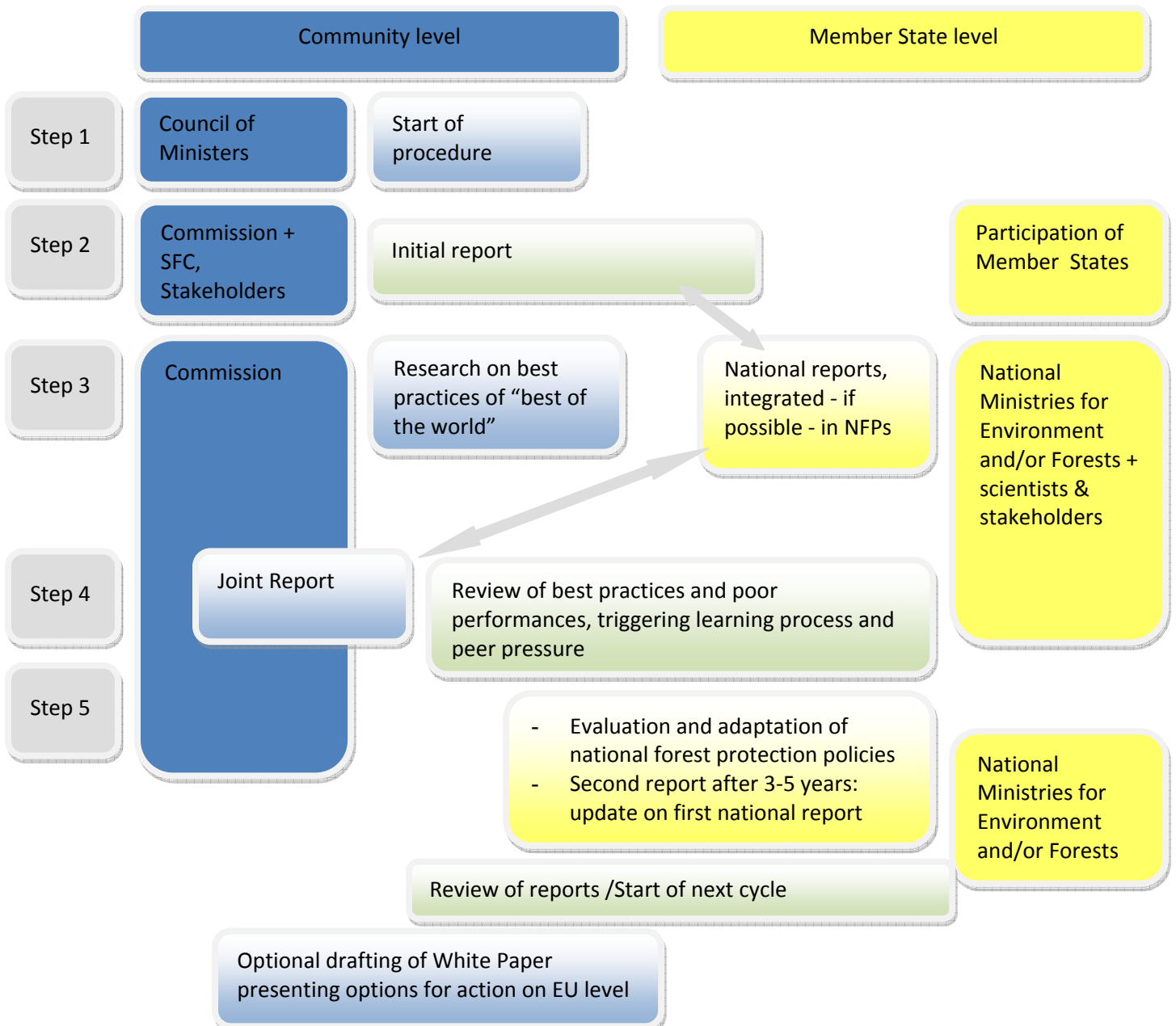
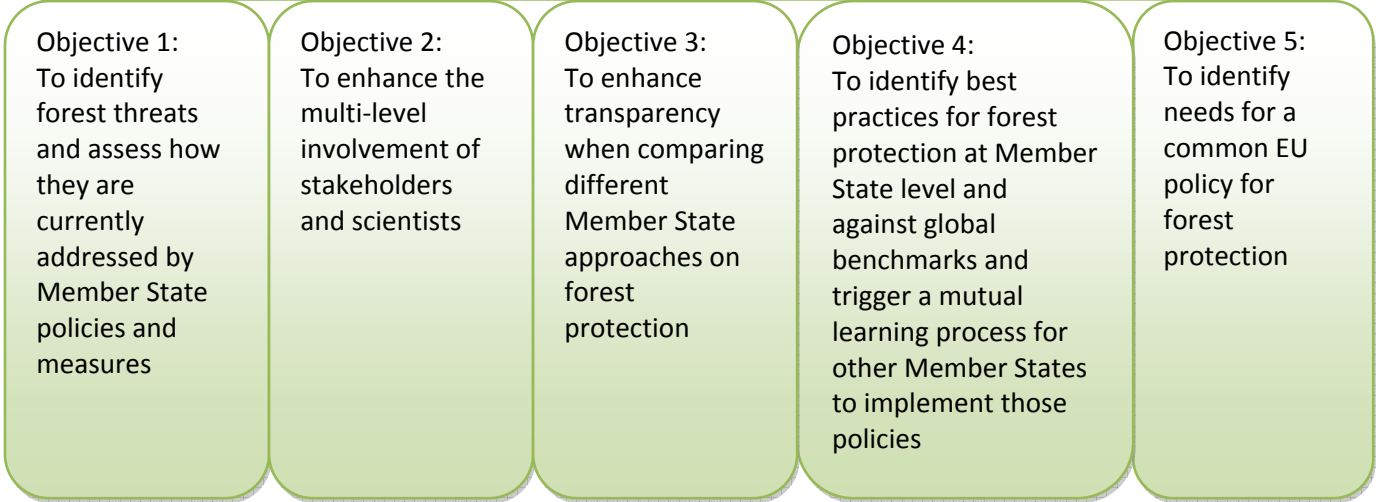


Figure 4: Policy concept 4: Open Method of Coordination



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## 5.5.4 Summary OMC

The main idea of an OMC for Forest Protection is to develop a **more coordinated approach to forest protection policy**. Communication, cooperation and coherence in European forest protection policy should be improved whilst respecting and even encouraging the competence and sovereignty of forest policy of the Member States.

The OMC on Forest Protection aims to:

- Clarify the many **different regional and sectoral perceptions of forest threats** and elaborate on existing national policies at the Community level,
- **Improve the current approach** to EU forest policy and identify needs and ideas for action at the Community and Member State level

In order to reach these objectives, the following sub-objectives have been defined:

- **Identify forest threats** and how they are addressed by Member State policies and measures,
- Enhance the **multi-level involvement** of stakeholders and scientists,
- Enhance **transparency** when comparing different Member State approaches on forest protection,
- Identify best practices for forest protection at the Member State level and against global benchmarks and trigger a **mutual learning process** for other Member States to implement those policies,
- Identify the need **for a more integrated Community approach** to forest protection.

The OMC on Forest protection will proceed in 5 steps:

Step 1: Introduction of the OMC for forest policy and start of the process: The Council of Ministers starts the procedure upon agreement of the European Commission and the Commission's proposal.

Step 2: Initial Report: Development of common objectives, measures, guidelines and indicators: An initial report is composed by the Commission in close cooperation with the SFC. Stakeholders (forest and environmental NGOs), Member States and scientific experts need to be integrated in the compilation of the document.

Step 3: Implementation and national reporting phase: Member States reflect on the common objectives, guidelines, indicators and measures outlined by the initial report in view of their existing and planned national forest protection policies. In doing so, Member States will compile a national report based on the guidelines included in the initial report.

Step 4: Definition of benchmarks and best practices: Based on the Member States' national reports, the Commission drafts a Joint Report which proposes benchmarks and includes an evaluative chapter. National reports will be reviewed and commented on by the SFC and the Council of Ministers. NGOs are also invited to share their opinions on the Joint Report. Throughout the course of this process, best practices will be promoted and shared, encouraging a learning process between Member States and forest policy stakeholders.

Step 5: Continuation of the OMC and decision on additional activities at the Community level

# 6 Evaluation of policy concepts for a European forest protection policy

## 6.1 Evaluation Methodology

Policy evaluation can be conducted ex-ante and ex-post. While the first option looks at policy effects before implementation, the latter focuses on an *a priori* assessment of the policy in question. The ex-ante evaluation in this study intends to provide an analysis of the extent to which the implementation of various policy options would achieve the objectives set out by the policy-makers.

Policy assessment is a complex process which includes qualitative and quantitative stages. Qualitative assessments are often referred to as general impact assessments; quantitative assessments are more detailed and use methods such as cost-benefit or cost-effectiveness analyses. In this study, a qualitative approach is used due to the complexity of the topic and time restrictions.

The policy options outlined in Chapter 5 will be analysed according to their **effectiveness in achieving the policy objectives** and their **implementation feasibility**. The evaluation framework is schematically presented in Figure 5.

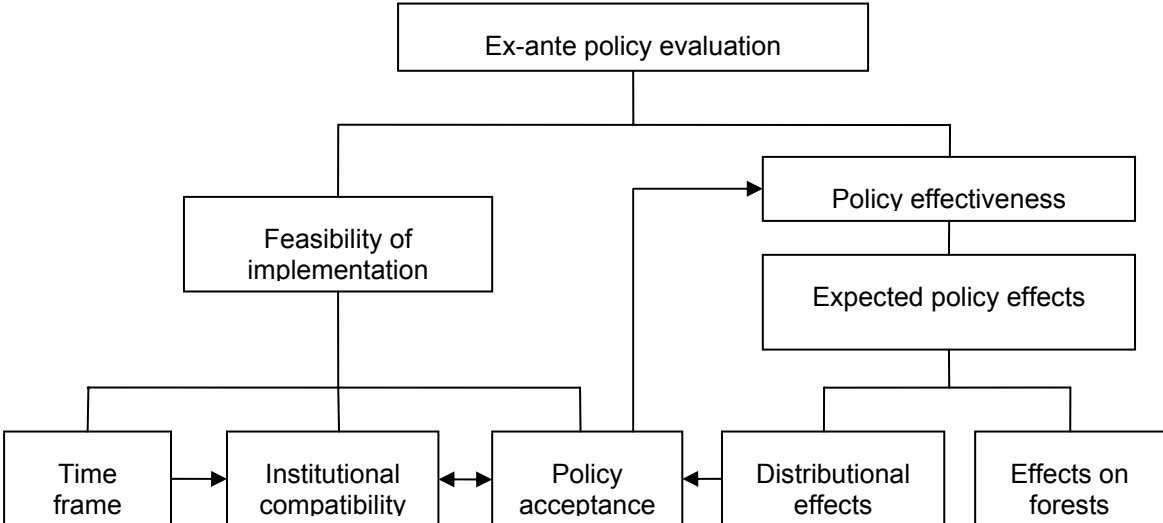


Figure 5: Evaluation framework for a qualitative evaluation of policy options

The criterion of **expected policy effects** deals explicitly with policy outcomes. The success of a policy option can be determined by its **effectiveness** in reaching the main objective of the policy, i.e., the protection of European forests against harmful impacts, or also according to the scope of its negative or positive side-effects.

*The effects on forests* criterion looks at the factual impact of the policy on the ecological state of the forests.

*Distributional effects* analyse the social side-effects of policy implementation. This criterion should be applied to each of the actor groups at different governance levels and across different interest groups. The analysis should look at the main beneficiaries of the policy as well as who will be worse off. This criterion can, to some degree, determine policy acceptance. The actors who feel that their interests will suffer under the new policy approach are likely to resist its implementation.

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The **feasibility of policy implementation** is a criterion that aims to identify and assess constraints to the implementation process. For the evaluation of the policy options, 3 sub-criteria were chosen: time frame, institutional compatibility and acceptability.

The *time* frame indicates the roughly estimated period (in approximate years) needed for the development, integration and implementation of the policy option at all governance levels; this is therefore the time that is necessary before the policy starts producing its first effects. It can also include references to the envisioned time of achievement for the main objective or sub-objectives. Though the time frame, as such, does not constrain policy implementation, it might be significant for policy relevance, acceptability and success.

*Institutional compatibility* looks at the correlation between the policy instruments in place, i.e., institutions, measures and formal or informal processes, and the policy instruments to be implemented. “[P]olicies will affect certain areas of reality, which are already subject to valid and (more or less) effective institutions” (THEESFELD et al. 2008:2). Besides the required changes at a policy level (i.e. new legislation, changes in forest related policies, instauration of new processes), it is important to look at the changes in governance structures and the property rights of forest.

Institutional compatibility correlates to the time frame criterion. Policies that require significant changes in existing structures need more time to be developed and implemented.

*Policy acceptance* can, to a large degree, determine the success of the policy implementation and thus eventually the policy effectiveness. This criterion should be weighed with regard to the various interest groups and forest users that are most affected by a change in forest policy (e.g., forest owners, farmers, forest industry, environmental stakeholders, rural communities, general public, taxpayers, affected public administrations and agencies and decision-makers) and at different governance levels (Community, national, regional and local levels, if needed ).

The policy acceptance criterion is strongly linked to institutional compatibility. If the property rights of actors are affected as a result of a policy’s implementation, there is a risk of strong resistance to the policy’s implementation.

In this study, input for the evaluation was gathered from a total of 12 interviews with selected experts from research institutions, NGOs, forest owner associations and the forest industries.

Starting with a general question dealing with the strengths and weaknesses of the different policy options, the experts were requested to give their opinions on the feasibility and effectiveness of the different policy options. The interview was structured along the following questions which also constitutes the structure of the following chapters:

1. What impact would the policy option have on the ecological state of the forests in Europe?
2. What impact would the policy option have on forestry, forest owners and the forest based industries (identify winners/losers and effects on property rights)?
3. What impact would the policy option have on other groups (societal groups, environmental groups, etc.)?
4. How long do you think it would take for the implemented options to have visible effects on the forests?
5. How well does the approach fit into the already existing institutions and policies regarding forest protection?
6. Are there obstacles? What are they?
7. How would different interest groups and forest users accept this approach?
8. Who would be most resistant? Who would support the option?
9. What could be done to gain support from the resistant groups?

## 6.2 Results

### 6.2.1 General strengths and weaknesses of the options

Table 15 outlines general strengths and weaknesses (pros and cons) of the 4 options that were outlined in Chapter 5. As it shows the opinions of the interviewees some aspects might contradict in content. It thereby paves the way for the subsequent, more detailed assessment.

**Table 15: Pros (strengths and chances) and cons (weaknesses, risks and challenges) of the 4 policy options as described by the interviewed experts**

	<b>Pros: strengths and chances</b>	<b>Cons: weaknesses, risks, and challenges</b>
<b>Improved Current Approach</b>	<ul style="list-style-type: none"> <li>- might enhance communication and mutual learning among European institutions and MS</li> <li>- brings about no real change, thus no additional burdens for forest users and chances to achieve consensus are good</li> <li>- report on subsidies might deliver a useful basis for the amendments of existing EU regulation (EAFRD)</li> </ul>	<ul style="list-style-type: none"> <li>- will not result in an improvement of the current situation (no institutional change, no real addressing of actual failures, better coordination not likely to occur) – thus rather symbolic policy approach</li> <li>- will not allow for prioritisation among conflicting objectives</li> <li>- will not strengthen forestry's position at EU level</li> <li>- will result in more administrative work without clear benefits</li> </ul>
<b>European Forest Monitoring System</b>	<ul style="list-style-type: none"> <li>- will result in better information for decision makers through harmonized approaches</li> <li>- will support reporting needs at all levels</li> <li>- serves as a precondition for effective forest and forest-related policies at the Community level</li> <li>- is a well-known instrument that can build on previously well established structures</li> <li>- is a rather uncontested instrument as it does not have any direct effects on forests and forest management</li> <li>- will enhance overall political awareness about forest issues</li> </ul>	<ul style="list-style-type: none"> <li>- is very demanding (technical work, information, time and money consuming);</li> <li>- will intensify the struggle for competences between institutions</li> <li>- might focus too much on protection issues and then lead to biased information/interpretation – clear political mandate and competences are needed</li> <li>- the need for additional data gathering at Community level is questionable, as MS already have enough data at the national level; with regard to the big differences in the quality of national inventories, attempts to streamline methodologies and data collection already exist</li> </ul>
<b>Forest Framework Directive</b>	<ul style="list-style-type: none"> <li>- is the most effective option with a clear implementation mechanism</li> <li>- delivers a wise combination of legally binding objectives/instruments and sufficient flexibility in the implementation process, thus MS are committed without feeling harassed</li> <li>- is a more comprehensive approach (e.g., integrating the PES) than Natura 2000, but still integrates this instrument</li> <li>- allows for the participation of different societal groups</li> <li>- is a well known approach, as similar framework directives exist for other issues</li> <li>- strengthens both the forest sector within the EU (own legislation and resources) and the EU in international negotiations</li> <li>- enhances a mutual learning process and leads to a common understanding and a regulative agreement on SFM</li> <li>- clarifies the competences of different forest related EU bodies and thus will likely improve inter-sectoral coordination (at all levels)</li> <li>- might serve as crucial basis for a distinct 'integrative' EU forest protection policy</li> <li>- clarifies the "rules of the game" preventing big corporations from interfering into the market, leading to huge disturbances on the market and to negative environmental impacts</li> </ul>	<ul style="list-style-type: none"> <li>- might be too ambitious taking into account the current disagreements between relevant actor groups</li> <li>- needs agreement from the forest sector for successful implementation, which will not be easily achieved (binding obligations are generally critical)</li> <li>- has to be flexible due to diverse local conditions, forest users and MS demands, but too much flexibility might put the overall objectives at risks</li> <li>- might lead to coherency problems with other discussed or existing European initiatives and approaches (EU Charta for wood, MCPFE legally binding instrument, Natura 2000)</li> <li>- the current design has a "amenity bias"; overall concept of SFM (including production issues and recreational functions) must be considered</li> <li>- quantitative targets (e.g., the 5% wilderness areas target) are too simplified and go beyond the competences of the EU considering land use policy and planning</li> <li>- Participatory forest management does not work in practice</li> <li>- the <b>PES</b> might play a significant role, but <ul style="list-style-type: none"> <li>- it works only if forestry directly responds to societal needs; the PES should not finance business as usual (danger with the flexible catalogue of measures)</li> <li>- should not concentrate on carbon services</li> <li>- should also include public forests (state and communal)</li> <li>- is limited by the complexity of market-based approaches</li> <li>- must pay heed to competition rules of the EU and WTO</li> <li>- should be financed by public money</li> <li>- must be tailored to specific local situations (forests and societal demands) and provide flexibility for local implementation</li> </ul> </li> </ul>

<b>Open Method of Coordination</b>	<ul style="list-style-type: none"> <li>- enhances a holistic learning process and the achievement of mutual understanding</li> <li>- is an inclusive approach encouraging participation of forest owners, industry and NGOs</li> <li>- provides good incentives for MS to participate as (1) the approach is flexible and voluntary and (2) MS are invited to present their best practice examples</li> <li>- can rely on already successful examples of this approach in other sectors</li> </ul>	<ul style="list-style-type: none"> <li>- provides no enforcement mechanisms to make MS implement agreements and to reach objectives, thus effectiveness is questionable</li> <li>- is a complex mechanism that should not be used for forest protection only</li> <li>- is a rather time demanding procedure</li> </ul>
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In the following sections, the options are evaluated in more detail with regard to the crucial aspects of effectiveness and feasibility.

## 6.2.2 Policy effectiveness

### 6.2.2.1 Impacts on the ecological state of forests

The majority of the consulted experts asserted that the policy concept of **Improved Current Approach** might not have any major effect on the current ecological state of the European forests.

In contrast, all of the 3 remaining concepts were evaluated as being beneficial in terms of improving the state of forests; however, there were still some differences in to what degree and specific nuances. For example, the effects of the **OMC** would depend on the results of the process and the degree to which a learning process within the Member States could be achieved. The **European Forest Monitoring** could be beneficial in an indirect manner. This is due to the “soft power” that the increased transparency of monitoring might exert and, in the long term, the possibility to plan more accurate policy measures based on the gathered data. In this sense, monitoring would serve as a precondition for creating more effective policies; that is, it would raise the awareness for creating necessary changes. Following the expert evaluations, the most notable beneficial effects on the ecological state of the European forests were found to be expected from the **FFD**. For instance, the protected area network and the PES were expected to have a direct positive effect on the ecological state of the forests. The possible effects of the FFD notably depend, however, on the manner of concretisation of the Common SFM Framework between the EC and the MS.

### 6.2.2.2 Distributional effects (social side-effects)

#### a) Impacts on forestry and forest based industries

Several experts estimated that the **Improved Current Approach** would have no major direct effects on forestry and forest-based industries in Europe. The forest sector would still remain indirectly or directly affected by other EU policy fields. Following some individual evaluations, positive effects from increased communication might be achieved. Furthermore, if the EU would streamline its financial instruments in light of forest protection, there could be a notable improvement in the status-quo, benefiting forest owners, managers and users. As for the **OMC**, any effects on forestry and forest based industries would depend on the results and recommendations derived from this policy process. In general, there were no direct effects expected; however mutual learning could provoke the adoption of best practice strategies by others, possibly having effects on forestry and the forest based industries. Importantly, the OMC might offer the forest sector beneficial possibilities for co-shaping the policy process.

Several of the consulted experts regarded **forest monitoring** as a chance to create better and more harmonised knowledge. The extent to which this knowledge would affect forestry and forest based industries depends on both (1) the kind of knowledge that would be created and (2) the manner in which this knowledge would be used politically. Concerning the first point, if the produced knowledge would serve the demands of both amenity and commodity

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actors, it will be mostly beneficial for both sides. Concerning the second aspect, policy making, based on the forest monitoring data, would also have an impact in the long run on forestry and the forest based industries. Depending on the conclusions that policy makers would draw from the monitoring results, forestry and forest owners might be scared away, for example if it would become mandatory to collect data that might later be used 'against' their interests. On the other hand, forest monitoring could also deliver data that would be useful for forestry and forest industries, and which could aid policies supporting the forest sector. Furthermore, monitoring results could demonstrate the benefits of successful multipurpose forest management strategies to politicians and to the broader society.

The **FFD** would probably have the strongest effects on forestry and forest management. Obviously, the exact scope and direction of the Directives' impacts on the forest sector would depend on the degree and strictness of the environmental standards impacting forest productivity and commodity production. On the one hand, the majority of the experts underlined that stronger protection measures (e.g., wilderness areas) and more detailed regulations might limit forest management area, constrain timber production and thus perhaps cause forest owners and the timber industry in Europe to suffer from economic losses. The forest sector is also expected to lose power once stronger EU regulations and obligations based on environmental competencies are implemented. On the other hand, some experts also underlined positive effects. For example, the PES could provide additional income, improve livelihoods and offer new business opportunities in rural areas, thus benefiting forest owners, users and forest-based industry. Besides, depending on the way it is institutionalised and implemented, the FFD could also notably strengthen the overall political influence of the forest sector as compared to other sectors, such as the energy sector.

#### **b) Impacts on other societal groups / broader society**

In most experts' opinions, the **Improved Current Approach** would not result in major impacts on other social groups or on society as a whole. This would mainly be due to the expectation that it would not change the lack of perception by the public of the current approach. In contrast, **European Forest Monitoring** is expected to deliver several benefits to the broader society and certain social groups. If environmental non-governmental organisations, scientists and other stakeholders are involved, such groups might benefit from the better and more comparable knowledge of forests. Later, forest data that would be released to the public in an appropriate manner could increase the level of understanding about forests and would help to get rid of 'misconceptions' or political 'myths' regarding forests and forestry. In this way, the chance for better stakeholder coordination and stronger supervision by civil society in terms of forest protection and management would be achieved. It should not be forgotten that scientists would particularly benefit from more harmonised and improved data. While the **OMC** is also expected to benefit various civil society interest groups and stakeholders through active involvement, thus resulting in better information and chances for co-option, it is not expected to notably enhance the perception of forests by the broader public.

As the **FFD** was evaluated to be the most effective in terms of reducing harmful impacts on forests, it would obviously benefit society at large. Following multiple assessments, the desired inclusive participation of stakeholders and the general public would be another strong point of this approach. Increasing the overall involvement of society members in forest issues might also lead to more support and understanding of forest (protection) issues. Moreover, the approach addresses some issues that are popular amongst environmental and other societal groups, such as the idea of wilderness areas. The development of clear criteria for SFM would likely increase transparency and improve communication between the forestry and other sectors, as well as the general public.

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## 6.2.3 Policy feasibility

### 6.2.3.1 Institutional compatibility

Several experts assessed that the proposed **Improved Current Approach** would be most compatible with the existing institutional status quo. This approach might enhance the communication between authorities and contribute to an improved management of the complex forest subsidy system. Consequently, no opposition based on institutional incompatibility against this policy approach is to be expected. The only challenge that could be revealed lies in the set-up of the intersectoral or technical working groups and the temporary working groups emanating from it. This was viewed as an additional burden on the limited administrative capacities of the Member States and was thought to possibly lead to resistance when considering the low overall effectiveness of this approach.

The **European Forest Monitoring Approach** was repeatedly evaluated as being a comparatively uncontested instrument for policy makers at all levels. Most notably, based on better and harmonized data, the Commission would have the possibility to position itself better and gain more competences on forest protection policy within Europe as well as in international processes. Member States and the EU have long-term experience with this instrument. Thus, the proposed policy concept of European Forest Monitoring would generally be compatible with the existing structures.

However, the existing institutional arrangement for forest monitoring in Europe is seen as being deficient, most notably because the current EU support scheme under the Life+ programme was assessed as being insufficient in terms of its focus and enduring funding for coordinated and consistent monitoring activities. Following several expert opinions, the existing institutional fragmentation and competing competences within and between the MS and Community structures may pose further challenges for adequate compatibility. For example, most Member States already gather and manage the data they need for internal or external forest policy objectives by means of national inventories. Thus, it needs to be clarified exactly what additional data is needed at the Community level and for what reason, as conflicts between Member States and EU institutions over competences are to be expected when the added value of a Community approach is not visible.

European Forest Monitoring would also lead to an increase in the workload of forestry administrations as additional data would need to be gathered and reported. In this context, it should be pointed out that problems in (co-)financing forest monitoring may occur in the Member States' forestry administrations that are tight human and financial resources. It should not be overlooked that the nomination of the agency, which would coordinate the different monitoring activities and assemble all of the generated data into a common data set for European forests at the supranational level, could evoke conflicts in competences between existing institutions, and also between the MS and the Commission. Such an institution should be as independent as possible from existing structures. Following some experts' opinions, the proposed role could be assigned to single or a consortium of different research institutes (e.g. universities in France, Germany and/or Switzerland).

The stronger protection approach of the **FFD** is viewed by some experts as being consistent with existing EU biodiversity conservation policies. Furthermore, some specialists pointed out the fact that virtually all proposed policy mechanisms have already been established somehow. In particular, synergies with existing institutions, processes, standards and networks such as the Natura 2000 network, the MCPFE process, current databases, etc. exist. Furthermore, in countries where forestry is environmentally oriented, the FFD would find high institutional compatibility.

Significant additional workloads are, however, to be expected if the FFD is implemented. Additional resources would be needed in terms of personnel capacity and a complex institutional adaptation process including participation elements would likely require the highest workload out of all of the options. Thus, the concern has been raised that the current enforcement and implementation capacities at the national level would be insufficient as the

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resources of forest ministries and departments have been reduced in most European countries over the years.

Moreover, following some expert judgements, serious obstacles to the formulation and implementation of the FFD would result from the lack of a clear legal basis for EU competences regarding forest policy. These institutional incongruities could undermine the legitimacy of an EU directive on forests. The principle of subsidiarity is particularly relevant in this area. In fact, lacking political will and a struggle for competences between and within institutions both at the EU and MS levels could be expected and may result in tensions and significant delays in the formulation and implementation of the FFD. Interestingly, no clear picture exists in this context regarding the effects of this approach in terms of a possible redistribution of competences. While the Commission would likely benefit from the FFD in terms of gaining more responsibility than it has now, this approach could also strengthen the position of forest and forest related MS administrations as compared to other sectoral administrations, as has been shown by other framework directives. In this sense, forest and forest related administrations at all levels might profit from a Common approach at the Community level (cf. Chapter 4).

Budgetary issues were widely seen as a potential hurdle for the set up of a FFD, or at least as an essential component of a successful agreement on a FFD. The Payment for Forest Ecosystem Services scheme was deemed feasible, assuming it would be based on public money, mainly managed and conceded at the local level and adapted to the needs of the local population and their uses of the forest. The role of the Community in this regard would be to offer a platform for coordination and homogenisation of the rules of the system. However, a large amount of progress and effort would still be needed to recognise a common system for evaluating ecosystem services and for establishing reliable and comparable accounting rules.

In general, the institutional elements of the **OMC** were assessed by some experts as lacking sound experience among the existing structures. Moreover, many ambiguities concerning legitimacy and unification efforts might prevent an appropriate institutional fit. For instance, it was critically remarked that with this procedure, Member States' government and bureaucracy would be likely to lose democratically assigned decisional power and would be constrained in their effective representation. Further obstacles inhibiting a proper implementation of this policy concept could arise due to a divergence between the limited MS and Community capacities and the expected significant additional administrative burden on the Member States and the Commission in terms of personnel costs, working time and bureaucratic facilities, as this process aims to enhance stakeholder participation and increase coordination. Not only insufficiently represented national interests, but also reluctance from the MS in terms of additional reporting duties might be anticipated within the OMC; such problems might place the feasibility of this concept into question. However, similar or even overlapping guidelines and experience on learning processes do exist within Europe due to the set-up and operation of many collaborative efforts within the MCPFE, participatory National Forest Programmes and the EU Forest Action Plan. Thus, OMC could also build on the structures that are already familiar to those who have been involved in these processes on a pan-European and national scale.

#### 6.2.3.2 Policy acceptance and time frame

As discussed, the issue of the acceptance of the distinct policy options seems to be significantly related to the effects that these concepts might have on the different actor groups. Nevertheless, distinct factors that influence the acceptance of actor groups towards the proposed policy options are difficult to generalise. Interestingly, various representatives of stakeholder groups interviewed often misjudged one another's acceptance or positions on the options. Some consensus could nevertheless be observed on factors enhancing the general acceptance of all options. For instance, forest owners and environmental NGO's have repeatedly expressed the wish to be included and consulted during the processes, also in advance before decisions for one or the other will be made. Cooperation and acceptance



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inside the Commission right from the beginning has been mentioned as unavoidable to assure the success of any option.

Moreover, some experts saw an urgent need for an integrated and inclusive approach on forest policy and warned against an approach that focuses too much on “pure forest protection”. A balance of interests and a focus on the concept of multifunctionality of forests will be necessary to gain support and acceptance from the forest based industry and forest owners. On the other hand, an essential point for environmental NGOs seemed to be that ecologically ambitious standards are incorporated in a proper definition of sustainable forest management.

Based on the assessments of several experts, the **Improved Current Approach** would be highly accepted by those who would like to adhere to the policy status-quo. In particular, these actors may include forest owners, forest administrators, forest managers and forest-based industries. In contrast, environmental groups would either be less accepting or unclear in their opinions towards this policy approach. Nonetheless, either no policy effects may be expected or a longer time frame than envisioned would probably be needed in order to recognise some implementation outcomes.

The **Forest Monitoring Approach** has repeatedly been viewed as the most widely accepted policy option. For instance, the whole environmental community and most groups in the forest policy community, including most of the MS and many scientists, have shown significant support for this approach. In contrast, some concerns have been raised that the established data collectors or institutions providing the finances, most notably at the MS level, would resist this concept. Further, there might be some reluctance towards monitoring among forestry actors if the focus of monitoring were to be too highly focused on contested amenity parameters. It was estimated that the positive effects of the implementation of this approach would take a medium to long time frame in terms of years (at least 2 to 5 years), if not longer.

The **FFD** has repeatedly been assessed as being widely accepted by environmental groups and relevant administrations, the general public and national parliaments. In contrast, several experts highlighted that the Directive would not be politically feasible and that it would be faced with a low acceptance rate or even met with strong resistance by commodity oriented actors. In particular, the majority of evaluations pointed out that the MS, forest owners, forest users and forest-based industries would probably oppose a centralised EU regulatory approach and the stronger protection rationale of the FFD. However, some experts judged that these groups might not generally be opposed to any type of FFD, as both the forest industry and forest owners might benefit from it by securing a more level playing field for the forest sector. While the general idea of a FFD might also have some support from the commodity side, some specific issues of the outlined version are likely contested. The implementation, and especially the design and negotiation about a FFD, has been evaluated as taking 5 to 10 years, but as showing positive results as soon as it has been commonly agreed upon and the implementation began.

The introduction of an **OMC** for forest policy would evoke mixed feelings. Some experts interpreted the approach as politically infeasible, ineffective, resource intensive, too restrictive and as infringing on MS competences and sovereignty. In particular, it has been argued that existing administrative and consultative bodies at the MS level, forestry actors and forest owners would resist the implementation of this policy concept. For others, the voluntary nature of OMC could function as a beneficial solution for forest owners and forest based industries in order to influence policy-making. The OMC could then function as an intermediate solution that could enhance further consensus and compromise through its voluntary nature. Importantly, MS would share its views with others and encourage others to share their best practises. In general, the OMC would be accepted by those that have experience or are willing to experiment with new coordination methods. As with the previous concept, the visible policy effects from the OMC would materialise in a longer time perspective, probably 2-3 years or longer.

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#### 6.2.4 Resume

The ex-ante evaluation based on the expert interviews has provided some evidence outlining possible overall strengths and weaknesses of the 4 developed options, including how effective they might be in terms of forest protection, how they might affect different groups and, last but not least, how feasible the options are given the existing institutional environment and the interests of diverse relevant groups.

These preliminary results, however, should not be overvalued given the limited picture that can be drawn from 12 expert interviews. Moreover, the evaluation of the effects and feasibility of the 4 options obviously depends on the exact manner in which the options would be developed and implemented. For instance, a very weakly formulated FFD might be less effective in addressing the ecological state of the forests as compared to an ambitious European Forest Monitoring System that points out the exact 'weak points' of European forests and their management and protection. In an analogous manner, such a Monitoring system might even face more resistance by concerned groups than a weak FFD.

Taking these limitations into account, however, certain tendencies that go along with the 4 options can be outlined:

- The **Improved Current Approach** to forest protection is, on the one hand, politically feasible as it directly builds on the current approach, presenting the to date political wills the Member States. It is, on the other hand, seen as having little effect on the ecological state of the forests as well as on different relevant societal groups.
- The (re-)established **European Forest Monitoring System** provides a feasible option and has support from both the amenity and commodity perspectives. It is also effective in that it delivers information regarding informed policy strategies to be developed at the MS or Community levels. In this sense, it has often been noted that it is not really a policy option itself, but a prerequisite for any other policy option.
- The **FFD** is the most challenging option. On the one hand, it definitely holds the greatest potential for an effective Community-based forest protection policy. This approach is the most inclusive and integrated; the added value, particularly for the ecological state of the forests, and effectiveness scores are comparatively high. On the other hand, these potential benefits are likely to provoke a lot of 'frictional resistance'. In other words, the task of making this option politically feasible will not be easy. In general, amenity actors seem to support the option, but commodity actors might have serious reservations. The same holds true for some Member States, particularly those with a strongly commodity-oriented forest policy. Thus, going for the FFD might require a high degree of political skill as well as willingness to compromise.
- Finally, the **OMC** for forest protection seems to be a rather ambiguous option. Not only did many experts have problems in evaluating the possible effects of using this approach for forest protection, but those who had a distinct opinion pointed out that feasibility might be questionable due the institutional efforts needed and the unclear outcomes of using this 'new' approach. In the same manner, the effects of this option concerning the ecological state of the forests as well as the different involved groups are unclear as they depend on the results of the whole procedure. Mutual learning processes, however, have been considered as being an added value that can be attained by implementing this approach.

Table 16 summarizes the main findings of the evaluation and illustrates these findings by using a simple symbol technique.

Table 16: Overview on the evaluation results of the 4 options

	Improved Current Approach	Forest Monitoring	Forest Framework Directive	Open Method of Coordination
<b>Effectiveness</b>				
Impacts on the ecological state of the forests	☺	(☺)	☺	(☺)
<b>Distributional effects (policy/social side effects)</b>				
...on public authorities	☺	(☺) (☹)	(☺) (☹)	(☺) (☹)
...on forestry and forest-based industries	☺	☺	(☺) (☹)	(☺) (☹)
...on other groups/society	☺	☺	☺	(☺)
<b>Feasibility</b>				
Institutional compatibility	☺	(☺)	(☺)	☹
<b>Acceptance</b>				
...of Commodity actors	☺	(☺)	(☹)	(☹)
...of Amenity actors	☹	☺	☺	(☺)

☺	mostly positive	(☹)	likely negative
(☺)	likely positive	☹	mostly negative
(☺) (☹)	partly positive, partly negative	☺	no strong effects at all

Finally, some general conclusions can be drawn based on the evaluation.

First and foremost, there is an evident trade-off between policy effectiveness and feasibility. In particular, the more ambitious a policy option is in terms of effectiveness, that is the more it positively and inclusively addresses the issues of forest protection, the more likely it will run contrary to established interests of different forestry related groups and evoke the resistance of groups that fear limits to their actual property and usage rights. Thus, if a more coordinated Community approach is desired, a well balanced architecture should be chosen in order to reach a balance between policy effectiveness and feasibility.

Second, a similar trade-off exists between the goals of the amenity and commodity perspectives. Again, a careful balance must be found that takes the demands of both perspectives regarding forests into account. Financial incentives have been frequently

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mentioned as tools for enhancing acceptance among resistant groups, for instance by providing compensatory payments for efforts to reach forest protection goals. If, for instance, a FFD is sought, the art will be to make use of existing synergies between amenity and commodity objectives and to create win-win situations by the PES, particularly in situations where conflicts exist between different forest interests.

Third, the expert interviews clearly showed that the development of any new Community option for forest protection would touch on the principle of subsidiarity and the delicate question of the distribution of competences between the European institutions and the Member States. Thus, it is obligatory for the Commission to carefully legitimise any new approach to forest protection at the Community level in terms of needs and competences. Further on, each approach must clearly demonstrate the benefits for the Member States and stress that any new standardisation will serve their interests. A Community approach will only make sense if it delivers additional benefits without compromising the achievements of national, subnational and local initiatives. Thus, it is important that the Member States will be given a large amount of flexibility during the implementation process, e.g., by being given the possibility to choose from a plethora of potential measures and by having an implementation process that enables opportunities to be adjusted based on working groups. However, this should not compromise the commonly agreed upon objectives of the approach as this would put the benefit of any Community approach in question.

Fourth, as for the FFD, the effects of the inherent standardisation at the Member State level would also depend on the forest management and conservation standards that were currently being applied in the respective state, compared to those demanded by the Directive, and taking into account the flexibility given in the implementation process. In this sense, it would be more likely that the forest sector of those countries where forestry already had a well established SFM standard, including a forest protected area network, would have an advantage as compared to countries where such regulations were lacking or weak. In this context, again, a careful balance must be found between the flexibility given to the Member States in applying the measures that would be most suitable to their interests, local forest specificities and industry needs (taking into account a broad stakeholder involvement at the national level), and the overall idea of guaranteeing a certain level of forest protection in favour of all European societies at the Community level.

Fifth, any new Community initiative must not only pay heed to the distribution of competences between the MS and the Community, but should also take into account the goals and objectives concerning forest protection that have been agreed on at the international and particularly at the pan-European level. In this sense, any Community initiative should be developed in accordance with such processes, particularly the MCPFE.

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## 7 Policy recommendations

In this chapter concluding policy recommendations are derived from the previous analytical steps. The rationale of this chapter is not to recommend a specific policy approach, but to provide ideas for discussions on potential strategic paths that may lead to better forest protection in Europe. Thus, this chapter outlines different scenarios for action that might be taken up by policy makers and stakeholders based on different possible evaluations of the current situation.

The chapter is structured as follows: In section 7.1, the vertical and horizontal integration of a Community approach are discussed. In Chapter 7.2 possible scenarios with associated roadmaps for implementing the policy options are presented. Chapter 7.3 concludes with some final considerations on a potential Community initiative on forest protection.

### 7.1 Initial Considerations: How to integrate a Community Initiative on forest protection into the current forest policy system?

#### **Horizontal integration: Forest protection, forest policy, and sustainable forest management**

The question of how the derived options for forest protection are connected to an overarching idea of forest policy and, more specifically, to the concept of sustainable forest management is a core issue which has been pointed out by many of the experts consulted during the workshop and the evaluation interviews.

As we have stressed in Chapter 2.4, forest protection is understood as an integrated approach of (impact) management that regulates threats to forests in order to safeguard ecosystem services. In this sense, it addresses both threats as they are perceived from a commodity perspective (i.e., factors that impede forest stability and vitality) and threats as perceived by those holding the amenity perspective (i.e., factors that negatively affect forest diversity and hamper natural processes in forests). Forest protection policy inevitably links environmental, social and economic aspects of forests and forest management together. It thereby mitigates, on the one hand, threats that are relevant from a commodity perspective. On the other hand, it might cause opportunity costs, if, for instance, timber production will have to be reduced at the expense of more effective biodiversity protection. Therefore, socio-economic aspects have been taken into account in this study, for example, when comparing the commodity and amenity perspectives in Chapter 2.3, and when developing the different policy options and analysing their effectiveness and feasibility.

Since forest protection policy is connected to all 3 dimensions (ecological, economic and social) of sustainable forest management and forest conservation, cf. Chapter 2.1.2), it should not be seen as replacing a more comprehensive general approach on forest policy. Forest policy, can be understood as a policy approach that explicitly addresses goals related to all 3 sustainability dimensions of SFM. Therefore, it goes well beyond forest protection issues, as forest policy directly addresses aspects such as recreation, urban forestry, economic performance of forestry and forest based industry, timber mobilization, etc.

In this sense, forest protection policy can be seen as one important component of forest policy. As it mostly addresses environmental aspects of forests and forestry, it virtually builds the environmental basis of forest policy.

#### **Vertical integration: MCPFE and a Community initiative on forest protection**

Another crucial aspect in this study is the question of the appropriate level of any forest protection policy. This issue has been intensively discussed in Chapter 4 in terms of the distribution of competencies between Community and Member States, and the principle of subsidiarity. Several arguments have been provided in favour and against a Community

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action that must be weighed in ongoing decision making processes. Furthermore, vertical integration has been discussed in view of the coherency of current Community policies and international forest and environmental policies in Chapter 3.5.1. As a result, a need for further action at the Community level to address coherency gaps in forest protection policy has been identified, for example in terms of forest biodiversity and adaptation to climate change. The forest protection options that were developed in this study are addressing these gaps, although to different extents.

In this section, however, particular importance should be given to the linkage between a Community initiative in forest protection and the activities of MCPFE, as this issue has been raised frequently by the experts consulted for this study and should therefore be considered during eventual development of a Community initiative.

One aspect that was discussed is how the work currently done by the MCPFE would be related to a Community initiative on forest protection. This issue was raised in light of the currently underway expert group discussion process, on the pan-European level, about the potential added value of and possible options for a legally binding agreement on forest issues (cf. Chapter 3.2).

Generally, there are some arguments that support a stronger engagement of the MCPFE in the forest protection issue. First, the process has a long tradition of forest related expert consultations and policy formulation. It is well established and has considerable acceptance and support by the forest sectors of many European states. It has also delivered notable results in terms of the standardisation of sustainable forest management and has influenced forest certification and regional forest monitoring schemes via criteria and indicators. Moreover, as not only EU Member States, but also neighbouring countries such as Albania, Belarus, Croatia, Liechtenstein, Iceland, Norway, Republic of Macedonia, Republic of Moldova, Montenegro, Russia, Serbia, Switzerland Turkey, and Ukraine are participating in the process, it provides a platform for the exchange between experts and standardisation work, not only for the European Union territory and the Common Market, but also for adjacent countries and their forest product markets.

On the other side, all MCPFE resolutions are non-legally binding and the MCPFE does not provide any substantial enforcement mechanisms besides voluntary commitment and reporting. Moreover, the whole process is actually not designed in a manner that provides common policy instruments, but rather functions as a voluntary knowledge exchange process that aims for the development of a common understanding on important issues mostly related to the comprehensive concept of sustainable forest management. It covers a broad range of countries with different governance structures, economic developments and social needs. The MCPFE countries are connected by the trade of forest products, but do not represent a common market, as trade restrictions such as, for instance, the Russian timber export tax hamper free trade. Moreover, despite some efforts to strengthen stakeholder involvement, the MCPFE does not cover the whole set of forest and forestry related stakeholders, but mainly serves as an exchange and coordination platform for forest ministries and administrations. Taking all these aspects into account, progress in further harmonisation of forest protection issue seems challenging under the MCPFE, particularly if a more committing status of the MCPFE decisions is striven for.

However, the MCPFE provides a well developed platform for the discussion of all forest related issues at the Pan-European level. Moreover, it can virtually be understood as a toolbox, which participating countries and the Community can make use of in order to design any new approach on forest protection. The past and current standardisation work done by the MCPFE is a good basis for any Community approach on forest protection and delivers concepts and standards that have been already agreed on at the Pan-European level. The more concrete the standardisation given at the Pan-European level is, the more it provides a valuable basis to be taken up by the Community and the Member States. If, for example, a legally binding instrument on European forest and forestry would have been successfully negotiated under the MCPFE, it would further legitimise Community action in forest

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protection against the backdrop of the existing international agreements that must be implemented. The Pan-European Bern Convention on the Conservation of European Wildlife and Natural Habitats, that literally served as a blueprint for the formulation of the Habitats Directive, provides an excellent example of such a mutually fruitful interplay between both policy levels. The MCPFE for its part might eventually use a Community initiative on forest protection as a basis for further negotiations and might serve as an important mechanism to diffuse EU forest protection standards and approaches into adjacent countries and markets.

## **7.2 Scenarios for Community action**

Considering the aspects that have been discussed in Chapters 6.3 and 7.1., and based on the 4 policy options (Improved Current Approach, OMC, Monitoring, and FFD) that have been outlined in Chapter 5, 3 different strategic scenarios for action at the Community level can be developed:

1. Environmental policy framework
2. Policy learning approach
3. Selected issue approach

In these scenarios, the 4 options are not understood as being mutually exclusive. They can rather be flexibly applied, also in parts, and be combined in order to achieve the main objective of improving forest protection in Europe.

There are some elements that are, however, common for all 3 scenarios.

First, as forest protection is directly related to the environmental pillar of forest policy (cf. Chapter 7.1), all possible policy approaches would have to be based on environmental competences partly or wholly conferred on by the Member States to the Community. Therefore, it is recommended to set up a new forest protection initiative in light of the EU primary goals of sustainable development, environmental protection and implementation of international and EU forest-related agreements, most notably in relation to biodiversity and climate protection.

Second, the concept of Forest Monitoring will play a major role in all scenarios. Monitoring has been characterised as being the most consensual of the developed options while also having positive effects on forest protection issues. Furthermore, it can be seen as an important precondition for future informed decision-making on forest protection to provide reliable data for European decision-maker.

Third, vital to the success of each scenario is the timely and effective inclusion and consultation of all Member States and all relevant institutions and stakeholder groups representing both amenity and commodity rationalities. The additional value of any initiative must not only be demonstrated, but also has to be actively created by taking into account the various demands of the stakeholders. That is not to say that every single demand can be equally considered, as this would render any new approach overloaded and – with regard to the existing trade offs and conflicts – potentially inconsistent and self contradicting. The careful weighting of different demands and the tracing of synergies will be crucial already at the early stage of policy formulation and the initiative must provide a well-balanced rationale on how obvious conflicts of interests will be dealt with.

Eventually, a Community initiative on forest protection would have to be embedded in formal consultation and/or decision-making processes. Some basic ideas in this regard are proposed in Chapter 5.1 and will be further outlined when describing the scenarios in detail. For all scenarios, and related to the aspect discussed in the last paragraph, it is recommended for the Commission to start with a Green Paper consultation process in order to activate a broader consultation process. The Green Paper would present ideas on needs and options for forest protection in the EU and raise questions on controversial aspects to Member States and relevant stakeholder groups. Some initial ideas on process design are

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given in the plan of implementation of the Forest Monitoring concept (cf. Chapter 5.3). Enough time must be envisaged for professional and political discussions.

Whereas these first procedural steps would apply for all of the policy concepts, further steps can be split up in 3 basic scenarios for the Commission to proceed, which might also be selected depending on the results of the Green Paper consultations, and will be outlined in the following.

### **Scenario 1: Environmental policy framework**

The first scenario is based on the assumption that enough evidence and political support exist to go for a coherent environmental framework for forest protection at the Community level. This decision may be derived from the awareness gained during the consultation process in that the advantages of a Community approach (e.g., the prevention of market distortions) outweigh the sceptics and that such an approach can only be achieved through further regulation and standardisation. In this event, a common framework drawing on the FFD including a European Forest Monitoring System will be the most reasonable approach. Thus, the Commission might use the high profile of environmental framework directives, which combines the setting of common objectives with a lot of flexibility in terms of implementation, to work towards the FFD approach.

Following the Green Paper process outlined above, the Commission would draw a White Paper that proposes the FFD as the core element of an EU forest protection initiative. The paper should take the interests of Member States and relevant groups into consideration; addressing concerns by means of smart combinations of instruments at the Community and Member State level, and including clear statements on financial requirements. If the paper is welcomed by the Council, the Commission would compile a legislative proposal for EU action in forest protection based on the EU environmental competence. In the following, the rules of the co-decision procedure would apply involving joint adoption of the proposed legislation by the Council and the European Parliament.

In parallel, the Commission might propose an action programme on EU forest protection which could be integrated in the 7th Environment Action Programme after 2012. In the course of such a kind of policy initiative, and preferably when drafting the White Paper, the Commission might undertake an appropriate impact assessment. It would evaluate the effects of the desired actions on different groups and goods, and eventually deliver a comprehensive basis for the Commission and the European Parliament to check the legitimacy of these actions. Moreover, it would also properly calculate the financial implications and suggest appropriate budgeting of the selected policy proposals. As it has been discussed in Chapter 5.4 and 6.2, the environmental policy framework would have significant financial implications. With the establishment of a comprehensive Community policy, potential cost would have been at least partially to be addressed by EU budget. Consequently, the existing financial instruments for forest protection (EAFRD, LIFE+) would have to be extended, streamlined and secured by future EU funding. However, the expected costs have to be balanced against the likely policy effects when judging eventually the appropriateness of the selected policy approaches (e.g. cost-effectiveness).

### **Scenario 2: Policy learning approach**

In a second scenario, it is presumed that there is currently not enough evidence and political will to formulate a Common environmental framework as outlined in scenario 1. Based on the rationale provided by this study, however, it might be concluded all the same, that there is a need to develop an approach that goes beyond the current state of EU forest protection policy.

In this case, the Commission might enter into a process that is mostly based on the concepts “Improved Current Approach” and “OMC”; striving for an iterative and mutual consultation process with Member States and relevant stakeholders as well as those from civil society.



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Regardless, the establishment of the European Forest Monitoring System may be strived for in a manner that is compatible to the procedure described under scenario 1.

Due to the learning process and possible agreements further procedures might follow. As for the OMC, the Council of Ministers would have to decide to start the procedure upon agreement with the Commission and the Member States. In this case, the associated specific co-ordination steps described in Chapter 5.5 would have to be implemented. If the “Improved Status Quo” is opted for, no legislative change would be needed, as the valid Council decision establishing the SFC (89/367/EEC) would already legitimise this approach. The approach would only have limited direct financial implications. With no changes towards more competencies for the Community, limited justification is given for additional funding from the EU budget.

Scenario 2 points at the importance of both a mutual policy-oriented learning process and, on the long term, an enlightening function of policy-relevant information derived from the monitoring system. Such efforts would arrive at common understandings and actions towards improved forest protection in Europe. Gradually, a higher degree of mutual agreement and acceptance of Common measures would result from this approach. However, it would leave the question open as to whether this approach might lead to a more coherent Community approach beyond forest monitoring in the long run.

### **Scenario 3: Selected issues approach**

As a matter of compromise, scenario 3 might be appropriate to aim for. This scenario builds on the assumption that, on the one hand, there is a recognised need to address specific threats or challenges in forest protection at the Community level, but on the other hand, there isn't sufficient political will to establish a Common environmental policy framework as outlined under scenario 1. The Commission might choose prominent forest protection issues that are rather uncontested in terms of their severity and causes on different temporal and geographical scales. For example, the spread of forest fires and invasive alien species across Europe might prove to be relevant issues to be addressed by EU Forest Monitoring and by a framework regulation. If so, respective policy instruments might be established following the procedures outlined above. These instruments might be designed in a manner that they can be adapted to address further forest protection issues if a political need for those issues is seen in the future. Regarding financial implications, existing as well as additional EU financing mechanisms may be used for this approach, however, it has to be taken into account that additional EU funding might be less easily justified compared to scenario 1.

## **7.3 Concluding remarks: Using the window of opportunity**

Observing the current state of negotiations and achievements in the multi level forest policies, a notable window of opportunity for new initiatives on forest protection policy at any level can be recognised. When set against the stalemate of the recent decade (HUMPHREYS, 2009), forest issues have currently gained new prominence and are more veraciously discussed than before.

In the UNFCCC negotiation process, the forest related aspects are intensively debated under the REDD+ and LULUCF negotiations and are likely to find their way more decidedly than before into any post-Kyoto agreements. Furthermore, various public and private approaches on reducing emissions from deforestation and forest degradation have been started in different regions of the world and rely on remarkable personal and financial resources. Although no breaking through in terms of new decisions and agreement can be noted under the CBD, forest issues are constantly negotiated, with regard to the ecosystem approach and forest protected area networks. While the UNFF Non-Legally-Binding Instruments on all Types of Forests might not be seen as satisfying, it nevertheless provides a new globally agreed on document of a ‘forest consensus’ for the first time since the UNCED’s 1992 Forest

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Principles. Last but not least, the idea of achieving a more binding agreement at the pan-European level is discussed under MCPFE for the first time.

A Community initiative on forest protection can make use of the public and policy attention towards forest issues. The EU's ambition for environmental leadership is currently not sufficiently backed up by a comprehensive approach on forest protection. As a consequence, the Union and its Member States are hampered when demonstrating their responsibility for and leadership in international forest policy (cf. Chapter 4). In this sense, a Community initiative for forest protection would be well justified against the international background and when understood as the EU's own contribution to a desirable global multilateral 'new green deal' on forests.

In addition, Forest law enforcement, governance and trade initiatives (FLEGT) might benefit from a more coherent Community approach on forest protection as it is likely to provide stronger legitimacy for management and information standards encountering illegal trade with forest products and thus contributing to SFM in a wider international context.

Internally, a policy window that is even more limited in time can also be made out when the decision making mechanism of the European Union are taken into account. It can be roughly estimated that, altogether, the preparation and decision making process of a Community initiative on forest protection will take about 4 to 5 years. Given the time frame of the EU's next budgetary period (2014-2020) and of the next EU Environmental Action Programme in 2012, this means that the Commission must take up the initiative within the upcoming months if the advisable, integrative and participative decision making process is aimed for.

In general, any new approach faces the challenging task of reaching compromises and forming synergies to overcome and regulate the trade-offs between the feasibility and effectiveness of any European forest protection policy. As it has been demonstrated in this study, a Community initiative on forest protection would primarily serve as the environmental pillar of European forest policy. It might be advisable, in this regard, for the decision makers to not only carefully balance between ecological, economic, and social aspects when formulating the initiative, but also look for the possibility to make it part of a more comprehensive approach on European forest policy. That is, a Community approach on forest protection might be eventually combined with a Community initiative to strengthen forest related rural development and the competitiveness of the EU forest sector. Such a combination would offer some opportunities for package deals and might substantially increase the feasibility of both the forest protection and a rural development and competitiveness initiative. Regarding effectiveness, careful coordination of both approaches would have to be strived for in order to avoid compromising their respective goals.

Those ideas are, however, beyond the scope of this study. The mission of this report was to carefully assess the issue of forest protection within the EU by analysing arguments for the necessity of a Community approach on forest protection and developing potential concepts for such an approach. It aimed at providing a toolbox of thoughts and arguments for an inclusive and intensive political debate followed by a balanced decision making process. This process may eventually lead to the implementation of some of the ideas that have been developed in this report.

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## 8 References

- AALST M. VAN, (2006): The impacts of climate change on the risk of natural disasters. *Disasters*, 30 (1): 5-18.
- AGRA CEAS CONSULTING (2005): Synthesis of Rural development mid-term evaluation LOT 1 – EAGGF Guarantee. Final Report for the European Commission. Job No2181/BDB/November 2005.
- ALBRECHT, L. (1991): Die Bedeutung des toten Holzes im Wald. – *Forstwissenschaftliches Centralblatt* 110: 106-113.
- ANGELOVA, E. H. (2007): Die Rolle der Nationalen Forstverwaltung in der bulgarischen Forstpolitik am Beispiel der Beratung und Ausbildung privater Waldeigentümer in Bulgarien. Remagen-Oberwinter, Kessel. *Freiburger Schriften zur Forst- und Umweltpolitik* 14.
- ANGELOVA E. & WINKEL G. (2007): Bulgarische Forstpolitik zwischen Planwirtschaft und Europäischer Harmonisierung. Zur Problematik des Policy-Transfers in Transformationsländern. *Südosteuropa-Mitteilungen* 47 (3): 32-45.
- ANGELOVA, E. H.; IRIMIE, D.; SOTIROV, M.; WINKEL, G. (2009): Bulgarien und Rumänien in der Europäischen Union – forstpolitische Herausforderungen. *Schweizerische Zeitschrift für Forstwesen* 160 (1): 15-22.
- BASTIAN, O. & SCHREIBER, K.F. (1994): Analyse und ökologische Bewertung der Landschaft, Gustav Fischer Verlag Jena - Stuttgart. In: BMVEL (Bundesministerium für Verbraucherschutz, Ernährung und Landwirtschaft) (eds.) (2001): *Gesamtwaldbericht der Bundesregierung*. – Bonn.
- BERGLUND, E. (2001): Facts, Beliefs and Biases: Perspectives on Forest Conservation in Finland. *Journal of Environmental Planning and Management* 44 (6): 833-849.
- BÖHLING, N. (1992): Floristischer Wandel von Waldgesellschaften. *Naturschutz und Landschaftsplanung* 24 (1): 16-19.
- BORRÁS, S. & GREVE, B. (2004): Preface. *Journal of European Public Policy* 11 (2):181-184.
- CBD (2008): Decision adopted by the Conference of the Parties to the Convention on Biological Diversity at its ninth meeting, IX/5, Forest Biodiversity. Bonn, 19–30 May 2008. Available online on: <http://www.cbd.int/doc/decisions/cop-09/cop-09-dec-05-en.pdf>.
- CHMIELEWSKI, F.-M. & ROETZER, T. (2001): Response of tree phenology to climate change across Europe. *Agricultural and Forest Meteorology* 108: 101-112.
- CEPF (2008): European Forest Owner Organisations - Forest Owner Cooperation: Main figures, aims and goals. A study conducted by CEPF. Available online on: [http://www.unece.org/timber/docs/tc-sessions/tc-66/pd-docs/CEPF\\_report.pdf](http://www.unece.org/timber/docs/tc-sessions/tc-66/pd-docs/CEPF_report.pdf).
- CLRTAP (2007): Hemispheric Transport of Air Pollution 2007. *Air pollution Studies* No 16. United Nations, New York and Geneva.
- COUNCIL OF THE EUROPEAN COMMUNITIES (1989): Council Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work.
- COUNCIL OF THE EUROPEAN UNION (1979): The Birds Directive, 79/409/EEC on the conservation of wild birds, 2 April 1979.
- COUNCIL OF THE EUROPEAN UNION (1986): Council Regulation (EEC) No 3528/86 on the protection of forests against atmospheric pollution.

- 
- COUNCIL OF THE EUROPEAN UNION (1989): Council Decision setting up a Standing Forestry Committee (89/367/EEC).
- COUNCIL OF THE EUROPEAN UNION (1992a): Council Regulation (EEC) No 2158/92 on the protection of the Community's forests against fire.
- COUNCIL OF THE EUROPEAN UNION (1992b): The Habitats Directive, No 92/43/EEC on the conservation of natural habitats and of wild fauna and flora.
- COUNCIL OF THE EUROPEAN UNION (1992c): Council Regulation (EEC) No 2078/92 on agricultural production methods compatible with the requirements of the protection of the environment and the maintenance of the countryside.
- COUNCIL OF THE EUROPEAN UNION (1992d): Council Regulation (EEC) No 2080/92 instituting a Community aid scheme for forestry measures in agriculture.
- COUNCIL OF THE EUROPEAN UNION (1996): Council Directive 96/62/EC on ambient air quality assessment and management.
- COUNCIL OF THE EUROPEAN UNION (1998): Council Resolution (1999/C 56/01) on a forestry strategy for the European Union.
- COUNCIL OF THE EUROPEAN UNION (1999): Council Regulation (EC) No 1257/1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF) and amending and repealing certain Regulations.
- COUNCIL OF THE EUROPEAN UNION (2003): Council Regulation (EC) No 1782/2003 establishing common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers and amending Regulations (EEC) No 2019/93, (EC) No 1452/2001, (EC) No 1453/2001, (EC) No 1454/2001, (EC) 1868/94, (EC) No 1251/1999, (EC) No 1254/1999, (EC) No 1673/2000, (EEC) No 2358/71 and (EC) No 2529/2001.
- COUNCIL OF THE EUROPEAN UNION (2005): Council Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development.
- COUNCIL OF THE EUROPEAN UNION (2006): Council Decision on Community strategic guidelines for rural development (programming period 2007 to 2013) (2006/144/EC).
- DOYLE, U. (1999). Alien organisms in Germany. Federal Environmental Agency Research Report 298 82 779/05, Berlin, Germany.
- EEA (EUROPEAN ENVIRONMENTAL AGENCY) (2006): European forest types. Categories and types for sustainable forest management reporting and policy. EEA Technical Report No 9/2006. Luxembourg: Office for Official Publications of the European Communities.
- EEA (2006a): How much bioenergy can Europe produce without harming the environment? EEA Report No 7/2006. Luxembourg: Office for Official Publications of the European Communities.
- EEA (2007): Halting the loss of biodiversity by 2010: proposal for a first set of indicators to monitor progress in Europe. EEA Technical Report No 11/2007. Luxembourg: Office for Official Publications of the European Communities.
- EEA (2007a): Air pollution in Europe 1990-2004. Technical report No 2/2007. Luxembourg: Office for Official Publications of the European Communities.
- EEA (2007b): Europe's environment — The fourth assessment. Copenhagen. Luxembourg: Office for Official Publications of the European Communities.
- EEA (2008a): European forests – ecosystem conditions and sustainable use. EEA Report No. 3/2008. Luxembourg: Office for Official Publications of the European Communities.
-

- 
- EEA (2008b): Air pollution by ozone across Europe during summer 2007. Technical Report No 5/2008; Luxembourg: Office for Official Publications of the European Communities.
- EEA (2009): Progress towards the European 2010 biodiversity target. EEA Report No. 4/2009. Luxembourg: Office for Official Publications of the European Communities.
- EGESTAD, P. S. (2002): Trustful relations. A perspective on trust in actor relations in forestry. Ph.D thesis Wageningen University. Cip-data Koninklijke bibliotheek, Den Haag.
- ELLIOT, C. (2000): Forest certification. A policy perspective, CIFOR thesis series, Jakarta, Indonesia.
- EUROOBSERV'ER (2006): Solid biomass barometer, December 2006.
- EUROOBSERV'ER (2007): Biofuels barometer, May 2007.
- EUROPEAN COMMISSION (1997): Communication from the Commission: "Energy for the future: Renewable sources of energy". White Paper for a Community Strategy and Action Plan. COM(97)599 final (26/11/1997).
- EUROPEAN COMMISSION (2001a): Common Implementation Strategy, for the Water Framework Directive (2000/60/EC), Strategic document, as agreed by the Water Directors under the Swedish Presidency.
- EUROPEAN COMMISSION (2001b): Communication from the Commission: A Sustainable Europe for a Better World: A European Union Strategy for Sustainable Development (Commission's proposal to the Gothenburg European Council). COM(2001)264 final.
- EUROPEAN COMMISSION (2001c): Communication from the Commission to the Council and the European Parliament Biodiversity Action Plan for the Conservation of Natural Resources. COM(2001)162 final.
- EUROPEAN COMMISSION (2003): Communication from the Commission to the Council and the European Parliament, "Forest Law Enforcement, Governance and Trade" (FLEGT), Proposal for an EU Action Plan. COM (2003) 251 final.
- EUROPEAN COMMISSION (2004): Communication from the Commission to the Council and the European Parliament, Financing Natura 2000. COM (2004) 431 final.
- EUROPEAN COMMISSION (2005): Communication from the Commission to the Council and the European Parliament, Reporting on the implementation of the EU Forestry Strategy. COM(2005) 84 final.
- EUROPEAN COMMISSION (2005b): Communication from the Commission, Biomass action plan. COM(2005) 628 final.
- EUROPEAN COMMISSION (2006a): Communication from the Commission to the Council and the European Parliament on an EU Forest Action Plan. COM (2006) 302 final.
- EUROPEAN COMMISSION (2006b): SEC (2006) 748, Commission Staff Working Document: Annex to the Communication from the Commission to the Council and the European Parliament on an EU Forest Action Plan : A contribution to the EU's Growth and Jobs Strategy. SEC (2006) 748.
- EUROPEAN COMMISSION (2006c): Regulation (EC) No 1974/2006 laying down detailed rules for the application of Council Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD).
- EUROPEAN COMMISSION (2006d): Regulation (EC) No. 1737/2006 laying down detailed rules for the implementation of Regulation (EC) No 2152/2003 of the European Parliament and of the Council concerning monitoring of forests and environmental interactions in the Community.
-

- 
- EUROPEAN COMMISSION (2007): Work programme for implementation of the EU Forest Action Plan (2007-2011).
- EUROPEAN COMMISSION (2008a): Communication from the Commission to the Council and the European Parliament on innovative and sustainable forest-based industries in the EU, COM(2008) 113 final.
- EUROPEAN COMMISSION (2008b): Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources (presented by the Commission). COM(2008) 19.
- EUROPEAN COMMISSION (2008c): Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions. A Mid-term Assessment of Implementing the EC Biodiversity Action Plan. COM(2008) 864 final.
- EUROPEAN COMMISSION (2009a): Report from the Commission to the Council and the European Parliament. Composite Report on the Conservation Status and Habitat Types and Species as required under Article 17 of the Habitats Directive. COM (2009) 358 final.
- EUROPEAN COMMISSION (2009b): White Paper, Adapting to climate change: Towards a European framework for action. COM(2009) 147 final.
- EUROPEAN COMMISSION, DG AGRI (2006): Rural Development 2007-2013. Handbook on Common Monitoring and Evaluation Framework. Guidance document.
- EUROPEAN COMMISSION, DG AGRI (2008a): Rural development in the European Union: Statistical and Economic Information Report 2008.
- EUROPEAN COMMISSION, DG AGRI (2008b): Work programme for implementation of the EU Forest Action Plan (2007-2011): Progress report on implementation delivered to the Advisory Group on Forestry and Cork.  
Available online on: [http://ec.europa.eu/agriculture/fore/action\\_plan/progprep07\\_2008\\_en.pdf](http://ec.europa.eu/agriculture/fore/action_plan/progprep07_2008_en.pdf).
- EUROPEAN COMMUNITIES (2003): Natura 2000 and the Forests – Challenges and Opportunities. Interpretation guide.
- EUROPEAN COUNCIL (2000): Presidency Conclusions, Lisbon European Council, 23-24 March 2000.
- EUROPEAN COURT OF AUDITORS (2004): Special Report No 9/2004, on Forestry Measures within Rural Development Policy, together with the Commission's replies.
- EUROPEAN COURT OF AUDITORS (2006): Special Report No 7/2006, concerning rural development investments: do they effectively address the problems of rural areas?, together with the Commission's replies.
- EUROPEAN COURT OF AUDITORS (2008): Special report No 8/2008 "Is cross compliance an effective policy?". Luxembourg.
- EUROPEAN PARLIAMENT (2009): MEPs respond to call to protect Europe's wilderness. Available online on: [http://www.europarl.europa.eu/news/public/story\\_page/064-47957-033-02-06-911-20090202STO47940-2009-02-02-2009/default\\_en.htm](http://www.europarl.europa.eu/news/public/story_page/064-47957-033-02-06-911-20090202STO47940-2009-02-02-2009/default_en.htm).
- EUROPEAN PARLIAMENT; COUNCIL OF THE EUROPEAN UNION (2000): Directive 2000/60/EC establishing a framework for Community action in the field of water policy.
- EUROPEAN PARLIAMENT; COUNCIL OF THE EUROPEAN UNION (2001): Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources in the internal electricity market.
-

- 
- EUROPEAN PARLIAMENT; COUNCIL OF THE EUROPEAN UNION (2003a): Regulation (EC) No 2152/2003 concerning monitoring of forests and environmental interactions in the Community (Forest Focus).
- EUROPEAN PARLIAMENT; COUNCIL OF THE EUROPEAN UNION (2003b): Directive 2003/30/EC on the promotion of the use of biofuels or other renewable fuels for transport.
- EUROPEAN PARLIAMENT; COUNCIL OF THE EUROPEAN UNION (2006): Directive 2006/12/EC of the European Parliament and of the Council on Waste.
- EUROPEAN PARLIAMENT; COUNCIL OF THE EUROPEAN UNION (2007): Regulation No 614/2007 concerning the Financial Instrument for the Environment (Life+).
- EUROPEAN PARLIAMENT; COUNCIL OF THE EUROPEAN UNION (2009): Directive 2009/28/EC (RES-D) on the promotion of the use of energy from renewable sources amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC.
- EUROPEAN PARLIAMENT (2009): Non-legislative Resolution of the European Parliament on wilderness areas in Europe (T6-0034/2009).
- EUROPEAN UNION (2002): Consolidated Versions of the Treaty on European Union and of the Treaty establishing the European Community (2002/C 325/01).
- EVERS F. H. & HÜTTL R. F. (2007): Magnesium-, Calcium- und Kaliummangel bei Waldbäumen – Ursachen, Symptome, Behebung. Reihe FVA-Merkblätter 42. Available online on: [http://www.waldwissen.net/themen/waldoekologie/boden\\_standortkunde/fva\\_basemangel\\_waldbaeume\\_DE](http://www.waldwissen.net/themen/waldoekologie/boden_standortkunde/fva_basemangel_waldbaeume_DE).
- FAO (2001): State of Food and Agriculture Part II: Food and Agriculture Organisation of the United Nations, Rome.
- FAO (2007): State of the World's Forests 2007. Food and Agriculture Organisation of the United Nations, Rome.
- FAO (2009): State of the World's Forests 2009. Food and Agriculture Organisation of the United Nations, Rome.
- FEEMERS, M.; BLASCHKE, M.; SKATULLA, U.; GULDER, H-J. (2003): Klimaveränderungen und Biotische Schäden im Wald. LWFaktuell 37: 19-22.
- FREER-SMITH, P., EVANS, S., MORGAN, G., ILVESNIEMI, H., FINER, L., MOFFAT, A., DEROME, J., HUMPHREY, J., LAINE, J., MICHALAK, R. & PAWLACZYK, P. (2006): Development and review concerning Forest Focus. Final Report for EU Contract No C2 - 07 03 01/ 2004/396316/MAR/B3.
- GENOVESI, P. & SHINE, C., (2004): European Strategy on Invasive Alien Species. Council of Europe publishing, Strasbourg.
- GEF (2002): "Invasive Alien Species: A global threat to forest ecosystems" New York, USA.
- GLÜCK, P. (1994): Entstehung eines internationalen Waldregimes. Centralblatt für das gesamte Forstwesen, 111 (2): 75-92.
- HARE, W. (2003): Assessment of Knowledge on Impacts of Climate Change – Contribution to the Specification of Art. 2 of the UNFCCC. Potsdam, Berlin. Available online on: [http://www.wbgu.de/wbgu\\_sn2003\\_ex01.pdf](http://www.wbgu.de/wbgu_sn2003_ex01.pdf).
- HAUBER, J., WINKEL, G., PISTORIUS, T. (2009) : Trends und Entscheidungen in der internationalen Wald- und Umweltpolitik und ihre Wirkungen auf die baden-württembergische Forstpolitik. Remagen-Oberwinter (Dr. Kessel) – Freiburger Schriftenreihe zur Forst- und Umweltpolitik (in press).
-

- 
- HOGL, K. (2000): The Austrian domestic forest policy community in change? Impacts of the globalization and Europeanisation of forest politics. *Forest policy and economics* 1: 3-13.
- HUMPHREYS, D. (2009): Discourse as ideology: Neoliberalism and the limits of international forest policy. *Forest Policy and Economics* 11: 319-325.
- ICP FORESTS (2001): Manual on methods and criteria for harmonized sampling, assessment, monitoring and analysis of the effects of air pollution on forests. 4th edition edited by the Programme Coordinating Centre, Hamburg, Germany.
- ICP FORESTS (2004): The conditions of forests in Europe – 2004 Executive report; UNECE/BFH.
- ICP FORESTS (2008): The conditions of forests in Europe – 2004 Executive report; International Co-operative Programme on Assessment and Monitoring of Air Pollution Effects on Forests. Prepared by: Institute of World Forestry. Hamburg.
- IPCC (2000): Special Report on Land Use, Land-Use Change and Forestry. Geneva / Switzerland, Available online on: [www.grida.no/climate/ipcc/land\\_use/index.htm](http://www.grida.no/climate/ipcc/land_use/index.htm).
- IPCC (2002): Climate Change and Biodiversity. IPCC Technical Papers V.
- IPCC (2007): Climate change 2007: Synthesis report; Summary for Policymakers.
- KANKAANPÄÄ, S. & CARTER, T. K. (2004): An overview of forest policies affecting land use in Europe. *Finnish Environment* 706. Finish Institute, Helsinki.
- KLINS, U. (2000): Die Zertifizierung von Wald und Holzprodukten. Eine forstpolitische Analyse. Fakultät für Forstwissenschaften der Technischen Universität München, Dissertation.
- KNOERZER, D.; KÜHNEL, U.; THEODOROPOULOS, K. & REIF, A. (1995): Zur Aus- und Verbreitung neophytischer Gehölze in Südwestdeutschland mit besonderer Berücksichtigung der Douglasie. – In: BÖCKER, R.; GEBHART, W.; KONOLD, W. & SCHMIDT-FISCHER, S. (ed.): Symposium Neophyten – Gefahr für die Natur? Gebietsfremde Pflanzenarten: Auswirkungen auf einheimische Arten, Lebensgemeinschaften und Biotope; Kontrollmöglichkeiten und Management. – Landsberg, pp. 67-81.
- KONOPATZKY, A. (1998): Vegetationswandel in den Wäldern des nordostdeutschen Tieflandes. – *AFZ-Der Wald* 53 (11): 593-596.
- KONIJNENDIJK, C. (2000): Adapting forestry to urban demands - role of communication in urban forestry in Europe, *Landscape and Urban Planning* 52: 89-100, Elsevier Science.
- KOKKO, K.; TOIVONEN, R.; PELKONEN, P.; MÄKI-HAKOLA, M.; LETTO-VANAMO, P. ENROTH, R.-R.; TAHVANAINEN, T. (2006): EU Competences in Forestry Policy. Finnish Ministry of Agriculture and Forestry.
- KRAEMER, R. A., KLASING, A., HOMEYER, I. VON (2003): The EU Open Method of Coordination: Risks and Chances for Environmental Policy. Paper for the Conference "Sustainable Development in an Enlarged Union – Linking National Strategies & Strengthening European Coherence" 27 – 29 April 2003 in Vienna, Austria.
- LAMBIN, E.; TURNER, B.; GEIST, H.; AGBOLA, S.; ANGELSEN, A.; BRUCE, J.; COOMES, O.; DIRZO, R.; FISCHER, G.; FOLKE, C.; GEORGE, P.; HOMEWOOD, K.; IMBERNON, J.; LEEMANS, R.; LI, X.; MORAN, E.; MORTIMORE, M.; RAMAKRISHNAN, P.; RICHARDS, J.; SKANES, H.; STEFFEN, W.; STONE, G.; SVEDIN, U.; VELDKAMP, T. & VOGEL, C.; XU, J. (2001): The causes of land-use and land-cover change: moving beyond the myths. *Global Environmental Change* 11: 261–269.
- LASCH, P. LINDNER, M. ERHARD, M.; SUCKOW, F.; WENZEL, A. (2002): Regional impact assessment on forest structure and functions under climate change—the Brandenburg case study. *Forest Ecology and Management* 162: 73–86.
-



- 
- MCPFE (1993): Resolution H1, General Guidelines for the Sustainable Management of Forests in Europe. Second Ministerial Conference on the Protection of Forests in Europe, Helsinki, Finland.
- MCPFE (1993a): Resolution H2, General Guidelines for the Conservation of the Biodiversity European Forests, Second Ministerial Conference on the Protection of Forests in Europe. Helsinki, Finland.
- MCPFE (1993b): Resolution H4, Strategies for a Process of Long-term Adaptation of Forests in Europe to Climate Change, Second Ministerial Conference on the Protection of Forests in Europe. Helsinki, Finland.
- MCPFE (1993c): General declaration. Second Ministerial Conference on the Protection of Forests in Europe. Helsinki, Finland.
- MCPFE (1998a): Resolution L1 People, Forests and Forestry – Enhancement of Socio-Economic Aspects of Sustainable Forest Management. Third Ministerial Conference on the Protection of Forests in Europe. Lisbon, Portugal.
- MCPFE (1998b): Resolution L2, Pan-European Criteria, Indicators and Operational Level Guidelines for Sustainable Forest Management, Third Ministerial Conference on the Protection of Forests in Europe. Lisbon, Portugal.
- MCPFE (2002): Improved Pan-European qualitative and quantitative criteria and indicators for sustainable forest management. as adopted by the MCPFE Expert Level Meeting 7-8 October 2002, Vienna, Austria.
- MCPFE (2003): State of Europe's Forests 2003. The MCPFE Report on Sustainable Forest Management in Europe. Jointly prepared by the MCPFE Liaison Unit Vienna and UNECE/FAO.
- MCPFE (2003a): Resolution V1 Strengthen synergies for sustainable forest management in Europe through cross-sectoral co-operation and National forest programmes. Fourth Ministerial Conference on the Protection of Forests in Europe. Vienna, Austria.
- MCPFE (2003b): Vienna Resolution V4, Conserving and enhancing forest biological diversity in Europe, Fourth Ministerial Conference on the Protection of Forests in Europe. Vienna, Austria.
- MCPFE (2003c): Resolution V5, Climate change and sustainable forest management in Europe, Fourth Ministerial Conference on the Protection of Forests in Europe. Vienna, Austria.
- MCPFE (2007): State of Europe's Forests 2007. MCPFE Report on Sustainable Forest Management in Europe. Jointly prepared by MCPFE Liaison Unit Warsaw, UNECE and FAO. Ministerial Conference on the Protection of Forests in Europe Liaison Unit Warsaw.
- MCPFE (2008): Exploring the Possibility for a Legally Binding Agreement on Forests in Europe, Adopted at the MCPFE Expert Level Meeting, Oslo, Norway, 7-8 May 2008.
- MEMMLER, M. (2003): Der Konflikt um die Novellierung des Bundeswaldgesetzes. Advocacy-Koalitionen und „belief systems“. Diplomarbeit an der Fakultät für Forst- und Umweltwissenschaften der Albert Ludwigs-Universität Freiburg.
- MOFFAT, A.J., DAVIES, S. & FINÉR, I. (2009): Reporting the results of forest monitoring — an evaluation of the European forest monitoring programme. *Forestry* 81: 75-90.
- MOORE, B. (2005): Forest Health & Biosecurity Working Papers. Alien Invasive Species: Impacts on Forests and Forestry. A Review. Working Paper FBS/8E, FAO, Rome.
- MUFV (MINISTERIUM FÜR UMWELT, FORSTEN UND VERBRAUCHERSCHUTZ RHEINLAND-PFALZ) (2008): Waldzustandsbericht 2008. Mainz.
-

- 
- NISKANEN, A.; PETTENELLA, D & SLEE, B. (2007): Barriers and Opportunities for the Development of Small-scale Forest Enterprises in Europe, *Small-scale Forestry* 6:331–345, Springer.
- PISTORIUS, T. (2008): Eignung von Kohlenstoffbilanzen als Entscheidungsgrundlage für eine Einbindung von Forst- und Holzwirtschaft in die nationale Klimapolitik. Albert-Ludwigs-Universität Freiburg. Dissertation. Available online on:  
[http://www.freidok.unifreiburg.de/volltexte/4626/pdf/Dissertation\\_Pistorius\\_08\\_03\\_10.pdf](http://www.freidok.unifreiburg.de/volltexte/4626/pdf/Dissertation_Pistorius_08_03_10.pdf).
- PÜLZL, H. & NUSSBAUMER, E. (2006): "Modes of governance" for European Forest Policy. Coordination, co-operation and communication. Edited by the Federal Ministry of Agriculture, Forestry, Environment and water Management, Vienna.
- PUTMAN, R.J. (1996): Ungulates in temperate forest ecosystems: perspectives and recommendations for future research. *Forest Ecology and Management* 88: 205-214.
- RADAELLI, C. (2003): The Open Method of Coordination: A new governance architecture for the European Union? Rapport Nr. 1, Swedish Institute for European Policy Studies (SIEPS), Stockholm.
- RAMETSTEINER, E.; NILSSON, S.; BÖTTCHER, H.; HAVLIK, P.; KRAXNER, F.; LEDUC, S.; OBERSTEINER, M.; RYDZAK, F.; SCHNEIDER, U.; SCHWAB, D. & WILLMORE, L. (2008): Study of the Effects of Globalization on the Economic Viability of EU Forestry. International Institute for Applied Systems Analysis.
- REQUARDT, A.; POKER, J.; KÖHL, M.; SCHUCK, A.; JANSE, G.; MAVSAR, R.; PÄIVINEN, R. (2007): Feasibility study on means of combating forest dieback in the European Union. BFH & EFI Technical Report.
- REQUARDT A, SCHUCK A, KÖHL M. (2009): Means of combating forest dieback - EU support for maintaining forest health and vitality. *iForest* 2: 38-42. Available online on:  
<http://www.sisef.it/iforest/show.php?id=480>.
- SABATIER, P. A. (1987): Knowledge, Policy-Oriented Learning, and Policy Change. *An Advocacy Coalition Framework. Knowledge: Creation, Diffusion, Utilization* 8 (4): 649-692.
- SABATIER, P., LOOMIS, J. & MCCARTHY, C. (1995): Hierarchical controls, Professional Norms, Local Constituencies, and Budget Maximization: An analysis of U.S. Forest Service Planning Decisions. *American Journal of Political Science* 39 (1): 204-242.
- SABATIER, P. & JENKINS-SMITH, H. (1999): The Advocacy Coalition Framework: An Assessment. In: SABATIER, P., (Ed.) *Theories of the Policy Process*. Westview Press, Boulder (Co.), pp 117-166.
- SABATIER, P. & WEIBLE, C. (2007): The Advocacy Coalition Framework: Innovations and Clarifications. In: SABATIER, P., (Ed.), *Theories of the Policy Process*. Westview Press, Boulder (Co.), 2nd edition, pp. 189-220.
- SAN-MIGUEL-AYANZ, J., SCHMUCK, G., FLIES, R., SCHULTE, E. & SEOANE, I. (2005): Towards a forest information system for Europe. In: *Proceedings of the 16th International Workshop on Database and Expert Systems Applications (DEXA '05)*, Copenhagen, 22-26 August 2005, pp. 669-673.
- SCHAICH, H. & KONOLD, W. (2005): Naturschutzfachliche Grundlagen und Möglichkeiten der Operationalisierung eines Honorierungssystems ökologischer Leistungen im Wald. In: WINKEL, G.; SCHAICH, H.; KONOLD, W. & VOLZ, K.-R. (2005): *Naturschutz und Forstwirtschaft. Bausteine einer Naturschutzstrategie im Wald*. BfN (Bundesamt für Naturschutz, Bonn) Schriftenreihe Naturschutz und Biologische Vielfalt, pp. 222-304.
- SCHANZ, H. (1996): Forstliche Nachhaltigkeit. Sozialwissenschaftliche Analyse der Begriffsinhalte und -funktionen. *Schriften aus dem Institut für Forstökonomie* 4, Universität Freiburg.
-

- 
- SCHERZINGER, W. (1996): Naturschutz im Wald. Qualitätsziele einer dynamischen Waldentwicklung. Ulmer Verlag, Stuttgart.
- SCHIEGG, K. (1998): Totholz bringt Leben in den Wirtschaftswald. – Schweizerische Zeitschrift für Forstwesen 149: 784-794.
- SCHMITT, C.; PISTORIUS, T. & WINKEL, G. (2009): Global Conservation of Forest Biodiversity: Options for a Forest Protected Area Network under the CBD. BfN (Bundesamt für Naturschutz, Bonn) Schriftenreihe Naturschutz und Biologische Vielfalt (in press).
- SCHRAML, U. (2005): The nameless counterpart: a reconstruction of the experiences of private forestry extension officers with their clients. *European Journal of Forest Research* 125: 79-88.
- SCHRAML, U. (2006): Between Legitimacy and Efficiency: The Development of Forestry Associations in Germany. *Small-scale Forest Economics, Management and Policy*, 4(3): 251-268.
- SCHRAML, U.; DETTEN, R. VON; WURZ A.; SCHULZ-MONTAG, B.; STEINMÜLLER, K.; HIRSCHFELD, J.; OTT, K.; EGAN-KRIEGER, T. VON; BRÜGGEMANN, B.; RIEHLE, R.; BEHRENDT, S. & MOSER, K. (2009): „Waldzukünfte“: Herausforderungen für eine zukunftsfähige Waldpolitik in Deutschland. Policy Paper – Zukünfte und Visionen Wald 2100 (eds.). Available online on: [http://www.ioew.net/downloads/downloaddateien/Waldzukuenfte\\_Broschuere\\_Policy\\_Paper.pdf](http://www.ioew.net/downloads/downloaddateien/Waldzukuenfte_Broschuere_Policy_Paper.pdf).
- SCHRÖTER, D.; CRAMER, W.; LEEMANS, R.; PRENTICE, C.; ARAÚJO, M.; ARNELL, N.; BONDEAU, A.; BUGMANN, H.; CARTER, T.; GRACIA, C.; DE LA VEGA-LEINERT, A.; ERHARD, M.; EWERT, F.; GLENDINING, M.; HOUSE, J.; KANKAANPÄÄ, S.; KLEIN, R.; LAVOREL, S.; LINDNER, M.; METZGER, M.; MEYER, J.; MITCHELL, D.; REGINSTER, I.; ROUNSEVELL, M.; SABATÉ, S.; SITCH, S.; SMITH, B.; SMITH, J.; SMITH, P.; SYKES, M.; THONICKE, K.; THUILLER, W.; TUCK, G.; ZAEHLE, S. & ZIERL, B. (2005): Ecosystem Service Supply and Vulnerability to Global Change in Europe. *Science* 130:1333-1337.
- SCOTT, J. & TRUBEK, D. (2002): Mind the Gap: Law and new approaches to governance in the European Union, in: *European Law Journal* 8 (1): 1-18.
- SFC (2008): Standing Forestry Committee - 2008 work programme for implementation of the EU Forest Action Plan. Available online on: [www.mmm.fi/attachments/metsat/kv/5AwN64Qea/SFC\\_work\\_programme\\_for\\_implementation\\_of\\_the\\_EU\\_FAP\\_2008.pdf](http://www.mmm.fi/attachments/metsat/kv/5AwN64Qea/SFC_work_programme_for_implementation_of_the_EU_FAP_2008.pdf).
- SOTIROV, M. (2009): Waldpolitik im Wandel. Eine Politikfeldanalyse im Transformationsprozess Bulgariens. Albert-Ludwigs-Universität Freiburg. Dissertation.
- SPIECKER, H.; MIELIKÄINEN, K.; KÖHL, M. & SKOVSGAARD, J. (1996): Growth Trends in European Forests; Studies from 12 Countries. EFI Research Report 5. Springer-Verlag, Berlin.
- TCD (Trinity College Dublin) (2005): What is policy coherence? Available online on: [http://www.tcd.ie/iis/policycoherence/index.php/iis/policy\\_coherence/what\\_is\\_policy\\_coherence](http://www.tcd.ie/iis/policycoherence/index.php/iis/policy_coherence/what_is_policy_coherence).
- THEESFELD, I., SCHLEYER, C., CALLOIS, J.-M., AZNAR, O. (2008): "Ex-ante Policy Assessment of Agricultural, Environmental, and Rural Policies from an Institutional Perspective: The Procedure for Institutional Compatibility Assessment". Congress paper at the 12th Congress of the European Association of Agricultural Economists (EAAE).
- TREATY OF ROME (1957): Treaty establishing the European Economic Community. Consolidated version including the amendments of the Treaty of Nice of 26 February 2001.
- TREIB, O., BÄHR, H. & FALKNER, G. (2005): Modes of Governance: A Note Towards Conceptual Clarification. *European Governance Papers (EUROGOV)* N-05-02.
- TRUBEK, D. & TRUBEK, L. (2005): Hard and Soft Law in the Construction of Social Europe: the Role of the Open Method of Coordination. *European Law Journal* 11 (3): 343- 364.
-

- 
- T&E (European Federation for Transport and Environment) (2009): Biofuels in Europe: An analysis of EU targets and sustainability requirements with recommendations for future policy.
- UNECE / FAO (2005): European Forest Sector Outlook Study, Main report, Geneva.
- UNITED NATIONS (1992): Report of the United Nations Conference on Environment and Development. Annex III: Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests. A/CONF.151/26 (Vol. III).
- UNITED NATIONS (2007): Resolution 62/98 of the General Assembly on Non-legally Binding Instrument on All Types of Forests.
- WEGENER, G. & ZIMMER, B. (2001): Wald und Holz als Kohlenstoffspeicher und Energieträger. In: SCHULTE, A., BÖSWALD, K. & JOOSTEN, R. (eds.): Weltforstwirtschaft nach Kyoto: Wald und Holz als Kohlenstoffspeicher und regenerative Energieträger. Paderborn.
- WEISS, C. (1977): Research for Policy's Sake: The Enlightenment Function of Social Research. *Policy Analysis* 3: 531-545.
- WIERSUM, K. F. (1995): 200 Years of Sustainability in Forestry: Lessons from History. *Environmental Management* 19 (3): 321-329.
- WINKEL, G. (2007): Waldnaturschutzpolitik in Deutschland. Bestandsaufnahme, Analysen und Entwurf einer Story-Line. Remagen-Oberwinter (Dr. Kessel). *Freiburger Schriften zur Forst- und Umweltpolitik* Band 13.
- WINKEL, G. & MEMMLER, M. (2004): Political science on a tightrope-walk? Analysing and deliberating on the formulation of a new German federal forest act. In: BUTTOUD, G.; SOLBERG, B.; TIKKANEN, I. & PAJARI, B. (eds.) (2004): *The Evaluation of Forest Policies and Programmes*. EFI-Proceedings 52: 167-177. European Forest Institute, Joensuu.
- WINKEL, G.; SCHAICH, H.; KONOLD, W. & VOLZ, K.-R. (2005): *Naturschutz und Forstwirtschaft. Bausteine einer Naturschutzstrategie im Wald*. BfN (Bundesamt für Naturschutz), Bonn. *Schriftenreihe Naturschutz und Biologische Vielfalt* 11.
- WULF, M. (2003): Forest policy in the EU and its influence on the plant diversity of woodlands. *Journal of Environmental Management* 67:15-25.
- VERKERK, P., ZANCHI, G. & LINDNER, M. (2008): Impacts of Biological and Landscape Diversity protection on the Wood Supply in Europe. EFI Technical Report 27. European Forest Institute, Joensuu.
- VOLZ, K.-R. (2002): Die drei Dimensionen der forstlichen Nachhaltigkeit – Oder: wie nachhaltig ist die Forstwirtschaft wirklich? *Schriftenreihe des Deutschen Rates für Landespflege* 74: 62-64.
- ZIEGENSPECK, S., HÄRDTER, U. & SCHRAML, U. (2004): Lifestyles of private forest owners as an indication of social change. *Forest Policy and Economics* 6: 447-458.

## 9 Appendix

### 9.1 Needs for forest protection policy and already established EU policy means<sup>28</sup>

Impact/ Threat	Needs for action		Existing EU policy means		
	Urgency	Potential measures	Regulatory	Financial	Informational
<b>Biotic</b>					
Alien plant species	Rather low <i>Rather high</i>	<ul style="list-style-type: none"> <li>- <i>Prevention of uncontrolled introduction of new species and spread of already introduced species</i></li> <li>- <b>Monitoring on effects of alien plant species on forest biodiversity and forest stability/growth</b></li> <li>- <b>Development of concepts of how to further develop forest landscapes that are currently dominated by alien tree species, including socioeconomic aspects</b></li> <li>- <b>Provision of subsidies /incentives for the planting/creation of mixed stands</b></li> <li>- <b>Installing of an Early-Warning-System</b></li> </ul>	<p><b>EC directives incorporate protective measures linked to the import or introduction of harmful organisms and products (REQUARDT et al. 2009)</b></p>	<ul style="list-style-type: none"> <li>- <i>Natura 2000 payments (compensations) (Art. 46 EAFRD)</i></li> <li>- <i>Payments for voluntary forest-environment commitments (Art. 47 EAFRD)</i></li> </ul>	
Insects and pathogens	High <i>Rather low</i>	<ul style="list-style-type: none"> <li>- <b>Implementation of adaptive and preventive forest management measures: creation of diversity</b></li> <li>- <i>Avoidance of non-native tree species monocultures</i></li> <li>- <b>Monitoring of harmful organisms; installing of an Early-Warning-System</b></li> <li>- <b>Provision of incentives or respective silvicultural prevention measures</b></li> <li>- <i>No assistance of abatement measures in non-native monocultures</i></li> </ul>		<ul style="list-style-type: none"> <li>- <i>Natura 2000 payments (compensations) (Art. 46 EAFRD)</i></li> <li>- <i>Payments for voluntary forest-environment commitments (Art. 47 EAFRD)</i></li> <li>- <b>Reforestation and restoration of forestry potential and the introduction of preventive actions (EAFRD)</b></li> </ul>	<p><b>COM supports research on protection of forests and phytosanitary issues under the 7<sup>th</sup> RFP (FAP KA-9)</b></p>
Game and livestock	<b>Huge regional differences considering need for action</b>	<ul style="list-style-type: none"> <li>- <b>Monitoring and evaluation of impacts caused by game animals</b></li> <li>- <b>Application of appropriate hunting/wildlife management</b></li> <li>- <b>Legal clarification of property rights</b></li> <li>- <i>Increase carrying capacity of forest ecosystems (structural diversity)</i></li> <li>- <b>Funding of prevention measures only, if high game/livestock density is not caused by forest management</b></li> </ul>			

<sup>28</sup> Text **bold and black**: relevant to **both forestry and biodiversity** perspective

Text *red and italic*: relevant to **biodiversity** perspective

Text in *blue*: relevant to **forestry** perspective

Abiotic					
Storms	High <i>None</i>	<p><b>Preventive measures:</b></p> <ul style="list-style-type: none"> <li>- Promotion of mixed and structured forests comprised of native species - Reduce rotation periods</li> </ul> <p><b>Reactive measures:</b></p> <ul style="list-style-type: none"> <li>- Support for the reprocessing of windthrow</li> <li>- Possibly: timber market interventions in case of severe and extensive storm events</li> <li>- Reduce reprocessing of windthrow and allow for natural forest regeneration</li> </ul>		- Reforestation and restoration of forestry potential and the introduction of preventive actions (EAFRD)	
Effects of climate change	No or medium need for action depending on the effects on forestry or biodiversity	<p><b>Preventive measures:</b></p> <ul style="list-style-type: none"> <li>- Creation of more diverse and thus resilient forest stands</li> <li>- Enhancement of conversion of 'climatically critical' stands (e.g. conifer forests)</li> <li>- Introduction of more climatically robust alien tree species</li> <li>- Shortening of rotation periods in order to increase flexibility</li> <li>- Enforcement of monitoring to analyze how climate change affects increment, vitality and biodiversity of forests</li> <li>- Creation of protected areas in order to study (and understand) the impacts of climate change on natural dynamics, and also as corridors to enable migration processes</li> </ul> <p><b>Reactive measures:</b></p> <ul style="list-style-type: none"> <li>- Active management in severely effected forests stands; possibly even active preservation measures to save rare species that will otherwise be lost</li> </ul>			<p>Com:</p> <ul style="list-style-type: none"> <li>- coordinates on responds on obligations of Articles 3.3 and 3.412 of Kyoto Protocol</li> <li>- will coordinate discussion, and support research, training and studies on the impact of and adaptation to climate change (FAP KA-6)</li> </ul>
Fire	High (e.g., in Southern Europe)  <i>Moderate (depending on type of forest ecosystem and fire)</i>	<p><b>Preventive measures</b></p> <ul style="list-style-type: none"> <li>- Adapted forest management</li> <li>- Construction of forest roads</li> <li>- Conversion of monocultures towards mixed forest stands</li> <li>- Monitoring and research activities</li> </ul> <p><b>Reactive measures</b></p> <ul style="list-style-type: none"> <li>- Support for reforestation (close-to nature, mixed and diverse forests using native species, no support for susceptible alien coniferous monocultures)</li> </ul>		- Forest fire prevention is addressed in the European Regional Development Fund (Requardt et al. 2009), EAFRD or LIFE+ Regulations	<ul style="list-style-type: none"> <li>- Com works towards the development of European Forest Fire Information System (FAP KA-9)</li> <li>- European Forest Fire Information System (EFFIS) addresses pre-fire and post-fire conditions (Requardt et al. 2009)</li> </ul>

Acidification, eluviation eutrophication of forest soils	<p>Medium need (reduce emissions, liming)</p> <p>High need (reduce nitrogenous emissions, only cautious liming)</p>	<ul style="list-style-type: none"> <li>- Apply measures outside the forest sector to reduce emissions</li> <li>- Monitoring, particularly of nitrogen depositions, including effects on forest growth, vitality, and forest biodiversity</li> <li>- Support for liming in case of high acid depositions and at sites that are not likely to experience significant losses of diversity, no (support for) liming of non-native monocultures as well as in protected areas</li> <li>- No support for liming of non-native monocultures as well as in protected areas</li> <li>- Support of a conversion of non-native forests types that catalyst acidification processes on already acid sites by site-adapted stands</li> </ul>		<p>Payments for voluntary forest-environment commitments (Art. 47 EAFRD)</p>	<p>- MS monitoring systems to assess atmospheric pollution and its impact on forests are funded through the Life+ Regulation (EEA 2008)</p>
<b>Directly human-induced</b>					
<b>Impact/Threat</b>	<b>Needs for action</b>		<b>Existing EU Policy means</b>		
	Urgency	Potential measures	Regulatory	Financial	Informational
Land use changes (deforestation), fragmentation	<p>Low need</p> <p>Medium need</p>	<ul style="list-style-type: none"> <li>- Introduce Land use planning and environmental assessment also for forest road construction</li> <li>- Avoid dense net of skidding trails</li> </ul>	<p>Natura 2000 (birds &amp; habitats directives): EU wide network of nature protection sites established under the Habitats Directive comprising Special Areas of Conservation (SAC) designated by Member States and Special Protection Areas (SPAs) designated under the 1979 Birds Directive.</p> <p>The favourable state of conservation of forests in Natura 2000 protected areas has to be maintained and achieved respectively</p>	<ul style="list-style-type: none"> <li>- First afforestation of agricultural land (Art. 43 EAFRD)</li> <li>- Contribution to the purchase of land aiming at the maintaining or restoring integrity of NATURA 2000 sites (Life+)</li> </ul>	<ul style="list-style-type: none"> <li>- Com proposes SFC to consider monitoring of the fragmentation of forests and of the effects of forest expansion on biodiversity (FAP KA-9)</li> <li>- Forest fragmentation and the effects of land-use change on forest ecosystems are object of several European monitoring and research activities (EEA 2008)</li> </ul>

Forest management	<p>Medium Need</p> <p><i>High need</i></p>	<ul style="list-style-type: none"> <li>- Promote and subsidize sustainable forest management <i>with a particular view on forest biodiversity (ecosystem approach)/ with a particular view on forest stability and productivity</i></li> <li>- Establish and improve forest monitoring systems <i>with a view on forest growth/vitality and forest biodiversity</i></li> <li>- Create incentives to overcome obstacles arising from the fragmentation of forest holdings <i>in view of improving sustainable timber production/ in view of improving ecosystem management</i></li> <li>- <i>Establish and improve binding management standards</i></li> <li>- <i>Establish and improve protected area networks</i></li> </ul>		<ul style="list-style-type: none"> <li>- First afforestation of non-agricultural land (Art. 45 EAFRD)</li> <li>- Natura 2000 payments (compensations) (Art. 46 EAFRD) <ul style="list-style-type: none"> <li>- <i>Payments for voluntary forest-environment commitments (Art. 47 EAFRD)</i></li> <li>- <i>Grants for non-productive (amenity) investments (Art. 49 EAFRD)</i></li> <li>- <i>Contribution to implementation of EU nature and biodiversity policy, most notably Habitats and Birds Directives (Life+)</i></li> <li>- <i>Support to the further development and implementation of Natura 2000 network (e.g. site and species management and planning, purchase of land) (Life+)</i></li> </ul> </li> <li>- Funding for improvement and development of infrastructure <i>(restructuring and developing physical potential and promoting innovation) (Art. 20b EAFRD)</i></li> <li>- Measures to diversify the rural economy: support for the creation and development of micro-enterprises (Art. 52a(ii) EAFRD)</li> <li>- Measures to diversify the rural economy (Art. 52a(iii) EAFRD): Encouragement of tourism activities including recreational infrastructure (Art. 55b EAFRD)</li> <li>- Measures aimed at promoting knowledge and improving human potential vocational training and information actions; set-up and usage of advisory systems (Art. 20a EAFRD):</li> <li>- Measures aimed at restructuring and developing physical potential and promoting innovation: improvement of economic value of forests; added value for forest products; cooperation in developing new technologies (Art. 20b EAFRD)</li> <li>- Measures to improve the quality of life in the rural areas (Art. 52b (iii) EAFRD): <ul style="list-style-type: none"> <li>i) conservation and improvement of rural heritage, including management plans for protected areas (e.g. Natura 2000);</li> <li>ii) awareness raising;</li> <li>iii) investments for preservation, restoration, improvement and protection of the natural heritage</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- Com proposes SFC to establish Working Group on valuation and compensation of non-marketed goods and services (FAP KA-3)</li> <li>- Com &amp; MS exchange experiences on cooperation between forest owners and enhance education and training in forestry (FAP KA-5)</li> <li>Com proposes to SFC: <ul style="list-style-type: none"> <li>i) to exchange experiences on implementation of Natura 2000 in forest areas;</li> <li>ii) to consider forest biodiversity monitoring as a pilot exercise in the framework of the current work on EU biodiversity indicators;</li> <li>iii) evaluate existing information and scientific studies on the necessary area coverage of and modalities for protection of forests undisturbed by man;</li> <li>iv) follow implementation of CBD and other decisions regarding forest biodiversity (FAP KA-7)</li> </ul> </li> <li>- European Forest Genetic Resources Programme (EUFORGEN) is a collaborative mechanism among European countries to promote conservation and sustainable use of forest genetic resources (EEA 2008)</li> <li>- Monitoring of conservation status, including setting up procedures and structures for such monitoring (Life+)</li> </ul>
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General (cross-cutting) issues	
Existing EU Policy means	
Financial instruments	Informational instruments
<p>Life+:</p> <ul style="list-style-type: none"> <li>- promotes collection, analysis and dissemination of policy-relevant information concerning forests and environmental interactions,</li> <li>- works on project basis and co-financing (limited resources as compared to e.g. Forest Focus or ICP Forests)</li> <li>- supports harmonisation and effectiveness of forest monitoring activities and data collection systems and making use of synergies by creating links between monitoring mechanisms established at sub-national, national, Community and global level,</li> <li>- stimulates synergies between specific forest-related issues and environmental initiatives and legislation (e.g. Thematic Strategy for soil protection, Natura 2000, Directive 2000/60/EC),</li> <li>- contributes to Sustainable Forest Management (SFM), in particular, by collecting data related to the improved pan-European Criteria and Indicators (C&amp;I) for SFM as adopted by the MCPFE (2003)</li> <li>- builds capacities at national and Community level to allow for coordination and guidance on forest monitoring (REQUARDT ET AL. 2007)</li> </ul>	<ul style="list-style-type: none"> <li>- Com &amp; MS will work towards a forest monitoring (environmental indicators, economic &amp; social); Information, could be expanded to cover MCPFE indicators (FAP KA-8)</li> <li>- Com &amp; MS will develop communication strategy on forestry (FAP KA-18)</li> <li>- Com encourages MS to form groupings to study particular regional problems with the condition of forests (FAP KA-9)</li> <li>- Forests will be one component of European Ecosystem Assessment by the EEA for 2012 (EEA 2008)</li> <li>- Biodiversity and forests issues are increasingly important in EU research framework programs (EEA 2008)</li> <li>- The European information and observation network &amp; EU data centres for biodiversity and for forests should improve data at MS &amp; EU levels (EEA 2008)</li> </ul>

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## **9.2 Summary of the Expert Workshop “EU policy options for the protection of European forests against harmful Impacts”, Brussels, 7 – 8 May, 2009**

### **1. Introduction**

#### ***1.1 Political background***

Europe's forests offer a plethora of ecosystem services for society, e.g., timber, recreation, biodiversity, and carbon storage. Sustainable forest management and conservation measures are applied to ensure the lasting deliverance of these services. Forests and forest management, however, face a variety of challenges due to ecological and socio-economic developments, such as climate change, globalisation and changing demands of societies. Those challenges result in a variety of potentially harmful impacts on forests, from abiotic sources such as droughts and emissions, of biotic origin such as alien and invasive species, and from directly human induced factors such as fragmentation or inadequate forest management.

Depending on the perspective, these impacts can be characterised as forest threats. Challenges, impacts and threats respectively are addressed by forest-, climate- and environmental policies at an international, EU- and national level. These policies reflect different perspectives and are subject to different governance modes. Altogether, they form a dense multilevel web of regulatory, economical, and informational measures that influence forest management and conservation.

The EU Forestry Strategy and the Forest Action Plan are the core of European forest policies. They are, however, mostly restricted to coordination and communication actions. At the same time, other EU policies, e.g., nature conservation policy (particularly Natura 2000) as well as the Common Agricultural Policy impact European forests and forest management.

In this context, the European Commission assigned the Institute of Forest and Environmental Policy, University of Freiburg, in cooperation with the Ecologic Institute, Berlin, to carry out the study: “Implementation of the EU Forestry Strategy: How to protect EU Forests against harmful Impacts?” in November 2008. The study shall contribute to the requests of the Council and the Commission by reviewing existing ways and means to facilitate coordination, communication and cooperation between different policies which have an influence on forests and forestry within the European Union.

On May 7 – 8, 2009 the expert workshop “EU policy options for the protection of European forests against harmful impacts” took place in the European Forestry House, Brussels. The workshop provided the opportunity to discuss crucial policy issues on forest protection with relevant experts from academia, administration and NGOs. It represented a significant contribution to the above mentioned study.

This paper summarizes the discussions and main results of the workshop. It does not aim to construct a coherent rationale of the workshop results, but rather to trace the course of the workshop discussion.

#### ***1.2 Workshop objectives***

The main objectives of the workshop were to identify which specific environmental challenges would necessitate a Community approach to protect European forests and to assess options for a Community initiative on forest protection.

To achieve the objectives the discussion process was orientated around the following key questions:

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- Which ‘threats’ are the most challenging for European forests?
  - Which policy interventions & instruments are needed to adequately address these threats? Are existing policies sufficient/ coherent? Which need for action exists on EU policy level?
  - Which policy options exist at the European Community level?
  - What are the strengths and weaknesses of different policy options? Which are the most appropriate?

The workshop alternated between plenum sessions (partly with keynote speakers) and small working groups in order to ensure maximum involvement of the different participants. Please find the agenda at the end of the document.

## 2. Workshop Contents & results

### 2.2 Welcome and introductory session

The workshop participants were welcomed by *Mr. Joost Van de Velde of the European Commission*, who stressed the role of this workshop in giving indications as to the directions that the study, but also the broader policy process, could take in the long run. He specifically pointed out that the Forest Action Plan indicates that effort is needed to improve forest protection, monitoring and information.

Afterwards *Mr. Georg Winkel (IFP Freiburg)* briefly presented the objectives and structure of the workshop as outlined above. He also placed the workshop in the context of the study on *Implementation of the EU Forestry Strategy: "How to protect EU Forests against harmful impacts?"* and presented its wider objectives and methodology.

A deeper insight on the workshop background was provided through two presentations.

The first presentation by *Mrs. Lydia Rosenkranz (IFP Freiburg)* covered the main ecological and socioeconomic trends that can be observed and respective future challenges faced by European forests. Biotic, abiotic and human induced impacts and resulting threats to the forests, based on the background paper that was prepared by IFP and Ecologic Institute, were presented.

A second presentation by *Mr. Timo Kaphengst (Ecologic Institute)* gave an overview of forest and forest related policies at different governance levels (EU, pan-European, international). Regarding policy coherence, he briefly outlined conflicts and synergies between the various corresponding policy fields that affect European forests.

### 2.3 Keynote speeches: EU environmental and forest policy governance modes

Four keynote presentations were given to illustrate different governance modes, from coordination to regulation, in EU forest and forest-related policies. The presentations served as a useful basis to gain an overview of existing policies impacting forests and to initiate a discussion on possible policy options at Community level.

#### 2.3.1 EU Forest Policy (Metodi Sotirov, IFP Freiburg)

The presentation began with stating that to date there has been **no specific EU Common Forest Policy** due to lacking provisions in the relevant EC/EU primary legal basis. However, it was shown that there has been a long history of forest-related Community supporting actions under established Community policies (e.g., agriculture, environment). Furthermore, the actual EU forest policy builds on several EU policy processes and decisions that build on one another. In particular, an EU Forestry Strategy was developed in 1998, followed by 2005 Council conclusions indicating the need for an EU Forest Action Plan (which was adopted in 2006) and further improvement of coordination, cooperation and communication.

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In the central part of the presentation, the defining characteristics of the current mode of governance within the EU forest policy were discussed. They are reflected in **subsidiarity and shared responsibility** between Member States as well as the need for specific **regional approaches** and actions in light of different natural, socio-economic and cultural conditions. In addition, the EU forest policy defines sustainable forest management (SFM) and the multifunctional role of forests and forestry for society as being its key objectives. Moreover, concrete implementation mechanisms were precisely discussed around the questions of involved actors, defined competences, institutional framework for co-ordination and the different types of policy instruments.

In the closing portion, it was concluded that the nature of the current EU forest policy mode of governance can be assessed as being an **abstract and non-legally binding approach**; based on **national sovereignty and broader Community support**. In addition, the current EU forest policy is characterised by **complex interactions** with other (existing) Community policies & regulations and voluntary actions by Member States which are to a great extent free to choose from objectives and instruments that best serve national and/or regional needs.

### 2.3.2 Lessons to be drawn from the EU Water Framework Directive (Thomas Dworak, Ecologic Institute Vienna)

The Water Framework Directive (WFD), agreed on by the Member States in 2000, introduced a **holistic approach** to the management of water as a cross sectoral issue. The WFD's aim is to achieve a high status of **environmental protection of waters** (quality and quantity) by 2015, thus allowing for a wide range of measure to achieve this target. Its approach is unique, as management is initially developed and organised at the **river basin level** according to natural hydrological boundaries as opposed to the usual administrative management units such as provinces or communities.

#### **Key points:**

There are fundamental **differences but also similarities** between water and forest: the similarities relate to the high amount of **ecosystem services** provided by water bodies and forests, the increasing pressure on these ecosystems and their services and the linkages between ecosystems and the long term time scale for restoration. The main difference lies in the very clear **trans-boundary nature** of water issues (including upstream-downstream relations) and the human right quality of "**access to water**".

Implementation framework: a **Common Implementation Strategy (CIS)** was elaborated in order to address challenges in a co-operative and coordinated way, to limit the risks of bad application and subsequent disputes, and to support the Commission in delivering on its obligations for further policy development (e.g. Working group F on Floods). The major functions of the CIS are communication and information between Member States, to develop a common but flexible understanding and interpretation of the WFD and to give guidance on the implementation of complex and critical tasks. The CIS, nevertheless, produces a lot of information which sometimes results in a lack of consistency and transparency; also, it is not yet sure what its effect on implementation will be.

Lessons learned from the WFD (possibly in relation to future forest policies):

- Common EU approaches have the advantage of **sharing the burden** of developing suitable solutions
- **Stakeholder involvement** increases resources and can support implementation
- The organisation structure for implementation should be kept **simple**
- Other **sectors** should be involved right from the beginning
- A clearly defined **science –policy** link is a benefit
- **Consistency** between the different work flows must be ensured
- Agreement on basic definitions ensures **comparability**

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### 2.3.3 Support for forests under the EU's rural development policy (Peter Wehrheim, DG Agriculture)

Measures for the general support of forests and for forest protection can be found under the second pillar of the Common Agriculture Policy (CAP) which entails funding for a wide range of **rural development measures**. They are divided into four axes according to their priority area and the actors to be involved. In contrast to the first pillar covering market and income support measures, the rural development programmes are co-financed and implemented by Member States and/or communities. Forestry measures ranging from the **improvement of the economic value of forests, afforestation, Natura 2000 payments and restoration activities** are components of axis 1 and 2 of the European Agricultural Fund for Rural Development (EAFRD).

#### **Key points:**

The resources from the EAFRD Member States available for forestry-specific (EUR 6.2 billion) and forestry-related measures (EUR 1-2 billion) add up to **approximately EUR 8 billion for the period of 2007-2013**) These amounts correspond to about 9 % of total EAFRD funding (not including Health Check and Recovery Package). The support for the second pillar has been strengthened by **Health Check programmes and the Recovery Package**, which provide additional funding through an increased modulation rate and direct support from the EU.

### 2.3.4 Natura 2000 network – Forest component (Mariam Sanchez Guisandez, DG Environment)

The Natura 2000 network, enacted by the **Birds and the Habitats Directive**, established a network of protected areas throughout the EU. Currently the process of site designation is almost finished and the management and implementation phase has begun. The scientific bases of the Natura 2000 network lies in site selection criteria, the definition of objectives and the listing of habitats and species of Community interest. The in-the-field implementation of the network falls under **Member States competences**.

#### **Key points:**

**Management** of Natura 2000: Human activities and economic development are not *per se* prohibited in Natura 2000 protected areas. In some cases certain economic activities can even be essential or characteristic of the protected habitats. In other cases a compromise between economic and conservation interests has to be sought. In this aim the Habitats Directive foresees a **procedure to evaluate projects affecting the protected site** according to (1) the nature of their impact on the site, (2) a "Nature impact assessment", (3) existing alternatives, (4) and the public and priority interest of the project. Only if this procedure has been applied a project can be implemented. Compensation measures have to be developed if the impact cannot be avoided and serves public interests.

EU funding for the Natura 2000 network is built upon two separate sources: the **LIFE funding programmes** and the national **Rural Development Programmes** under EAFRD. Funding through rural development measures is dependent on the selection of specific Natura 2000 related measures by the Member States, and farmers' application for these measures.

During the discussion after the presentation, the current LIFE+ funding available for the management of Natura 2000 sites was described as being insufficient by several workshop participants.

## **2.4 Working groups on threats**

After the presentations, two working groups were formed to discuss the main factors currently threatening European forests. The differentiation of threats between biotic (pests, diseases, browsing), abiotic (e.g., storms, fires), and directly human induced that had been

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suggested by the organisers was eventually dropped to provide for a broader discussion in the working groups.

The working groups aimed for defining and prioritising 'threats' to EU forests, discussing the need for action at the Community level and finally developing options for response to the identified threats. Summaries and conclusions of the working group discussions were presented to the plenary.

#### 2.4.1 Definition of threats to EU forests

**Key arguments** in the discussion on the definition of threats:

- **Threats are often strongly related to national and regional contexts** resulting in different management strategies according to regional conditions. For example, risk from forest fires is a core issue for southern-European countries. Many differences also exist in the perception of threats across Europe according to natural and socio-economic conditions. Grazing in the south and browsing in the north are threats that are widely neglected in monitoring and current policies.
- Many threats are tightly connected to each other and can only be understood when looking at **long term interactions** in forest ecosystems. For instance, storms can render trees more susceptible to insect pests.
- The differentiation between a **'commodity' and an 'amenity' perspective** on threats, which was elaborated in the background paper, was mostly considered to be helpful for an informed discussion about perceptions and the acceptance of possible steps towards better forest protection. It also helps to understand the often observed lack of forest policy coherence within EU policies and between Member States.
- It was noted that threats are often only **assessed by the direct (economic) damage** they cause, which is rather related to the 'commodity' perspective on forests. In contrast, some perceived threats also bear rather positive socio-economic side-effects, e.g. climate change can increase the productivity of forest ecosystems through the effects of carbon fertilisation and rising temperature in Northern countries.
- The significance of threats is also characterised by its **perception by the public**. However, many (ecosystem) services provided by forests and their social benefits lack attention. Consequently, direct and indirect effects of these threats on the environment have to be highlighted and communicated in a comprehensible way.
- Instead of being a threat itself **climate change** has been characterised as a **mega-trend**; exacerbating the effects and frequency of threats such as pests, fires and floods. Besides direct adaptation activities such as adjusting tree species compositions in forests, it was stated that, over time, forests also adapt themselves to changing climate conditions through natural processes. Long life spans of forest trees and long lasting processes within forest ecosystems are likely to make climate change particularly challenging for forest management. Consequently, there is a need for interpreting the effects of climate change on forests from a long time-scale perspective when adaptation measures are developed. The remaining problem with adaptation to climate change, however, lies in the **uncertainty** about the degree of the effects' severity and its factual regional distribution.
- In contrast to climate change, the threats resulting from **alien invasive species (AIS)** are more difficult to convey to the public due to the prior knowledge needed to distinguish between native and invasive species. Apart from this difficulty of perception, AIS create a great and broadly underestimated threat to forest ecosystems, both from the 'amenity' and 'commodity' perspective.
- Another threat which could rather be categorised as a mega-trend is the **expansion of biomass production** for the generation of energy which increasingly impacts forest ecosystems. Increasing wood extraction (including deadwood and residues)

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notably alters the character of forest ecosystems and leads to a loss of forest habitats and related forest biodiversity.

#### 2.4.2 Needs for action at the Community level

**Key arguments** in the discussion on the need for action at the Community level:

- The need for action at Community level is based on public and national priorities in regard to threats. It might be evaluated differently depending on the perceived character of a threat and related regional as well as interest shaped perspectives. The need for action at Community level should therefore be decided and defined in an **intensive public discussion process** between all involved stakeholders and the public. On the other hand the current threats and needs are difficult to evaluate for non-experts, and contradictions between 'commodity' and 'amenity' perspectives could persist in the expressed public needs. In consequence, the provision of coherent, comprehensive and homogenous **data on forests** to estimate threats, evaluate progress and inform the public can build the basis to derive needs for action at Community level.
- Almost unanimously a need for **better coordination and improved monitoring activities** has been identified. Appropriate structures are already in place (e.g., ICP forests, Forest Focus (now integrated in LIFE+) and activities under MCPFE), but information gaps and problems of data inconsistencies remain; especially for new threats. At the aggregated level this often results in too general information (e.g. MCPFE). Improved monitoring and coordination is also a basis for credibility in international debates and negotiations on forest protection (e.g. on deforestation or illegal logging). Various specific needs have been formulated, such as for a **binding financial support mechanism** or a platform **for data sharing among EU Member States**. The current lack of financial and human resources has been highlighted as a restrictive factor.
- The important **role of forests owners** as central actors in the management of forests has been recognised and leaves room for improvement and coordination. Forest owners should increasingly be the target of **capacity building and education activities**. In this manner, **internalising positive externalities** of forests (financing public goods) was described as an important need for action at the Community level in order to harmonize individual profit seeking of forest owners and public expectations and demands on forests.

#### 2.4.3 Options for response to the identified threats

Following the definition and identification of the main threats for European forests, potential approaches for an adequate response to these threats and needs were briefly outlined. **Main foci** were:

- Forest protection should increasingly find better access to the political agenda. Broad discussions on future threats to European forests are a prerequisite for the acceptability of public payments for forest benefits. **Awareness-raising** could be achieved through demonstrating the benefits of forests to the citizens more clearly not only in terms of products but also of (ecosystems) services. In this context, the concept of Payments for Ecosystem Services (PES) could serve as an efficient tool. Moreover, certification schemes have to be more transparent in order to increase the consumer's sense of influence.
- The concept of **Sustainable Forest Management** (SFM) was controversially discussed in different contexts. While some argued that SFM is the proper basis for a common response to existing and new threats others called it an "empty concept" that should be replaced or reinvigorated. Main arguments included:

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- **Pro:** In the European context SFM is closely linked to forest protection through its integration of economic, social, and environmental functions. It is an elaborated, accepted and almost institutionalised concept.
  - **Contra:** The concept of SFM is complex and remains too general. Although the different perspectives on and functions of forests have been integrated into the concept the conflicts between them have not been resolved in many cases.
- As an example of an integrative response to existing forest information problems, **forest monitoring** was intensively discussed. Moreover, some participants proposed the idea of a **forest (protection) framework directive**, while others underlined the need to **continue and improve the existing approach** to EU forest (protection) policy.
  - There is a potential for analogy between a possible Forest Protection instrument and the Rural Development policy and Water Framework Directive approach to consider regional conditions in policy implementation. Binding objectives are set on EU level, whereas Member States can decide how they reach the objectives by choosing or selecting suitable measures and programmes. Such an approach could also be used as a basis for a common approach in forest policy.
  - The impact assessment of the current Natura 2000 legislation (Art. 6.3/4 Habitats Directive) can serve as an example of how to deal with future activities impacting forest ecosystems in general. A respective system could follow the same procedure as the compensation mechanism presented by Ms. Sanchez Guisandez (see 2.2.4 above) accompanied by an obligation to monitor and report.

### ***2.5 Working groups on options for forest protection at Community level***

On the second day, the workshop participants decided to split up in 3 working groups to discuss 3 options for forest protection at Community level that were seen as an outcome of the working group discussions of the first day:

- forest monitoring
- a forest (protection) framework directive
- a continuation and improvement of the current approach to forest protection

In addition, the last working group was asked to discuss whether the Open Method of Coordination might be a further option for action at the Community level with regard to forest protection.

#### **2.5.1 Forest monitoring**

Although monitoring is not a policy option in itself, it appears to be a **fundamental basis for developing further policy options** for forest protection. Policy-makers and foresters need to have precise, comparable and reliable data on the state of forests. For instance, if forests were to enter plans for climate change mitigation, appropriate information on carbon storage capacities of forest ecosystems would be necessary to produce real equivalents. Everyone agreed that the focus of forest monitoring and national inventories currently differs among Member States and between Member States and the EU and that a more **harmonised monitoring approach** should be aimed for. Moreover, certain impacts on forests and changes of forest ecosystems (e.g., related to forest biodiversity and carbon) are not yet adequately covered by monitoring systems, at least not in a coherent manner. However, it seemed difficult to reach an agreement on the specific needs for a more harmonised forest monitoring. Therefore, the needs must be properly defined among relevant stakeholder taking into account, for instance, that the monitored aspects must be relevant regarding current policy challenges (referring, e.g., to international obligations or issues to be addressed by environmental and forest protection policy).



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A first step towards identifying and filling relevant data gaps would be to conduct a **review of existing forest monitoring systems**.

- Forest Focus was considered to be a good basis for a harmonised monitoring system.
- The MCPFE approach appeared like a sound tool for sustainability indicators that could be extended and linked to other policy processes.
- Natura 2000 (particularly Art 6 of the Habitats Directive) seemed to provide a good example for assessing impacts on forest ecosystems.

Participants recognised the need for and suggested ways of implementing a harmonised EU-monitoring system. Using synergies between EU and Member States and **improving coordination between responsible departments** appeared to be essential for sharing the monitoring burden and making it more efficient. Subsequently, a **set of common European objectives for forest protection** has to be created which could serve as the basis for a set of common criteria and indicators to be monitored. National forest observatories could adapt common monitoring practices to specific regional needs and demands.

**Permanent and stable structures** for forest monitoring built on a legal basis at the EU level were seen as prerequisites for an efficient monitoring system. In this context, the current coverage of Forest Focus activities by LIFE+ was criticised as it is based on project applications and might thus not sufficiently secure funding for permanent monitoring. Some argued that the existence of a common financial support scheme for consistent monitoring would automatically result in the provision of better small scale data to work with.

The establishment of a **flexible system of monitoring** should be based on a twofold aim: the enforcement of a consistent **network of long-term observation measurements**, and the possibility to **react to acute and new threats** by providing first hand information. To enable and especially control such a system, a **common independent agency** could be set up.

#### 2.5.2 Forest (protection) framework directive

Drawing on the general structure of the Water Framework Directive some specific elements and options for a 'Framework Directive on Forest Protection' were roughly outlined and discussed. Before creating such a framework directive it was seen as essential to analyse which of the current objectives for forest protection could not be achieved with current policy approaches (such as the Biodiversity Action Plan). Threats caused by climate change and the loss of biodiversity were discussed as potential rationales which might necessitate a framework directive approach. Objectives for forest protection have to envisage **all 3 dimensions of sustainability**, that is ecological, social and economic. Covering all dimensions SFM could serve as a basis for outlining relevant objectives. However, lacking prioritisations, different understandings and contradicting aims within SFM have to be considered and possibly enriched by other concepts such as the multifunctionality of forests as well as by existing objectives in international conventions (e.g., CDB, UNFCCC and UNFF). Following the structure of the WFD, objectives would be set on the EU level while measures to achieve them would be up to Member States. However, it was seen as essential that targets are binding and accompanied by common benchmarks for specific criteria in forest protection. Otherwise, targets could be watered down by Member States or interpreted in a very different way as has happened with the loose requirements for SFM. For the whole process a strong involvement of relevant stakeholders could provide for better acceptance and meaningful implementation of respective objectives.

**Questions concerning initial funding** of the Framework Directive and its implementation have to be clarified from the start. A high(er) share of EU funds would provide for higher legitimacy of control mechanisms for the implementation of objectives. Governance structures of the Directive should also involve **reward mechanisms** for forest owners and other actors who apply forest protection measures or enhance the ecological value of forests.

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**Payment schemes for ecosystems services (PES) and certification schemes** as a possible tool were mentioned in this context.

The main **strengths** of such a framework approach are as follows:

- One unified approach could prevent inconsistent and ineffective spread of approaches across different policies and Member States.
- Both the commodity and amenity side could benefit from the approach, given that all dimensions of sustainability are considered.
- If Member States can choose measures it might be easier to get national funding/co-funding.
- Public perception on forest issues would rise with a common approach.

The following **weaknesses** were identified:

- With 27 Member States and their very different forest ecosystems the framework would have to be very broad. As a result, the set objectives might be too general.
- Acceptance of forest owners is presumably low as the concern about further regulation narrowed down to biodiversity will not necessarily outweigh positive expectations towards the approach.

### 2.5.3 Continue and improve the current approach

Currently different EU policies and instruments affect forest protection. The resulting **lack of transparency** in this policy field has been identified as a major problem. In this context **Natura 2000** has been recognised as the most adequate policy concept. However, its practical implementation regarding forest protection is seen as being impeded in a twofold way. On the one hand its financing is split up across funding for rural development measures and the LIFE + financial instrument; on the other hand it was seen simply insufficient and not specific enough to achieve important forest protection objectives.

The other major problem that was identified is the **lack of coherence and coordination** between various committees and working groups related to forests on EU level. Coordination of forest related policies and instruments was stressed as a more appropriate strategy than to increase coherence, due to the intrinsic differences of objectives between various policy instruments effecting forests. For instance, the coordination of forest related funding mechanisms such as Interreg, LIFE+, rural development programmes and regional funds was suggested as a good starting point in view of **increasing the transparency and user-friendliness of EU-funding** for potential applicants.

**Two possible paths** for improving coordination of the current approach emerged:

First, based on the regional disparities coexisting in the EU and in terms of natural contexts and policy needs, a more **regionalised approach** could be adopted. Various regional forest strategies could be coordinated and merged into a single common document in order to pursue different but complementary forest protection objectives across the EU. This vision would be based on the specialisation of regions in the production of certain forest goods and the provision of the most adequate services adapted to the regional context and strengths.

Second, the main recognised coordination need lies in the activities and multilateral communication between the different forest related institutions and committees (e.g., Standing Forestry Committee, Advisory Group on Forestry and Cork, Inter-Service Group on Forestry etc.) and with the European Commission and the Member States. To this end a new **special intersectoral working group/technical working group** under the Standing Forestry Committee could be established with a mandate to generate and coordinate information and organise temporary working groups of external experts on the relevant topics.

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#### 2.5.4 Open Method of Coordination

Finally, an efficient tool for increased coordination that was addressed by the working group on the continuation and improvement of the current approach is a process similar to the **Open Method of Coordination (OMC)**. Within the working group, this approach was outlined as an iterative process consisting first of the identification and verification of common objectives, measures and indicators through national reporting, followed by the development of best practice examples by the Commission (and hence “naming and blaming” practices). This process eventually results in an ongoing coordination and standardisation process in which the Commission plays a mediating role.

Strengths of this coordination method could be:

- The triggering of a **learning process** based on the exchange of information and best practises in the face of similar challenges.
- This approach does not need a specific legal basis or competence to be applied.
- It could give some level of **political backing to common action** in the forest policy field.
- On the practical side, it would be **easy to implement**. Information to draft the national plans is readily available and easily mobilised.

Due to time constraints, this approach was not further discussed within the working group.

### **3. Conclusion and outlook**

To sum up, the workshop showed that further actions for forest protection in Europe are needed to meet upcoming challenges. While different options for policy action were proposed, discussed and outlined in the workshop, no common agreement could be reached among the participants either on the most challenging forests threats to be dealt with, on priorities for action on the Community level, nor on specific measures that should be implemented to enhance forest protection. The differentiation between the commodity and amenity perspective on forests which was elaborated on in the background paper also evidently appeared within the discussions. For instance, one group of participants pointed out the continuing loss of biodiversity and threats to forest biodiversity resulting from intensified forest management with regard to an increasing demand for biomass (wood) for energy and industrial use. Others underlined the need to enhance rural development by applying sustainable forest management and to focus on forest owners and the specific needs in a forest protection policy (e.g., by increasing funds for public services of forestry). While climate change was seen as a challenge by all participants, different perspectives on its potential impacts and its character as a ‘threat’ to forests became obvious.

Different views were also apparent as concerns the need for action at Community level. Roughly spoken, participants sharing the commodity perspective expressed scepticism towards policy approaches that would lead to more regulation and a stronger role of the EC in forest policy. Others, more tied to the amenity perspective, rather highlighted the advantages of stronger integration of forest protection measures in EU policies. Although the controversy between keeping and slightly adapting current forest policies and establishing a new EU common approach as represented by a 'Framework Directive on Forest Protection' could not be resolved, pro and cons for both options had been elaborated on, thus providing valuable input for the upcoming working steps in the project. Interestingly, a certain consensus in the general need for strengthening and streamlining monitoring activities in the EU in order to create a reliable and consistent basis for further policy activities could be observed.

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## Agenda of the workshop:

7 May 2009 – Day I

Time	Activity
1:00 pm	<b>Welcome addresses and introduction</b> <ul style="list-style-type: none"><li>• Welcome address (<i>J. Van De Velde, DG Environment</i>)</li><li>• “Implementation of the EU Forestry Strategy: <i>How to protect EU Forests against harmful Impacts</i>”: Study &amp; Workshop objectives, tasks and structure (<i>Georg Winkel, IFP Freiburg</i>)</li></ul>
1:30	<b>Presentations on workshop background</b> ( <i>IFP Freiburg, Ecologic Institute</i> ) <ul style="list-style-type: none"><li>• European forests: Challenges, impacts, and threats (<i>Lydia Rosenkranz, IFP Freiburg</i>)</li><li>• Policy framework in the context of EU forests (<i>Timo Kaphengst, Ecologic Institute Berlin</i>)</li></ul>
2:00	<b>Key note speeches: From Coordination towards regulation. EU environmental and forest policy governance modes</b> <ul style="list-style-type: none"><li>• EU Forest Policy (<i>Metodi Sotirov, IFP Freiburg</i>)</li><li>• EU Water Framework Directive (<i>Thomas Dvorak, Ecologic Institute Vienna</i>)</li><li>• EU Common Agricultural Policy (<i>Peter Wehrheim, DG Agriculture</i>)</li><li>• EU Nature Conservation Policy (<i>Mariam Sanchez Guisandez, DG Environment</i>)</li></ul>
3:00	<b>Coffee break</b>
3:30	<b>Working groups on abiotic, biotic, and directly human induced forest threats part I</b> <ul style="list-style-type: none"><li>• Definition of threats</li><li>• Need for action at Community level</li></ul>
4:40	<b>Plenary: Presentation and discussion of results</b>
5:40	<b>Working groups on abiotic, biotic, and directly human induced forest threats part II</b> <ul style="list-style-type: none"><li>• Developing options for a response at Community level</li></ul>
7:00	<b>End of day I</b>
7:30	<b>Dinner (optional)</b>

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## 8 May 2009 – Day II

Time	Activity
8:00 am	<b>Introduction day II</b> ( <i>IFP Freiburg, Ecologic Institute, DG Environment</i> )
8:15	<b>Plenary: Presentations and discussion of results on threat related options for a Community response</b> (Working groups day I)
9:30	<b>Coffee break</b>
9:45	<b>Wrap up: Different options for EU approach on forest protection</b> ( <i>IFP Freiburg, Ecologic Institute</i> )
10:00	<b>Working groups on options for forest protection at Community level</b> <ul style="list-style-type: none"><li>• Outlining different options for a response for forest protection</li><li>• Strengths and weaknesses of options</li><li>• Steps for implementation</li></ul>
11:30	<b>Coffee break and snacks</b>
12:00	<b>Plenary: Presentation and discussion of results</b>
13:00	<b>Final discussion: EU policy options for the protection of European forests against harmful Impacts</b> <ul style="list-style-type: none"><li>• Main workshop results/ key messages</li><li>• Open questions/contradictions</li><li>• Take home messages</li><li>• Outlook on the project/compilation and evaluation process of report</li></ul>
14:00	<b>End of the workshop</b>

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### 9.3 List of participants at the expert workshop

Name	First Name	Organisation
Beck	Roland	European Commission, DG Agriculture
Bucki	Michael	European Commission, DG Environment
Carvalho Mendes	Américo	Portuguese Catholic University, Faculty of Economics and Management
Dossche	Veerle	FERN - the Forests and the European Union Resource Network
Dworak	Thomas	Ecologic Institute, Vienna
Herbert	Sophie	Ecologic Institute, Berlin
Humphreys	David	The Open University, Faculty of Social Sciences
Kaphengst	Timo	Ecologic Institute, Berlin
Larsson	Tor-Bjorn	Swedish University of Agricultural Science, Department of Forest Resource Management
Parviainen	Jari	Finnish Forest Research Institute Joensuu
Pigan	Izabela	Forest Research Institute (Poland)
Pülzl	Helga	University of Salzburg
Requardt	Aljoscha	Johann Heinrich von Thünen Institute, Federal Research Centre for Forestry and Forest Products
Robaey	Zoe	Ecologic Institute, Berlin
Rosenkranz	Lydia	University of Freiburg
Schulze	Ernst	European Commission, DG Environment
Sanchez Guisandez	Mariam	European Commission, DG Environment
Sotirov	Metodi	University of Freiburg
Thorøe	Morten	Confederation of European Forest Owners (CEPF)
Van de Velde	Joost	European Commission, DG Environment
van Ham	Chantal	International Union for Conservation of Nature (IUCN)
Velasco	Fermín Olabe	Forest Service of Navarra
Wegener	Tarik	University of Freiburg
Wehrheim	Peter	European Commission, DG Agriculture
Winkel	Georg	University of Freiburg

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## **9.4 Interview guideline for the evaluation of the options for forest protection at the Community level**

In this study, we outlined 4 potential options for forest protection policy at the level of the European Community:

1. Maintain the current approach based on national and regional forest protection policies and carefully improve it by enhancing coordination
2. Apply the Open Method of Coordination in order to evaluate the current state of EU Member State policies on forest protection and to exactly define the need/identify the basis for a Common approach
3. Establish a European Forest Monitoring system that responds to both scientific and political needs for information (e.g., forest biodiversity, carbon storage, etc.) to inform policy makers on the need for future forest protection policies in the EU
4. Develop and implement a Forest (Protection) Framework Directive as the legal basis of a Common European Forest Protection Policy.

In the following, we have prepared 2 matrixes for an ex-ante evaluation of the approaches. To help us structure the interview, we would like to ask you to express your opinion concerning these options and fill out the table accordingly and where you think is necessary. Our telephone interview will be based on these matrixes.

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**Evaluation matrix: Strengths and Weaknesses**

In this matrix, general comments on strengths and weaknesses can be made. Please fill in using short words.

	<b>Pro (strengths)</b>	<b>Con (weaknesses)</b>
<b>Improved Current Approach</b>		
<b>Open Method of Coordination</b>		
<b>European Forest Monitoring System</b>		
<b>Forest Framework Directive</b>		



## Evaluation matrix: effectiveness and feasibility

In this matrix, questions addressing the effectiveness and feasibility of the presented policy options are asked. Please fill in using short words.

	Improved Current Approach	Open Method of Coordination	European Forest Monitoring	Forest Framework Directive
<b>Potential effectiveness</b>				
What impact would the approach have...				
a) On the ecological state of forests in Europe?				
b) On forestry and the forest based industry? (distributional effects, effects on property rights)				
c) On other groups or users/ the broad society?				
Generally: What can be achieved by successful policy implementation?				
<b>Feasibility</b>				
<b>Timeframe</b> How long do you think it will take before the implementation of the policy option shows visible effects on forests?				
<b>Institutional compatibility</b> How well does the approach fit into the existing institutions and policies of forest protection? Could this result in obstacles to the implementation? What obstacles?				
<b>Acceptance</b> How would different interest groups and forest users accept the approaches? Who would be most resistant? What could be done to gain support from these groups?				
<b>Additional remarks</b>				

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## 9.5 List of expert interview partners

Name	First Name	Organisation
de Galembert	Bernard	Confederation of European Paper Industries (CEPI)
Dossche	Veerle	FERN - the Forests and the European Union Resource Network
Frhr. Klein von Wisenberg	Lorenz	Independent Consultant
Klein	Manfred	German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
Kühn von Burgsdorff	Jobst	Biocen
Larsson	Tor-Bjorn	Swedish University of Agricultural Science, Department of Forest Resource Management
Mayer	Peter	International Union of Forest Research Organizations (IUFRO)
Parviainen	Jari	Finnish Forest Research Institute, Joensuu
Schwörer	Matthias	German Federal Ministry of Food, Agriculture and Consumer Protection
Stipp	Frank	Ministry for the Environment, Forests and Consumer Protection, Rhineland-Palatinate
Thorøe	Morten	Confederation of European Forest Owners (CEPF)
Volz	Karl-Reinhard	Institute of Forest and Environmental Policy, University of Freiburg