Inter-sectoral coordination in forest policy

A frame analysis of forest sectorization processes in Austria and the Netherlands

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1   Introduction

'In ancient times alchemists believed implicitly in the existence of a philosopher's stone, which would provide the key to the universe and, in effect, solve all of the problems of mankind. The quest for co-ordination is in many respects the equivalent of the medieval search for the 'Philosopher's stone'. If only we can find the right formula for co-ordination, we can reconcile the irreconcilable, harmonise competing and wholly divergent interests, overcome irrationalities in our government structures, and make hard policy choices to which no one will dissent (H. Seidman in Jennings and Krane 1994:341)'.

1.1 The call for inter-sectoral coordination

The worldwide call for inter-sectoral coordination in today's forest governance debate seems to grow ever stronger and has become a central issue in the debate. The origin of calls for inter-sectoral coordination can be found in the 1980s, when discourses over sustainability came to the fore with the publication of 'Our common future' (Brundtland, 1987). This publication was the first inter-governmental report to discuss possible solutions and ways of reversing the negative effects of continued industrialization and growth, and argued the need for establishing co-operative and co-ordinating structures between different policy sectors (Brundtland 1987). The report argued that problems with our natural world can only be solved through the active involvement of those causing these problems. The report coined the phrase 'sustainable development' and started a political debate that has continued for some twenty years, affecting many sectors, (including the forestry sector) which now recognize the necessity of coordinating activities with other sectors at the global, regional, and national levels.

The global level
The initial attempts at establishing co-operative structures between different policy sectors were primarily focused on deforestation and land degradation in developing countries. However, developed countries also became obliged to look at the problems they faced in managing their forests, largely as a result of political pressure from environmental non-governmental organizations. The problems of deforestation and degradation became re-defined as global problems. It became recognized that all governments had a responsibility for addressing these problems, and this resulted in a world-wide discussion on sustainable forestry and how to establish co-operative structures between different policy sectors (De

Montalembert 1992). The 1992 United National Conference on Environment and Development in Rio de Janeiro played a key role in building a global consensus and structuring the debate amongst countries, building a widespread recognition of the crucial role that forests play in safeguarding our planet for future generations. Since then, several dedicated policy arenas have emerged where the global debate on forestry has continued: first the Intergovernmental Panel on Forests (IPF), second the Intergovernmental Forum for Forests (IFF), and third the United Nations Forum on Forests (UNFF). These structures have all been working on implementing the agreements laid down in Agenda 21 (see UN-CSD-IPF 1996)[1]. Chapter 11 of Agenda 21 specifically deals with the issue of sustainable forest management and emphasizes the importance of inter-sectoral coordination in ensuring sustainable forest management, by harmonizing different policies that have an impact on the state of forests.

> "More effective measures and approaches are often required at the national level to improve and harmonise policy formulation, planning, and programming: legislative measures and instruments; development patterns […] roles of the private sector, local organisations, non-governmental organisations and cooperatives; […] administrative structures and mechanisms, including inter-sectoral co-ordination, decentralisation, and responsibility and incentive systems" (UN 1992).

The Forest Policy Department of the Food and Agricultural Organization of the United Nations (FAO) has also played a key role in getting the issue of inter-sectoral coordination onto the forest policy agenda. Several forest policy officers within this department have advocated this approach and the FAO has financed studies and organized expert meetings on inter-sectoral coordination (De Montalembert 1992, 1995; De Montalembert and Schmithüsen 1993, Broadhead 2001; Broadhead and Dubé 2003).

The European level
At the European level, there are three different fora for forest policy: the Timber Committee of the United Nations Economic Commission of Europe (UNECE), the Ministerial Conference on the Protection of Forests in Europe (MCPFE) and the European Union (EU). These three fora address different issues, their geographical scope varies and they have different degrees of involvement by governmental and non-governmental organizations. Yet one common feature that they all share is that they all explicitly call for the need for inter-sectoral coordination in forest policy. As on the global level, all the agreements made

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[1] Agenda 21 is a non-legally binding instrument outlining the principles for dealing with natural resources in a socially, economically, and environmentally sustainable way.

in these policy fora are non-binding and the implementation of declarations and agreements depends on the commitment of individual states and their willingness to act.

The Timber Committee was established after World War II by the United Nation Economic Commission of Europe (UNECE).[2] Their initial focus on the wood market and the sound and legal use of wood has subsequently broadened and now includes other forest products and services. For example, they now explicitly pay attention to the role of inter-sectoral co-ordination in forest policy, and this is reflected in their activities and publications. For example in their 'Integrated Programme of Work on Forests and Timber', they, together with the European Forestry Commission of the FAO, selected cross-sectoral forest policy issues as one of five core working areas. In their fifty-ninth annual meeting they agreed upon:

> "The necessity of thinking and of understanding in an inter-sectoral way and being receptive to developments in other sectors. The exchange of information was considered valuable in itself because of the insight it provided into other sectors, which were in fact the main determinants of a broad forest sectoral approach (Timber Committee 2001)".

Since 1990 the MCPFE[3] has held five conferences, all of which produced declarations containing a set of resolutions. Several of these resolutions have supported the promotion of National Forest Programmes (NFPs) as a strong policy instrument for sustainable forest management. Inter-sectoral coordination is an essential element of NFPs and, as such, has become a central issue for the MCPFE. For example, Resolution 1 from the Fourth MCPFE meeting in Vienna states that:

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[2] The Timber Committee provides a forum for governmental representatives from European countries to discuss forestry issues. It has a specific focus on stimulating the wood market across the whole of Europe in order to develop a strong economic forestry sector.

[3] In 1990 the MCPFE organized its first Ministerial Conference. The main reason for initiating this new European forest policy structure was the conviction that European forests needed more protection against external threats, such as acid rain, fire and the unsustainable use of forests. The MCPFE has predominantly focused on protecting forests through sustainable forest management, whereas the Timber Committee had a more one-dimensional focus on the economic function of forests. The MCPFE has facilitated a continuous policy dialogue on forest issues between a much larger group of actors: including governmental and non-governmental actors. Presently the MCPFE includes over 40 European national forestry ministries, 13 forestry ministries from non-European observer countries, and 28 European observer organizations, such as WWF International and the Confederation of European Paper Industries.

"National forest processes are an important means to strengthen coherence and synergies within the forest sector as well as between the forest sector and other sectors in order to facilitate work on forest relevant cross-sectoral issues through inter-sectoral coordination (MCPFE 2003)".

At the level of the European Union the forestry debate is limited to one about coordination, since the EU has no specific competence over forests[4]. Here also the issue of inter-sectoral coordination plays a central role in the debate on forest policy, as reflected in the following statements from the EU Forestry Strategy (1998) and the EU Forest Action Plan (2006):

"[…] forests and the forest sector are mainly affected by elements lying outside the sector, which will need 'reorienting' cross-sectoral and forest related policies in favour of forests. Addressing issues pertaining only to the forest sector itself or to forests themselves would not have a sustainable and long-term impact (EC 1998)".

"Improve coherence and cross-sectoral cooperation in order to balance economic, environmental and socio-cultural objectives at multiple organisational and institutional levels (EC 2006).

The national level
The call for inter-sectoral coordination at the national level is reflected in the prominent position of National Forest Programmes (NFPs) within the forest policy debate. NFPs are seen as central tools for ensuring the conservation and sustainable development of forest resources all over the world. They provide a generic form that includes a wide range of approaches to sustainable forest management that can be applied at the national and sub-

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[4] The basis of all common EU policies is the principle of subsidiarity: that the EU can only act in those fields that member states have agreed that the actions of individual countries is insufficient. Despite having limited competence in forestry policy, the EU has become more actively involved in forestry issues over recent decades. This is reflected in the establishment of the Standing Forestry Commission (Council Decision 89/367/EEC) in 1989 and the EU Commission passing the EU Forestry Strategy (EC 1999/C 56/01) in 1999, the first official policy document on the EU's forests. Since then, some forestry measurements have been financed within the Rural Development Programme (EC Regulation 1257/99, EC Regulation /05). Most recently, in 2006, the EC passed the EU Forest Action Plan (EC 2006), which provides for concrete actions on sustainable forest management. However, the implementation of these actions is voluntary and at the discretion of member states. This growing involvement of the EU in forestry appears to be related to the rise of the global forest policy debate in which the EU needs to find a common point of view so as present a unified voice. Moreover, with the accession to the EU of Finland, Austria, and Sweden in 1995, the 'forestry character' of the EU changed completely. The European Union went from a wood importing to a wood-exporting union, forest cover rose from 25% to 36%; the share of softwood and round wood harvesting increased by 80% and pulp production by 300% (EP 2004). The growing number of forest related structures and policies in the EU suggest that this forest policy forum is gaining in importance at the expense of the Timber Committee and the MCPFE, despite forestry not officially being a competence of the EU.

national levels (Egestad 1999; Michaelsen 1999). NFPs should therefore be seen as normative and politically defined concepts that are conceptualized and implemented within specific contexts (Egestad 1999).

Inter-sectoral coordination is a basic principle in the formulation and implementation of NFPs (Hogl and Pregernig 2000; Glück 2004). The European forestry policy community, consisting of scientists and policy makers, discussed the principles of NFPs in a European context within the COST Action E19 on NFPs, a meeting that aimed to improve the capacity of European policy makers in formulating and implementing NFPs. It led to inter-sectoral coordination becoming one of the four essential constituents of NFPs, together with participation, collaboration and procedures (Hogl and Pregernig 2000). Thus inter-sectoral coordination has also become an integral part of the forest policy debate at the national level too.

1.2 Inter-sectoral coordination: a governance trend?

These moves, at the global, European and national policy level show the broad consensus that exists within the forest policy community that inter-sectoral coordination needs to be an integral aspect of forest policy. According to the Oxford English Dictionary (OEDonline 2006), co-ordination refers to "the activity of placing or arranging (things) in proper position relatively to each other and to the system of which they form parts". Since almost every interaction between social entities involves arranging and re-arranging their position relative to each other and to the system, coordination is a central issue in the theory of public policy. Yet, despite this the concept of coordination is not as well-defined and operationalized as one might expect (Metcalfe 1994). There are at least three reasons for this.

First, the word coordination itself is ambiguous: referring to both the activity of coordination as well as to an end-state of a coordination process (Peters 1998b; Hogl 2002). Moreover, coordination activities may, but do not necessarily, result in co-ordination (Regens 1988:137). Second, Peters (1998a) attributes the relative low priority that policy science accords to coordination to the fact that coordination is an all-embracing activity that exists within all interactions within policy processes. This makes it difficult to actually grasp the essence of coordination or arrive at an unambiguous definition. Third, coordination is usually presented as 'a means to a higher goal', for example to reduce expenditure or maximize efficiency (see e.g. Godfroij 1981; Termeer 1993; Metcalfe 1994; Peters 1998a, Hogl 2002). However, coordination is not always 'good'; Rhodes (1991:530) argues that too much coordination can lead to inefficiency: some overlap has the positive

advantage of keeping the insufficiencies and deficiencies of single practices within acceptable limits. The strong emphasis on inter-sectoral coordination thus does not automatically imply coordinating activities between different sectors will actually lead to coordination or, for that matter, that coordination between different sectors will actually solve the problems that it was intended to solve.

Thus, the use of the term 'coordination' is somewhat problematic. However, despite these conceptual issues, the forest policy community uses the term 'inter-sectoral coordination' as a strategy to solve, what they frame as 'inter-sectoral problems'. The term 'coordination' makes sense for members of the forest policy community and is often presented as a call to look beyond the boundaries of the forest sector. Coordination represents the recognition that problems often cannot be dealt with within a single sub-system, and solutions require coordination practices across the 'boundaries' of these sub-systems. Increasing specialization within society has resulted in more disaggregated sub-systems with limited tasks, competences and resources (Hanf 1978; Rogers and Whetten 1982; De Bruijn and Ten Heuvelhof 2000). This need for cross-sectoral coordination is widely recognized in one of the main stands of governance literature, which frames coordination in terms of a steering relationship between government and other social actors (Van Kersbergen and Van Waarden 2001).

Traditionally, the steering or governing relationships between governmental and social actors have been interpreted as hierarchical relationships through which government governed other social entities (Jennings and Jo Ann 1998). Whenever there was a need for co-ordination, the impetus would be top-down, with central administrative and political figures taking the lead in generating the necessary co-ordination. Hierarchical coordination assumes a central role for government and is based on an instrumental rational of policy making. This instrumental rational assumes that policy goals are objectively defined and based on objective scientific information. Equally it assumes that policy making takes place through the consecutive steps of policy formulation, implementation and evaluation. Forest policy makers have traditionally followed this model with its instrumental rationale, and this is reflected in the central role of national governments in typical forest institutions, such as legislation and National Forest Services.

These days, all over Europe, the central state is withdrawing from typical forest institutions (Schmithüsen 1993). Top-down control from government, based on an instrumental rationale has become problematic. First, there has been growing societal pressure for governments to become more efficient and curb ever-rising expenditure (Peters 1998b). Second, because of expanding governmental functions, the complexity of the societal environment, and increasing interdependencies, governments increasingly have been forced

to take into account a wider set of social actors from market and civil society and coordinate activities with them (Gage and Mandell 1990; Franz 1991; Peters 1998b). Finally there is a political shift afoot in which political power and institutional capacity are no longer seen as derived from formal constitutional powers but more from the capacity to coordinate resources from public and private actors (Peters and Pierre 2001).

Therefore, one of the key-challenges for governments today is to seek out new forms of cooperation since political power has become dispersed amongst different actors with formal authority now being just one, as opposed to the leading, actor (Rhodes 1997). In general, this change is referred to as a shift away from 'a government setting' dominated by the state, towards a 'governance setting' in which the state is one of the actors together with besides market parties and civil society (see e.g. Beck 1999; Kooiman and Vliet 1993; Scharpf 1993; Börzel 1997; Stoker 1998; Hazeu 2000; Bressers and Kuks 2001; Van Kersbergen and Van Waarden 2001:5-14, Van der Zouwen 2006). As a consequence, new coordination structures need to be developed as the traditional allocation of tasks and responsibilities between state, market, and civil society becomes blurred: new arrangements arise or existing arrangements need to be adjusted (Pestman and Van Tatenhove 1998; Van Tatenhove 2001).

Facilitating the development of such new kinds of arrangements is most generally based on a 'network type' of policy coordination. The basis for network coordination is a communicative rational rather than an instrumental one, because network coordination involves continuous processes of exchange and bargaining through which resources are re-allocated. Network policy coordination builds on the assumption that different actors from the state, market and civil society are more or less interdependent in reaching their goals or finding solutions for their problems (Börzel 1997; Kickert 1997). Network coordination within governance is thus more of a continuous process in which all the involved actors communicate and exchange ideas (Innes 1993; Hajer 1995).

The forest policy community has used these ideas from the governance literature to address current issues in the forest policy debate. Both Glück (1997) and Schanz (1999a; 2002) claim that current trends within forest policy, such as the focus on inter-sectoral coordination, are based on a paradigm of policy coordination which involves complex patterns and processes of interaction that include various social actors in consensus building through information-sharing and strategies of persuasion. The involvement of a wider range of actors in the policy process and a shift from a purely instrumental rationale to a mixture of network-like coordination mechanisms that facilitate the search for new arrangements, are both in line with the move from government towards governance. Yet, Schanz (2002)

argues that the mainstream of forest policies is still oriented towards an instrumental rationality and that there has been only limited adoption of communicative elements.

It is notable that the governance literature does not give much prominence to the issue of inter-sectoral coordination. Instead, its focus is on coordination between different actors from the state, market and civil society, and between different governmental layers. The focus on different actors, often referred to as multi-actor governance, has led to research on the (shift in) dispersion of decision-making power between state and non-state actors. Multi-actor governance has mostly been studied in relation to decentralization, privatization and the emancipation of civil society (Van der Zouwen 2006). Research into coordination between different governmental layers, often referred to as multi-level governance, has mostly focused on the dispersion of decision-making power amongst actors at different territorial levels. According to Benz (1999) multi-level governance refers to "processes of policy-making of central and decentralized governments are inter-dependent, that there is a necessity of coordination between levels, and that the latter must be achieved in processes of negotiations and cooperation, as there is no distinct hierarchical order between levels" (Benz 1999). Studies of multi-level governance have mostly focused upon European integration process, in which resources are increasingly distributed between different policy levels (see e.g. Marks *et al.* 1996; Jordan 2001; Hooghe and Marks 2001; Van der Zouwen 2006).

Neither of these approaches specifically touches upon the issue of inter-sectoral coordination, as neither has a focus upon sectors. This raises the question of how to relate the trend toward inter-sectoral coordination within forest policy (which is clearly related to more general trends towards governance), even though the governance debate has not paid specific attention to the issue of inter-sectoral coordination? Is the field of forest policy so 'special' that it justifies the specific use of the term inter-sectoral coordination in addition to, or perhaps instead of, the more generally used term of governance?

1.3 Hypotheses to explain the call for inter-sectoral coordination

Section 1.1 showed that the idea of inter-sectoral coordination has become a central issue in the forest policy arena, while section 1.2 questioned why the term inter-sectoral coordination has been used in forest policy, rather than the term governance. Both concepts address coordination problems, the need to adjust existing arrangements and search for new types of arrangements that can address contemporary problems that cut across existing policy arrangements. The similarities between the two raise the question of why the discourse over forest policy specifically and persistently refers to inter-sectoral

coordination. Does inter-sectoral coordination entail dealing more issues than are covered by the notion of governance, or it entail dealing with the same issues?

To gain more insights into the meaning of inter-sectoral coordination in forest policy, this study starts by exploring the reasons that possibly could explain, and thus justify, the specific focus on inter-sectoral coordination. These reasons are introduced in this study as 'hypotheses'. These hypotheses are not meant in the sense of the hypothetic-deductive model, but are used to present the main assumptions that the forest policy community uses to justify its focus on inter-sectoral coordination. These hypotheses are used to guide the researcher in exploring the relevance of inter-sectoral coordination in forest policy and to guide the search to find explanations for the call and use of inter-sectoral coordination.

Hypothesis 1: The main pillars of the forest sector are being eroded
The first hypothesis is based on the assumption that the forest sector is confronted with a growing number of developments that seem to erode the main pillars on which the forest sector is built. Duerr and Duerr (1975) identified four doctrines that were generally believed to be the main pillars of the forest sector: timber is the chief product of forests; sustainability means cutting less than the annual growth; society must adapt and be patient as forestry is a long term matter; and professional foresters decide on forest measurements as other people are not to be trusted in such matters (Duerr and Duerr 1975; Glück 1987). These four doctrines led forest professionals and owners to develop an inward-looking and narrow focus on 'forests' and the 'forest sector', which excluded the involvement of other sectors and actors.

According to this first hypothesis recent developments have undermined these doctrines and have evoked the growing need for forestry to coordinate its activities with other sectors. First, the wood market has become global, putting enormous pressure on wood prices. In Europe this, together with the increasing cost of land and labour, has marginalized the position of forestry and forest owners. Second, in a post-industrial European society, primary production is no longer perceived as the main pillar of the countryside and farmers and forest owners need to look for other sources of income. Elands and Wiersum (2003) argue that the regional importance of forests should no longer be based on wood production, but should be based on the rural characteristics of forests. This implies that, forestry should take into account specific regional contexts, should be open to multiple demands and tasks and apply a management approach that is people-oriented (Hoogstra *et al.* 2004:445). Third, forest owners are increasingly city people or live in cities and these owners manage their forests from an urban perspective. As a result it can no longer be expected that forest owners focus on only wood production, but have different rationales and motivations for managing their forests (Kvarda 2004; Ziegenspeck *et al.* 2004). Finally,

as society pressures for a broader definition of sustainability, that covers economic, ecological, and social terms; foresters need to adapt to these changing wishes and to incorporate different societal interests in forest management. Together these pressures are leading the forest policy community to coordinate a growing number of its activities with other sectors.

Hypothesis 2: The main problems in forest policy lay outside the forest sector
The second hypothesis is based on the conviction that the main causes of the problems current confronting the forest sector lie outside the forest sector. In the tropical forest policy debate, forest policy makers were convinced that problems of deforestation and degradation of forests in developing tropical countries could not be solved through a solely sectoral forest policy strategy. Rather they see the main causes of deforestation and the degradation of forests as lying elsewhere, in poverty and the shift from shifting cultivation to permanent agriculture. The 1985 Tropical Forests Action Program (TFAP) stressed the need to focus more on adjacent policy fields and paid explicit attention to the need for complementary actions and policy reforms in other sectors that influence the conservation and sustainable use of forest resources (FAO 1985). Within developed countries, forest policy makers are also convinced that the main problems threatening forests lie outside the forest sector. One factor that contributed to this conviction was debate over acid rain in the 1980s when industrial emissions were seen as posing a very real threat to the health of forests. More recently, the fierce fires, mostly human-induced, that have threatened Mediterranean forests are another example of external threats to forests (see Le Houérou 1987). Through such changes 'forest problems' have become redefined as inter-sectoral problems, thereby legitimizing the call for inter-sectoral solutions and coordination.

Hypothesis 3: Forest have a multi-functional character, automatically implying involving other sectors
The third hypothesis is based on the growing acknowledgement of the multi-functional character of forests. In Europe it is increasingly recognized that forests fulfil a wide range of economical, ecological, and societal functions (Hytonen 1995; Farrell *et al.* 2000:6). It has also become generally acknowledged that urban societies' interest in forests is increasing. Increased wealth and more leisure time are increasing demand for the recreational value of forests and there are other shifts in social values toward the natural environment. According to Achterberg (1994), these involve a shift from attaching value to the world depending on the way it can fulfil humanity's needs, to valuing the inherent qualities of ecosystems and landscapes.

Growing acknowledgement of the multi-functional character of forests is expressed in the increased social interest and demand to protect forest ecosystems: at present 11.7 % (equal

to 127 million hectares) of the total European forest cover (about 1,000 million hectares) is protected to some extent. In 85% of these protected areas the aim is to conserve forest biodiversity, whereas in the remaining 15% the aim is to protect the landscape in which forest play a dominant role (Rametsteiner and Kraxner 2003). In addition forests are increasingly valued for their recreational possibilities: they serve as quiet and relaxing places that can counterbalance busy city life, or for more active leisure pursuits. Forests and trees have also acquired a prominent role in the current climate change debate because of their role in sequestrating CO_2. Finally in the present discussions over biomass and energy discussion have highlighted another function of forests, as an alternative energy supply, since wood is a CO_2 neutral renewable resource.

Acknowledging the multi-functional character of forests has resulted in the recognition that forest policy makers no longer can just focus on the forest sector but must coordinate forest policy and practices with other sectors with an interest in the different functions of forests: e.g. the recreation sector, the nature conservation sector the water sector for regulation of water flows and avalanches, and the biomass sector.

Hypothesis 4: Forest policy making increasingly occurs outside of typical forest policy structures

The fourth hypothesis is based on the assumption that forest policy making increasingly occurs outside the typical forest policy structures. For a long time, the forest policy field, like many other policy fields, has been mainly state dominated with coordination predominantly involving the forest owners and the state. Typically this coordination was institutionalized through national forest laws, a national forest service and state organized education of forest professionals (Egestad 1999). However, during the last decade, the state has withdrawn from these typical forest institutions. State forest organizations are increasingly being privatized or semi-privatized, and the implementation of forest law decentralized to regional governmental authorities. For example in Spain, Belgium and the Netherlands, the forest authorities have been decentralized to regions and provinces. In Austria, Finland, France, the Netherlands, Sweden, and the United Kingdom, management of state-owned forest land has been entrusted to (semi-) autonomous agencies with the aims of improving the efficiency and flexibility of management and reducing the burden on public finances (UNECE 1999). In several countries, such as Germany, Belgium, Great Britain, and the Netherlands, national forest bodies have been merged with the environmental or nature conservation departments These observations are all in line with a recent FAO study that concluded that forest authorities across Europe are rapidly losing their independent positions (FAO 1999).

Interestingly, whereas national states are increasingly withdrawing from typical forest institutions section 1.1 shows that there is a growing number of international forest policy arenas. These new arenas contain a growing number of 'new' actors, mainly professional non-governmental organizations (NGOs) from civil society and businesses. For example in the European policy arenas (such as the MCFPE and the EU), the 'traditional' representatives of forest owners such as the Confederation of European Forest Owners (CEPF) are being joined by actors from other sectors, such as the Confederation of European Paper Industries (CEPI) and the NGOs World Wildlife Fund (WWF) and FERN. This tendency is also reflected at the national level, where NFPs increasingly include a wider group of social actors in forest policy issues. Thus, not only are traditional forest institutions losing their autonomy, but at the same time more actors from other sectors are becoming involved in forest (related) policy making processes.

Hypothesis 5: The perceived need to have an independent forest sector
The fifth hypothesis is based on the assumption that by introducing the term inter-sectoral coordination the forest policy community wants to maintain its independence. One explanation for wanting to maintain an independent and separate forest sector could be foresters' fears about losing their sovereignty and independence to set forest policy, a trend observed by Schmithüsen (1993) in forestry discourses. By adopting the term inter-sectoral coordination, the forest policy community opens up the possibility of maintaining a separate 'forest sector.' Use of the term 'coordination', allows the forest policy community to participate in the move towards 'governance' through opening up the boundaries of the forest sector 'for coordination with other sectors'. Thus inter-sectoral coordination implies counteracting the failure of the traditional forest sector in recognizing these social changes and adopting appropriate new strategies (Hellström and Reunals 1995). Thus, introduction of inter-sectoral coordination into the forest policy debate could be understood as providing new coordination mechanisms that go beyond the traditional sectoral coordination mechanism between forest owners and the state and facilitates coordination between a larger set of institutional levels and actors. Yet by, specifically using the word 'sector' the forest policy community gives itself the opportunity to continue to maintain an independent forest policy field and thereby an independent forest sector.

A common theme: what is meant by the forest sector?
All five hypotheses address the dynamics currently confronting the 'forest sector'. For example, multi-functionality in forestry means the involvement of a broader range of actors, or 'sectors', in defining forestry. The hypothesis that problems and opportunities mostly come from 'other sectors' implies interacting more with these 'other sectors'. The hypothesis that typical forest institutions that traditionally made up the 'forest sector' are losing their distinct identity and no longer institutionally demarcate the 'forest sector'

implies changes in the composition of the forest sector. All these processes imply a likely shift in the definition or common understanding of the term 'forest sector': new meanings of the 'forest sector' need to be developed. New institutions or arrangements are being established that contribute to the need to rethink what is meant by the 'forest sector' And most likely, redefining and re-understanding the 'forest sector' also influences the understanding of inter-sectoral coordination, as was discussed in the hypotheses.

1.4 Problem statement and research aims

Inter-sectoral coordination has become a central issue in different forest policy arenas, and is considered to be essential for solving a whole range of problems currently facing the forest sector. However, until now it has been unclear what exactly is meant by inter-sectoral coordination and the processes it refers to. Inter-sectoral coordination in forest policy is related to a more general move towards governance, although the broader governance debate has not specifically addressed the issue of inter-sectoral coordination. The governance trend sees policy coordination to take place in complex patterns and processes of interaction between various social actors who employ strategies of information-sharing and persuasion. It was questioned why forest policy makers refer to 'inter-sectoral coordination', rather than to the more commonly used terms of multi-actor and multi-level governance, which are used in the governance debate. Five hypotheses were formulated as possible explanations for this, which represent the main assumptions used by the forest policy community to justify its focus on inter-sectoral coordination. The common premise of these hypotheses is that the term 'inter-sectoral coordination' in forest policy implies more than the governance-related terms used in political science. All hypotheses refer to the dynamics confronting the forest sector which seem to expand the range of understanding and interpretations of the terms 'forest sector' and 'inter-sectoral coordination'.

The aim of this study therefore is to explore the processes through which the actors involved set, maintain and adapt the meaning of the 'forest sector' so as to understand the meaning of the call for inter-sectoral coordination in forest policy arenas within Europe. These insights will also be valuable for forest policy makers, as they can provide the basis for developing tools to facilitate inter-sectoral coordination.

1.5 Outline

Chapter 2 discusses the conceptual framework which provides the analytical tools for exploring the different meanings attached to the 'forest sector' in the two case studies. The basis of the conceptual framework is the framing perspective which permits an analysis of the dynamics of perspectives about the boundaries of the ´forest sector´, which are differently perceived. This approach allows us to view inter-sectoral coordination as a process of frame-alignment. Chapter 3 proposes an interpretative approach for empirically studying forest sectorization processes and sets out several methodological issues, such as the research strategy, selection of case studies and the different methods used to gather research data. Chapters 4 and 5 explore how different actors (specifically 'insiders' and 'outsiders') in the two case study countries (Austria and the Netherlands) set and reset 'forest sector' boundaries. Both case studies address the following issues: what meanings are attached to forests? Who are seen as insiders? What patterns of interactions can be observed? How effective are they? And which different forest sector frames are used by the involved actors to depict the 'forest sector'? Each of these chapters concludes with observations on the processes of sectorization in each country. Chapter 6 reflects on the implications of the empirical findings for a more general understanding of the processes of sectorization and inter-sectoral coordination in forest policy. This chapter also discusses how the call for inter-sectoral coordination in forest policy can be explained by the hypotheses formulated in section 1.3 Finally, chapter 7 discusses the value of the framing perspective, relates the findings of this study to those of other studies, explores the relationship between inter-sectoral coordination and governance, reflects on the meaning of inter-sectoral coordination for forest policy and speculates on the future of inter-sectoral coordination in the European forest policy context.

2   A framing perspective on sectors

*'Just as structures cannot guarantee success in co-ordination,
processes depend upon the commitment of the principal participants
to the goal of co-ordination (Peters 1998:39)'.*

2.1 What is a sector?

The aim of this chapter is to develop a conceptual framework for analyzing the empirical findings in a common language: for comparing the empirical material and finally for drawing new levels of understanding. The conceptual framework serves as a 'pair of glasses' and differentiates between what the researcher can and cannot observe and analyze. Chapter one highlighted that inter-sectoral coordination is a central issue in current discussions in the forest policy arena. Since inter-sectoral coordination expresses the need for coordination, the chapter assessed how inter-sectoral coordination is viewed within more general discourses about coordination within policy science. It showed that, despite the obvious similarities between inter-sectoral coordination and the trend towards governance, discourses about governance have not explicitly addressed the issue of inter-sectoral coordination. .This raises the question of whether inter-sectoral coordination in forest policy implies more than merely a development in governance. Subsequently, five hypotheses or assumptions were formulated to provide possible explanations for the specific focus on inter-sectoral coordination in forest policy. Central to all the hypotheses were the dynamics confronting the forest sector. Together these seem to undermine the notion of providing one common unifying understanding or definition of the forest sector. Thus in order to conceptualize and understand inter-sectoral coordination, and how it might relate to multi-level and multi-actor governance, we need to first focus on the question of 'what is a sector?'

The introduction of the term policy sector dates back to the establishment of the welfare state around the end of the 19th century, when the state's active involvement in societal issues became more generally accepted and democratically legitimated. Such involvement saw the establishment of consultation between policy makers and private organizations in specific policy sectors in which discussions over common issues of interest took place, such as health or the environment (Koppenjan *et al.* 1987; Rayner *et al.* 2001; Howlett and Ramesh 2002; Shannon and Schmidt 2002). In this sense policy sectors can be seen as demarcated areas where governmental and non-governmental actors interact.

Traditionally, these policy sectors were characterized as spaces where a tightly defined, and empirically observable, group of actors established a general set of commonly accepted rules and norms (Rayner *et al.* 2001). The observable outcomes of this process might include the establishment of objectives and the instruments required to achieve these, such as specific institutional arrangements, policy documents and legislation relating to a certain policy field. Examples of such spaces were the agricultural sector and the forest sector. These institutional arrangements involved small groups of specialists, usually drawn from parliament, civil servants, government ministers and representatives of private organizations or interest groups who developed tight connections and close working relations that had both formal and informal aspects (Heclo 1978). These policy sectors generally had clearly defined boundaries and have been referred to as iron triangles. The close-knit connections between a few specialists often created situations where these iron triangles became closed structures with clearly observable boundaries. The levels of expertise that they embodied and their close cohesion meant that these small groups were able to obtain much leverage over the political and administrative system (De Vries 1989; Van Waarden 1992). In mainland Europe, these closed informal relationships have often also been referred to as corporatist subsystems especially where the relationship between interest groups and the state were legally formalized. These corporatist subsystems, which often defined the boundaries and interests of a policy sector, coordination exerted much influence on policy making, also as the officially recognized interest groups defended any policy decisions to their members (Schmitter 1979; Hunold 2001; Andeweg and Irwin 2002).

According to Lijphart (1984; 1999), the development of such closed corporatist structures in mainland Europe can be partly explained by the dominance of the consensual democratic model, in which relationships between government and society are more prominent and formal than under the majoritarian model. In the latter model, power resides with the single largest political party which has a centralized administrative machinery at its disposal that allows it to impose its will (see Lijphart 1984; 1999). According to Lijphart, the management of policy sectors relies on a multi-party system, which relies upon the long term involvement of high-ranking civil servants, whose position is independent of political power and fixed representatives from interest groups, who together form a closed network. One aspect of this corporatist tradition is the natural tendency to for closed patterns of interaction to emerge, which in turn strengthen the segmentation of policy making. In consequence, the different sectors become observably separate and decisions that cross the boundaries of different government departments and/or interest groups become rare (Andeweg and Irwin 2002; Visser and Hemerijck 1997).

This approach of policy making within closed and observable policy sectors has shown itself to be limited in the face of current complex inter-sectoral policy issues. Many contemporary problems are complex and do not respect the borders of a legally defined policy field or the competencies of governmental departments. Contemporary developments, such as the complex arrangements of public offices, their overlapping responsibilities, the growth of the number and influence of external lobbying and interest groups and blurred lines of authority all go challenge these static and closed sectoral divisions. The time-honoured divisions of responsibilities that governed the departmental structure of government are giving way to more complex arrangements in which overlapping responsibilities, with blurred lines of authority (Heclo 1978; Sabatier and Jenkins-Smith 1999; Hunold 2001; Howlett and Ramesh 2002; Weible and Sabatier 2005). This raises the challenge of creating more open systems of interest representation so as to overcome problems of limited, authoritative policy making associated with corporatism, a development that is fully in line with current trends in governance (see section 1.2).

A review of studies on inter-sectoral coordination in forest policy by Verbij and Schanz (2002) shows that most studies have primarily interpreted forest sectors as social and institutional structures, which strongly resemble the characteristics of iron triangles and corporatist subsystems. The forest sector has been mostly studied by objectively analyzing the given typical forest structures, legal policy, established forest actors, the competencies of governmental departments, sectoral policies, programmes and regulations and historically developed administrative structures (see De Montalembert 1992; Schmithüsen *et al.* 2001; Hogl 2002; Dominguez and Plana 2002; Schmithüsen 2003; Krott and Hasanagas 2006). These studies mostly find that the impediments for inter-sectoral coordination lie in the differences in organizational history, culture, interests and belief systems between different social entities and economic sectors (Shannon and Schmidt 2002). Other studies have focused on describing and analyzing the interfaces and coordination mechanisms that link the forest sector with other sectors (see Repetto and Gillis 1988; Broadhead 2001; FAO 2003). Schmithüsen *et al.* (2001) reviewed these studies and concluded that, most studies on inter-sectoral coordination have merely resulted in descriptions of the other sectors influence upon the forest sector. The most influential of these other sectors are macro-economic policies, population and social affairs, agriculture, land-use and tenure, energy, environment and infrastructure policies. The impact of these other policy fields on forests varies according to the context of a certain place or country at a given time (De Montalembert 1992; De Montalembert and Schmithüsen 1993). Thus to date, studies on inter-sectoral coordination in forest policy have treated different sectors as objectively given and clearly differentiated structures and represent inter-sectoral coordination in terms of the institutions and procedures that facilitate coordination between different social and institutional sectors, different governmental bodies, forest actors and

between sectoral policies and programmes (Schmithüsen *et al.* 2001; Schmithüsen 2003). These studies describe inter-sectoral coordination as an instrumental activity between observable societal sectors.

In a review on inter-sectoral coordination Verbij and Schanz (2002) argue, that the problem with taking sectors as a starting point implies interpreting these sectors as objectively given structures, whose boundaries are drawn *a priori* according to the observer's analytical focus. However, in practice, the actors involved in these sectors are continuously engaged in setting, accepting, maintaining and adapting the boundaries with other groups of actors, as these boundaries help them to define, structure and distinguish the complexity of their political and social interactions (Schanz 1999b). As a result the way in which actors themselves perceive the forest sector, by drawing boundaries around their social system, has an impact on coordination. In other words, forest sectors cannot be solely distinguished through empirical observation but must seen as socially constructed abstractions. This study is not the first in its field that recognizes the need to problematize the boundaries of the forest sector when researching inter-sectoral coordination. Andrian *et al.* (2002) argued that the definition of the forest sector and, more precisely, of the sector's boundaries is a prominent issue that should be the starting point for analyzing inter-sectoral coordination issues. Hogl (2002) also addressed this issue and argued that it is not programmes or structures that matter so much as the way in which the actors themselves coordinate their actions in inter-sectoral coordination.

2.2 Defining sectors: actors and boundaries

The previous section argued that it is no longer sufficient to conceptualize sectors as fixed and observable structures, described in terms such as iron triangles or corporatist subsystems. Instead, sectors have to be understood as socially constructed abstractions that are the result of, or influenced by, inter-sectoral coordination. The section also showed that *actors* are central in defining the social constructions of sectors, particularly in setting *boundaries* that they use to differentiate between what belongs to their sector and what belongs outside it. The following two sub-sections explore the role of actors and boundaries in order to gain more insights into how both actors and boundaries influence the dynamic nature of sectors.

2.2.1 Actors continuously (re)define their sector

The concept of actors was introduced in social science because almost all-relevant interactions within policy making take place between representatives from organizations (De Jong 1999:44). Individual opinions are seen as carrying less weight than the official viewpoint of the organization (Kaufman, 1986 in De Jong 1999:44). Long (1992:21) makes clear that actors must not be seen as disembodied social categories, but rather as active participants who process information and deal strategically with various other individual actors and institutions. These actors perform actions within a certain institutional context, and at the same time, these institutions are shaped and reshaped by these actions. Analytically, social reality can be explained by referring to prevailing actor constellations in a given context, or by emphasizing the role of the existing institutional context or structure on the actions of the actor, but both these approaches are quite reductionist (Knill and Lenschow 2001). Some social scientists have tried to overcome this actor-structure divide by taking a more holistic approach (see Crozier 1980; Godfroij 1981; Giddens 1981, 1984; Sztompka 1993). One common denominator of these more holistic approaches is their focus on the meso-level of actual practices; the level where action and structure meet. This analytical focus on this meso-level of actual practices is a useful one to employ when seeking to illustrate how sectors are conceptualized by the actors that define the 'forest sector' – through a continual process of setting and resetting the sector boundaries.

The idea of form proposed by Norbert Elias provides an interesting avenue for further conceptualizing sectors at the analytical meso-level of ongoing practices. For Elias, the structures and dynamics of social systems could only be understood by conceptualizing human beings as interdependent rather than autonomous, existing in what he called figurations. He emphasized the importance of understanding human beings in the plural, as part of collectives, and stressed that people's very identity as unique individuals only exists within and through those figurations (Elias 1978:129, Ahrne 1994). While these figurations only exist in and through the activity of their participants, they are also largely independent of the specific individuals which make them up (Goudsblom 1987). Figurations have the peculiarity that they continue to exist, even when all the individuals who originally formed the figuration have been replaced by others. In Elias' understanding, social structures are but a reflection, a snapshot in time, of the ongoing interactions and relations between actors. Organizations are a good example of a figuration: people come and go, the founders are probably already gone, but still the figuration of the organization continues.

Sectors can also be conceptualized as a type of figuration that are a snapshot within a continuous process. This snapshot will most probably differ in different temporal and spatial contexts. Thus sectors become *Gestalts*, or forms, that only come to the fore when

they give meaning to the practices of the actors involved. This means that you cannot actually touch a sector but can only distinguish it when it has a meaning given to it. Perceptions on the boundaries will be adapted according to how this sector fulfils the needs of the involved actors. Sectors thus are temporary forms that come to the fore when they having meaning for a certain group in a given context. Strong and dominant traditional meanings can continue to be meaningful for certain groups, whereas other groups can develop new perceptions about problems and solutions that lead to new meanings being attached to the sector.

Sectors need to be conceptualized in a manner that acknowledges that they are constructs of practices in which actors continuously set, accept, maintain and adapt the sector, and where the actions of these actors are also influenced by the sector. This study uses the term 'sectorization', derived from a study of Billé and Mermet (2002) to describe this process. Billé and Mermet (2002) introduced the idea of sectorization to show that sectors are constantly created in order to make sense of the world around us. The idea of sectorization expresses the process through which actions intended to integrate sectors result in the creation of new or adjusted sectors. Thus the term sectorization reflects that actors jointly and actively set and adapt the sector construct so as to give meaning to their activities. Actors thus do not simply belong to sectors, but are involved in a constant process of sectorizing their sector.

2.2.2 Boundaries of sectors as meaning systems

According to the OEDonline (2006) a sector refers to active and purposeful delineation of subsystems within a larger whole. The aim of this purposeful delineation is to reduce complexity. Sectors are thus defined by their boundaries, with the aim of identifying their role within a larger system. These boundaries simultaneously lock-in as well as lock-out (Kurtz and Snowden 2003). They simultaneously enable social entities to define their own activities and to make sense of the complex world around them. Since this study views sectors as being actively set and reset by actors, it follows that boundaries are also set and reset in a dynamic processes of sectorization, rather than being fixed entities.

The analytical focus of boundaries has become quite common in social science, particularly in organizational studies and in science and technology studies. In organizational studies, Weick (1995) and Kurtz and Snowden (2003) argue that the construction of boundaries must be seen as one of the most important aspects of sense-making, since boundaries represent the patterns we create in the world around us. Boundaries define what is inside and what is outside (Santos and Eisenhardt 2005). In science and technology studies, the activity of drawing boundaries has been referred to as boundary work (Gieryn 1995).

Boundaries are the contingent outcomes of social processes and allow actors to identify, distinguish, and make sense of the world. Boundaries thus need to be meaningful and respected by what is 'included' as well as by what is 'outside'. In this respect, Luhmann shows how boundaries play a central position in social system theory. He claims that society is differentiated into social systems that set and reset their boundaries by developing systems of meaning. What makes sense is within the system and what does not is seen as the environment (Ludewig 1992:94). If the system is to continue to exist, it has to make sense of information from the environment and it does so through internal structures that are based on more or less generalized expectations (Schaap 1997:277-8). According to Luhmann, rationality within social systems is based on the capability to resolve internal problems by understanding and translating external problems into the internal language, thereby maintaining the boundary of the social system (Goldspink and Kay 2004; Schaap 1997; Dunshire 1996). In this way, social systems reduce environmental complexity and enable meaningful action within the system.

According to Luhmann, meaning within social systems is constructed and reconstructed by the production and maintenance of a sense of difference between the system and the environment (Lee 2000). Each societal system is a functionally dedicated construction that reduces the complexity of its environment by differentiating itself from other societal systems (Lee 2000). Meaning is created and maintained by creating and maintaining difference between the system and the environment. Social systems do not react blindly, but rather they are structurally coupled with their environment. Events in the environment are used by the social system as stimuli in order to build up their own structures of meaning, with the social system maintaining reciprocal communication with its environment (Ludewig 1992; Goldsprink and Kay 2004). Sectors can continue to exist and have meaning to a certain group as long as a difference can be created and maintained. When the factors that differentiate a 'sector' from its environment diminish, the sector can lose its form or meaning and finally become unnoticed or indistinguishable.

A central idea in these analytical uses of the concept of boundaries is that we use boundaries to make sense of the world around us. Sectors need to be conceptualized in a manner that acknowledges that their meaning is created and maintained through creating and maintaining differences between the sector and the environment. Sectorization then needs to be understood as the process through which actors set, accept, maintain and adapt sector boundaries with the aim of creating and maintaining a difference between what is inside the sector, and therefore part of its identity, and what is outside. Sectors become distinct from other sectors when interactions between actors set and maintain a meaningful sectoral boundary. Sectoral boundaries are continuously maintained and challenged and the outcome of these dynamics is the sector. Thus sectors can be understood by analyzing the

construction of their boundaries (Gieryn) or the creation of difference between the sector and the outside environment (Luhmann). This focus on boundaries therefore provides a plausible entrance for studying the forest sector and the subsequent meaning of inter-sectoral coordination in the forest policy debate.

2.3 Understanding sectorization as a framing process

2.3.1 Introducing a framing perspective

Sections 2.1 and 2.2 put the case for conceptualizing sectors as social constructs to which the involved actors ascribe meaning by setting and re-setting the sector boundaries, while also being influenced by the sector in a continuous process of sectorization. Different sectors can co-exist alongside each other, since different actors can attach different meanings to a sector at the same time. The meaning that actors attach to a sector can change over time or with a change in context and another meaning can become more appropriate. While some factors may be likely to stabilize actors' perceptions of the sector, others may be more likely to change them. Taking into account these essential characteristics of the sectorization process and the orientation towards sector boundaries, this study will make use of a frame perspective to empirically measure these processes of sectorization.

It does so firstly, because frames, like sectors define reality. Section 2.2 showed that sector boundaries are being defined and re-defined by involved actors so they can continue to make sense of their sector. The term frame is derived from Goffman's frame theory (1974), in which he used the term frame to denote schemata that enable actors to locate, perceive, identify, and label occurrences within their daily lives and the world at large. Frames thus also define reality as well as merely describe it. Different research domains, such as decision theory, conflict and negotiation theory and policy analysis, have made use of the concept of framing in order to research how actors define their realities. For example in policy analysis, Schön and Rein (1994) assert that frames determine how actors see issues, policies, and policy situations and how these frames embody different prescriptions for action. Overall, there is no general consensus about what frames are, or about how actors make use of them (Dewulf 2005). Despite this, Fisher (1997) argues that the study of frames and framing is useful in studying how actors process information to generate meanings. Dewulf (2005) found elements of a common denominator of the frame concept and argued that frames are "something, like a vague notion of a problem, an interaction situation or a specific set of problem elements, which can be arranged in a different ways, according to different frames and this holds different implications".

Frames are important for a second reason because they, again like sectors, are used by actors to shape reality by a focus towards its boundaries. Framing-theory claims that actors do not arbitrarily form frames (Fischer 1997): frames are not simply used as a way to make sense of reality, but also used to shape social reality in a particular way. Social actors use of frames to (re)construct a specific cultural orientation which favours or justifies their own position. Frames can serve to emphasize specific policy matters and offer a particular interpretation of a situation or event and even to attribute blame and responsibility (Triandafyllidou and Fotiou 1998). Therefore, frames focus on boundaries in order to distinguish between what is 'inside' and 'outside'. Actors seek and make use of frames that make sense of their social practices and, at the same time, create a difference between them and their environment. They will continue to do so as long as these sector frames are perceived as legitimate by those in the surrounding social environment. Continued use of a sector frame that is no longer accepted by those in the surrounding social environment can result in alienation of the 'sector'.

This view of framing sees it is the driving force through which sectorization occurs, by society, or social actors, reproducing meanings by making use of sector frames. This frame perspective on sectors implies that sectorization processes can be empirically studied by researching the sector frames that social actors use to (re) construct a sector that favours and justifies their own position. Actors will construct frames that make sense in a certain spatial and temporal context through a continuous process of setting and resetting frames. Different groups of actors will most probably favour and make use of different sector frames, choosing the ones that are most advantageous to their interests and position.

2.3.2 Sector frames are shaped by meaning, membership, and interaction boundaries

Framing theory analyzes boundaries by focusing on what gets framed. Dewulf *et al*. (2005) argue that there are two key dimensions in aligning the different approaches to framing, first the nature of the frame itself, and second what gets framed. Because the focus in this study is explicitly on analyzing sector boundaries, the focus here is on the second dimension 'what gets framed' which refers to how the frame is used to distinguish between what is framed as 'within' and what is framed as 'outside'. Dewulf *et al*. (2005) make a threefold distinction in what it is that gets framed, distinguishing between knowledge, relationship, and interaction as the key aspects of the framing process. 'Knowledge' refers to the meaning of events, situations or issues in the relevant domain or context. 'Relationship' refers to the meaning of the relationship that exists between self and the others. 'Interaction' refers to the meaning of interactive activities between the involved participants.

In this study, this threefold distinction is translated into three boundaries that together shape the forest sector frame. The first dimension, knowledge, is referred to in this study as *meaning boundaries*. Here the focus is on the meanings that actors attach to forests, given that forests are the central focus or binding element of the forest sector. The second dimension, relationships, is referred to in this study as *membership boundaries*. Here the focus is on perceptions about who belongs to the group and who is outside it. The third dimension, interactions, is referred to as the *interaction boundaries*. Similar to Dewulf *et al.* (2005), the focus here is on analyzing the meaning of the activities between involved actors. The following paragraphs elaborate on these three dimensions in greater detail.

Meaning boundaries

In the process of forest sectorization, the first thing that gets framed is the meaning of forests within a given context. The construction of this sector boundary reflects how the involved actors frame the meaning of 'forest' in a way that makes sense to them and to the world around them. Besides the specific meaning that forests have for their owners and managers, they also have meanings that are associated with the functions they fulfil for society at large. These forest functions are the meanings that society at large (or in Luhmann's term 'the environment'), attaches to forests. These are expressions of social expectations about what should be supplied by the forest. Traditionally, the most common functions of the forest have been the production of wood and other forest products; the protection and conservation of the environment (e.g. soil, water, and wildlife) and the provision of opportunities for recreation. But many other meanings (or functions) have been attached to forests by society, such as their function in CO^2 sequestration function, in cleaning the air and their spiritual or ritual function. The focus of this study is how actors perceive the forest sector in terms of these meaning boundaries, which can be based on the pre-eminence of any of these forest functions in relation to others, or on a multi-functional perspective in which forests are seen as fulfilling multiple functions at the same time.

Membership boundaries

Another aspect of forest sectorization processes involves the framing of who is inside and outside the forest sector. Since sector boundaries are also set and reset by framing membership, this study also looks at membership of the forest sector. Policy network theory conceptualizes network boundaries in terms of membership: actors are either included or excluded (Marsh and Rhodes 1992). Membership is also an important concept in group theory. Laitin (1998:16) defines a group as "a collection of actors who perceive themselves to be members of the same group (or are assigned membership by others), share some emotional involvement in this common definition of themselves and achieve some degree of social consensus about the evaluation of their group and of their membership in it". A key theme of theories of inter-group relations is that social groups provide their

members with an identification of themselves in social terms. Framing the boundary of the sector in terms of membership is thus at the heart of understanding who constructs the forest sector.

Within sectorization processes membership can refer to a temporary situation in which a certain group of social actors form a network. However, one difficulty with looking at membership is that sectors are not isolated and the actors interact with numerous other actors with whom they have different types of interdependencies and relationships. Membership is thus not exclusive. Focusing on changes over time on how the boundaries of the sector, in terms of membership, change over time can provide insights into inter-sectoral coordination, with blurring or changing frames of membership being a possible indication of coordination with (former) non-members. In this sense membership is not fixed, but fluid.

Within a specific context one can analyze the rules of membership that govern access to a certain group and by so doing identify who is excluded and why. Van de Laar (1990:30) developed a list of possible membership criteria, such as ethnicity, gender, age, material status, economic status, type and level of education, or profession. When framing membership of forest sectorization processes, the criteria for framing membership might be based on education (as forestry is a profession), property rights (as most forests are owned by certain people), and organizations (as certain organizations are typically involved in forest matters). In addition to framing the criteria for membership, different types of membership can also be distinguished. Van de Laar (1990) points out that membership can be voluntary or compulsory: automatic or optional. This study uses both membership criteria and type of membership to analyze the membership boundaries of the forest sector that either frame actors being 'inside', 'outside' or 'on the boundary'.

Interaction boundaries
Since sectorization is viewed as a dynamic process it follows that perceptions on the nature of relationships should also be seen in the same way. This dynamic perspective on relationships gives a much more comprehensive and less static or one –dimensional view of the interactions between actors. Examples of such interactions can be found in the book on relationship dynamics by Musgrave and Annis (1996). They introduce a four-dimensional model that identifies the power balances and key drivers within relationships. This study, narrows these four dimensions down to three possible elements that seek to explain can the manner and styles in which interactions can be framed. These three elements, the formality of interactions, the level of trust, and the ability of the different actors to and influence decision making processes, are described below.

First, the nature of the interactions can be perceived in terms of the degree of formality. Large variations in the levels of formality might be found: informal contacts, voluntary exchange, actors operating through a mandate, or even a pattern of power and dependence. Thus, interactions that set the boundary of the forest sector might be based on quite informal contacts between, for example, forest professionals and forest owners within a forest association or might be more formalized, or institutionalized through, for example, official advisory boards.

Second, the nature of the interactions can be perceived in terms of the level of trust involved. This study follows the definition of trust provided by Tomkins (2001) who refers to the degree to which an entity believes that another operates in a fair and trustworthy manner, where this belief is held without undue doubt or suspicion and in the absence of detailed information about the actions of that other party. Overall, the level of trust can be assumed to play an essential role in interactions that aim at coordination, since these actions imply a degree of interdependency between actors (Eshuis and Van Woerkum 2003; Hajer 2003; Egestad 2002; Edelenbos 2002; Van Ark 2005). However, networks are not isolated and, actors also interact with numerous other actors, with whom they have different types of interdependencies and relationships. Actors can therefore be co-operative in one network while being indifferent or uncooperative in another (see Scharpf 1993:152-156). In this respect the people who transcend different boundaries are particularly interesting since trust plays a crucial role in the boundary-spanning activities of these individuals (Currall and Judge 1995). These boundary people are positioned in-between and have the possibility of linking actors from different sector frames: potentially creating a common culture, set of interests and perceptions, and thus a new sector frame.

Third, the nature of the interactions can be perceived in terms of the actors' expectations about the overall ability of the sector to perform capably, i.e., its ability to attain its defined goals. Whether these expectations are met can depend both on the availability of resources and the capability and knowledge of the actors to use these resources. The term resources is interpreted in this study in a rather broad sense, which not only includes financial resources, but also those more formal resources based of democratically mandated powers that can shape ideas and beliefs, as well as more informal resources, based on the personal networks of specific actors and communicative skills (see e.g. Faulks 1999).

2.4 Inter-sectoral coordination in a framing perspective

Thus this study conceptualizes inter-sectoral coordination in a framing perspective in which the involved social actors frame the forest sector within their specific spatial and temporal context. Before further conceptualizing coordination in light of sectorization processes (section 2.4.2), an integral understanding of a forest sector frame is needed. Section 2.3.2 showed that the overall sector frame is constituted by three different 'sector boundaries' but paid no specific attention to the empirical analyses of the integral sector frame itself. Section 2.4.1 introduces the term sector metaphor to analyze integral sector frames.

2.4.1 Analyzing integral sector frames: introduction of sector metaphor

In the frame perspective, frames function as metaphors; they stimulate actors to focus on particular aspects of representation, while ignoring others (Fisher 1997). This metaphorical function of the concept of sector frame, leads us to the concept of discourse which describes how metaphors linguistically give meaning to a particular set of practices. Hajer (1995) defines a discourse as "a specific ensemble of ideas, concepts, and categorizations that are produced, reproduced and transformed in a particular set of practices and through which meaning is given to physical and social realities". The analysis of discourses can give insights into why a particular understanding of a problem gains dominance at a certain point, while other understandings are discredited. Foucault emphasized that discourses are not merely sets of words, but contain internal rules through which the discourses can structure human behaviour: in either an enabling or a constraining way (Hajer 1995). The concept of discourses is thus closely linked with the framing perspective in which the involved actors use metaphorical frames to structure social reality.

However, the concept of discourse seems less appropriate for studying framing processes because it applies more to the meta-level of practices (Boonstra 2004) - while this study is interested in the meso-level of practices. Science-policy studies provides some inspiration for empirical analysis of metaphorical sector frames at the meso-level of practices which closely parallels concepts about discourses. Such studies also make use of demarcation by boundaries with linguistic demarcation playing an important role in sense-making. Gieryn (1995) used the term boundary work to describe the linguistic demarcation between the fields of 'science' and 'policy'. Interactions between what lies inside and outside the boundaries are often facilitated by boundary objects (Star and Griesemer 1989) which can be jointly produced by insiders and outsiders (Turnhout 2003; Turnhout *et al.* 2007). Star and Griesemer (1989) defined boundary objects as objects that are both plastic enough to allow involved actors to constrain themselves, yet robust enough to maintain a common identity across sites. This dual focus on actors and structure implies that the study of

boundary objects essentially occurs at the meso-level as this provides the link between the macro and the micro level of practices. An essential feature of boundary objects is that they are simultaneously both abstract and concrete, thereby allowing for multiple interpretations: abstract and broad enough to be generally recognized but concrete enough to give meaning to the practices of individual actors (Van der Windt 1995; Turnhout 2003; Broekhans 2003). For example, Turnhout *et al.* (2007) have shown that ecological indicators, jointly produced by scientists and policy makers can serve as boundary objects between science and policy when each community is able to interpret the indicators in a way that serves their own needs. Broekhans (2003) introduced the idea of framing motives as a way of operationalizing the idea of boundary objects. Broekhans (2003:10) viewed framing motives as concise terms that, through suggestion and possible multiple interpretation can bind or bring actors together.

This study follows Broekhans' (2003) interpretation of boundary objects. It introduces the term 'sector metaphor' to refer to those concise terms that, through suggestion and possible multiple-interpretations, can bind or bring actors together in a certain sector. Involved actors use sector metaphors to either accommodate or reject actors from other sectors in participating in their exchanges of ideas and arguments. Thus sector metaphors are another element used in constructing a sector frame.

2.4.2 Coordination as a process of sector frame alignment

Section 2.1 showed that the term coordination is generally used to refer to the activity of arranging things in a proper position relative to each other and to the system of which they form a part. In line with this study's focus on different sector frames, it seems reasonable to argue that inter-sectoral coordination refers to coordination between different sector frames or the adaptation of certain sector frames. Coordination between different sector frames then could imply that the sector metaphors and sector boundaries are questioned, which may result in learning processes. Schön and Rein (1994) introduced the term frame reflection with which they use to refer to this process of questioning one's own frame. "Participants […] must be able to put themselves in the shoes of other actors in the environment, and they must have a complementary ability to reflect on their own action frames: they must overcome the blindness induced by their own ways of framing the […] situation" (Schön and Rein 1994:187). This can give rise to a process of learning and different frames becoming aligned. Snow *et al.* (1986) did an extensive study of frame alignment processes by studying the issue of support for and participation in social movements. They made use of the concept of frame alignment to study the linkages between individual interests, values and beliefs and the activities, goals and ideology of social movements. The underlying premise of frame alignment is that it is typically

achieved through interactions and is a necessary condition for any interactions between actors making use of different frames. Snow *et al.* (1986) distinguish four processes through which frames become aligned: frame amplification, frame extension, frame bridging and frame transformation (or reframing). This study uses these four processes as the basis for analysing the possible forms of coordination between different sector frames.

Frame amplification is the most basic process of frame alignment and simply refers to the clarification and strengthening of a given frame (Snow *et al.* 1986:469). Frame amplification only applies to existing frames and can only be utilized for frame maintenance; not for the construction of new frames. Frame amplification can draw on highly ranked values and beliefs that appeal to morality but can also fortify an existing frame by delivering a strong 'negative' identity (Gamson 1992). Frame amplification can also work in reverse, bringing about a blurring of a frame, for instance through displaying the remoteness of a frame from particular issues, problems or events.

Frame extension adds certain issues or dimensions to a frame that previously were of no relevance to it. The main goal of frame extension is to make the frame more attractive to potential adherents with similar but not identical priorities. Frame extension thus refers to portraying the objectives and activities of a certain frame in a way that makes the frame more congruent to the values or interests of potential supporters or participants. One possible drawback of frame extension is that it can weaken the appeal of a certain frame through clouding the essence of its contents (Snow and Benford 1988).

Frame bridging, similar to frame extension, this refers to the linking of two or more ideologically congruent (or similar), but structurally unconnected frames in relation to a specific issue or problem (Snow *et al.* 1986).

Frame transformation is essentially the process of reframing, in which activities and events that are already meaningful from the standpoint of an existing frame are reframed in terms of another framework, in such a way that these activities or events are now seen as something quite different. Goffman (1974) referred to this process as the process, in which "a set of conventions by which a given act[s…], already meaningful in terms of some primary framework, is transformed into something patterned on this act[s] but seen by the participants to be quite something else" (in Tarrow 1992:188). For frame transformations to occur "new values may have to be planted and nurtured, old meanings or understandings jettisoned, and erroneous beliefs or 'misframings' reframed" (Tarrow 1992:188). Putnam and Holmer (1992) have also used the term reframing to address the learning process that occurs as a result of tuning between different frames. According to them, reframing involves redefining the sector frames of the involved actors so as to enable the integration

of different frames. A confrontation between different frames may produce a shock among the actors that could motivate them into joint sense-making.

These four different forms of frame alignment are used in chapter 6 to conceptually analyze and characterize the processes of sectorization processes as processes of frame alignment. Through this an attempt is made to explore how and why different sector frames that are used next to each other can become aligned or reframed over time.

2.5 Wrapping up the main concepts

This theoretical and conceptual chapter has been guided and structured by the question 'what is a sector'. The starting point for this was laid down in the first chapter which questioned whether inter-sectoral coordination within the forest policy debate is similar to the trend towards governance. A trend in which policy coordination is seen as taking place in complex patterns and processes of interaction between various social actors who employ strategies of information-sharing and persuasion. It was questioned why forest policy makers refer to inter-sectoral coordination, rather than to the more commonly used terms of multi-actor and multi-level governance, which are used in the governance debate. Five hypotheses were formulated as possible explanations for this, which shared the common premise that the term inter-sectoral coordination in forest policy implies more than the governance-related terms used in political science.

Studies that take the sector as the starting point for studying inter-sectoral coordination have focused on different types of coordination mechanisms. This study conceptualizes sectors as being socially constructed. As a result the starting point of this study is not a definition of the sector but the definition of the forest sector is one of the results of this study. In the process of sectorization meaning of sectors is created by creating difference between what is within the sector and what is outside, in the environment. The actors involved set and maintain a sector boundary that has a meaning for them, within their given context. These sector boundaries are set and reset in a continuous process of sectorization.

This study will use frame analysis to empirically study these sectors. Frames, like sectors, function metaphorically. By making use of metaphorical frames, the actors involved can distinguish between what is 'inside' and 'outside' and thereby construct the boundaries of the sector. This study will analyze the boundaries of meaning, membership, and interaction to gain insights into what gets framed by the sector frame. It does so by researching actors' perceptions about these different boundaries. With respect to the boundary of meaning, the focus is on the perceptions on the function(s) of forests. The membership boundary is

related to perceptions on the types of membership and membership criteria. With respect to the interaction boundaries the focus is on the perceived nature of interactions, such as the level of formality, level of trust, and the ability to perform based on available resources.

In addition this study will also look at sector metaphors. These are concise terms that through suggestion and possible multiple interpretation can bind or bring actors in a certain sector together. The involved actors make use of sector metaphors to either accommodate or reject actors from different sectors and to exchange ideas and arguments. The sector metaphor, together with the different boundaries, empirically construct sector frames.

Finally, this study studies inter-sectoral coordination as processes through which different sector frames align themselves. In this respect coordination between different sector frames means questioning the sector metaphors and allowing learning processes to take place. Four processes are investigated through which frames become aligned: frame amplification, frame extension, frame bridging, and frame transformation or reframing. These different forms of frame alignment are used in chapter 6 to conceptually analyze and characterize sectorization and inter-sectoral coordination as frame alignment processes.

3 An interpretative approach

'Show me the borders, and I'll show you how to cross them
(Loesje 2006)'.

3.1 Epistemological starting points

The aim of this methodological chapter is to link the framing perspective on studying sectorization processes (developed in the previous chapter) with the study of empirical practices. The term methodology not only describes the actual methods used to obtain scientific data, but also requires reflection on the part of the researcher on the epistemological assumptions underlying the empirical data. In this study, the aim is to describe, understand and explain a social world that is continuously changing. Equally, the researcher is part of this world, and the research carried out contributes to these social dynamics.

The first epistemological starting point is related to the specific aim of this study, namely of understanding the meanings that involved actors attach to the 'forest sector' and how they make sense of their situations. According to insights derived from the 'hermeneutic cycle', this study perceives science to be a continuous process of dialogue between interpretations of the theoretical literature and of the empirical material; a constant dialogue between preconceived background knowledge and newly acquired insights (Schweizer 1998:47). Scientific validity, then, very much depends on consistency in argumentation and on transparency: the extent to which constructions can be traced back to their sources. Therefore, this study uses traceable citations throughout the empirical chapters as a way of grounding the analysis. The results of this study remain an interpretation by the researcher. Egestad (2002) compared this process with taking pictures: an x-ray camera gives a different picture than a normal camera. Neither one of the two pictures is more 'true' than the other, but different pictures may be helpful in different situations. This also holds true for this study: the perspective has been chosen to cast a certain light on inter-sectoral coordination – even though another perspective would cast another light that would yield different insights. Most importantly it is important to know which technique has been used when interpreting the different pictures or, in case of research, which conceptual framework and which methodology have been used.

The second epistemological starting point of this research is that the behaviour of actors is assumed to be based on their subjective interpretations of 'reality'. It is not the 'objective facts', but the interpretations of involved actors, that are perceived to be 'real,' and which are real in their consequences (Thomas 1928). As such, this study investigates actors' perceptions about forest sectorization processes. These will provide the basis for understanding why and how actors in and outside the forest policy domain set and reset sector boundaries; why and how they construct forest sector frames through a continuous process of sectorization. This interpretive position is in line with the constructivist approach (see e.g. Voogt 1990; De Jong 1999).

Long (1992) points out that one of the consequences of such an interpretive approach is that the researcher him or herself is also an active agent influencing the construction of social reality. Daly (1995:1 in Dupuis 1999:47) claims that this interdependent relation between the researcher and the object of study requires giving thought to the role of the researcher as an acting, feeling, thinking and influencing force in the collection and interpretation of data. Such researchers need to adopt a reflexive attitude (e.g. Dupuis 1999:48; Alvesson and Skoldberg 2000; Flyvbjerg 2004), an issue discussed in the last section of this chapter.

3.2 Case study strategy and case selection

Case study as research strategy

The previous chapters showed that most studies on inter-sectoral coordination in forestry have focused on the sector as an objectively given political structure. By contrast, the conceptual framework developed for this study starts with the assumption that defining forest sector boundaries is problematic. The focus of this study therefore is on the dynamic processes of sectorization: which create an interpretation of the forest sector. The aim of this study is not so much to test existing ideas or theories on forest sectorization, but rather to develop an appropriate conceptual framework to analyze the forest sector. The research strategy needs to be qualitative, open and able to disentangle the complexity of the different interpretations and meanings attached to the sector boundaries and the forest sector frame. In this respect, a qualitative case study approach seemed the most appropriate. In general, case-studies are valuable when the aim is to construct as complete a picture as possible (Hutjes and Van Buuren 1992; Denzin and Lincoln 2000). According to Yin (1994:1), the case-study approach is useful and appropriate when "why or how questions are being posed, when the researcher has little control over events and when the focus is on contemporary phenomena within some real-life context". Understanding how involved actors make sense of the forest sectorization process requires studying these processes in their natural settings. Characteristically within case study approaches the phenomenon to be

studied cannot be approached separately from their context (Swanborn 2000). This applies to studying forest sectorization processes; since the meanings attached to the forest sectorization process cannot be understood outside their context.

Case selection

Before selecting a case, one needs to decide what qualifying criteria should define a 'case' in light of this study needs to be determined. Reviews of other case study approaches show that cases can be defined by a focus on a specific policy field or process or by boundaries of time and/or geography (e.g. De Jong 1999; Turnhout 2003; Boonstra 2004; Van der Zouwen 2006). In addition to these boundaries this study adds another boundary. Because the forest sectorization process involves numerous coordination practices: around forest property, wood production, water catchments, soil protection, recreation etc., this study also bounds which coordination practices form a part of the overall process of forest sectorization.

The first boundary is the decision making process. The focus of this study is not on a single specific decision making process, but on the perceptions of the involved actors on the forest sectorization process. This process is bounded by the object forests. The second boundary of the case is geographical. Because forest sectorization processes mostly occur at the national policy level, the geographical boundaries were set at this level. The third boundary of the case is the time boundary. The starting point for this research is the moment when practices of coordination between governmental and non-governmental actors emerged at the national level. The fourth boundary is the boundary of coordination practices with other sectors. Based on the problem statement, and within the European context, the following three forest functions have been selected: wood production, recreation, and nature conservation. Wood production is one of the primary functions of forests and its role has shifted greatly within the European Union, which in 1995, moved from being a wood importing to a wood exporting area with the new EU members Austria, Finland and Sweden. Recreation has been selected because of the continuous process of urbanization in Europe and nature conservation has been selected because of the trend in Europe towards protecting nature which often extends to and includes forests.

After having identified how a case will be defined within this research, the next step is to decide on the number of cases. Two cases have been selected, namely Austria and the Netherlands. The reason for selecting two country cases was first related to the thought of the added value for this study if at least two forest sectorization processes would be studied. If the main aim would have been to compare different cases, three case studies would have been more appropriate. But as the aim of this study is not to test or create theories but rather to analyse and reflect on forest sectorization processes in the context of a specific country,

two cases appeared appropriate. The reason for selecting EU member states is that the membership of the EU has a clear influence on domestic policy processes. In addition, both countries are characterized by the same democratic consensus model that according to Lijphart allows the establishment of (institutionalized) negotiations between actors from state, market, and civil society. Second, the reason to select two cases is related to arguments of a practical nature, in the sense that resources available for carrying out this research were limited. Given the limited resources and the explorative nature of the study, two cases studies would give the possibility to study different forest sectorization processes in-depth. In the following sections the selection of Austria and the Netherlands is further explained.

In selecting these two case studies preference was given to selecting countries on the basis of the maximum differences in 'independent' variables or contextual characteristics. The term 'independent' is somewhat peculiar in relation to case studies as case studies in essence study a phenomenon within its context (Swanborn 2000). However three main reasons underlie the selection of the case studies.

First, finding the maximum variation in context was in line with the aim of this study: that of exploring a range of hypotheses under different conditions (Swanborn 2000:60-66). In the first chapter, five hypotheses were formulated to try to explain the specific focus on inter-sectoral coordination in the forest policy debate. On the one hand, the emergence of common patterns in sectorization processes within the case studies would support the claim that inter-sectoral coordination in forest policy does represent something more than the general trend towards governance. On the other hand, if these common patterns do not occur, this might be due to differences in the contextual characteristics. Second, selecting case studies that vary widely in their independent variables fits the explorative character of the study. These wide variations allow the study of forest sectorization processes in quite different circumstances giving more insights into the variations and adaptations in quite different circumstances (Hutjes and Van Buuren 1992:63). Third, there is added value in selecting quite different case studies as this permits consideration of analogous situations. Selecting cases on the basis of maximum variation increases the maximum room for comparing different experiences.

Two aspects have been selected that would maximize the variation in contextual characteristics through their anticipated influence on the dynamics of the forest sectorization process, namely societal pressure on forests and the economic importance of wood production.

The first variable that of differences in societal pressure on the use of forests reflects the point raised in chapter 1, which identified the growing influence of urbanized society in making demands upon forests and forestry. Variation in the societal pressure on forests depends both upon the societal demand as well as the forest cover in a country. It is assumed that societal demands about the use and exploitation of forests will differ between more urbanized and more rural societies and that this will influence the dynamics of forest sectorization processes. At a national level this difference can be expressed in terms of population density. In January 2003, the average population density within EU-15 was 120 persons/km^2: The Netherlands had the highest population density, with 478 persons/km^2, and Finland the lowest, with 17 persons/km^2 (EU 2004). On the other side of the equation there are also large varieties between EU countries in the level of forest cover: while Finland has a forest cover of over 70%, Great Britain, Ireland, Netherlands, Denmark and Belgium have a forest cover of about 10%.

Secondly, the cases were selected to show a wide variation in the economic role that forests and the wood processing industry play within a country. In Austria, Finland, Sweden, and Portugal, the wood processing industry is among the most important three national industries. When the wood processing industry is among the most important industries it is to be expected that wood production and its economic relevance will have a large influence over the dynamics in forest sectorization processes. Interestingly, when in 1995 Austria, Sweden and Finland joined the EU, the EU instantly transformed from a wood importing to a wood-exporting union. Prior to this time the 'old' European member states had not succeeded (or were not that interested) in paying much attention to forest issues. However, in 1998, during the Austrian presidency, the European Commission accepted a European Forestry Strategy. This is a first sign of the changing role and importance of forests and forestry within an expanded European Union. In contrast to these new(er) member states the role of the wood processing industry is minimal in many 'old' European countries and continues to decrease due to falling timber prices.

These two 'independent' variables served as selection criteria for the case studies, leading to the selection of the Netherlands and Austria. On the first selection criteria of societal pressure on forest land Austria ranks relatively low, whilst the Netherlands scores very highly. Forty seven per cent of Austria is forested and the population density is 98 persons/km^2. The Netherlands has a forest cover of 10% and the population density is 478 persons/km^2. On the second selection criteria of role of wood production and wood processing industry, there is a very noticeable difference between Austria and the Netherlands. In Austria the wood processing industry is the second most important industry, whilst in the Netherlands almost all the wood processed by the relatively small industry is imported and makes a very limited contribution to the Dutch economy. While

Finland would have provided an even more extreme contrast to the Netherlands, practical considerations, such as availability of background information, familiarity with the language, an available research network and opportunities for cooperation, led Austria to be selected instead. Table 3.1 gives an overview of the basic relevant characteristics of both countries.

Table 3.1 Characteristics of Austria and the Netherlands

Country characteristics	Austria (2002*)	The Netherlands (2002/4**)
Forest cover	3,960,000 ha (47%)	360,000 ha (10%) ***
Population	8.2 million	16.3 million
Private ownership	*Size (ha) #owners #ha* <200 ~170,000 2,130,000 > 200 ~1,400 1,111,000 Total share private ownership: 82%	*Size (ha) #owners #ha* 5-250 1301 32,098 >250 39 20,298 Total share private ownership: 20%
National Forest Service	591,000 ha (15%)	85,555 ha (31%)
Public land (municipalities, provinces, public services)	129,767 ha (3%)	66,575 (24%)
Private nature conservation organizations	-	61,751 (23%)
Community forests	348,886 (not included in above overview)	-
Other owner categories	-	5,753 (2%)
Wood stock (m3)	1,095 billion m3	58 million m3
Annual growth	31.28 million m3	2.2 million m3
Annual cut	18.8 million m3, 60% of annual growth	0.9 million m3, 41% of annual growth

* BFW (2005)

** Probos (2005) and Bosschap (2005)

*** These figures include approximately 85,000 hectares, owned by about 15,000 owners, each with less than 5 ha. As this are rough estimates ownership shares have been calculated from the 272,030 registered hectares of forests

3.3 Data collection

The main body of data was collected by conducting qualitative interviews, an approach that uniquely allows the collecting of perceptions of actors involved in forest sectorization processes. The interviews created opportunities for respondents to tell their stories and,

through interacting with the researcher, explore how they perceive and give meaning to the boundaries of the forest sector. The aim of the interviews was to 'mediate' meanings in the sense that the respondents' answers and stories became the basis for further analyzing meanings in relation to the conceptual framework (Lamnek 1995:38-39). A semi-structured questionnaire was developed with open questions that allowed on the spot adjustment of the exact order and wording of questions. Oppenheim (1992:115) has discussed the advantages and disadvantages of using semi-structured open questionnaires. The advantages are the freedom and spontaneity of the answers, the opportunity to probe and that open questions are useful for testing hypotheses about ideas or awareness. The disadvantages are that the interviews are time-consuming, coding is very difficult and they demand more effort from the respondent. However, the open questions fit well with the open character of this study and allowed the researcher to dig deeper and to probe further whenever appropriate.

In this context interviewing is understood not merely as a technique for collecting 'objective knowledge' from respondents, but as an activity that involves interactions. In other words, interviews are social encounters (Dingwall 1997; Fontana and Frey 2000; Silvermann 2000) in which both interviewer and respondent are active and knowledge is inter-subjectively created and constructed by their joint collaboration (Holstein and Gubrium 1995:4; Dupuis 1999:57). In such a social situation, a triangular relationship exists between the type of information that is sought, the type of respondent with this information, and the type of interviewer asking for this information. As a result, empirical data are an interpretation or an *"expression of negotiable, perspective-dependent interpretations, and as conveyed in an ambiguous language"* (Alvesson and Skoldberg 2000:276).

In addition to the qualitative interviews, background material, such as policy documents, annual reports, country studies, scientific reports, articles on the countries etc., were collected for both countries. These data served not only to complement the empirical analyses and allowed for triangulation, but also provided information about the period before the collective memory of the respondents. In addition, in case of Austria personal contacts were established with the University for Life Sciences in Vienna in order to gather additional material about Austria. In case of the Netherlands, the researcher already had access to sufficient historical information.

The respondents were selected using the snowball-method. Murty (1999:69) describes the snowball-method as follows: the researcher starts with an original list or set of respondents who are then asked to identify others who meet certain criteria. These others are then interviewed and asked to identify others, with in principle, the process continuing until no more new respondents are identified that meet a specific inclusion criteria. The inclusion

criterion applied in this study, was that respondents should be, in one way or another, be involved or have an insight or opinion on the process of setting, maintaining and adapting the forest sector boundary and the forest sector frame. As a result, those interviewed included respondents perceived as typical forest sector members', as well as respondents coming from the outside' but whose activities influence the boundaries of the sector.

In case of the Netherlands, the signatory organizations of the Dutch Forest Accord (*Nederlands Bosakkoord* in Dutch) served as the original set of respondents. On May 22 1995, sixteen private organizations[5], four Provinces[6], and three Ministries[7] signed this Accord. By so doing, these organizations formally expressed an involvement with forest policy in the Netherlands. Denig (1995) has reviewed the Accord which he sees as having two main aims: increasing public attention towards multi-functional forests in the Netherlands and directing and steering the political discussion over forests and forestry. The Accord did bring some obligations, with the signatory parties committing themselves to respect the commonly agreed upon principles and actions of the Accord within their own policies. It is not the aim of this research to discuss the effectiveness or effects of the Accord. Rather it was to use the signatory organizations as a starting point for identifying respondents, since these organizations were obviously, at that time at least, taking an interest in Dutch forest policy. In case of Austria, there was no Forest Accord or similar document, so a different approach was needed to identify an initial set of respondents. A thorough study of scientific publications about forestry and forest policy in Austria (Pregernig and Weiss 1998, Pregernig 1999, and Voitleithner 2003) resulted in a list of organizations with an apparent interest in Austrian forest policy. This initial list was then discussed with an Austrian forest policy expert to see if there were any omissions or

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[5] Sixteen 'private' organizations have signed the Dutch Forest Accord: Bosschap, Nederlandse Vereniging van Boseigenaren, Staatsbosbeheer, Vereniging tot Behoud van Natuurmonumenten in Nederland, Federatie Particulier Land Bos Natuur, Algemene Vereniging Inlands Hout, Unie van Provinciale Landschappen, Unie van Bosgroepen, Stichting Bos en Hout, Platform Hout in Nederland, Stichting Natuur en Milieu, Stichting Recreatie, Koninklijke Nederlandse Bosbouwvereniging, Nederlandse Vereniging van Rentmeesters, ANWB, and Stichting FACE.

[6] Four provinces have signed the Dutch Forest Accord: those of Drenthe, Overijssel, Gelderland, and Noord-Brabant.

[7] Three Ministries have signed the Dutch Forest Accord: those for Agriculture, Nature Conservation and Fisheries; for Housing, Spatial Planning and the Environment; and for Economic Affairs.

organisations which should not be included. This resulted in a list of organizations[8] that served as the original set of respondents for the interviews in Austria.

For the snow-balling method the respondents were twice asked during the interview if they could provide the names of additional useful respondents. First, in a question on whether there are actors missing that are involved in the forest sector, and second, at the end of the interview they were asked to indicate 'any other persons who would be worthwhile interviewing for this research'. In theory, this process should have been continued until no new names came up. In practice, however, it was impossible to interview all those mentioned and only the most frequently mentioned actors were selected for interview (due mostly to time constraints). This was particularly the case in Austria, where the scholarship for fieldwork allowed a visit of three months and, this time frame, combined with the existing commitments of the respondents, constrained the number of respondents that could be interviewed. In the Netherlands this time constraint was less rigid, and as a consequence somewhat more interviews were conducted there.

In both countries, the interviews started by asking the respondent to define the boundaries of the forest sector in terms of the actors (addressing the membership boundary). This was done by using a pile of cards showing the names of forestry organizations. The selection of organizations was based on the procedures explained above, with new cards being added in as a result of previous responses about additional actors. The respondents were asked to create three piles of cards representing members, non-members and boundary-members. While placing the cards, the respondents were asked to explain why they placed each card

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[8] Bundesministerium für Land, Forst, Umwelt, und Wasser (BMLFUW), Präsidentenkonferenz der Landwirtschaftskammern Österreichs (PRÖKO), Bundeswaldbauernverband, Zentralstelle Österreichischer Landesjagdverbände, Landesjagdbehörden, Österreichischer Forstverein, Österreichischer Bauernbund, WWF Österreich, Österreichischer Naturschutzbund, Wirtschaftskammer Österreich Fachverband der Holzindustrie, Wirtschaftskammer Österreich Fachverband der Papierindustrie AUSTROPAPIER, Hauptverband der Land- und Forstwirtschaftsbetriebe Österreichs, Österreichische Bundesforste AG, Umweltdachverband, Landesnaturschutzbehörden, Universität für Bodenkultur Wien (BOKU), Wirtschaftskammer Österreich Bundessparte Tourismus und Freizeitwirtschaft, Naturfreunde Österreich und Österreichischer Alpenverein, BM f. Wirtschaftliche Angelegenheiten, BM f. Finanzen, Landesforstbehörden, Landesraumplanungsbehörden, Österreichischer Gemeindebund/Österreichische Städtebund, Österreichische Bischofskonferenz, Österreichischer Gewerkschaftsbund (ÖGB), Bundesarbeitskammer (AK).

on a certain pile so as find out what they saw as the membership criteria. Throughout most interviews, this method proved to be a fruitful way to start discussions on what constitutes the forest sector. Several respondents, however, asked the researcher to define the 'forest sector' before they made the piles. The researcher answered by saying that it was not her intention to define the sector and this was exactly what the respondent was being asked to do. Consequently, there were several questions asked about perceptions of the meaning of forests, on interaction patterns between actors, and on specific events in time that were perceived as important in influencing changes in the sector boundaries. The final part of interviews focussed on respondents' perceptions on the meaning of the forest sector and on interactions between members and non-members. Asking questions about the role of the respondent (or not) in the forest policy process at national level, proved particularly helpful. This allowed the respondents to talk about their role in forest policy and in the forest sector, and this led them to reflect on how information exchange, communication, and coordination with related policy fields (such as the wood and paper industry, recreation, and nature conservation) occurs.

The interviews were all recorded and fully transcribed. This method has several advantages. First, without tape recording it is impossible to recall the whole conversation relying on notes and memory alone. Second, transcripts can be repeatedly analyzed, from different points of view. Third, other researchers can also analyze the transcripts and decide whether they agree or disagree with the conclusions (Silvermann 2000:149). One possible disadvantage of using a tape recorder is that respondents can possibly be less willing to speak freely, as they know that all their statements are being recorded. On a few occasions respondents indicated that a particular statement was 'off the record' although nobody refused to be recorded.

In the Netherlands, all the organizations were initially approached by telephone, and after a short explanation about the research they were asked for their cooperation. All of them were willing to cooperate, although in a few cases it took some time to find a 'suitable' person within the organization. In Austria a different approach was used, the organizations were approached via an e-mail that explained the context of the research, the aim of the research, the focus of the interview and finally asked for an interview. Some of the respondents replied to the e-mail, and those that didn't were followed up with a phone call in order to arrange a meeting. One organization refused to be interviewed because they thought they were not sufficiently involved in Austrian forestry.

In general, one interview was conducted with each organization, mostly with the spokesperson or the person involved in forest-related activities. In most cases, these spokespersons were either the chairperson or the head of the organization or of the

department responsible for forests or forest-related issues. In the case of large organizations and those with a specific focus on forests (such as a ministry responsible for forestry) more than one person was interviewed. In this way, a balanced point of view of the perspective of this organization on the forest sector was obtained. Almost all interviews were conducted at the office of the respondent. Interviews were face-to-face and, by using a neutral to soft style of questioning, an atmosphere of trust was created in which both interviewer and respondent felt comfortable. The respondents were willing to answer all the questions, share their perceptions on the forest sectorization process and also to reflect on their own roles in this process. In the Netherlands, all the interviews were conducted in Dutch, while in Austria most interviews were in English. In a few cases, when the respondent did not felt confident with their English, an Austrian forest policy researcher joined the interview and acted as an interpreter when necessary.

In total, 59 interviews were conducted: 36 in the Netherlands (between September 2003 and January 2004) and 18 in Austria (between March and June 2004). In October 2004 an additional week of interviewing was scheduled in Austria and five additional interviews were conducted. On average, the interviews lasted between 1-1.5 hours. While a tape recorder was used in all interviews to provide the basis for transcribing the interview texts, there were mechanical difficulties during two interviews. In these two cases the interview report was made with the use of notes and the memory of the researcher and the report was sent to the two respondents for their comments, with both reports being returned with some minor comments. The data collection process (interviewing and transcribing) resulted in almost 1000 pages of written text. The next step in the research was to analyze and give meaning to this data by analysing and interpreting it.

3.4 Data analysis and interpretation

In general, qualitative data analysis involves searching for patterns in data by going from the individual responses to more general interpretations (Neumann 1997; Silvermann 2000). In other words, data analysis involves an ongoing dialogue between the existing literature about the data collected and the distinctive interpretations that emerge from the analysis of data from field work (Alvesson and Skoldberg 2000). Silvermann (2000:143) proposes three steps in data analysis that should guide and structure the data analyzing process:

- *Data reduction*: the process of selecting, focusing, simplifying, abstracting and transforming raw data;
- *Data display*: assembling the data in an organized way that permits conclusion drawing and action taking;

- *Conclusion drawing*: getting to the meaning of things, noting patterns, finding explanations and testing the plausibility and validity of provisional conclusions (Silverman 2000:143).

The data analysis and interpretation processes applied in this study was based on these three steps and sought to make the process of data analysis and interpretation as transparent as possible.

Data reduction: coding

The transcripts of all the interviews amounted to approximately 1000 pages of data. To be able to systematically research, analyze, and structure this huge data source, the interviews were coded. 'Codes' are labels used to assign meaning to certain pieces of text from an interview (Miles and Huberman 1994:56). According to Neuman (1997:422), "coding is two simultaneous activities: mechanical data reduction and analytic categorization of data". In other words the researcher imposes order on the data. One of the advantages of coding lies in reducing an enormous pile of raw data into manageable piles. Coding also allows a researcher to quickly retrieve bits of data whenever needed (Neuman 1997). The software program Atlas-ti was used for coding. All the interviews were entered in Atlas-ti. Most quotations were between 10 to 20 lines and the number of codes per quotation was usually three or less. All the interviews were coded twice. In the first run the interviews were coded using a set of predefined codes based on the main concepts from the conceptual framework. Second, when revisiting the interviews, new codes emerged (open coding) from the interview texts. Annex 2 shows the final coding list used to code all the interviews, a total of 38 codes. All respondents were given a unique number and through this method the interview quotes included in the analysis can be traced back to the transcripts (using this number and the line numbers) both of which are included in brackets after the quotations in the text.

Data display: individual case studies

The coded interviews were used to develop case stories for both Austria and the Netherlands. Because of the methodological choice for an interpretative approach, the sorting of the empirical material was based on these interpretations. Therefore, the paragraph titles used in both case stories are outcomes of the analysis of the interpretations of the involved actors on the different boundaries. Both case studies start with a section that provides background information about the natural, political, and societal context of the country. The second section of the case studies analyses the meanings attached to 'forests' which are the basis on which the meaning boundaries of the 'forest sector' are constructed. The third section analyses who is (and is not) involved (and why) in setting and maintaining the membership boundaries in the process of forest sectorization. The fourth

section analyses the patterns of interaction between members and between members and non-members. The last section of each case study analyses those frames which are used to frame the 'forest sector' through identifying the sector metaphors employed and the dynamics of the boundaries of the forest sector. Traceable (but anonymised) quotes are used throughout the empirical chapters to ground the presented constructions. The Dutch case study has been reviewed by a colleague from Wageningen University. While it did not prove possible to do this with the Austrian case study the essence of both cases study has been published as a book chapter (Verbij *et al.* 2007) and this chapter was reviewed by a colleague from BOKU University in Vienna.

Conclusion drawing: cross-case learning

The aim of cross-case learning is to gain insights into the meanings of things and to find explanations. Alvesson and Sköldberg (2000:439) argue that "researchers use qualitative data analysis to examine and organize the observable data so their ideas and theories about the social world reflect not only the surface level of reality but more important, the deeper structures and forces that may lie unseen beneath the surface". In the case study the specific aim of cross-case learning is to explore the meaning and value of the five hypotheses presented in the first chapter. The second part of chapter six analyses the added value of studying sector frames and frame adaptation as a way of understanding the meaning of inter-sectoral coordination.

Reflexive interpretation

The results of the study are mainly based on data collected during face-to-face social interactions. An increasing number of researchers, such as Dupuis (1999:48); Alvesson and Skoldberg (2002) and Flyvbjerg (2004), claim that such situations require the researcher to adopt a reflexive attitude. Dupuis (1999) argues that reflexivity requires that the research should meet the following criteria: conscious and deliberate inclusion of the full self; use of empathy throughout the research process; recognition of the active, collaborative role that both participants and researchers play in the process of creating meaning; and explicitly showing how the research process developed over time including how research design decisions were made and what factors affected those decisions. In the final section of his chapter the researcher reflects on her role in this research, following these criteria.

First, with regard to the conscious and deliberate inclusion of the full self in the research, the researcher realized that her training as a forester at Wageningen University made her part of the group she was studying. Furthermore, she realized that through reflecting on the boundaries of the forest sector and inviting others to do so she was participating in setting and resetting these boundaries, both through publishing this dissertation, but also through discussing the research results with other forest professionals who are part of her

professional and personal network. Second, with regard to the use of empathy, the researcher consciously sought to put the respondents at ease during the interviews, by visiting their offices and starting the interviews by discussing their background. Third, the collaborative role of the researcher has been made explicit, with the interviews having been transcribed and quotations used to illustrate the case study stories. Fourth, with regard to reflecting on the research project, at different places throughout the methodological chapter the research process has been discussed and reflected upon.

4   Austria

"[...] everything is sectorally driven. There is a sector for forestry, there is a sector for nature, there is a sector for industry and so, and of course it is the same with the lobby clubs: the strongest lobby is winning. So, one has to be very compact and very well positioned within one's own community and there of course the forestry sector has not such a bad position (8:306-312)".

This chapter analyzes the process of forest sectorization in Austria; how the boundaries of the forest sector have been constructed, and how and why different sectors have gained or lost dominance in this continuing process. The chapter starts with a brief descriptive section providing contextual information about Austria, as a country and society. The following sections focus on the three main sectoral boundaries of the forest sector, which were introduced in the conceptual framework.

The following three questions structure sections 4.2 - 4.5 of this chapter:
- What meanings are attached to the term forest?
- Who are the members of the forest sector and who are not, what criteria determine membership?
- What patterns of interaction between actors effectively structure the forest sector?

The last section, 4.6, analyzes the sector metaphors and sector frames that were observed in Austria, and how, and why at certain moments in time, specific sector frames came to the fore at the expense of others.

4.1 Natural, political and societal context

4.1.1 The natural context a mountainous landscape well suited to forests

Austria is a landlocked European country, with about 2/3 of its landscape dominated by the high Alps mountain range. The lower eastern side of the country is delineated by the Danube River and contains the capital of Austria, Vienna. With the retreat of ice some 13,000 years ago, forests gradually spread to cover almost the whole country. From about 6,000 years ago, until the 15the century, the forests on the plains and the lower hilly lands

slowly disappeared due to small-scale logging in these areas, which were well suited for settlement and agriculture. The forests located on steep slopes and at higher altitudes were extensively used for pasturing and collecting useful materials. From the 15th century onwards, this system of small-scale forest logging was replaced by large-scale cutting and the tree line gradually moved upwards. The increase in large-scale cutting was due to the growing demand for wood: from a growing population, consuming more energy and constructing more houses. In addition wood was also needed to meet the growing demands of the fast developing iron and steel industries and salt mining (Frank *et al.* 2003; BMLFUW 2003a).

This overexploitation lasted until the middle of the 19th century, when the demand for wood decreased. The use of other energy supplies (first coal and then later oil) led to a decline in demand for charcoal, easing one of the main pressures on Austria's forests. As a result forest cover increased again. Nowadays, about 47% of Austria is covered with forests, which amount to total of about 3,924,000 ha. These forests are unevenly distributed across Austria: forest cover in the mountainous area is 70%, whereas in the lower plains it is often less than 20% (Gschwandtl *et al.* 2002). This difference is largely due to the lower plains being more suitable for agriculture, whereas forests in the higher Alps were far less accessible, and often were maintained because of their protective function against avalanches (Johann 2000). Today, Austrian forest cover is growing annually as a rate of about 7,700 ha, per annum, mostly through alpine meadows reverting to fallow and natural succession slowly turning them into forests (Schadauer *et al.* 2004). A study by the University of Vienna showed that 3% of Austrian forests have not been subject to any human impacts and can thus be considered natural; 22% of them can be considered semi-natural; 41% as moderately altered; 27% altered; and 7% are as artificial (Koch *et al.* 1997).

4.1.2 The political context – the pre-eminence of informal structures over formal ones

Politically Austria can be characterized by its focus on consensus and on solving issues through the informal political arena (Pregernig 1999; Voitleithner 2002, 2003). These characteristics can be traced back to the relatively long period when monarchs and nobility were pre-eminent. For centuries, Austria was governed by different monarchies, the last being the Austro-Hungarian Monarchy. Only in 1848-1849, did the bourgeois revolt against this system for the first time. This attempt partly failed, as the emperor refused to recognize a constitution, resulting in Austria entering a kind of pre-democratic phase in which a *Reichsrat* (parliament) was granted limited political influence. However, the *Reichsrat* was dominated by the nobility and the rich bourgeois, since suffrage was linked to property and

income. Equally the government, which was appointed by the Emperor was not accountable to the *Reichsrat* (Pelinka and Rosenberger 2000).

In 1918, after defeat of the Austro-Hungarian Empire in WWI, the First Republic of Austria was established, and its borders then are the same as those today. Universal suffrage for adult men was introduced in 1907 and extended to adult women in 1918. Austria became a federal state with nine *Bundesländer*: Burgenland, Kaernten, Niederoesterreich, Oberoesterreich, Salzburg, Steiermark, Tirol, Voralberg, and Wien, although the federal government still maintained substantial powers (Pelinka and Rosenberger 2000). The constitution (the *Bundesverfassungsgesetz* of 1929) provided the basis for the country developing into a full-grown democracy. The parliament now contained political parties, which had been established in the pre-democratic phase. However, a civil war in 1934 abruptly stopped this democratization process and the country entered the period known as 'Austro-fascism'. In March 1938, Austria lost its independence and became part of Germany. After WWII, Austria continued to democratize, and on April 27, 1945, the Second Republic of Austria was proclaimed, based on the 1929 constitution. The new government consisted of the existing political parties, the Social Democrats (SPÖ), the Austrian People's Party (ÖVP), and the Communist Party (KPÖ). Until the 1990s, the grand coalition of the SPÖ and the ÖVP governed Austria and dominated the formal political playing field (Pelinka and Rosenberger 2000).

In this Second Republic of Austria, a strong informal structure developed alongside the formal parliamentary structure. The basis of this informal structure lay in the negotiations between labour representatives and industry interests. In the fifties, Austria was in great need of economic recovery and needed to control wage levels. This was facilitated by negotiations between the central trade union organization the *Österreichischer Gewerkschaftsbund* (Austrian Federation of Trade Unions, the ÖGB) and the Federal Chamber of Commerce This informal structure became known as the *Sozialpartnershaft* (Social Partnership). Attempts to pass a formal law that would officially empower these social partners failed, as the Constitutional Court was afraid that these two partners would become a kind of official parallel government. The formal parliamentary power, the grand coalition between SPÖ and VPÖ, was thus exactly mirrored by the informal power between labour representations and industry interests. This allowed the development of a relationship between parliament and the Social Partnership that was based on a high degree of mutual trust. The corporatist tradition in Austria was born, based on a high degree of trust in elites, a strong belief in authority and a high level of continuity in the power balance between political parties which due to stable voting behaviour and strong informal relationships between the government and the social partners (Pelinka and Rosenberger 2000).

4.1.3 The societal context – the close links between rural society and the forests

The Austrian population is about 8.2 million people, of whom approximately 1.6 million live in Vienna, and another million in the provincial capitals such as Graz, Linz, Salzburg, and Tirol. Over 5 million Austrians, or more than 60% of the populace, live in rural areas where there is a deeply-rooted traditional cultural link with the forests. About 2/3 of the country is covered by the Alps, and the forests here play an essential role in offering protection against avalanches and floods (Weiss 2001; 2005). Over 47% of Austria is covered with forests and Austrian culture and identity are very strongly interwoven with the mountainous and forested landscape. This is reflected in the numerous forest museums within Austria, the abundant use of wood in house construction and the national sports of skiing and hiking in the mountains and forests.

4.2 Meaning boundaries

This section analyzes the meaning of boundaries within the Austrian forest sector. The focus of the first parts of this section is on perceptions about the different functions of the forest and their role in the process of sectorizing. Section 4.2.1 deals with the mono-functional perspective on forests; 4.2.2 with the multi-functional perspective; and section 4.2.3 with optimizing the wood production chain. Section 4.2.4, analyzes these competing interpretations of the meaning boundaries attached to Austrian forestry, how they relate to each other over time, in overlapping or developing next to each other and their relative dominance.

4.2.1 Mono-functional forests: strong focus on commercial forestry

The high level of forest cover (over 47%) and a high level of private forest ownership seem to have laid down the basis for the historically strong focus on the commercial exploitation of Austrian forests by exploiting the wood production and hunting function of forests. The revolution in 1848 can be seen as the main basis for the high level of private ownership of Austrian forests as it resulted in the abolition of the privileges of the nobility to exploit all of the forests in Austria. These privileges were laid down in the *Montanforestreservat* which dated back to the Middle Ages and gave the Monarchy exclusive use to the forests which it in turn handed over to the aristocracy. The most accessible Austrian forests were heavily overexploited to meet the needs of the (mining) industries for wood, using the argument that this would benefit the welfare of all Austrians. Following the 1848

revolution, all user rights were transferred to individual private forest owners, and today over 80% of Austrian forests are privately owned (Weiss 2001; 2005).

The sovereignty of property is legally embedded in Article 5 of the Constitution of Austria: *Das Eigentum ist unversetzlich*, which translates as 'private property is inviolable'. Sovereign property rights are thus a fundamental right of all Austrians. In respect of forests this gives private forest owners independent decision making powers over their own forests, in contrast to the previous period, when the user rights of forests lay with the monarchy and the nobility. Private sovereignty over forests remains of great importance to private forest owners, as reflected in the mission statement of the private forest owners' organization: *"the aim is to maximize the autonomy and responsibility of these large forest owners and to minimize governmental influences on private property. Independence is the main prerequisite for forest enterprises to be able to continue to exist"* (HVLF 2005). The importance of sovereignty for the private forest owners was also stressed in an interview with one of the representatives of the organization of private forest owners:

> "Property rights are important, very important. I would say they are the basis of everything we do here. We say that we want to have a strong property right and we want to use our land, we want to use our property […] The land is the basis of our living and just as in a supermarket: everybody can come in and take away what he wants but he also has to pay in the end. That's the message (3:118-120)".

This shift in user rights allowed all private owners, small or large, to develop their own interests in their forests and to explore and exploit the possibilities for using their forests in their own interest and for their own benefit. These private forest owners need to generate an income, because they have to maintain the property, which has been owned by the same family for generations, since there is a tradition of passing the property on to future generations. For a long time, the main way to get an income has been through exploiting the natural resources on the forest property, producing and selling wood and to a lesser extent through exploiting hunting rights.

> "If you have only an economic view, I think you could say that part of the forest sector consists of these institutions and people that earn money or that have some financial function in the economic circle. This is only an economic view […] I think it is a strong identity, in fact, wood production is very important for the Austrian economy. We are the second biggest pine chip exporter in the world, we are a very small country, but with a very big wood economy, I believe that the people realize that (19:55-65)".

The forests themselves reflect this strong focus on wood production and hunting. Almost 70% of the forests are dominated by conifers, more than half of which are the highly productive spruce variety (*Picea Abies*). In the lower plains the natural deciduous forests

have largely been replaced by more commercially interesting conifer forests. With respect to hunting rights, forest owners receive standard, per-hectare compensation payments for expected damage, from the leasing hunting rights for their property. Before the 1848 revolution, hunting was a privilege reserved solely for the aristocrats and this pattern can still be seen today as hunting in Austria is mainly a hobby of the rich and influential even though, in principal, anyone can apply for hunting rights (Pregernig and Weiss 1998).

There is a very long tradition of wood production and hunting and these are both part of identity of private foresters in Austria. These uses of the forests also seem to be generally accepted by Austrian society, which perceives this as an appropriate and relevant use, not least because the wood production, at least, contributes substantially to the national economy. Such use of forests has long been part of Austrian culture and forestry and the forest processing industry provide many jobs in rural areas. As the government and, in particular, the Forest Authority has always strongly supported using forests for wood production. High levels of wood production from Austrian forests are in the interest of the Austrian government, as fuel-wood and timber production were, and are, important for Austria's trade balance and the Austrian economy. However, when the *Montanforestrservat* was abolished in 1848, the state no longer had any direct control over private forest owners, even though the new government did manage to issue the Imperial Forest Law (1852). Under the guise of 'safeguarding the protective function of forests' this Law supported the economic role of forests and was mainly focused on stimulating the exploitation of forests (Pleschberger 1986; Weiss 2001). Thus while the government lost its direct control over the forests it was able to continue to support the commercial approach towards forests.

Thus within Austria there is a long lasting and strong belief in the commercial exploitation of forests through wood production and hunting. Private owners exploit their forests for income, based on their rights of sovereignty, and the Forest Authority supports them in these activities as these contribute to the economic development of Austria.

4.2.2 Multi-functional forests: but with most emphasis on wood production

Since the 1970s, this mono-functional focus started to become problematic. Income from wood production and hunting decreased and societal interest in forest and landscape protection developed rapidly. Low wood prices created financial difficulties for a growing group of private forest owners and this is reflected in the growing area of forest that has come up for sale since that time (Johann 2000). Another response of forest owners has been to increase their game stock, so as to increase their incomes from hunting rights. As a result over 65% of the Austrian forest is hardly regenerating because of high grazing pressure (OECD 2003).

As Austria urbanized and industrialized, society started to develop a different relationship with the natural environment. Since the end of 19th century, several local Environmental Non Governmental Organizations (E-NGOs), such as the *Naturschutzbund* (Nature Protection Organization) and the *Naturfreunde Österreich* (Nature Friends of Austria, NFÖ) were established and became involved in seeking to protect Austrian forest landscapes. Recreation plays an important part in this interest: mountain sports such as skiing, hiking, and mountaineering are very popular typical Austrian sports. In addition, about 70% of forests in the higher Alps play an important role in providing protective functions, since they stabilize the slopes and hold soil, water and snow. Until the 1970s social views about the use of forests were mostly expressed by locally based E-NGOs and Social NGOs. But since the 1970s, international E-NGOs (such as Greenpeace and WWF), and later the Austrian Green Party, started to advocate for the protection and landscape function of the Austrian forests. At the same time societal demands for recreation and the tourism also developed rapidly. For Austria this meant an enormous growth in tourism; with skiing in the winter and hiking and mountaineering in summer. Tourism is now the main economic activity in Austria. These developments laid the basis for a more multi-functionality view of forests, based not just on the commercial exploitation of forests through wood production and hunting, but also including the other functions that forests fulfil. The following quotations of two civil servants in the Forest Authority illustrate these changes:

> "Identification with wood production was seen too narrow and forest owners were only concerned with themselves and not looking over the border of the plate. And this has become very important because the interests of others in forests are very big and these interests have to be considered (22:142-146)".
>
> "[…] it became more and more obvious that wood prices were stagnating […] the economic boundary of private forest owners became narrower (21:363-365)".

However, recognition by private forest owners of the multi-functionality nature of forests did not bring them any additional income from their forests. And, it was only the new Forest Act of 1975, which replaced the 1852 Imperial Forest Act that provided the first possibilities for forest owners to receive financial compensation for focusing on the recreational and nature functions of their forests. This new act advocated a broader and more sustainable perspective on forest exploitation than the one-dimensional focus of the Imperial Forest Law. The 1975 Forest Act also established goals to preserve the Austrian forest area, the productivity and functions of forest sites and of yields for future generations. Two key aspects of the act were the obligation to replant any forest areas that were cleared and a prohibition on destroying, degrading, or damaging forests.

The 1975 Forest Law explicitly acknowledged the multi-functionality nature of forests recognizing not only their wood production function, but also their functions in protection against natural hazards, in maintaining an attractive landscape and for recreational use. Since then Forest Development Plans, have classified Austrian forests within four different categories, according to their main function(s): wood production, protection, conservation, and recreation. All Austrian forests are designated as fulfilling one or more of these four functions. According to the Austrian Forest Inventory of 2000/02, Austria's forest is now classified as follows: 75.7% production forest, 7.4% protection forest with commercial yield, 11.9% protection forest without commercial yield (where the gradient is over 60%) 2.6% forested area without commercial yield, and 2.4% coppice stands (BFW 2005). These figures show that over 80% of Austrian forests maintain a primarily commercial function but that there is a broader overall acknowledgement of their multi-functionality.

A further key feature of the 1975 Forest Act was that, for the first time, it granted universal access rights to all forests for recreational purposes. These were defined as recreational activities for the purpose of relaxing; access was restricted to day-time use and only by foot. This regulation implied forest owners giving up part of their sovereignty and in exchange for opening up the forests; the Forest Authority initiated a subsidy scheme for forest owners that provided them with new economic opportunities. Under this scheme forest owners could apply for compensation when undertaking forest measurements that favoured fulfilling multiple forest functions as opposed to commercial ones, as this quote from a forest manger shows.

> "If discussions are about the land rights and the area, then the borders are closed. If it is about compensation payments and about making offers to the public, then the borders are open. Foresters are not stupid, they can adapt very well to new financial situations and then borders open and close really quickly (10:167-174)".

When the demand for recreational use of forests in any area is very high then these forests are designated as 'recreational forests' in the Forest Development Plan, with the owners receiving financial compensation. The 1975 Forest Act also contained a clause that provided subsidies for constructing forests roads – which opened up opportunities for multi-functional forest use as such roads created additional possibilities for recreation in the forests and also provided additional infrastructure for wood harvesting. In the period between 1976 and 2001, almost €5 million was spent on subsidizing about 340 projects of forest road construction.

While the recreational function of forests was firmly (financially) acknowledged by the 1975 Forest Law, it did not adequately address their nature conservation function. Nature conservationists were dissatisfied with priority that the act gave to nature and landscape

conservation. This had been increasingly socially recognized since the 1970s, when forest degradation became a matter of public concern, especially when there was a widespread fear about forest die-back from acid rain. Although the effects of pollution proved to be exaggerated, it did cause foliage and tree-crown damage (Koch *et al.* 1997). Since that time, local, provincial, and national voluntarily projects between conservationists and forest owners have been set up, to protect ancient forests, and to stimulate *naturnahe Waldbau* (nature-oriented forest management). The following quotations of a large private forest owner and two provincial forest officials illustrate that forest owners have become started to show some interest in conservation but mainly because of the economic incentives from the provincial governments. However the nature conservation function is not structurally embedded in Austrian forest management because of the absence of a structural financial compensation schemes at a national level.

> "There are many projects coming from local government but also […] the NGOs are initiating a market. Because without that pressure and there would be no demand from the people and then there would be no market. So indirectly what they do is also important. And we are mostly on the defensive and we say ok, you want that and we only allow that if you do that, that, and that. So mostly we do not develop our own ideas and own activities in the field of nature conservation, we cannot do that because we cannot find anybody who pays for that. Mostly we are reacting: if somebody else wants something in the field of nature conservation, then we can react (6:145-158)".
>
> "I mean it is more focused on economic matters: how to survive in this sector. And environmental obligations are felt as obligations, not something one does from self-motivation and in some cases they are sometimes almost felt as a threat, with all these environmental acts and so on (8:291-295)".
>
> "Nature conservation […] all these things are in the most part of forestry, from my point of view, only a discussion about money, only! (10:101-103)".

The reluctance of private forest owners towards any large scale move of receiving payment for ecosystem services remains, mainly because of their fear of becoming dependent on politics and society for continuing payment of these services. But, during the last decade the growing legal basis for nature conservation does appear to have supported the rise of the nature conservation function of forests. Austria has signed up to international nature conservation agreements which it has to honour. This has created a momentum that allowed establishing a more significant legal basis for the forest conservation. The 2002 Amendment to the Forest Law enshrined a definition of sustainable forest management. According to the website of the *Bundesministerium fur Land, Forst, Umwelt und Wasser* (Ministry of Agriculture, Forestry, Environment and Water; BMLFUW) this amendment implied a paradigm change because of the fundamental shift from a narrow to a broader interpretation of 'sustainability' and therefore created a new direction for forest policy (BMLFUW 2005). The 2002 amendment no longer spoke of sustainability solely in terms

of wood production (in the sense that annual wood harvested should not exceed the annual growth) but referred to the *Lebensraum Wald* (forest ecosystem) and the importance of forests for people, animals and plants. Furthermore, the 2002 amendment introduced a new forest category for forest areas with a special protected status, such as Natura 2000 areas and national parks. Additional funding is available for such forests to help conserve their nature values. Despite these changes, most respondents claimed that it is still difficult to combine the nature conservation function of forests with wishes of the private forest owners to exploit the forests commercially. This is reflected in the following quotation from a forest civil servant:

> "For the EU countries that depend on the economic part, the framework for these activities is getting smaller and smaller. Because the European DG for the Environment forces through laws like the Flora and Habitat Direction, and says that we have to select these areas without giving thought to the economic aspect. It is in the Directive so they do their duty, if they want something from the agricultural sector, there is a huge wall and they say maybe come here and discuss. The forest sector, here you can just have whatever you want […] multi-functionality in Austria is very important. But if we go this way for the next 20 years then we might lose the multi-functionality, we might have to say 'half of Austria is national park, with nobody in it because it is not possible to maintain the protection function, it is more the protection of the forest and not the protective function of the forest (16:250-255)".

Over recent years several provincial authorities have made special subsidies available to encourage forest owners to pay more attention to nature conservation. The following statement from a civil servant from the nature conservation authority shows that this is a relatively new development for Austria:

> "There are some special subsidies coming from nature conservation for wooded areas, such as for dead wood, forest edges and old stands of trees. These are arranged by the federal state and are actively offered. There are programmes for wooded areas in Voralberg and in Salzburg which were established in 1999 in the International Year of Nature Conservation, so really were part of the Zeitgeist (9:478-482)"

In addition, the Forest Authority has initiated a programme, the *Österreichische Naturwaldreservate-Programm* (Natural Forest Reserve Programme) that aims to preserve important representative parts of Austria's 125 different forest ecosystems. Through this programme, Austria aims to meet the international forest biodiversity standards, which it is a signatory to: Alpine Convention (1991), the Helsinki Resolution (H2) on the conservation of the biodiversity of European forests (1993), and the Convention on Biological Diversity (1995). To date Austria has designated 180 reserves covering a total of 8272 ha; about 60% of the target for the number and size of forest reserves. However, many areas intended for designation have not yet been designated and these are all located in commercial forests.

Frank and Müller (2003) argue that these areas have not been designated (and thus Austria's targets not met) as participation is voluntary. This tension again shows the difficulty of balancing private commercially interests with the societal interest in conservation.

A similar problem of conflicting interests between conservation and wood production functions emerged in the discussion about the implementation of the EU's Habitats and Birds Directives. These aim to protect natural habitats that are either endangered or important for the protection of endangered wildlife. Because of Austria's unique location it hosts almost 1/3 (65) of all the recognised important type of habitats, together with 66 animal and 27 plant species covered in these directives. By June 2005, Austria had designated 164 areas covering a total area of 8,884 km2 (EU 2005) to meet the requirements of these Directives. In the forested areas in the mountainous western part of Austria this was relatively straightforward. Most forests in these areas were already protected and have limited commercial potential because of the poor soil conditions, high altitude and steep slopes. However in the eastern part of Austria where the forests are predominantly commercial, the implementation of the Directives was much more problematic and gave rise to heated conflicts and debates, especially about the size of the subsidies and the financial compensation for the loss of sovereignty claimed by private forest owners. Conservationists did not expect that these designations would impose many additional limitations on forest owners, since the sites were already designated as Natura 2000 sites, and that the forest properties designated as Natura 2000 sites had been selected under the existing exploitation regimes. The following quotations of civil servants from the nature conservation and forest authorities reflect that this dispute arose from the effects that Natura 2000 was seen to have on the (future) freedom of decision-making of forest owners and how this has become a financial discussion about compensating forest owners for giving up part of their sovereignty.

> "Subsidies ok, but […] if a landowner loses the right to do what he wants to do, then he has the right to go to court to get compensation. And now there is a legal dispute about what could realistically be exacted as an income by the landowner […]. That's a tricky legal problem. So, we have a big discrepancy between the sums which are now being discussed for the Natura 2000 areas; let's say between what is realistic and reasonable and what is a nice try (14:292-300)".
> "As far as we can see, most forestry regimes will not be influenced very much by the objectives of the Natura 2000 protected areas. Because after 100 years of forestry activities the area is still valuable enough to be designated as a Natura 2000 site. The only problem would be if they were to change forest management in these areas […] That's a more theoretical discussion, especially in lower Austria. Yes, it might be a problem, very theoretical […] but on the whole as far as our country is concerned I don't see major problems in the field of forestry. And this is the case at least in the mountains and alpine regions where you don't have very much choice in silviculture because of climate, soil and slopes (9:367-378)".

"This discussion is only a discussion about money. Most owners of areas say: you come with Natura 2000 and where is the money? And we have no money in the EU for this task, or not so much. You cannot discuss all these things only through money. That is not right. It can not only be about money […] but the owners say: cash! (10:91-98)".

"I think many problems which are discussed in our forest newspapers and diverse forums, they are more theoretical and they are not good for cooperative outcomes. Of course one has to think about what could happen, of course one has to discuss it, but one mustn't see everything in negative and financial terms (7:404-409)".

4.2.3 Optimizing the domestic wood chain: the most promising way forward

Despite the establishment of a governmental subsidy scheme which focused primarily on improving wood production and indirectly on recreation, forest owners have continued to experience financial difficulties. This is partially due to the opening up of boundaries with Eastern Europe and the access this has given the wood processing industry to a new cheap source of wood. As a result Austrian wood prices have stabilized or dropped, while costs, especially for labour have increased. Forest owners have increasingly realized that in such an open and competitive market they need to keep their transaction costs as low as possible. Moreover, there is a latent fear amongst forest owners that the large international wood processing industry might forget about Austria and its wood producing forests. These circumstances have led forest owners to seek new ways of linking with the wood processing industry and optimizing the domestic wood chain.

Apart from the large private forest owners, a growing group of smaller farm-foresters have taken steps in this direction. They have established *Waldbauernverbanden* (Associations for Forest-Farmers); co-operative associations of small farm-foresters that jointly exploit their forests and can work more efficiently with wood processing companies. In 2005, some 51,500 small farm-forest owners, who jointly own about 875,000 ha of forests, were organized in about 350 different *Waldbauernverbanden*. About 30% of the total number of 170,000 smaller farm-foresters has become members of cooperatives, and together they manage almost half of the forest owned by small farm-forest owners. Decreasing agricultural income has been a driving factor for this initiative. The Forest Authority has given financial support to help establish the *Waldbauernverbanden* and it for example runs an annual competition to select the best one. The following quotations (the first two from representatives of the wood processing industry and the last two from the Forest Authority and the ÖF respectively) illustrate the broad interest in this initiative to optimize the domestic wood chain.

"[…] the forestry side is very small scale and many small forests will not be economically used in the future as their children are likely to go and live and work in the city and not use the

forest, possibly creating a problem in the future [...] one of the positive responses could be *Waldbauernverbanden*, where people take care of the forests for others […] I think that that is the way it could work (5:339-350)".

"We have a lot of wood standing in the forest but we don't get it out. So our aim is to get the domestic wood from Austria out of the forests and I think it's in the interest of the Forest Authority as well (12:346-347)".

"We have these small-scale enterprises and they have some forest and they belong to the Chambers of Agriculture. […] But it did not work very well in the economic sense, so we made *Waldbauern* associations and an Austrian national association known as the Austrian *Waldbauernverband*. […] They also take part in the 'Wald Dialogue' as they know best the economic activities and problems of the small owners (16:258-277)".

"[…] the income from the forests for the farmer is becoming more and more important. You know the percentage of the non-used volume that is growing? Farmers only cut 60% of the standing volume of wood in their forests […]. So, there is work to do, and through these *Waldbaurnverbanden* small farm foresters could increase their income […] (2:28-34)".

The Austrian wood processing industry has its own reasons for becoming interested in optimizing the domestic wood chain. They were convinced that it would be disastrous for them, and the Austrian economy, if forest owners produce less wood in favour of receiving payments for ecosystem services or sell their wood to bio energy factories. As such they wanted to develop efficient ways working that minimize transport and transaction costs. The following quotations illustrate the shared wish of forest interest organizations, the wood processing industry and the Forest Authority in working together to optimize the domestic wood chain.

"Of course the foresters are interested but not so much as we would like, but I think it is getting better and better. We want them to be more interested, so the forest sector does not end as just tourism and water, the money they get is from us, from the wood industries, 90% of their income comes from the wood prices (12:63-70)".

"well, to integrate, and to say: the main product that I produce from the forest is wood, I live from wood, this is my basis for living … I don't live off of subsidies, I don't live on people who are walking around in the forest, I am living from wood … it is one of my most important issues at the moment, to strengthen this, to make a cluster […] to concentrate the powers instead of fragmenting (3:333-339)".

"I depend on the paper industry to buy my small trees and on the wood industry to buy my big trees […] it is typical to have the feeling that the forest sector isn't that important because we are so fragmented […] and if you are not seen as one strong partner, then you can have the impression, well, here you have some saw millers, some paper industry, some forest owners […] and we have to work on establishing one joint sector of forest owners and the wood processing industry that focuses together on the wood chain […] (3:338-363)".

"We are divided a little bit between the actual forest sector and the timber-based industry although they should be together, because we see the activities on the global market. Because we are on the global market, so, as a very small country having to act on the global market you have to get

very close together. The smaller you are the closer together you have to go, to be strong (16:90-98)".

These quotes show that those who support optimizing the domestic wood chain are all aware that the previous societal acceptance of wood production has eroded. They recognize the importance of continuously 'reminding' society of the importance of forests and wood for Austria. In other words, the wood processing industry and forest owners now have to actively seek for and invest in support for their project of optimizing the wood chain. One of the ways this is done is by organizing the 'Week of the Forest' an annual event that takes place in Vienna during which forest owners, the forest industry and the BMLFUW highlight the importance of forests for Austria in terms of the landscape, culture, national identity as well as the economy, trade and employment in rural areas. Another promotional tool is the marketing organization *ProHolz* (Promoting Wood), which has run campaigns in Austria and in Italy to promote the use of wood, (such as the campaign *Stolz auf Holz -* Proud of Wood). Although the forest interest organizations are not official members of *ProHolz*, they increasingly give financial support to the campaigns as also they seem to realize the need to remind Austrians of the importance of forests and wood. The following quotations illustrate this growing need to promote wood within Austrian society in order to legitimate continued wood production and wood processing.

> "So, the readiness to consider other wishes has strongly increased in order to accommodate to societal changes and wishes but this opening up to the public involves a balance. Part is about getting accepted, gaining sympathy, and image kind of things, but the rest so far has been the fight against losing our sovereignty (5:151-157)".
> "we [the HVLF] do a lot of public relations […] we are doing more PR work than PRÄKÖ does because we are more flexible in some ways and we because we are a voluntary organization, we also have to sell ourselves much more than others who are established by law (3:42-45)".
> "And it is also about branding: the forest industry is inventing brands to say: this is wood and we are proud of wood. Public buildings are made of wood. The HQ of the state forest service is a very nice building made of wood. And it is no shame to have a central heating running on wood because it is one of our natural products. You don't have to use oil or gas; you can use wood (13:150-153)".

Another issue that the wood processing industry, which has a strong international focus, has to confront is the growing demand from wood consuming countries for sustainable wood. In 1999 this led the forest interest representatives, the *Umweltdachverband*, and the wood processing industry to jointly establish the Pan European Forest Certification (PEFC) working group, which developed the PEFC scheme for Austria. Just one year later, the PEFC council approved the Austrian PEFC scheme. By April 2005, all of Austria's regions had become PEFC certified and 292 chain-of-custody certificates had been issued. Besides

being important for exports, the PEFC scheme allows forest interest organizations to send out a message to the Austrian public that their forests are sustainably managed.

> "of course we have a logo, PEFC in Austria, we don't need it here but when we export wood to England or to other countries they demand it … logical because when you go to Austria wherever you look you see wood, it is not explicable to the people that you need some logo for sustainability … in the Netherlands or Great Britain they don't have any forests so they need it, they want to know where the wood comes from … (12:220-229)".

4.2.4 The meaning boundaries: the continued dominance of economic meaning

Thus the economic orientation towards forests has maintained its position as the dominant viewpoint in Austria. As such, the meaning boundary was and remains an economic meaning boundary. But over time the nature of this economic meaning boundary and what is 'inside and outside' it has altered. Initially, forest owners and the Forest Authority developed and maintained a strong economic meaning boundary, based on the commercial exploitation of forests through wood production and hunting. This excluded other forest functions, with the exception of the protection function, which the government used a pretext to establish the 1852 forest law. But since the 1970s, excluding these other forest functions has become problematic: because of societal pressure and because of financial difficulties amongst forest owners. As a consequence, a more multi-functional meaning of forests has gained ground. However, section 4.2.2 showed that the economic meaning of forests has continued to play an important role and has been revitalised and redefined. Forest owners have only been willing to give up part of their focus on commercial exploitation in exchange for payments, such as subsidies or new market systems that pay for ecosystem services or because of (international) societal, political, and juridical pressures. Their primary expectation and hope is to broaden the focus of the economic perspective by optimizing the domestic wood chain. In contrast to the traditional economic orientation towards wood production and hunting, this 'new' economic interpretation of the meaning boundary has to be actively marketed so as to maintain societal support.

4.3 Membership boundaries

This section addresses two central questions who are the members of the forest sector (and who are outside it)? And second, what are the rules on which (non)-membership is based? These questions will be answered by analysing the responses to the first question posed to interviewees, when they were asked to make three piles reflecting their perception on membership of the forest sector. Figure 4.1 shows the results of this exercise and identifies three groups which are discussed separately in sub-sections that also analyse the differences

and dynamics in the membership rules that the respondents identified. Section 4.3.1 deals with the core members, 4.3.2 with a group perceived as being 'on the boundary' and 4.3.3 with a group of outsiders. Section 4.3.4 analyzes how these different membership boundaries relate to each other, whether these boundaries overlap or develop next to each other and whether one boundary takes precedence over another.
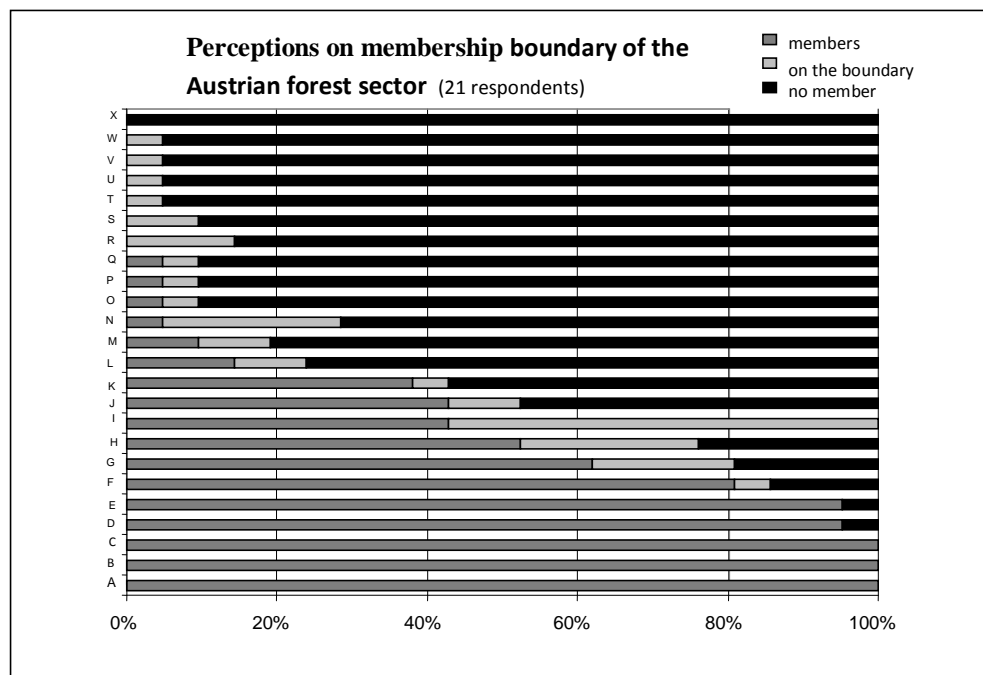
A - Österreichische Bundesforste AG; B - Hauptverband der Land- und Forstwirtschaftsbetriebe Österreichs; C - Österreichischer Forstverein; D - Präsidentenkonferenz der Landwirtschaftskammern Österreichs (PRÄKÖ); E – Landesforstbehörden; F - Bundesministerium für Land, Forst, Umwelt, und Wasser (BMLFUW); G - Universität für Bodenkultur Wien (BOKU); H – Österreichischer Bauernbund; I - Wirtschaftskammer Österreich Fachverband der Holzindustrie; J - Zentralstelle Österreichischer Landesjagdverbände; K - Wirtschaftskammer Österreich Fachverband der Papierindustrie AUSTROPAPIER; L – Umweltdachverband; M - Österreichischer Gemeindebund/Österreichische Städtebund; N - Österreichischer Naturschutzbund; O - WWF Österreich; P - Landesnaturschutzbehörden; Q - Naturfreunde Österreich und Österreichischer Alpenverein; R – Landesraumplanungsbehörden; S - Österreichische Bischofskonferenz; T - BM f. Finanzen; U - Wirtschaftskammer Österreich Bundessparte Tourismus und Freizeitwirtschaft; V - Bundesarbeitskammer (AK); W - Österreichischer Gewerkschaftsbund (ÖGB); X - BM f. Wirtschaftliche Angelegenheiten

Figure 4.1 Perceptions on the membership boundary of the Austrian forest sector

4.3.1 Core members: the forest family – an exclusive group

The starting point of this analysis was of the actors that were perceived by almost all respondents as core members of the Austrian forest sector and who therefore play a dominant role in setting its membership boundary. Figure 4.1 shows three groups of core members:

➢ **Forest owners and their interest organizations**: *Österreichische Bundesforste'* (Austrian Federal Forest Service, ÖBf); *Hauptverband der Land- und Forstwirtschaftsbetriebe Österreichs* (Austrian Confederation of Farmers and Forestry Owners, HVLF); *Präsidentenkonferenz der landwirtschaftlichen Körperschaften Österreich* (Presidents' Conference of the Austrian Chambers of Agriculture; PRÄKÖ); and the *Bauernbund*.

➢ **Forest policy organizations:** The *Forst Sektion* within the *Bundesministerium fur Land, Forst, Umwelt und Wasser* (Ministry of Agriculture, Forestry, Environment and Water; BMLFUW); the nine provincial forest authorities, the *Landesforstbehörden*.

➢ **Training and professional organizations**: *Österreichischer Forst Verein* (Austrian Foresters Association, ÖF); and the *Universität für Bodenkultur* (University of Natural Resources and Applied Life Sciences, BOKU).

Figure 4.1 shows a quite clear differentiation between members and non-members, suggesting that the membership rules in the Austrian situation were relatively straightforward and were widely shared. Two exceptions to this were the *Bauernbund* and BOKU, which were both placed on the boundary by a relatively large number of respondents. This study treated these two as members of the sector but less central then the other core members. Analysis of the reasons why most respondents identified these organizations as members of the forest sector, revealed three quite straightforward membership criteria: forest ownership, involvement in implementing the Forest Law and training foresters. These views are reflected in the following quotations.

> "That is the main thing: they have forests, they have a forest education, or they deal with forest politics (16:99-101)".
> "There is this Wald Dialogue going on and I can remember that I was sitting at the podium there when it was starting and there was one statement that was very clear: 'you do not own forests so why do you talk?', so this is the criterion. So, first ownership and then how you can influence the policy, how close you are to the Ministry, to the Minister (17:230-234)".
> "For me, the sector is about lobbying, about a group of organizations, a group of people, working within the same field with a main interest in forests (12:96-100)".

Forest owners and their representatives - membership based on forest property
Both forest owner organizations were perceived as members since they both represent
Austrian forest owners, and forest ownership is one of the membership rules of the 'forest
sector'. Table 4.1 shows that Austria has three main categories of groups of forest owners,
two large groups of private owners and the public ÖBf. The remaining 3% of forests are
owned by provinces and communities (see Kvarda 2004). The following paragraphs further
analyse all three categories and their membership of the forest sector.

Table 4.1 Categories of forest owners and their property (BMLFUW 2003b)

	1993	2002
Private forests < 200 ha*	1647,297	1804,137
Private forests > 200 ha*	776,226	785,488
Community forest	341,567	348,886
Public land	709,221	698,918
of which: ÖBf-AG	589,210	569,151
Austria - in total	3475,311	3637,411

*including forests of the church

First, there is a relatively small group of about 1,400 large forest owners that together own
about 1/3 of the total forest area. In Austria a forest owner is seen as 'large' when the
property exceeds the 200 hectares. This group consists mainly of former aristocrats,
churches and monasteries together with some 500 private individuals (OECD 2003). Most
of these private individuals purchased their forest property from the Emperor, mostly
during the 19th century, when he was forced to sell more than half of his forest property in
order to pay off war debts (Weiss 2005).

Second, Austria has a relatively large group of small private forest owners, about 170,000
owners who own more than half of the total forest area. Most of these small owners are
farm-foresters, who combine having a farm with some forest. On average, these farm-
foresters own about 15 hectares of forest, with the smallest owning a few hectares and the
largest up to about 200 hectares of forest. The primary focus of most of these farm-foresters
is on their agricultural property, especially if their forest property is quite small (Hillgarter
and Johann 1994).

> "And they [farm-foresters] run their enterprises to optimize the whole system: agriculture and
> forestry, because it's the income of the family (19:41-43)".

With the abolition of the Monarchy in 1918 the Austrian government became the largest single forest owner, managing 17% of Austria's forests. The *Österreichische Bundesforste* (Austrian Federal Forest Service; ÖBf) was assigned with the task of managing these forest properties. In 1997, under the *Bundesforstgesetz* No. 793/96 (Federal Forest Act) the ÖBf was privatized into a stock operation (ÖBf-Ag) with the Austrian federal government as sole shareholder. The aim was to increase its entrepreneurship and efficiency, with the decision for establishing an *Aktiengesellschaft* (limited company; Ag) being based on the advantage of establishing a clear division of responsibilities between management and ownership. While the government remains the owner of the forests, the actual management is carried out by the ÖBf, which every year has to pay 50% of their yearly surplus to its sole shareholder, the government, as usufruct. The ÖBf is the largest forest entrepreneur in Austria and clearly perceived as a core member.

> "A strong, clearly business oriented company, state owned, but it's sort of privatized and they are working quite industrially, like the big Scandinavian companies (7:96-99)".
> "ÖBf-Ag, yes, because they are the representative of the biggest forest owner, so they are the number one client: the key player. No other body or no other person owns more forest surface (13:41-43)".
> "Inner circle: ÖBf-Ag […] (15:132)".
> "I would say they are inside because they manage 15% of the Austrian forests (17:120-122)".

The interests of the different forest owners are represented by PRÄKÖ and the HVLF. These organizations have a different basis for membership, with a partially overlapping membership, and their main focus differs somewhat. PRÄKÖ is an interest representation body for all land owners, including owners of forests and agricultural land, where membership is obligatory. It is the national umbrella organization for the regional Chambers of Agriculture, which originated from agricultural societies that previously were involved in preserving rural culture and representing local interests. These Chambers of Agriculture have some authority to implement public policies, since all private landowners are obliged to be members. PRÄKÖ's main focus is on agriculture and only to a lesser extent on forests, especially since most forest owners in Austria are farm-forest owners. This is reflected in the organizational structure of PRÄKÖ, which has only a relative small department, the Standing Forestry Commission, responsible for forest issues. The primary focus on agriculture is reflected in the following quotation from a respondent from the Forest Authority.

> "You have the owners represented by the Chamber of Agriculture. Each landowner has this mandatory membership and they more represent the smaller owners, farms. The farmers have a variety of interests, not only forests; forestry is just one of their branches (7:100-104)".

Established in 1948, the HVLF is the umbrella organization of provincially based voluntarily organizations for landowners. It differs from PRÄKÖ in two respects. Whereas PRÄKÖ is based upon compulsory membership, the HVLF relies on voluntarily membership and only 'large' forest owners can join. HVLF represents about 600 large landowners, who own a total of some 800,000 ha. The largest member is the ÖBf-Ag. The HVLF primarily focuses on forests as more than 85% of the 800,000 ha owned by HVLF members is forest land. Figure 4.1 shows that all respondents viewed the HVLF as a member of the forest sector and nearly all of them saw PRÄKÖ as a member. The following quotations illustrate the central role of both organizations.

"They [PRÄKÖ and HVLF] are very comfortable; they are secure about their role (17:420-412)".
"PRÄKÖ yes, the PRÄKÖ is not a part of the forest sector, but the forest sector is a part of the PRÄKÖ […] (9:117-123)".
"I think this [PRÄKÖ] is the most important institution, including all the forest interests in Austria (20:96)".

A third member group representing the interests of forest owners is the *Bauernbund* (Farmers' Party), the political association of farmers and foresters and part of the ÖVP. Since the establishment of the Second Republic of Austria, the ÖVP always been one of the coalition partners and the Minister of Agriculture and Forestry has always come from the *Bauernbund*. However, the *Bauernbund*'s membership of the forestry sector is less obvious than that of the other owners' interest groups. Figure 4.1 shows that about 50% of respondents perceived the *Bauernbund* as a member, since it politically represents the interests of forest owners. The other 50% saw the *Bauernbund* as more focused on agriculture and not a core part of the forestry sector. The following quotations from representatives from the *Österreichischer Forst Verein* (Austrian Foresters Association, ÖF), PRÄKÖ and the *Umweltdachverband* illustrate this ambiguity over *Bauernbund*'s membership of the 'forest sector'. On the one hand they seem important because they are the main political wing of forest owners, but on the other hand there are doubts because they represent other interests apart from the forest interest.

"*Bauernbund*, the political wing of the farmers in the ÖVP is actually the political basis for our political topics. When we have a special topic, the first thing is to persuade the Member of Parliament of the *Bauernbund* to get this on their agenda (2:221-223)".
"The *Bauernbund* has a lot to do with the forestry sector, but whether it is part of it, I don't know. It is a matter of definition. Many people in the forest sector are members of the *Bauernbund*, but does this mean that the *Bauernbund* is part of the forest sector? I don't know (21:144-150)".
"*Bauernbund*, yes, they are in and they are at the centre. They are the most powerful organization in this, they are linked and they are political […] the Minister of Agriculture and Forestry always comes from the *Bauernbund* although there are only 2 or 3 % farmers in Austria so there would

also be other possibilities! But it is like this: where do we find our new Minister? At the *Bauernbund*! So they are totally in (17:144-149)".

Forest ownership thus seems to provide a strong and stable criterion for membership of the Austrian forest sector. However, several developments seem to challenge this stable membership criterion, especially because of a change in the large group of smaller forest owners. Previous sections showed that forest ownership and representation has been closely linked with agricultural ownership. Therefore, developments in agricultural ownership can also have repercussions for forest ownership and forest interest representation. From 1960 to 1999, the total number of farms in Austria dropped from 400,000 to 220,000. Of these remaining farms only about 1/3 depend primarily on agriculture and forestry for their income. These developments in agriculture probably also affect forest property, because about 80% of forest owners are also farmers. According to a study from Hogl *et al.* (2003), this implies a possible decrease in the number of forest owners, and that new forest owners might have different ideas about forest management and might not adhere to the ideas of the existing forest interest organizations.

The Forest Authority – membership based on Forest Law
Figure 4.1 shows that the Austrian Forest Authority was also perceived as one of the core members of the Austrian forest sector: over 80% of the respondents perceived the BMLFUW as a member, and over 90% perceived the provincial *Landesforstbehörden* as members. At the national level, the Forest Authority is represented by the *Sektion Forstwesen* part of the BMLFUW. Furthermore, as Austria is a federation, every federal administration has an own department, the *Landesforstbehörden*, responsible for implementing the Forest Law. And finally at the district level, the Forest Administrative Authority is the focal point for forest issues. The following statements reflect the overall opinion of most representatives that the Forest Authority is one of the core-members.

> "This is our Ministry, simply that's where we are at home (2:11-12)".
> "BMLFUW of course, is the head of the spear (13:118)".
> "And the Forestry Section deals almost exclusively with forests, so, it is the nucleus of the forest sector, not only part of it (9:167-169)".
> "The *Landesforst*, they are the forest sector. They are not only the police, but also the extension service, and they handle the subsidies and those sort of things. So, they are without any doubt a member of the forest sector (21:202-206)".
> "*Landesforstbehörden* are the official place for going with one's grievances ideas and wishes, which means on the regional level you have to deal with the *Landesforstbehörden* to be allowed to cut wood or to be allowed to make roads, so they are very important (11:68-71)".

The main criterion for the Forest Authority (the BMLFUW) being seen as a core member was their involvement in implementing Austrian Forest Law, a role that is laid down in

Article 10 of the Austrian Constitution, which states that *Forstwesen* (forestry) is a matter of federal legislation. *Forstwesen* covers all activities connected with tending, maintaining, and protecting forest stands, including importing and exporting round wood, forestry education and flood and avalanche control (Pregernig 1999). This article and the Forest Law gives the BMLFUW official authority for forest matters and in this it is supported by provincial and local forest policy officers. However for other policy domains, such as nature conservation and rural planning, the official competence lies at the provincial level.

Over the past decade, the Forest Authority's membership of the forest sector has been challenged and reconfirmed. Its seemingly straightforward and automatic position within the forest sector was challenged by the more general recent political discussion about the usefulness and legitimacy of public administration (Tálos and Kittel 1996). As a result the Forest Authority had to show that it served a broad range of social interests, not just those of the forest owners. The following two quotations reflect this challenge for the *Forst Sektion*.

> "Those two, BMLFUW and *Forstdirektion* […] are part of the forest sector. I do not know if for example in a country such as the Netherlands the Ministry would be part of the forest sector. […] Traditionally I would count both of them in the forest sector and I believe they have to act in the interests of all 8 million Austrian forest people, but they don't' […] (20:55-57)".
> "I would say you cannot really put the Ministry in the sector, we're probably more some sort of link in between. […] because we have wider responsibilities. OK, we are the forestry department, but we have to balance all interests, we somehow play more of a connecting role (7:70-77)".

Yet, at the same internationalization of forest dialogues has created new possibilities for the Forest Authority to reconfirm their membership of the forest sector. The development of an international forest policy arena meant that Austria had to negotiate on forest issues at the international level and to implement international forest agreements. This new international role led the Forest Authority to create a special team focused on international forest policy. The BMLFUW hosted the MCFPE-Liaison Unit at its headquarters the in Vienna, prior to organizing the fourth MCPFE meeting in 2005 (also in Vienna) and this suggests that Austria is keen to play an active role in the international forest policy debate. This international role helps to increase the legitimacy of the Forest Authority and creates additional possibilities to represent Austrian forest owners in international and national discussions, as illustrated in the following quotes

> "But forest policy is a very small sector […]. Most of it is thinking, influencing, talking to people and nowadays the international task. Some people say that if this hadn't come, it would be very hard to still have the Forest Section within the Ministry (23:592-595)".

"We not only represent the Austrian government in forest matters, but also the whole forest sector in these international processes at UN, EU and European levels (16:35-37)".

Training and socialization: "belonging to the family"

The third criterion for membership to merge was having been trained as a forester. The following quotation from a representative of an E-NGO clearly illustrates just how important this criterion is:

"The most important criterion to be part of the forest sector is if you are within the family […] I am a forester and even though I work for probably the most opposing organization [the WWF], I am part of the family […] (18:92-100)".

Forest education and research was initiated by the government in the C19th with the aim of professionalizing private forest ownership and educating professional foresters to manage forest properties. In 1875, Emperor Franz Josef established the *Universität für Bodenkultur* (University of Natural Resources and Applied Life Sciences; BOKU) to train forest academics, and in 1900 the *Höhere Forstlehranstalt für die Österreichischen Alpenländer* (Foresters' College) was established to train foresters. Forest research initiatives were set up by the Imperial and Royal Forest Experiment Directorate, which later became the Federal Forest Research Centre.

Following the establishment of these forest training institutes, the number of forest professionals grew, as more and more forest professionals graduated. In 1885, the *Österreichischer Forst Verein* (Austrian Foresters' Association, ÖF) was established in order to provide social cohesion amongst this group of professionals and forest owners. Figure 4.1 shows that the ÖF is perceived as a core member of the forest sector. However, there was not a clear consensus on BOKU's position as a member of the forest sector. Those who favoured BOKU's membership argued that all Austrian foresters have been trained there. Yet some questioned whether education and training were part of the forest sector, that BOKU was not a forest owner with a commercial interest, and is not involved in implementing Forest Law. The following quotations reflect both positions:

"BOKU, is the place that all foresters go through, so if bad ideas live there, they will live for a long time in the brains of the upcoming generation of foresters, so BOKU is very important in the sector (13:94-96)"
"The University not a member it is scientific; not economic, it's not in the sector (21:158)".

However, as with the previous two membership rules, membership based upon being trained as a forester seems to have become somewhat problematic. Table 4.2 shows that the number of jobs available for forest professionals has been decreasing enormously.

Table 4.2 Change in the number of forest professionals 1975 – 2002

	1975*	1986*	1996*	2002**	Change 1975-2002
Forest workers with fixed contract	9973	4370	5669	4621	-66%
Forest workers with temporary contract	3485	3431			
Forest skilled workers	1295	1179	898	635	-51%
Foresters	2082	1824	1564	1290	-30%
Forest academics	969	985	872	784	-19%
Total	*17804*	*11789*	*8003*	*7330*	*-58%*

(BMLF 1998; ** BFW 2005)*

Between 1975 and 2002, the number of people working within forestry decreased by almost 60% (BFW 2005). This decrease is most visible among less-educated foresters, which probably can be explained by the increased mechanization of forest work. For more educated foresters, the decline has been less marked. Most highly qualified foresters work with the core members of the forest sector: as civil servants at the Forest Authority (173), as managers of privately owned forests (160), at ÖBf-Ag (77), at the provincial and national Chambers of Agriculture (62) or at BOKU (54) (BFW 2005). But the following quotations of representatives from the ÖF and BOKU reflect that the situation is also changing for these more highly qualified forest academics.

> "We [ÖF] have a problem of not growing in membership […] and then the shrinking of jobs naturally causes the shrinking of the forest family (2:78-84)".
> "Concerning the chances for our students in the field of forestry, on the national market, you have the same situation as in the Netherlands: you have no chances in your own country. […] You must be part of the forest family in Austria, I think it is a good term, it is really a family, but the family must recognize that the situation will change drastically in the coming years (4:302-312)".

This decline in the number of forest professionals has had consequences for the different associations for forest professionals. Previously, there were three different associations: (1) for foresters working for private foresters, (2) for state foresters, and (3) for administrative foresters. But since 2002, these associations merged into one the *Verband Österreichischer Förster* (Austrian Foresters' Association; VÖF). This merger occurred as it no longer

seemed logical to have three different associations for the relatively small group of forest professionals.

In addition to organizational changes the focus of education and training of academic forests has also changed. In recent decades, BOKU has broadened its scope from a narrow focus on agriculture and forestry to become a University for Life Sciences. This is reflected within the forest policy sector where the *Institut für Sozioökonomik der Forst- und Holzwirtschaft* (Institute for Forest policy and Forest economics) broadened its scope to the *Institut für Wald-, Umwelt-, und Resourcenpolitik* (Institute of Forest, Environmental and Natural Resource Policy). Over time fewer and fewer students are interested in studying just forestry but rather are interested in a broader focus on the natural environment and in combining it with other disciplines.

Thus, three membership rules based around forest ownership, involvement in forest policy, and being a forest professional provide clear criteria for identifying the core members of the Austrian forest sector. Yet several developments have complicated these clear criteria: there are changes in the type of forest owners; the Forest Authority is seeking broader societal legitimacy and the number of forest professionals is declining while the focus of their training is broadening. Up until now these developments have not affected membership criterion, as figure 4.1 shows a quite clear demarcation of the core-members of the Austrian forest sector.

4.3.2 Non members: gaining influence but still outsiders

Figure 4.1 showed that there were quite a few actors who were perceived as members of the forest sector by some respondents although not by the majority of respondents. In addition other actors were perceived by all interviewees as falling outside the sector[9]. By and large these actors fell outside of the membership boundary as they did not meet any of the three

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[9] Other organizations that were considered not to be members of the forestry sector include the *Bisschofzkonferenz* (which represents all churches, who are also large forest owners); the *Landesraumplannung* (provincial spatial planning department); the *Bundesministerium für Finanz* (Ministry of Finance) and two the unions (the AK and the OGB). These organizations were barely mentioned in any of the interviews and this has been interpreted as showing that these organizations are not seen as playing a significant role in the Austrian forestry sector or in influencing its boundaries.

main membership criteria, the importance of which is clearly reflected in the following quotation:

> "And all those who are not directly living off, or are not directly involved in implementing forest laws are outside the forest sector, I would say that we have to make quite a strict difference there (2:413)".

This section will discuss two groups that were generally seen as non-members, nature conservation organizations and recreation and tourism organizations. Another organization that was seen as a non member, the *Bundesministerium for Wirtschaft* (Ministry of the Economy; BMW) – is discussed in section 4.3.3. This section 4.3.2 examines the perceived membership status of conservation organizations and recreation and tourism organizations to see changing social demands upon forestry have led to changes in the criteria for membership of the forestry sector

Nature conservation organizations
This study distinguishes between three different types of nature conservation organizations active in Austria: (1) domestically based E-NGOs; (2) internationally based E-NGOs; and (3) the provincial nature conservation authorities. There were very different perceptions of whether these three groups were considered to belong to the forest sector.

Most of the domestically based E-NGOS were established at the end of 19th century, including the *Naturschutzbund* (Nature Protection Organization) and the *Naturfreunde Österreich* (Nature Friends Austria, NFÖ). These domestically and locally based E-NGOs are characteristically organized locally and are predominantly focused towards the local and provincial levels. The focus on the provincial layer seems logical as policies for nature conservation are determined at this level. From the 1970s onwards these locally based E-NGOs also started to develop activities at the national level in response to the emergence of environmental issues onto the (inter)national policy agenda. This trend was established with the creation of the Federal Ministry of Public Health and Environmental Protection in 1972. Hence, it was not accepted that the environmental interests would became represented in a formal powerful structure of Social Partnership, like with the agricultural and forest interests in PRÄKÖ (Pregernig and Weiss 1998). Instead, the government established a national organization, the *Umweltdachverband*, which basically was a subsidy distribution organization of the new Ministry of Environment for non-governmental environmental interest representation organizations. In total, 33 locally based NGOs belong to the *Umweltdachverband* and receive financial support from it, so as to enable them to address and discuss environmental themes at the national level.

These 33 organizations include not only local nature conservation organizations, such as the *Naturfreunde*, but also locally organized forest owners interest organizations, such as the ÖF and the HVLF. This contributed to the slightly anomalous perception of the membership of the *Umweltdachverband* within the forest sector. Figure 4.1 shows that domestic E-NGOs were generally not perceived as members of the forest sector, but that the *Umweltdachverband* is perceived as a member.

> *"Naturschutzbund*, they are not in the sector. They are in the sector of nature organizations, of plants, of flowers, of animals, but not in the forest sector I think […] *Alpenverein* is not in the sector (13:50-54)".
> *"And then here you have *Naturschutzbund*, environment, nature conservation, tourism, these are other sectors of high relevance, and there is much potential room for cooperation, alliances with them (7:45-47)".

In the same way internationally based E-NGOs, such as WWF, are also not perceived as members of the forest sector. Greenpeace was excluded from figure 4.1 as they have withdrawn from the national forest policy issue in Austria. This withdrawal was given as the main reason why they declined to be interviewed for this study. Only one respondent perceived E-NGOs to be part of the forest sector and his views are illustrated in the following quotation.

> "From my point of view I have to do a lot with them [WWF, *Naturschutzbund, Naturfreunde* and *Umweltdachverband*] And WWF and *Naturfreunde* are important points in my network: the bears, walking routes, national parks. […] but I am special in this (10:123-131)".

Figure 4.1 also shows that the nature conservation authority was very rarely perceived as a member of the forest sector and can be regarded more as being on the boundary. Nature conservation is not explicitly mentioned in the Austrian Constitution and is dealt with at the provincial level. Respondents gave several reasons for placing the nature conservation authority in a boundary position. First, an increasing number of educated foresters now work within nature conservation departments. Second, in the province of Salzburg, the nature conservation department has been merged with the forest department, doing away with any organizational distinction between the two authorities. Third, the number of nature conservation regulations is continually growing and the nature conservation authority increasingly has an influence upon forest owners and forest management.

The increase in nature conservation regulations is largely related to the large number of international declarations that Austria has become a signatory to since the 1990s. These include CITES, the Ramsar Convention, the Bern Convention, the Danube River Protection Convention, the Alpine Convention, and the Convention on Biological Diversity. In

addition, since Austria joined the EU in 1995, the different provinces have to coordinate their activities to implement the Habitats and Birds Directives. As a result the official authority of these provincial nature conservation administrations has grown. The following quotations reflect the differing views about whether the nature conservation authority is a member of the forest sector. The first three quotes are from core forest actors and the last one from a policy officer of a provincial nature conservation authority, who also does not see the nature conservation authority as being a member.

> "*Landesnaturschutzbehorden* […] there are many foresters in the *Landesnaturschutzbehorden* but they are of course not the forestry sector (8:114-155)".
> "*Landesnaturschutzbehorden*. No, it is always a question of how narrowly you see the sector. Some organizations work with the sector and have an influence but they are not part of it (11:76-78)".
> "*Landesnaturschutzbehorden*. Yes, more and more, because they are eager to have an influence on topics of forestry (13:76)".
> "*Landesnaturschutzbehorden* are not directly part of the forest sector, but they might be responsible for parts of forestry, they are responsible for many things related to forests. There have close links to the forest sector but they are not part of the forest sector (9:131-134)".

This is reflected at the national level, where nature conservation is also not been seen as part of the forest sector. This view holds despite the BMLF and the environmental departments of the former Ministry of Environment and Health merging into the broader BMLFUW or the *Lebensministerium* (Ministry for Life) in 2000. This merger seemed to have weakened the position of environmental departments in relation to the Forest Authority, as any possible conflicts between forestry and nature conservation now have to be solved internally within one Ministry where the two policy domains have a different status. The Forest Authority is a Directorate with its own Director General, but there is no separate Directorate for Nature Conservation; nature conservation policy is covered by a unit within the Directorate for Rural Development. The following quotations from respondents of the Forest Authority reflect the weaker position of the nature conservation authority at the national level.

> "The merger only made it better, because more competences are within one Ministry. And especially with the environment it is better to have one Ministry […] that is positive for forestry (11:92-102)".
> "The [former] Minister of BMLFUW said: I am the Minister of Agriculture, Environment and Water and you as head of the Forest Section are the Minister of Forestry, and the current Minister of BMLFUW says the same (27:567-569)".

Recreational organizations

Organizations that represent the recreational interest are mostly focused on outdoor sporting activities, and are referred to in this study as sporting NGOs (S-NGOs). Several of these S-NGOs were established at the end of the 19th century, when growing numbers became interested in outdoor recreation. Examples of such organizations include the *Österreichische Alpenverein* (Austrian Alpine Association, ÖAV) and the *Österreichische Touristenklub* (Austrian Tourist Club, ÖTK). These S-NGOs are locally oriented, and are primarily involved with developing infrastructure for mountain sports: establishing hiking routes, providing climbing courses, building and maintaining mountain huts, etc. In addition to recreation, there is also a tourist sector represented by the *Bundessparte Toursimus und Freizeitwirtschaft of the Wirtschaftskammer Österreich*. In reality it is sometimes difficult to distinguish between recreation and tourism as the majority of mountain huts are owned and managed by S-NGOs, and these are used for overnight accommodation by large numbers of Austrian tourists. In addition, the tourist industry is the largest sector of the Austrian economy, accounting for about 18% of Austria's GPD, and employing about 550,000 people. Thus it is arguable that the influence of recreational organizations over the forest sector would be strengthened by the importance of tourism to the Austrian economy.

At the national level, the *Verband Alpiner Vereine Österreichs* (Federation of Alpine Associations Austria, VAVÖ) is an umbrella group representing the interests of 12 member associations, with more than a million members, all of whom have an interest in alpine recreation. The VAVÖ was established in 1949 as the national umbrella organization representing Austria's S-NGOs. However, VAVÖ does not appear in figure 4.1 because this study did not give any clear insights into forest sector actors' perception about VAVÖ and whether it should be considered a member of the forest sector. VAVÖ was not identified as a forest sector actor in the initial search for the main players in the forest sector, nor did any respondents mention it when asked to identify missing actors This suggests that VAVÖ and the recreational sector in general is not perceived as a member of the forest sector

4.3.3 Members on the boundary: the wood processing industry comes closer

Figure 4.1 shows that there is some group of actors that was neither clearly in, not clearly outside of, the forest sector but whose position was more on the boundary. This group consists of the actors representing the wood processing industry. In addition to this group, one other organization could be placed 'at the boundary', the *Zentrallstelle Jagdverband* (Federal Hunting Association). The main reason for this organization being placed on the boundary is because the membership rules could not be applied unambiguously: most forest

owners also hunt and hunting takes place in the forest, yet there are also hunters who are not forest owners. Hunters are not involved in implementing forest law and there are further ambiguities when applying the forest training criterion. As a consequence, there no consensus about whether the *Zentrallstelle Jagdverband* qualified as a member of the forest sector, as illustrated by the following quotations, including one from a representative of the *Zentrallstelle Jagdverband* showings that they do see themselves as a member.

> "*Zentrallstelle*, I hope we are in, we are in the sector, yes. […] Our members are foresters, joggers or cyclists and they do their hobby (*hunting)* in the forest, and so we are in the sector (11:140-144)".
>
> "So, *Jagdverband, Jagdbehorden,* there is an inter-relationship but, if you are strict, you have to say no. Up to a certain extent it is in but it is always a matter of definition. […] Is the forest sector those who are dependent on the production of wood? Then you have to say no, they are people who are hunting. So, they are partly in I would say (2:351-356)".
>
> "No, they are not in I would say. Hunting, hunters, and foresters are very often the same people, so, the same person who is claiming that he has damages from the wild are also hunters and are getting money from the hunters. If you look at the political process they do have impact on the process, not through the *Jagdverband* but through the ÖBf-Ag, through the HVLF, so they are linked but not in (26:173-179)".

The wood processing industry's membership of the forest sector is also somewhat ambiguous and borderline. The interests of the industry are formally represented within the statutory Chamber of Commerce. The main organizations that represent the interests of the wood processing industry are the *Fachverband der Holzindustrie Österreichs* (Association of the Austrian Wood Processing Industry; FHÖ); the *Vereinigung der Österreichischen Papierindustrie* (Association of the Austrian Paper Industry; VÖP) based on obligatory membership; and the Austrian Paper Manufacturer's Association (*Austropapier*) based on voluntarily membership. FHÖ is an umbrella organization for the whole wood processing industry that represents their interests, provides information and services to members and negotiates on collective labour agreements with the trade unions. There are two interest organizations in the paper industry, the VÖP and *Austropapier.* These two work closely together and most paper and board organizations are members of both organizations. In this study the two organizations have been treated as one, and are jointly referred to as *Austropapier.*

Figure 4.1 shows that almost half of the respondents perceived the wood processing industry as a member of the forest sector. Historically, the wood processing industry was not seen as a member of the forest sector as there were very few , if any, personal links between forest owners and the wood processing industry, which had been developed by business investors and not by forest owners. Since one of the main membership rules for the forest sector was forest ownership, the wood processing industry was seen as outside

the membership boundary of the forest sector. Yet figure 4.1 suggests that the wood processing industry has moved closer to membership of the forestry sector. The quotations that follow illustrate this development. The first quotation reflects the perspective of the Forest Authority, and the second is from a representative of a forest interest organization. The third and fourth quotations are from the wood processing industry itself. These last quotations illustrate the clear intention of the wood processing industry to become a member of the forest sector' and that they realize that they have not yet fully achieved this.

> "So for me actually these two organizations of FH and *Austropapier* belong to the sector although the reality is that they are still more on the border, but for me they should be inside the forest sector (16:122-124)".
>
> "[…] it is one of my most important issues at the moment, to strengthen this, to make a cluster […] to concentrate the powers instead of fragmenting (3:333-339)".
>
> "We are working on it to be part of it because we know in Brussels and in Scandinavia you speak about forestry and forest-based industries and I think it is the future to cooperate more closely and we are working on it. We intend to come closer and closer in very many aspects (5:57-60)".
>
> "We have to change and make it better of course to increase the competence of Austrian industry compared to other countries and therefore we need the forest sector (12:50-53)".
>
> "OK, there is, as I see the situation there is a bit of a change for the forest sector. I mean, people and institutions dealing with forests are very much related to ownership […] so this was traditionally considered the forest sector to do with management of forest, the ownership, and what goes on within. Then the forest based industries, they used to be, or are still, sort of considered as a separate sector but more and more, and this is I believe is something that comes through the international context, the forest sector is seen much wider and usually the forest industries are seen in conjunction as in many, or in some Scandinavian countries or in Northern America, Canada or so, the integration between forest management is very strong and very direct. That is not the case here but due to everything internationalizing more these two groups are seen together […] So, more and more this would form a type of a sector (7:40-48)".

Figure 4.1 also showed that the *Bundesministerium fur Wirtschaft* (Ministry of Economic Affairs, BMW) was seen as outside the forest sector. Yet, the wood processing industry is part of the Chamber of Commerce, an organization that is closely related to the BMW. Therefore, the growing link between the wood processing industry and the forest sector could also have resulted in a similar strengthening of the link between the BMW and the forest sector. However, the following quotations suggest the opposite to be happening, that the BMW is not at all seen as part of the forest sector and that the wood processing industry sees the BMLFUW, rather than the BMW, as 'their' ministry.

> "Until now they [BMW] have made no contacts to us and honestly speaking, we don't need it. We have the head of the Forest Authority and we have the Minister of the BMLFUW and if we need

them then we give them a call and they come. It is OK like this. For us the Minister of the
BMLFUW is our *Wirtschaftsminister* (12:114-117)".

"this because the Ministry of Economic Affairs also has all the other sectors and there is a kind of
rivalry between those sectors like the sectors for concrete, bricks, metal, and they are much
stronger than the timber-based industry […] so the Ministry of Economic Affairs is out (16:204-
207)".

4.3.4 Membership boundaries: maintaining the difference between core members and others

The above analysis shows that for a long period the traditional forest organizations have
been able to maintain the strongly established membership boundary, based on forest
ownership, forest training, and authority in the field of forests. This remains the case today.
However several recent and smaller changes within the group of core members might affect
this clear cut membership boundary in the (near) future. The typology of forest owners is
becoming more complex because of new owners; professional forest training is undergoing
a reorientation and the Forest Authority has to operate in a neo-liberal and internationalized
context. While the core actors have been able to keep the membership boundary closed to
those on the periphery of forest affairs the influence of the nature conservation authority
and recreation organizations is growing and is likely to continue to do so in the future.
However, up until now, there remains a clear membership boundary, based on a fixed group
of core members. Only in the case of the wood processing industry is there a shift in the
perception about membership boundary as core members are beginning to open up their
membership boundary to an outsider group on the basis of their shared (economic) need to
optimize the domestic wood chain.

4.4 Interaction boundaries

This section analyzes the dynamics and changes in perceptions over the interaction
boundaries through which the Austrian forest sector is constructed. The first three sections
analyze the nature of interaction patterns between core members (4.4.1); between core
members and outsiders (4.4.2); and between core members and the wood processing
industry (4.4.3). The last section (4.4.4) analyzes how these interpretations of the
interaction boundaries of the Austrian forest sector are related to each other: over time and
whether they overlap or develop alongside each other and which patterns dominate.

4.4.1 Interactions between core-members: a closed forest family

Closed interactions between forest owners and the Forest Authority
This section analyzes the nature of interactions among members of the forest sector as identified in section 4.3.1. A central feature of these interactions seems to be the delicate relation between the private forest owners with their strong wish to retain their sovereignty and the public Forest Authority which wishes to see a flourishing Austrian economy in which the wood processing industry plays an important role. The following quotation reflects this delicate relationship and the central role that the Forest Law plays in maintaining this relationship.

> "[…] as forests are managed privately, state interference in the private business is not very high […] it is always difficult to impose policy plans upon the private sector. We have regulations, we have programmes for subsidizing rural development, not much money, although we find ways of supporting important things, like cooperation between small-scale forest owners. So, policy is very much about legislation and that's sensitive (7:227-233)".

The formal patterns of interactions between forest owners and the Forest Authority are constructed around the Forest Law which legally defines how much control the Forest Authority has over private forest owners. Since 1852, the Imperial Forest Law prohibited forest owners from clear-cutting more than 0.5 hectare, obliged them to reforest within 3 to 5 years, although there was no obligation for them to make forest management plans. These principles continue to play a central role in the current Forest Law. Besides these regulations, there is no further national forest policy that defines the interactions between forest owners and the Forest Authority. According to Pregernig (1999), the absence of a national forest policy is due to the prevailing power balance between the Forest Authority and PRÄKÖ and HVLF, the forest interest organizations. The following quotation from a forest interest representative shows that the forest owners perceive the Forest Law as liberal and that the Forest Authority has only ever had limited direct control over privately owned forests.

> "[…] all the initiative is with the forest owner […] you can cut what you want as long as he forest is not older than 60 years and less than half a hectare, that's it […] what's not in the Forest Law does not exist, what is not forbidden is allowed (21:556-569)".

Most respondents characterize the interactions between private forest owners and the Forest Authority during the second half of the C20th as being closed. One of the pillars supporting this was centrality of the Social Partners in the policy process. Based on their position in the negotiations about wages, these Social Partners were granted privileges in other formal policy making processes and were closely involved in preparing the most important

decisions. The following quotations illustrate the importance of the Social Partners in the formal process of policy making.

"And for a long time we had an ÖVP – Social Democrat coalition […] when the big decisions were prepared by the Social Partnership (9:362-365)".

"There are many political studies about the role of the Social Partnership in Austria. In times of the grand coalition between the Social Democrats and the ÖVP the Social Partners played a large role, very large […] every decision in parliament was only possible if the Social Partners were informed. It stayed like this for a very long time (17:443-448)".

In case of forest policy making, PRÄKÖ was a Social Partner and was therefore granted privileges in forest policy making: the Forest Authority was obliged to formally involve PRÄKÖ at an early stage in formal forest policy processes. Furthermore, the Forest Authority of the BMLFUW had to facilitate a platform for the provincial Chambers of Agriculture and PRÄKÖ, through which the Forest Authority coordinated their forestry-related activities. Forest interest representatives were also able to use their close contacts with the *Bauernbund*, and thereby also influence the political arena. Thus PRÄKÖ, working together with the HVLF, were able to establish a prominent position in the policy making process. The following quotations from several core members of the forest sector illustrate the powerful position of PRÄKÖ, the HVLF and the *Bauernbund* and the closed interaction patterns that developed between them.

"We [PRÄKÖ and HVLF] are very good friends, we share the same bureau, they will do this, we will do that (21:99-101)".

"Forest interest representation is highly professional and the HVLF and PRÄKÖ do a really professional job […]. By professional I mean how they work together, the specialized knowledge they have, and how they can use their networks […] it functions as a very closed network (10:215-220)".

"They have a strong identity and you can see they have a strong interest representation, and I think they speak with one voice (5:163-164)".

"The main actors are the HVLF and PRÄKÖ […]. They are the most effective pressure groups or lobby groups, and I think that is normal […]. If I was a landowner and I didn't find that these two organizations are the most important proponents of the forestry interest then I would think there was something wrong with them (8:145-153)".

"For me it is a closed sector, not very friendly to newcomers (13:58)".

Informal interactions within the forest family
Following the 1852 Imperial Forest Law, the number of trained foresters started to increase. The initial impetus for this was the appointment of forest inspectors covering every province and district to implement and enact the Imperial Forest Law. Since this time interactions between the nationally *Forst Sektion* and the *Landesforstbehörden* have

remained very close. For example, the *Forst Sektion* of the BMLFUW regularly organizes conferences where the forest inspectors from the nine provinces meet, and coordinate their activities. These forest inspectors and district officers of the Forest Authority had direct and frequent interactions with the forest owners: the district authority implemented the Forest Law, and also gave advice to forest owners about forest management. Second, the Imperial Forest Law introduced a regulation called the *Bestellungspflicht* which imposed a ´duty´ on forest owners with between 500 and 1800 hectares of forests to employ a certified forester, and those with more than 1800 hectare to employ a certified academic forester. Certification of forest professionals was arranged by the *Staatsprüfung*, which was, and remains, in hands of the Forest Authority. In this way, the state ensured that the public interest in exploiting and conserving privately owned forests was maintained, with the qualified foresters being assigned the duty of ensuring that the regulations within the Imperial Forest Law were satisfied. This *Bestellungspflicht* also meant that forest professionals were assured of a job after graduation and provided a way for the Forest Authority to indirectly influence private forest owners, through the education that was government-led, and through the *Staatsprüfung* which certified these forest professionals.

This growing group of forest professionals was able to meet within the ÖF and discuss common concerns about Austrian forestry. A journal, the *Österreichische Forstzeitung* (Austrian Forest Journal) was established and allowed the dissemination of knowledge about forests and forest management among an even larger group of forest owners and forest professionals. This group of professionals and owners has been characterized as operating as a forest family. The word family suggests that the nature of interactions between the members took place on an informal basis and were built on familiarity and trust: they went together to the same university or college, worked in similar organizations, met at events organized by the ÖF, discussed issues through their professional journals, etc. The following quotations illustrate the important role that BOKU and the ÖF played in establishing the forest family within Austria.

> "The most important criterion for being part of the forest sector is if you are in the family […] I am a forester and even though I work on probably the most opposing organization [WWF], I am part of the family […] all the forest family went through BOKU, so there is a very high degree of familiarity between these people (18:140-160)".
>
> "It is a strong identity, I think. People within the sector, the players, know each other. A new face cannot hide for long. So you have your publications like the *Forstzeitung* and you have the journals, you go to certain meetings and read certain publications and you are informed. So it's not widespread, it is a small sector (13:56-59)".
>
> "[…] you must be part of the forest family in Austria, I think it is a good term, it is really a family, but the family must be prepared that the situation will change drastically in the coming years (4:302-312)".

Despite the central role that the ÖF, BOKU and the ÖBf-Ag make to the informal forest family, these organizations are perceived as playing only a minor role in official decision making processes.

> "So, the question was whether the ÖF really has influence; I couldn't say yes or no but when it comes to quantifying I would say not too much (2:331-332)".
> "Within the immediate forest policy we [ÖBf -Ag] don't have a specially great role because that role is played by our representatives, they are the politicians (22:257-258)".

Despite their perceived limited influence in formal decision making, both the ÖBf-Ag and the ÖF are members of the informal advisory board of the *Forst Sektion* of the BMLFUW. This *Forst Gipfel* (Forestry Summit) is an unofficial and informal advisory board that consists of about 20 foresters in influential positions who advise and assist the Forest Authority in solving the issues at hand. In other words, it is where the heads of the forest family meet and map out the main lines of Austrian forest policy. The next quotation, from one of the *Landesforstbehörden* illustrates the importance of this informal advisory board.

> "The *Forst Gipfel* is like a *Beratungsorgan* (advisory board) for the Minister and it is where the main directions of forest policy are determined (11:329-330)".

Another characteristic of the forest family was the high number of strategic positions occupied by foresters and the high number of personal unions, situations where one individual holds different positions at the same time and, through these, establishes relationships between different forest organizations. Several examples were given of foresters that, simultaneously or throughout their career, have held different strategic positions. Examples included personal unions between PRÄKÖ and the HVLF, the head of the Forest Authority, the *Landesforstdirektors*, the board of directors of the ÖBf-Ag, the president of the ÖF, the president of the *Bauernbund*, and policy officers in the Cabinet of the Minister of the BMLFUW. The following quotations illustrate another key characteristic of the forest family, the relatively small size of the top of the forest family:

> "HVLF is the President of this organization is also in the supervisory board of the ÖBf -Ag, so they are linked, they are all the same people. Give me 50 people, maybe 30 and I can fill in your cards. Everyone knows each other (17:140-144)".
> "There is an old fairy tale in Austria which says there are only three people [he points at *Forst Sektion* of BMLFUW, HVLF and PRÄKÖ] in Austria who make Austria forest policy yes, just three. They are all within the forest family (20:456-462)".

Thus there is a closed forest family that enjoys close formal and informal linkages with the forest policy process, creating a situation in which interactions were closed and dominated by a relatively small and select group of foresters occupying different strategic positions

within the Forest Authority, PRÄKÖ and the HVLF. The ÖF and BOKU play an important role in educating and binding this forest family. Transparency in policy making was limited, as involvement in decision making was mostly restricted to partners within the Social Partnership and the HVLF. This closed pattern of interactions, which could be characterized as a typical informal consensus style did not leave much room for other organizations to become involved. This analysis is in line with Glück (1997), who referred to this group of foresters and their interactions as green pillarization. Pregernig (1999) and Voitleitner (2002) have come to similar conclusions, both arguing that the relationship between forestry interest groups and the forest administration typifies 'sectoral corporatism' with permanent lines of communication between the main decision-making actors, which allow for a continual process of bargaining and consensus building between these actors.

4.4.2 Interactions with non-members: intensified but limited in scope

Growing domestic societal pressure
The closed pattern of interactions between the core members has increasingly been challenged as societal values and demands about policy making have evolved. More heterogeneous social structures have resulted in the establishment of new political parties, notably the Green and the Freedom Parties, which are not aligned with the traditional political camps. Competition from these new political parties has forced the old ones to sharpen their profile and become more involved in agenda setting rather than leaving it to the traditional Social Partners. Moreover, it is no longer acceptable for Ministries to only serve the economic interests of one sector. They have come under pressure to serve parliament and a broad range of public interests, rather than just one specific interest (Tálos and Kittel 1996). Since 2001 the SPÖ-ÖVP coalition which had governed Austria for more than half a century lost power and was replaced by a centre–right wing coalition between the ÖVP and the FPÖ. One of the focal points of this coalition was to reduce the role of government through decentralization, privatization and deregulation.

These domestic developments meant that PRÄKÖ and the HVLF could no longer rely on their informal and formal trust relationships with the Forest Authority. This has led both organizations to tighten their relations with the *Bauernbund* (and thus with the ÖVP) and with other political parties. They felt the need to increase their parliamentary lobbying position, since the unofficial route through the Social Partnership had become problematic. For the HVLF the increase in open public debate increased its possibilities to show their members how their interests were being represented. The Forest Authority was also forced to rethink its role and how it interacts with the forest sector, because of social and political demands that they adopt a broader orientation and act more as facilitators. The following quotations, from several core members, illustrate that these domestic developments

challenged the established interaction patterns and forced members of the forest sector to adapt their closed patterns of interaction.

> "There are many political studies about the role of the Social Partnership (SP) in Austria especially as in the times of the big coalition between the Social Democrats and the ÖVP the SP played a great role, very great. People started to say this is but a shadow government. Every decision in parliament was only possible if the SP were informed. It was like this for a very long time. In the recent years, and with the change in the government, the influence and the role of the SP has been considerably reduced (21:443-448)".
>
> "It was more the habit in the last century from World War II […] to the end of the century, that the Social Partnership […] that the Chambers, the Unions, those that made up this Social Partnership more or less decided what kind of laws we would get and that the parliamentarians were only good for raising their hands. Maybe this is a very strong picture and it was more or less right in the last century (3:200-207)".
>
> "We have had a hard discussion about changing processes in the administration. […]. We [the Forest Authority] are not only involved in legislation but we are also good advisers. We are a good administration that gives subsidies and we are able to mediate between all the players and we also try to safeguard the interests of society (19:126-132)".
>
> "It is a change in policy in general to have dialogues and not to hand down laws and regulations from on high. So it is a general change in policy that is not unique to the forest sector (13:165-166)".

These domestic societal pressures suggest that the characteristically closed patterns of interactions of the forest sector would be forced to become more open; allowing other actors to become involved in forest policy making. Officially this was the case because all voluntarily organizations, including the E-NGOs, have a right to be consulted in decision making processes that affect law making; Austria has consultation procedures for both non-governmental interest representation and compulsory interest representation. In practice, this means that, when laws are being drafted or amended, voluntarily organizations have the opportunity to submit a position paper and for their opinion to be heard. However, despite this official position of NGOs, their influence still seems limited. A quick scan of the process that led to the amendment of the Forest Law in 2002 suggested that it was the Social Partners, and the informal forest family of influential foresters, that dominated the proceedings, as illustrated the following quotations. The opportunities for non-members to influence the amendment were, according to themselves, limited.

> "In the year 2002 we had a process of amending the Forest Law. [...] I belong to the older foresters and therefore I was involved in the early discussions about this amendment. Well before this amendment was formally announced, informal discussions had already taken place and there the content was already prepared. [...] What I want to say is that as a forester I am already involved in the informal part of the process and it is much more efficient to implement your ideas there than in the formal period when the official consultation starts (23:322-333)".

"It [the influence of the Social Partners] became less, but recently it has increased again. With the Forest Law Amendment, the politicians took along experts but they didn't come really to an agreement. Then the presidents of PRÄKÖ and of the ÖGB [Social Partner] came together one evening and they decided together what to do. So […] it is important not to underestimate the informal route. It can make something real. When the politicians discuss in parliament, and also at the provincial level, then it is a strong debate but outside they have a normal conversation and they don't need to make a show of it. One can say that in principle in Austria the majority is prepared for consensus and it is only in recent years that there were stronger conflicts over political developments (11:368-380)".

"First for example amendment of the law: who can give input and how is the input valued? So, there is I think the core sector, the BMLFUW, *Hauptverband, Forstverein, PRÄKÖ, Bundesforste, Landesforstbehörden* and the administration is clearly part of the sector and owners of forests […] we were satisfied from our side because we could have influence through our PR work: through media and journalists, it was possible to correct some things (17:227-293)".

Growing international pressure

A further source of pressure on the closed patterns of interactions within the forest sector has been the rapid growth of international discussions on forest policy and forest-related polices. Since the 1990s, forestry has become an international policy topic and Austria has been active in these international debates. Moreover, on January 1, 1995, Austria joined the European Union, which had many implications for policy making, not only because many decisions are now taken at the EU level, but also because membership has implications for domestic policy making processes. While the domestic legislation needs the unanimous consent of the cabinet and majority support in parliament, at the EU level the position taken is left to individual cabinet members and civil servants (Falkner *et al*. 1999). While the Forest Authority plays an influential role in international processes, the Social Partners have been able to firmly establish some influence over policy decisions made at the EU level. In exchange for their support to the government over the EU integration process, the legal rights of interest groups with chamber-status were extended to EU matters. As a result the social partners share offices In Brussels with the official Austrian mission, and interest organizations participate in Austrian decision-making relating to some EU bodies, such as ministry councils and inter-ministerial coordination. In other words, Austrian's EU membership did not clearly diminish the influence of its corporatist institutions, but rather led to the establishment of new and additional relations between the state bureaucracy and the Social Partners (Tálos and Kittel 1996; Hogl 2000).

This has given PRÄKÖ a privileged position within EU decision making processes and provided them with additional possibilities to intensify their relationships of trust with the Forest Authority. The next quotation from a PRÄKÖ representative reflects how PRÄKÖ's official status in the EU furthers the process of forest sectorization in Austria.

"It is very good for the Austrian forest sector that we as the Chamber of Agriculture and Forestry are a member of, so to say, the official Partnership in Austria because I get all the documents from the EU that our Ministry gets. Often quicker […] the lines are very short and often they get things we don't get but then we exchange […] we are friends (21:230-234)".

But, at the same time, the closed interaction patterns within the forest sector came into conflict with the fact that the European Union has competences in certain policy fields which, in Austria, are the responsibility of the provincial level. This situation alarmed the Forest Authority which realized that not only are European regulations binding, but that they also overrule their nationally based authority, derived from the Forest Law. Moreover, because forestry is not a competence of the EU (in contrast to agriculture and nature conservation) this complicates their involvement in preparing different European directives that have a possible influence on forest management. The following quotation reflects that while the Social Partners occupy a privileged place in EU policy making (compared to civil society) the Forest Authority recognise the importance of establishing a European forest policy since this will legitimize a forest perspective on other issues at the European level.

"So, this is one important thing and Natura 2000 was the main reason why I became active at the EU level with forestry in the Constitution. Because things like that should not happen at EU level: that the sectors which are primarily involved are not able to influence the decision making process. That is not a good way, that does not work, so it is one of my reasons to be active (16:546-550)".

Austria's entry to the European Union provided a stimulant and legal legitimization for the provincial nature conservation authorities. According to the OECD (2003), the recent establishment of provincial nature conservation laws is largely attributable to the influence of international nature conservation legislation. EU membership provided an important external stimulus for the Federal Ministry of the Environment to establish the National Biodiversity Commission in 1996. This commission was assigned with the task of coordinating and harmonizing a wide range of international activities and programmes, as well as promoting the flow and exchange of information to the provinces. This commission consists of representatives from federal ministries and provincial authorities, unions and management, scientists and NGOS. The *Forst Sektion* does not participate in this commission. The following quotation from a forest policy officer illustrates that the Forest Authority did not appreciate being excluded from this Commission.

"We would like to be more involved in the process at the level of nature protection, Natura 2000 […] the provinces are in charge of nature protection and we do not yet know how to finance it, how to make these management plans and how to put it into action. There is no idea and there are these nature conservation departments sitting together and we don't know what is going on.

> And I would like to be involved there because more than 50% of the Natura 2000 areas are forest areas (16:509-518)".

Membership of the European Union also meant that decisions about subsidy streams have been partly moved up to the European level. Forestry measures that are included in the European Rural Development Program, receive financial support from the EU. However, one of the prerequisites for receiving financial support for forest measurements from the EU is that there should be a national forest policy. In April 2003, the Forest Authority of the BMLFUW organized a start meeting of the Wald Dialogue and invited over 80 organizations to participate in creating a National Austrian Forest Programme. Not surprisingly, this Wald Dialogue was perceived by both forest actors and the Forest Authority as a means, and not as an aim, to come to a European Forest Policy, as illustrated by the following quotation from a core member.

> "I just had to give a lecture on the Wald Dialogue in Lower Austria and there were some people from the Ministry sitting there who worked on that group and I made some very critical statements and they all approved. I think, 'the aim is the means to the end'. If we really want to come up with a European forest policy as a basis of European aims, rules, chances in forestry, also subsidies, I don't want to put them on the top but if we really want that, and if we really can only reach that through a Wald Dialogue, than we have to do it. I can see the point of the European Union which says that if we go into that field, then we want to have a standpoint of a nation and not of a group, but this is so hard that you always have to tell yourself all the time that this is for a higher aim, this is for a higher aim, otherwise […] (2:298-308)".

Limited openings for E-NGOs
By inviting over 80 organizations to be involved in the Wald Dialogue the Forest Authority appeared to send out the message that it intended to open up the rather closed pattern of interactions in the forest sector. The participating organizations ranged from the traditional forest actors, representatives of different political parties, E-NGOs, S-NGOs, as well as 'new' organizations, such as youth organizations. In addition to wide stakeholder participation, the Forest Authority also wanted to have a transparent Wald Dialogue and they developed a website dedicated to the Dialogue, enabling every Austrian with an interest to follow the process and to ask questions or make comments. Yet, some parts of the website were only open to invited participants of the Dialogue.
Thus, in contrast to the Forest Law which is based on an authority-relationship between the Forest Authority and private forest owners, the Wald Dialogue is based on voluntarily coordination practices. Moreover, there was never any intention that the Wald Dialogue would lead to any changes in the Forest Law. Indeed, while the Wald Dialogue was announced in August 2001 the process only started in 2003. It was postponed for over a year as precedence was given to drafting the 2002 Amendment to the Forest Law (Voitleithner 2003). This suggests that the Dialogue was never really intended to have any

great influence upon the Forest Law. The following quotation reflect that the Wald Dialogue was intended as a structured informal process that was not intended to change the Forest Law.

> "I mean, the Wald Dialogue is structured, but it is not formal. It depends on voluntary participation, on consensus and on taking responsibility. So, those engaged and willing to find a consensus on certain issues or activities would have the self-responsibility to implement and carry out and follow up their agreements. That's the concept. We will see whether it works (7:272-277)".

Despite these intentions participants involved in the Wald Dialogue were mostly sceptical about the outcome and impact that the Dialogue would have on forest policy making. Respondents in this study had some expectations that the Dialogue would lead to the views of civil society and other private actors to be more taken into account in the forest policy making process. Yet they also expected that, in the end, decision making powers would continue to rest with the traditional forest actors, both governmental and non-governmental and that the established structures of the Social Partnership and the *Forst Gipfel*, would, at least in the short term, continue to exert more influence over the forest policy making process. Moreover, since the implementation of any measures agreed on within the Wald Dialogue was voluntary, the impact was expected to be relatively limited, compared with that of the Forest Law. The following quotations of members, boundary members, and non-members reflect the high level of scepticism about whether any real progress was being made towards truly opening up the closed pattern of interaction that existed between the core members of the forest sector.

> *And what is your idea about the relevance of both groups in forest policy decision making?*: "In short term decisions that is certainly the *Forst Gipfel* but of course this is in the narrow field of forest management. I don't want to reduce the relevance of the Wald Dialogue but that will be a long-term development (11:333-341)".
> "The decisions are made by the forest organizations and forest owners but the decision making process also strongly considers other opinions, although the decision itself is made within the forest sector. Just like before (22:185-187)".
> "The only thing WWF wants is to change is the Forest Act and it is not the idea of the Dialogue to start set out to change the Forest Act! That .. is not the idea of the Dialogue. The idea of the Dialogue is that we focus on topics and if in the end it comes out that the Forest Act has to be changed, well […] (16:414-417)".
> "This Wald Dialogue will have absolutely no impact on the Austrian Forest Law, whatever the outcome is. They have used it to calm the E-NGOs, and that is all that there is to say about (12:245-247)".
> "We [E-NGOs] have no chance to change anything at this Wald Dialogue […] because it is dominated by the classical forest sector […] (18:281-283)".

Respondents offered several reasons as to why the E-NGOs have had limited success in establishing influential interaction patterns with members of the forest sector. The first reason was the inability of the domestically and internationally based E-NGOs to work together. These two groups were thought to have very different ways of working. Whereas domestically based E-NGOs were used to the consensus style of Austrian policy making, the internationally based E-NGOs were more accustomed to direct action and protesting through the media. There were also enormous discrepancies in the levels of abstraction involved between regional, national, and international issues and this further hindered cooperation between the two groups of E-NGOs. Moreover, internationally based E-NGOs were increasingly shifting their focus from the national to the international policy arena, as they were convinced that international agreements would indirectly give them more opportunities to have an impact on national policies. The following quotations illustrate how these differences between the different types of E-NGO limited their ability to work together and influence the forest sector.

> "The WWF has its own activities aimed directly at the government, which I can understand, but as a large private forest owner, I don't have so many connections to the WWF. I have better connections with the *Naturschutzbund* than with the WWF (6:266-268)".
> "Some of the NGOs say 'we are the only NGOs that are relevant', this is WWF and Greenpeace. But we also have some other environmental NGOs, *Naturschutzbund* and *Umweltdachverband* and I think these are also important. So, between the different organizations there are some differences. They [WWF and Greenpeace] are running for money and for members and therefore have to make some populist policy messages (19:98-102)".
> "[…] the member organizations of the *Umweltdachverband* are not really dealing with policy, they are working on the ground […] so we are the voice of these organizations in the political sense […] but we have to find common sense before going into politics and in forestry this is not always easy because many organizations have local experiences whereas we operate at a more abstract level […] (26:37-48)".
> "[…] the portfolio of WWF changed a lot in recent years […] I am much more internationally oriented now and I spend 70 to 75% of my time on international forest policy […] because of the stability of the Austrian forest sector it is very difficult to change forest management (20:13-16)".

A second reason given by respondents for the limited success of the E-NGOs in penetrating the forest sector and influencing forest policy making processes was the overall feeling that the they were no longer needed in Austria because 'all the targets had been met', making the E-NGOs redundant. The following quotations illustrate this perceived decline in the role of E-NGOs in Austria.

> "The role of NGOs is rapidly declining, especially that of the national NGOs. There is some importance of the WWF's work in international aspects of the trade in timber with Greenpeace, but the national NGOs are no longer really important. The *Umweltdachverband* and others,

astonishingly enough, they are almost not relevant any more […] the common change in the interest in media […] Another aspect could be that during the 70s and 80s and early 90s many goals in the field of environment and nature conservation were reached (9:412-423)".

"In Austria we don't need NGOs because there is no forest dying in Austria, we have too much wood […] I think there is no reason for the existence of the NGOs in Austria at this part, in the wood part […]the goal of these organizations is to reach targets and there are no targets in Austria left to reach, all targets have been met (12:261-269)".

"[…] based on the fear that as an interest group they will not be needed in the future. Some problems are blown up in discussion to a big balloon but in fact it is just a very simple problem but this and that […] are not dealing with real problems but artificial problems in order to create a problem. This can only be based on the wish to maintain an important function (8:480-489)".

Intensified interactions with recreational organizations

In contrast to the E-NGOs, the S-NGOs have actually managed to significantly open up the closed pattern of interaction within the forest sector and have established several structural interactions with core members of the forest sector. The basis for this interaction was the 1975 Forest Law that made all forests accessible for recreational use for the purpose of relaxation and forced forest owners and recreational users to start to discuss shared interests, such as the number and accessibility of forest roads. During the 1980s and 1990s a heated debate about mountain biking on forest roads intensified the interactions between the forest owners and the S-NGOs with the issue being whether mountain biking qualified as relaxation? The debate initially focussed on the legal responsibilities of forest owners in the case of accidents. Forest owners were also afraid that mountain bikers would disrupt their activities in the forest and sought financial compensation for allowing use of their forest roads. Long negotiations between the HVLF, the ÖBf-Ag, and VAVÖ resulted in the establishment of financial arrangements based on contracts between (the representatives of) forest owners and local mountain bike associations. These contracts resolved the issue of responsibility in the case of accidents and provided financial compensation to forest owners to maintain the forest roads and take responsibility for the safety of the users. The following quotations illustrate how the issue of relaxing in the forest became a source of debate between the forest owners and the S-NGOs and how solutions were arrived at.

> *EV: And what is the main issue to discuss with the forest sector?* "The freedom of relaxing in the forest. We have a clear legal situation and whenever problems come up you have to find a balanced solution for the given, local, concrete problem that comes up. But until now we have been able to work together to solve all the problems (15:297-300)".
>
> "For example the ÖBF, they are pro-active in that way: they are defining the routes and then the mountain bikers pay the cash. And this is done with local communities and tourism and so on. So, it is possible and in many cases it works. But that in this case it not the direct environmental society that is cooperating but more the market (8:357-361)".

The dispute over mountain biking seems to have provided the basis for further interactions between forest owners and the S-NGOs. Besides establishing financial arrangements, the interactions between the ÖBf-Ag and VAVÖ were contractually defined, giving VAVÖ the official right to participate in negotiations over specific sporting issues, such as access to forest roads. This contract was established in the wake of the privatization law which established the ÖBf-Ag. Thus VAVÖ has found effective ways to influence policy making and implementation and voice the societal interest in forests. VAVÖ's contacts with the ÖBf -Ag are very significant as the ÖBf-Ag is the main owner of the high altitude (forest) areas that are of most interest to alpine sports. The following two quotations from representatives of S-NGOs reflect VAVÖ's success in influencing the 'forest sector'.

> "VAVÖ has become more important and this year, the ÖBf and the VAVÖ made a contract about having better discussions and discussing problems and so on in a structured way and so on and this is quite good as this has not been a part of politics for the last 10 or 20 years (18:161-165)".
> "This is new. Before privatization ÖBf, as the major owner of woods and forests in Austria, was owned by a Ministry and we were in constant contact with the Ministry: whenever problems came up or new philosophies were discussed, we were part of the discussion. Now it is on paper and in the mission statement of ÖBf that VAVÖ is an important stakeholder. So, we are involved, not only out of the goodwill from the ÖBf but embedded within the new law for privatizing the ÖBf (15:33-37)".

VAVÖ did not participate in the Wald Dialogue, on the grounds arguing that it did not offer any additional opportunities to the interactions that they had already established with the Ministry of BMLFUW, the HVLF, and the ÖBf -Ag. This suggests not only that the S-NGOs now hold a powerful position, but also that the Wald Dialogue is not the only manner for civil society to establish interactions with core members of the forest sector. Respondents offered three explanations for VAVÖ's relatively strong position. First, all of VAVÖ's member organizations, despite some differences in their political backgrounds, have the same focus on recreation and outdoor sporting. This makes VAVÖ a coherent organization and strengthens their credibility. Second, VAVÖ represents about 1 million Austrians which gives them some political credibility. Third, the importance of recreation and tourism to the Austrian economy further strengthens the political position of VAVÖ. The following statements of representatives of S-NGOs illustrate the powerful position of VAVÖ and the effectiveness of their interrelations with core-members of the forest sector.

> "We have not only a lot of members; we also have economic power because we are the largest hotel chain in Austria with thousands of sleeping places across the country. I think we do more and more, VAVÖ as well as its big member organizations, we do our job more professionally (15:274-277)".
> "We are lucky that tourism is a very important industry: twelve percent of Austrian GNP comes from tourism and so tourism policy is a major issue for the economy of Austria. And on the other

hand there is a well-developed civil society in Austria, VAVÖ also represents half a million mountaineers we have the power to get politics moving (15:342-345)".

"And they [VAVÖ] are quite important because they have money and so on and they have many members. It is quite a large number of people and they have become more important (18:159-162)".

4.4.3 Intensified and professionalized interactions along the wood chain

The main basis of the relationship between forest owners and the wood processing industry is commercial, where the main interactions are over wood price, quality and size of wood, the time of delivery etc. However, respondents involved in the domestic wood processing chain expressed the opinion that the pattern of interactions was becoming more intense, with more topics being discussed. This process started some 30 years ago when the wood processing industry and the forest owners jointly established the *Kooperationsabkommen Forst Platte Papier* (The Forum for Forest Board and Paper; FPP). Signatories to the FPP included the Standing Forest Committee of PRÄKÖ, the FHÖ and *Austropapier*. Officially, the motto of the FPP was to sustainably utilize the domestic timber supply by seeking cooperation and initiating projects to improve buyer-seller relationships. More recently, under the moderation of the head of the Forestry Department, the *Forst-Holz* platform was established, in which the wood processing industry and the president of the HLVF get together and discuss common problems. One of the conditions that BMLFUW set in establishing this platform was that irresolvable discussions about wood prices would not be on the agenda. The participation of the HVLF in this platform (instead of PRÄKÖ) suggests that its focus is predominantly on large forest enterprises. Intensifying interactions between the organizations along the domestic wood processing chain have even led to discussions about the possibility of them moving into one building, showing just how seriously these organizations see their interactions and interdependence. The following quotations illustrate the extent to which forest owners and the wood processing industry are coming closer.

EV: Is it also interesting for you that the forest sector is interested in you? A: "Of course, not so much as we like, but I think it gets better and better. We want them to be more interested, the forest sector is not just tourism and water, the money they get is from us, from the wood industries, 90% of their income is from wood prices (12:66-70)".

"There has been a bit of a split between the actual forest sector and the timber-based industry although they should be together. Because with the activities on the global market we see that as a very small country we can only act on the global market if we are very close together. The smaller you are the closer you have to get together, to be strong (16:90-98)".

The interest of the *Forst Sektion* in facilitating the *Forst-Holz* platform partly seems to lie with their interest in ensuring that wood production and wood processing continues to take place in Austria and that the wood processing industry continues to make a large contribution to the Austrian economy. Throughout the last century, the Austrian wood processing industry became highly export-oriented and the trade in timber and wood products is now of substantial economic importance for Austria. Austria has about 1,400 sawmills, 27 paper and cellulose processing factories, and 10 board factories that together process 13.5 million m3 of domestic round wood and an additional 8.5 million m3 of imported round wood (OECD 2003). In 2003, the wood industry was the second largest contributor to the foreign trade balance, with a surplus of 3.12 billion Euros (just after tourism with a surplus of 3.15 billion Euros). The largest part of this comes from the paper and pulp trade that annually contributes some 2.2 billion Euros (FPP, 2005). In addition to being one of the main pillars of Austria's trade balance, the wood processing industry also provides jobs in rural areas to about 22,500 people (FPP 2005). Thus the wood processing industry is a powerful partner for the Forest Authority and the Forest Authority's interest in facilitating this platform suggests that the authority still sees gives priority to strengthening the economic contribution that the wood producing and processing industries make to the Austrian economy and their ability to provide employment, especially in rural areas.

Alongside these predominantly market developments, societal pressures from the E-NGOs have also provided an impetus for co-operation between the wood processing industry and the forest owners, as both parties see the E-NGOs as a common enemy and wish to limit their influence on forest management and forest policy. In this sense the establishment of the 'Pro*Holz*' campaign can be seen as a reaction to the growing influence of the E-NGOs. This is also reflected in the involvement of the wood processing industry in the Wald Dialogue. The industry was initially not invited by the Forest Authority to participate in the Dialogue as the Forest Authority thought that there already were sufficient avenues of dialogue with this sector. However, the wood processing industry indicated that it would like to be involved in the Wald Dialogue and the following quotation (from a representative of the wood processing industry) shows that they wished to counter the views of civil society about forests and to stress the importance of wood production to Austria. Thus while strengthening their interactions with the core members of the forest sector, the wood processing industry shares the goal of minimizing the influence of NGOs and the nature conservation authority over forest policy.

> "The main reason for the involvement of the wood processing industry in the Wald Dialogue is that we must prevent the forest in Austria from not being used any more […] that is our most important part. Forest and forestry can go together but many people in Austria seem to forget that (12:162-165)".

4.4.4 The interaction boundaries: increasingly permeable with core members maintaining the decisive power

The previous paragraphs showed that, for a long time, a closed interaction boundary existed based on the privileges of private forest owners; a delicate relationship between the Forest Authority and the forest owners and a closed forest family of forest owners and forest professionals. However, since the 1970s, this closed interaction boundary has become more diffuse as different, mostly informal relationships have been established with NGOs and the wood processing industry. The wood processing industry has become a strong coalition partner, partly at least because they also perceive the E-NGOs as a common enemy that needs to be excluded from the interaction boundary.

However, the E-NGOs and the provincial nature conservation authorities have to some extent managed to open up this closed interaction boundary that existed around the forest sector. They partially achieved this through the juridical powers granted to them through Austria signing international agreements in the field of nature conservation. However, the E-NGOs remain sceptical about their ability to have a decisive impact on the decisions of the core members of the forest sector. The position of the E-NGOs contrasts with that of recreational actors (the S-NGOs) who have, to some extent, managed to become involved in the interaction boundary of the forest sector and exert some, albeit limited, influence over decisions taken by the core members.

Thus, one can conclude that the interaction boundary that determines the forest sectorization process in Austria continues to be dominated by the core members, at least at the decision making level. At the lower level of discussing common issues, the interaction boundary set by the core members has become more permeable and continues to do so. The dominant interaction boundary across which core-members communicate is with the wood processing industry and this relationship is becoming progressively intensified and professionalized.

4.5 Sector frames and frame alignment processes

This chapter sets out to illuminate how actors inside and outside the field of forest policy in Austria set and reset sector frames in a continuous process of forest sectorization. In the previous sections, the focus was on analyzing perceptions of the different boundaries of the forest sector. Based on the identification of these boundaries, this section seeks to identify which 'sector frames' can be found in Austria, and how, and why at a certain moment in time specific sector frames have been adjusted. The sector metaphors used by the

respondents to denote the forest sector are the same names used to denote the 'sector frames' and are expressed in the original language used by respondents.

4.5.1 The establishment of a strong *Forst* sector frame

Sector metaphor '*Forst*'

The sector metaphor 'I' reflects a mono-functional focus on the wood production function of forests. In English, '*Forst*' would be translated as 'forestry' and seems to denote a relatively straightforward perception of the forest sector as an economic and commercial resource. The organizations and institutions established by the core-members of the forest sector all embody the use of the sector metaphor in their names as for example in the Reichs*forst*gesetz, *Forst* Gesetz, *Forst* Sektion, Landes*forst*behorden, Österreichische Bundes*forste*, Österreichische *Forst*verein, *Forst*gipfel, *Forst*zeitung, *Forst*er Schule, *Forst*rat, Abteilung *Forstwirtschaft* of PRÄKÖ, and so on. The influence of civil society has been restricted by restricting the meaning of the *Forst* sector metaphor to referring to a mono-functional approach towards forests, based on the core believes in the sovereignty of owners and their right to exploit their forests. The following quotes from members of the forest sector show how this sector metaphor plays a central role in the Austrian case.

> "*Forstwirtschaft* (forestry) is what makes the *Forst* sector the *Forst* sector (23:295-296)".
> "I remember when I was a young forest engineer many important people in forestry used words like *Forst Fremde Kreis*. Do you understand this? People outside of forestry shouldn't interfere with the forestry circle. Here is forestry and there is the bad world (21:629-632)".
> "I am not from a *Forst* family, I just liked it to study *Forstwirtschaft*, and I of course noticed then that the *Forst* people are a very closed group and they want to be left alone (23:261-263)".

The *Forst* sector frame builds on economic meaning and a closed forest family

Section 4.2 showed that the meaning boundary of the Austrian 'forest sector' was dominated by the economic meaning attached to forests. Initially, this economic meaning boundary was built upon a mono-functional focus on the commercial exploitation of forests. The sector metaphor '*Forst*' seemed to be predominantly used by core-members, such as PRÄKÖ, the HVLF, and the Forest Authority to express their strong emphasis on the commercial utilization of forests. In line with this clear mono-functional focus of the '*Forst*' sector metaphor, the analysis of the membership boundary in section 4.3 gave a similar clear picture that was based on clear membership criteria: forest ownership, involvement in the Austrian Forest Law and having gone through forest training.

These straightforward meanings and membership boundaries helped create the interaction boundary that was characterized in section 4.4 as being based on informal and formal relationships between a small group of forest owners and forest professionals. The

influence of civil society was restricted because all the boundaries of the *Forst* sector frame were kept closed. Furthermore, section 4.4.3 showed how the wood processing industry developed independently from the *Forst* sector frame, largely because of an absence of personal unions between forest owners and wood processors.

Section 4.4.1 showed that the term 'family' was used by respondents to express the high level of trust and informality in the relationships amongst this group of forest owners and forest professionals. The ÖF played a crucial role in this as their meetings and their publications facilitated the socialization and building of links between forest owners and forest professionals. These (re-)socialization processes contributed to a shared picture of what it meant to be part of the Austrian forest family. In addition, there was the *Forst Gipfel* that consisted of the 20 most influential members of the forest family which informally advised the Minister of the BMLFUW. This strong informal interaction boundary was complemented by formal closed relationships between the forest owners' representatives and the Forest Authority. Given these strong and clear boundaries of meaning, membership and interactions it is not surprising that the *Forst* sector frame led foresters to be proud of the contribution that they made to the Austrian landscape either through their property or their work.

4.5.2 The *Forst* sector frame challenged

During the 1980s, Austrian societal demands shifted and society started to challenge the traditional corporatist way of policy making, demanded more opportunities to influence the policy process, through increasing the role of parliament and decreasing the role of civil servants and the Chambers. At the same time, emerging post-industrial values led society to give more value to forests for their amenity, recreation and nature conservation functions. The *Forst* sector frame found itself coming under challenge from the debate over acid rain, increasing recreational demands, political changes, the changing role and place of agriculture, international agreements on nature conservation, the globalization of the wood processing industry and Austria's EU membership.

These developments encouraged the traditional forest actors to develop a more holistic focus on forests, and the forest owners to increase their efforts in attract social legitimacy. As a result, the rather closed forest family started to open up its boundaries and increase dialogue with other interests, such as nature conservation, recreation and the wood processing industry. His opening up found expression in the broadening of the scope of the Forest Law and several projects in which private forest owners or the privatized Forest Service collaborated with nature conservation, hiking and alpine organizations. However,

these NGOs continue to be seen as remaining outside the forest family. Consequently, new (informal) relationships have been established with actors outside the *Forst* sector frame.

Other changes that have occurred include a decline in the number of member's of the ÖF, a decline in work opportunities for foresters and a decreasing interest amongst students to study forestry. Today, only one third of Austrian farmers depend on agriculture and forestry for their main income. Selling, inheritance and changes of occupation have brought a new group of forest owners into existence. One important characteristic of these new forest owners is they are no longer solely interested in commercially exploiting their forests. All these factors have challenged the traditionally strong *Forst* sector frame and made the time ripe for frame alignment. However, there are different possible directions in which the *Forst* sector frame might develop: one direction was constructed around the '*Forst-Holz*' sector metaphor and the second direction was constructed around the '*Wald*' sector metaphor.

4.5.3 Towards a *Forst-Holz* sector frame?

Sector metaphor '*Forst-Holz*'
For historical reasons the Austrian wood processing industry and forestry sectors have for a long time constructed separate sector frames. But section 4.2.3 showed that reasons of increasing joint interests are bringing them increasingly closer; not only to improve their economic position, but also to improve the societal image of wood production. The *Forst-Holz* sector metaphor expresses this process of the *Forst* and the *Holz* sector approaching each other. It refers to a joint interest of forest owners and the wood processing industry in increasing domestic wood production for economic reasons. In English, this cooperation between the forest and the wood processing industry is often expressed in the term 'forest-based industries'. Constructing the sector metaphor *Forst-Holz* also seems to enable both the two sectors to become more involved in international discussions that address the complete wood chain. Yet, by drawing on and making explicit use of the two words '*Forst*' and '*Holz*', the sector metaphor *Forst-Holz* also suggests a continued difference between 'forest' and 'wood'. The following quotations reflect the reasons underlying the use of the sector metaphor *Forst-Holz*.

> "The industry is getting bigger […] and very powerful […](becoming) a buyer's market […] but on the other hand very strong and successful interventions to build a joined platform of '*Forst-Holz*' (that can promote the idea of) using more wood from our own country […] (5:230-234)".
> "[…] cooperating in the *Forst-Holz* is used for […] making the cake bigger […] (21:330)".
> "That's right, the HVLF and the wood processing industry; want to go together, that is the reality: they see their advantage and we see ours. And it is the same with the paper industry. In Europe

you have the forest based industry cluster and in Scandinavia you have that too, and I think we will get there in a few years. A joined '*Forst-Holz*' cluster (12:120-124)".

The shared interest in optimizing the domestic wood chain supports the *Forst-Holz* sector frame

Section 4.4.3 showed that the shared meaning of optimizing the domestic wood chain so as to improve the economic situation of all involved actors provided a fruitful basis for increased interactions between the wood processing industry and the forest owners. At the same time, increasing international pressures forced the wood processing industry to increase their competitiveness and this, in turn, led them to persuade the Austrian forest owners to increase their harvesting rates. Section 4.2 showed that a new meaning boundary emerged, that was jointly constructed by the forest owners and the wood processing industry, and rested upon a shared focus on optimizing the domestic wood chain. The economic legitimization for this focus rested upon the contribution that the domestic wood processing industry makes to the Austrian economy: together the forest and wood industries are the second most important sector in terms of the national trade balance and provide about 110,000 jobs in rural areas. The contribution of wood production by itself to the national economy is much less.

For the forest owners this new meaning boundary involved a shift in their focus from a focus one on wood production to a one on the whole domestic wood chain. For the wood processing industry this new meaning boundary involved a more explicit focus on the domestic wood market. However, societal support for this new economic meaning attached to forests did not come automatically. Supporters of the *Forst-Holz* sector frame had to actively invest in garnering societal support, through for example the *ProHolz* Association which promotes a positive image of wood and introduced the PEFC certification system in Austria.

Section 4.4 shows that the membership boundary of the forests sector was also opened up to the large group of smaller farmer-foresters. Low wood prices and declining incomes from agriculture made both large and smaller farm-foresters seek to be greater efficiency and to harvest more wood, activities which led them to jointly establish the *Waldbauernverbanden*. This again demonstrated that the great majority of private forest owners and their representatives are still mostly focused on the economic meaning of forests, and wish to increase this by optimizing the performance of the domestic wood chain. So, through building links with the wood processing industry and developing the *Forst-Holz*, sector frame the membership boundary of the forest sector really did open up.

Section 4.4.3 showed that based on the shared meaning of optimizing the domestic wood chain, the interaction boundary opened up to the wood processing industry and the

interaction pattern between the wood processing industry and the forest owners intensified. Most obviously this was reflected in the attempt of the head of the Forest Authority to initiate the establishment of the *Forst-Holz* platform, which included representatives from the wood processing industry and the forest owners. This *Forst-Holz* sector frame also enabled these two sets of interests to become jointly involved in international discussions about the wood chain.

To date, the *Forst-Holz* sector frame does not seem to have replaced the *Forst* sector frame, but more co-exists alongside it and offers a. promising approach to the problems that have confronted the *Forst* sector frame. Yet at the same time a second sector frame, the *Wald* sector frame is also being constructed, partly by the same actors involved in constructing the *Forst-Holz* sector frame.

4.5.4 Towards a *Wald* sector frame?

Sector metaphor 'Wald'

The sector metaphor 'Wald' seemed to have been introduced into the Austrian forest sectorization process to accommodate a broader range of forest functions and to allow the involvement of a broader group of societal actors. 'Wald' reflects a multi-functional focus on forests, which contrasts with the one-dimensional focus on wood production contained in the sector metaphor '*Forst*'. There are several examples of the term '*Forst*' having been replaced with 'Wald' so as to reflect this broader perspective on forests: the Forest Law Amendment of 2002 introduced the term Lebensraum Wald which reflects the effect that forests have on people, animals and plants; the *Forst* Inventory was changed to Wald Inventory and now includes many ecological indicators in addition to wood related statistics. In addition the social science department within the University of Ground Cultivation changed their name from 'Institut für Sozioökonomik der *Forst*- und *Holz*wirtschaft' to 'Institut für Wald, Umwelt, und Resourcen Politik'; and within the *Forst Sektion* of the BMLFUW the international policy department was renamed *Abteilung Waldpolitik und Waldinformation* (Department of Forest Policy and Forest Information). The following quotation reflects how the sector metaphor 'Wald' is used to present a more multi-functional perspective of forests.

> ""People say that Austria is a Waldland and that the Wald determines the landscape of Austria, the Wald also brings us wood production and that is a substantial part of the Wald […] And the foresters have broadened their horizons and their perspective on the Wald. The foresters also have to look at water management, environmental issues and nature protection matters. Foresters have to take into account all the aspects of the Wald and this is already happening (23:85-96)".

The *Wald* sector frame builds on acknowledging the multi-functionality of forests

Section 4.2 showed that the multi-functional meaning attached to forests must be seen in the context of the boundary of their economic meaning: forest owners were only willing to give up part of their sovereignty and focus on fulfilling other (societal) functions of the forest in exchange for some kind of payment. This continuation of the protection of the sovereignty right of forest owners was also reflected in the membership boundary. Section 4.3 showed that the membership boundary of the forest sector has hardly changed and that most NGOs are still perceived as outsiders.

But despite their position as outsiders, all NGOs have become, or at least have the possibility to become, involved in the dominant interaction boundary constituted by the core-members who make up the Austrian forest sector. This is most clearly shown in the Wald Dialogue. In addition the *Forst* Sektion of the BMLFUW has adapted its role and shifted from operating mainly as the mouthpiece of core members towards a position in which they facilitate dialogue between core members, boundary members and relevant outsiders. This was a clear response to Austrian societal demands that the government become more participative and transparent and represent all the interests of Austrian society. In this respect, this Wald Dialogue not only facilitated the participation of a broader range of societal actors, but also was set up as a transparent process. However, section 4.4 showed that, to date, the Wald Dialogue seems to have brought nothing new, in that the actual decision making continues to be dominated by the same actors that have enjoyed long lasting closed relationships that have determined the interaction boundary. Societal actors were quite sceptical about their influence and had the feeling that this process takes up too much of their already limited resources. These low expectations seemed related to their experiences with the Austrian *Forst* sector frame from which they were almost completely excluded. In addition they see that the traditional forest sector actors and the wood processing industry appear to be using the Wald Dialogue to improve the image of Austrian forestry, to get financial compensation for societal/policy demands on forests (such as Natura 2000), and to prevent civil society from exerting too much influence over their commercial activities.

It is interesting that the members involved in constructing and supporting the *Forst-Holz* sector frame were also involved in the Austrian Wald Dialogue, which seeks a quite different direction for Austrian forests, as shown in the previous paragraph. The traditional forest actors and the wood processing industry quite clearly indicate that they see the 'way they are heading' and the 'the way forward for Austrian forestry' as lying with the *Forst-Holz* sector frame. In other words, the forest owners seem to have more confidence in cooperating with the wood processing industry, and most forest owners appear less interested in cooperating with the nature conservation and tourism sectors, suggesting that

their involvement in the Wald Dialogue seems more based on obstruction than genuine dialogue building.

4.6 Conclusions

The *Forst* sector frame provided a relatively straightforward perception of the forest sector: a closely knit policy community consisting of a largely fixed set of core members, with a shared focus on the economic function of forests. For a long time this economic function served as the main basis for legitimizing the sector, its importance, content, interests, identity and boundaries. However, the current picture looks a little bit different. The Austrian case showed the influence of internationalization and increasing importance of other functions such as recreation, led to changes in the perceived identity of the forest sector and has led to the emergence of two other sector frames: the *Forst-Holz* sector frame and the *Wald* sector frame. Each of these sector frames reflects different perceptions and of the forest sector and offers differs prospects for its future. Actors supporting and making use of the *Forst-Holz* sector frame are seeking to address these challenges by including the wood processing industry and thereby strengthening the image of the forest sector as economically important. Others (including a substantial number of influential actors supporting the *Forst-Holz* sector frame*)* were seeking to make sense of the forest sector by supporting the *Wald* sector frame which seeks to deal with the challenges facing the sector by building the image of the forest sector as societal important and emphasizing the importance of functions such as recreation and conservation.

These two sector frames overlapped in terms of membership and those supporting the *Forst-Holz* sector frame used the *Wald* sector frame as a means for improving the image of forestry in Austria without making any substantive changes to its primary focus. There are substantial differences in respondents' expectations about the extent to which the *Forst* sector frame will open up when it comes to the level of decision-making. Most respondents expect that the traditional, economically oriented *Forst and Forst-Holz* sector frame*s*, will, at least in the short term, dominate forest-thinking in Austria. However, some respondents do expect that societal, political and economical pressures will lead the *Wald* sector frame to gain ground in the longer term. Table 4.3 presents a summary of the different sector frames and sector boundaries identified in the Austrian case.

Table 4.3 Summary of sector frames and sector boundaries in Austria

Sector frames	Forst sector frame	Forst-Holz sector frame	Wald sector frame
Meaning boundaries	Economic meaning - mono-functional perspective on wood production.	Socially accepted economic meaning - optimizing the wood chain (from production to processing) and taking into account societal wishes for sustainable forest management.	Multi-functional meaning of forests that allows a focus on wood production and, to a much lesser extent, on other forest functions.
Member-ship boundaries	'Forest family' of large forest owners and their representatives, forest professionals, the Forest Authority and BOKU. Membership based on forest ownership and forest training.	Forest Authority, large and small forest owners with economic motives, forest owner interest organizations and the wood processing industry. Membership along the wood processing chain.	Traditional forest actors, the wood processing industry, BOKU, nature conservation authority, E-NGOs, and S-NGOs. Membership more diffuse.
Interaction boundaries	Formal powers lie with the Forest Authority but most real authority lies with forest owners themselves acting through the Social Partnership and the Forest Gipfel. Informal trust relationships based on familiarity between members, supported by education and the ÖF.	Diminishing formal powers for the with Forest Authority, which more facilitates and supports interactions. Professional relationships of trust between owners and wood processing industry becoming increasingly formalized.	Formal authority more dispersed with the Forest Authority that also facilitates structured interactions between large groups of actors related to forests. Professional relationships based on fixed and explicit rules of interaction.
Sector metaphors	Forst (forestry)	Forst-Holz (forest-based industries)	Wald (forest)

The forest sectorization process in Austria thus appears to be a dynamic process, however, to date, this dynamism has encountered strong traditional powers and positions that enable the continuation of a largely unreconstructed forest sector. The Austrian case shows that while the traditional boundaries of the forest sector have largely been maintained, this requires more input and energy from traditional forest actors and of its new ally, the wood processing industry. The traditional boundaries of the Austrian forest sector are increasingly being challenged, at different levels and by different actors, but so far, the actual effects on the boundaries of the forest sector have been limited. Most respondents

expect that the traditional, economically oriented *Forst-Holz* sector frame will dominate forest-thinking in Austria, at least in the short term. However, due to ongoing societal, political, and economical pressures, it is likely that the *Wald* sector frame will gain ground in the long term.

5   The Netherlands

> *"[…] I have seen the old wood growers […] I have seen the confusion afterwards*
> *[…] I have seen the debate with nature conservation […] institutionalization of*
> *this debate […] and now the operationalization […] so site-management has to*
> *become professional, and this is not yet the case […](51:413-420)".*

As with the previous chapter on the Austrian forest sector, the aim of this chapter is to analyze the different boundaries of the Dutch forest sector and how and why different sector frames have gained or lost dominance throughout an ongoing process of sectorization. The chapter starts with a brief section that provides contextual information about the Netherlands, which introduces the Netherlands as a country and society. Subsequently, the focus of the following three sections (sections 5.2-5.4) is on the three boundaries identified in the conceptual framework and addresses the following three questions:

- What meanings attached to the concept of forest are used to construct the forest sector?
- Which members construct the forest sector and around what rules?
- What patterns of interaction between actors construct the forest sector?

Section 5.5 analyses the sector metaphors used by respondents, the sector frames that can be identified in the Netherlands and how some of these sector frames have come to the fore at the expense of others. Some conclusions on the process of forest sectorization in the Netherlands are drawn out in section 5.6.

5.1 Natural, political and societal context

5.1.1 The natural context – the dominance of agriculture as the main land use

The Netherlands is a relatively small country situated in north-western Europe, with a land mass of about 35,000 km^2. Prior to the Middle Ages most forests in the Netherlands were hardly used, being generally perceived as unpleasant and scary, although some were venerated as sacred places. During the Middle Ages this perspective changed and forests

came to be seen as important resources (Van der Windt 1995). Consequently, most forests were (over)exploited for different reasons: for the iron industry, building ships, house construction, fuel wood, etc. By the end of the C17th, there was hardly any forest left in the Netherlands (Buis 1993). Buis (1993) suggests three main reasons why some forest did survive. First, the Netherlands possessed a sophisticated fleet of ships and had extensive trade relations which allowed the country to import wood. Second, the growing cities were able to use peat as an alternative fuel, which was often cheaper as it could be extracted locally. Third, some forests had come under local forms of protection, as their owners recognized their value for hunting (Buis 1993).

Since these times agriculture has become the main land use in the Netherlands, yet there remain clear regional differences in the type of agricultural system and the possibility for forests and forestry. Large parts of the western and northern parts of the Netherlands lie below sea level and have a high water table. Water and the battle against it have always dominated life in the Netherlands: not only in the western half of the country, where much land lies below sea level, but also because the Netherlands is a delta of the Rhine, Schelde, and Maas rivers. Ingenuous water management has allowed large scale agriculture to develop in these fertile areas, often as a result of extensive land reclamation projects which created new fertile swathes of land. Forests in these reclaimed areas are mostly restricted to the dune areas along the North Sea coast, where they have been planted for stabilise and maintain the dunes.

By contrast, the eastern and southern parts of the Netherlands, which are located above sea level and dryer, have a different smaller-scale and mixed agricultural system. These systems consist of agriculture fields fertilized by cattle manure or by the top fertile soil layer of remote fields. Where there were no lower wet meadows, the cattle grazed in the forests and on degraded land. In these fragile 'potstal' systems, forests played an integral role within the agricultural system. Most forests were communally owned by fellowships, such as I*marken* and *malegenootschappen*. By 1806 overexploitation, overgrazing, wars, etc., had led to there being only ca. 230,000 hectares of forest left in the Netherlands (Buis 1993:10). Since then extensive afforestation projects have led to 370,000 hectares (about 10% of the country) being covered with forests, Nonetheless, in comparison to other European countries, the Netherlands is still one of the least forested countries.

5.1.2 Political context – consensus and a focus on private property

The dominance of water has not only influenced Dutch land use systems, but also the development of the Dutch political context. The verb *polderen* is common in the Dutch language. It refers not only to the process of reclaiming land from the sea, but also to the

activity of continuous deliberation and striving for consensus. It is believed that the origin of this consensus-building culture can be traced back to the Middle Ages when farmers, nobleman and civilians cooperated in building dikes to control the waters of the rivers and the sea. This cooperation helped contribute to a consensus style of policy making and led to the establishment of the *waterschappen* (water boards), the oldest democratic institutions in the Dutch polity.

This consensus style of policy making still can be found in the Dutch parliamentary system, which was established on August 24th 1815 after the defeat of Napoleon, when the United Kingdom of the Netherlands was officially established under a new constitution by the Congress of Vienna. The Netherlands became a constitutional monarchy with a government that has always consisted of a coalition of minorities. These minorities were a result of the (previously) pillarized character of Dutch society, which has long been deeply divided and segmented by religious (and subsequently political) cleavages. In such a fragmented society, consultation provides the most effective means of coordination. According to Andeweg and Irwin (2002), the Netherlands is a classic consensus democracy, in which the (potentially) destabilizing effects of deep social divisions have been neutralized by cooperation between the leaders of these social groups (Andeweg and Irwin 2002:208).

The 'French period' (1795-1813) saw a shift in attitudes towards forests, largely because of a major change in ideology with respect to property, which saw the government (under French rule) adapt the French preference for private property, which they believed increased national welfare. This also allowed the government to sell off large parts of its property as to pay the large national debt (Buis *et al.* 1999). Between 1809 and 1810, the (French) government issued its first *markewet* that abolished the common property system, which had dominated since the Middle Ages. By the end of the 19th century, ideas about property once again shifted (for reasons that are discussed later in this case study), and the government again started to purchase (forest) land. Nowadays, only a few forests are commonly owned, almost 40% is owned privately or by private nature conservation organizations and almost 60% of the forest is owned by the government.

5.1.3 The societal context – an urbanized point of view on forests

The Netherlands is a relative small country and is the most densely populated country in Europe: with almost 17 million inhabitants it has a population density of 478 people km^2. National attitudes towards nature and forests are strongly influenced by this high level of urbanization, which dates back to the ""Golden Ages" (C17[th]), a period of prosperity influenced by the Enlightenment, when ideas about nature and forests first began to change. At this time the well-off citizenry started to see nature no longer as the enemy, but as being

pliable to human use and needs. This changing view is clearly reflected in the estates established in this period by the *nouveaux riche;* for reasons of amenity, landscaping and recreation, factors that were reflected in the tree species used on the estates and the design of the road systems (Buis 1993).

During the industrial revolution Dutch society continued to urbanize and an Arcadian view of nature became prevalent among the urbanized population. They started to idealize nature and see it as an attractive place for relaxation, which should be properly managed. A growing feeling for protecting nature and the natural environment developed, reflected in the establishment of several nature protection organizations. In 1864, the *Nederlandse Vereniging tot Bescherming van Dieren* (Dutch Association for the Protection of Animals) was established, followed in 1899 by the *Nederlandse Vereniging tot Bescherming van Vogels* (Dutch Association for the Protection of Birds; VBN). To some extent, this wish to protect nature has been replaced by a wilderness perspective on nature ground on the idea of (large areas of) unmanaged nature (Van Koppen 2002). Thus Dutch views about forests and the use of forests have long been influenced and dominant by the urbanized nature of Dutch society.

5.2 Meaning boundaries

This section aims to analyze the meaning boundaries of the Dutch forest sector. The first sub-sections focus on the different perceptions of the functions of the forest that emerged from the case study and their role in the process of forest sectorization. Section 5.2.1 deals with the meaning of wood production; 5.2.2 with the meaning of nature and landscape conservation and 5.2.3 with the meaning of forests in policy and management terms. The final sub-section (5.2.4), analyzes how these interpretations of the meaning boundaries of the Dutch forest sector relate to each other in time, how they have overlapped or developed independently of one another and which ones dominate.

5.2.1 Very limited economic and social support for wood production

Private entrepreneurs introduce an economic perspective towards forests
At the beginning of the 19th century, an economic interest in the wood production function of forests emerged amongst a small group of private entrepreneurs who thought that wood production and forestry could be made economically profitable. According to Buis (1993) four conditions contributed to this economic interest in forests. First, large areas of land became available because of a shift from common to private property. The sale of previously communally owned lands provided an opportunity for private investors to

purchase large swathes of land for a relatively low price. Overgrazing during the 17th and 18th centuries had turned the poor sandy soils of the Veluwe into virtual deserts and these were sold off at a very low price. Second, the rapid development of infrastructure, especially of railways and roads, made the 'hinterland', where these degraded lands were located, more accessible. The growing infrastructure allowed for the transportation of tree planting materials and (later) of wood to sell. Third, the internal market for wood products was booming. The industrial revolution and the growing population were demanding more wood, for pit props for the coalmines and later for the expanding paper industry. Finally, experiments in land improvement had shown that promising foreign tree species, such as Douglas Fir and Japanese Larix, could grow fast on degraded soils.

These developments led a relatively small group of private entrepreneurs, consisting of rich bankers and industrialists, to become interested in the wood production function of forests. Their interest contrasted sharply with that of most existing forest owners who were more interested in the amenity, landscape, hunting and recreation value of their forest estates (Buis 1993). Apart from this group there was also a large group of relatively small forest owners whose forest holdings were not large enough to allow them to develop any commercial system of wood production. This large group of relatively small owners emerged from the first *Markewet* (law on the privatization of common property) which stipulated that common property could only be privatized if all the members of the fellowships agreed. As the Dutch inheritance system gave all children the equal right to a piece of land and these patches of forests became smaller and smaller and the number of forest owners increased (Buis 1993).

Early support from the government for wood production
Towards the end of the 18th century, this small group of entrepreneurs managed to interest the Dutch government in the wood production function of forests. At this time the Dutch government was becoming more pro-active: industrialization, increased scientific knowledge and a growing population all allowed for, and required more active government involvement in public affairs. The government's initial interest in forests was primarily based on local authorities' wish to prevent drifting sand from blowing over villages or productive agricultural land. The government's direct involvement in wood production was limited; mostly restricted to tree planting on the degraded land that had not been bought by private entrepreneurs. This planting also provided a welcome relief work project for the unemployed (Kuiper 2000). On August 9th 1888, the government following advice from the new forest entrepreneurs and established an organization to coordinate and organize the planting activity, the *Nederlandse Heidemaatschappij* (the Dutch Heather Company, NHM)

which replanted most of the degraded land that had been privatized after the second *Markewet* in 1886.[10]

The new private forest entrepreneurs managed to put the issue of expected wood shortages onto the political agenda and got the Dutch government interested in the wood production function of forests, believing that wood might become a scarce product because of the rapidly growing population. The forest entrepreneurs argued that it would be naïve to rely on supplies of wood from abroad, as the demand for wood was growing at a similar rate in other countries. The new private forest owners lobbied the government to create a national forest service: as wood production from forests could only be profitable in the long run and needed a long term organisational structure (Buis *et al.* 1999; Zevenbergen 2003). In 1899, the government established the *Staatsbosbeheer* (The National Forest Service; SBB) which was modelled after the state forest services in Germany and central Europe, with a hierarchical organization and a uniformed service. The SBB was intended to become a productive forestry enterprise that would manage the new forests planted by the NHM.

However, the expected wood shortages never became a reality. This, and the instability caused by two World Wars and intervening period of economic depression lessened the interest of the government in wood during the first half of the C20$^{\text{th}}$. In the aftermath of World War II this changed and wood production again became a political issue. During the war the Netherlands had faced an enormous shortage of wood and now needed wood for the reconstruction of the country. The government decided to financially compensate private forest owners for their losses and provided subsidies for reforestation in order to assure future domestic wood production. The first time that the government had provided financial incentives to private owners to maintain their focus on wood production.

However, the financial support proved insufficient for forest owners to maintain a focus on wood production. By the mid 1960s private forest entrepreneurs were facing huge problems as a result of increasing (mostly labour) costs and stable, or even decreasing, revenues (Buis *et al.* 1999). A large slice of the market for Dutch timber disappeared when the Dutch coalmines closed down. It became very difficult to run a forest enterprise solely around the exploitation of wood production. In 1967, Dr. Th. C. Oudemans, one of the large forest entrepreneurs on the Veluwe, wrote a letter to the Ministry of Agriculture drawing attention to the situation of the private forest owners. In reaction, the Ministry of Agriculture,

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[10] In contrast to the first *Markewet*, only one person was needed to end the system of communal property. As a result, more than 18.000 hectares of degraded land was been forested by the NHM, mostly with *Pinus Sylvestris*

together with the Industrial Board on Forestry and Silviculture (*Bosschap*), a platform in which all forest owners are represented) established an investigative commission, which published its findings in the *Nota Bosbouw en Bosbouwbeleid in Nederland* (Report on Forestry and Forestry Policy in the Netherlands). This concluded that if private owners were to continue to focus on commercial wood production the government would need to make financial contributions for reforestation costs and compensate for unprofitable thinning, (Bosschap 1969). The Dutch government decided to grant private forest owners further subsidies; meeting half of the costs for planting new forests and for replanting forests after cutting. In this way the Dutch government continued to support wood production from forests and this also allowed for the continuation of private forest ownership as the government was not interested in becoming a major forest owner.

Support from the wood processing industry

Since the 1960s, support from the government for wood production was complemented with support from the wood processing industry which became actively involved in stimulating wood production amongst Dutch forest owners. The paper processing industry became particularly interested in sourcing wood from Dutch forests as they expected imminent wood shortages, largely because the biggest round-wood exporting countries had started to make their own end products (such as furniture) while paper consumption was increasing. Accordingly, the paper industry established the *Vereniging Nederlandse Papierindustrie* (Dutch Association for the Paper Industry; VNP) which started to actively support wood production from Dutch forests. The VNP also founded the *Stichting Industriehout* (Association for the Wood Industry; SIH) with the aim of increasing the area of Dutch forests (planted with species suitable for the paper industry) through lobbying the Dutch government.

Initially, SIH worked alone on this lobby, but they soon started to work closely with private forest entrepreneurs and the SBB recognizing their shared interest in increasing the Dutch forest area. This close cooperation was reflected in a name change, with the SIH becoming the *Stichting Bos en Hout* (Association for Forests and Wood; SBH). Their lobbying activities drew on the findings of *Commissie Bosuitbreiding* (Commission for Forest Expansion) published in 1974 which concluded that wood would soon become a scarce product because of rising prosperity and increasing demand. Apart from their shared interest in forest expansion, the forest owners and the wood processing industry also had a shared interest in seeing an increase in the wood self-sufficiency rate of the Netherlands. This would mean an increase of the domestic wood supply for the paper industry and an increase in incomes for forest owners. Initially the government seemed sympathetic to these appeals to expand Dutch forest cover. In 1977, the *Ministerie van Landbouw en Visserij* (Ministry of Agriculture and Fisheries; L&V) published the *Structuurvisie Bos en Bosbouw*

(Structural Vision on Forests and Forestry[11]) in which they supported the ideas of SBH and argued that, during the coming two decades, the Netherlands should aim to establish about 50,000 hectares of new forests (L&V 1977).

The SBH also managed to also raise political awareness of the issue of forest expansion. SBH found two Members of Parliament, Braam and Van der Linde, willing to raise the issue of expected wood shortages. These two MPs convinced the Dutch parliament to support a motion calling on the government to undertake a study into the short and long term aspects related to the use, import and production of wood (TK 1980; Zevenbergen 2003). SBH was asked to conduct this research and their conclusions were fully in line with the earlier conclusions of the *Commissie Bosuitbreiding*.

The SBH also managed to interest the *Ministerie van Economische Zaken* (Ministry of Economic Affairs; MEZ) to support domestic wood production. Their support was enlisted as they accepted the argument that the wood processing industry needed a larger and reliable supply of domestic wood to offset any problems with supplies from abroad. Such problems could lead the Dutch based wood processing industry to relocate abroad, with a loss of domestic jobs. MEZ instigated the *Subsidieregeling voor snelgroeiend bos* (Subsidy for fast-growing forests), also known as the 'three thousand guilder subsidy'. Conventional farmers started to plant trees as they could combine this subsidy with the European set-aside arrangement for unproductive agricultural land. The MEZ provided other support to the wood production function of Dutch forests through financing the *Houtoogststatistiek en prognose oogstbaar hout* project (Wood harvesting statistics and forecasts for harvestable wood; HOSP) to monitor the productivity of Dutch forests (Zevenbergen 2003).

These activities were all politically anchored in the first official forest policy document the *Meerjarenplan Bosbouw* (Long-term Policy Plan for Forestry; MJPB) that was approved by parliament in 1986. This aimed to "create such conditions for the forest area in the Netherlands that would fulfil societal wishes towards forests, for now and for the future (L&V 1986)". This, document advocated a forest expansion of between 30-35,000 hectares and an increase in Dutch wood self-sufficiency from 7.5% to 17% (L&V 1986). Thus the MJPB advocated both forest expansion and an increase of the self-sufficiency rate, showing the success of the lobbying work of the SBH in getting the issue of wood production onto the political agenda and achieving political support for the issue.

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[11] In 1989 the Ministry changed its name to the *Ministerie van Landbouw, Natuurbeheer en Visserij* (Ministry of Agriculture Nature Management and Fisheries – LNV). Throughout this chapter the two acronyms are used interchangeably.

Declining societal and political support for wood production

Since this time, however, this support for wood production has almost completely vanished. By the end of the 1980s the paper industry no longer saw domestic wood production as a priority; the argument of expected wood shortages was no longer legitimate as trade with Eastern Europe was opening up. Moreover, the wood processing industry was internationalizing and the global market was providing a constant supply of wood undermining arguments about the domestic proportion of wood supply less interesting as an issue. The following quotation from the director of the SBH highlights the effects of internationalization on Dutch forest owners.

> "[…] interest representation of the wood sector started to turn its back on Dutch forest owners because wood is an international market and wood from Scandinavia and Siberia is much more interesting than Dutch wood (37:19-21)".

For much the same set of reasons this reason the support from the Ministry of Economic Affairs declined. In 1993, the MEZ published its own *Houtvoorzieningsplan* (Policy Plan for Wood Supply; HVP) that mainly focused on improving the efficiency of the forest-wood chain (MEZ 1993). This policy plan stated that "the policy aims related to wood production, in existing as well as in new forests, have to be realized by executing the Forest Policy Plan of the Ministry of LNV (MEZ 1993:13)". In other words the MEZ would merely aim to stimulate the use of Dutch wood, leaving responsibility for wood production with the Ministry of LNV.

In 1993, at the same time that the MEZ published its *Houtvoorzieningsplan*, the MLNV published its *Bosbeleidsplan* (Forest Policy Plan – LNV 1993)) which was based on an evaluation of the MJPB. The evaluation showed that the two central policy aims of the MJPB had barely been reached. Financial, societal, and spatial planning problems had obstructed forest expansion, and, despite an increase in the standing and growing wood stock Dutch self-sufficiency in wood had not increased since forest owners were reluctant to cut wood because of continuing low wood prices (LNV 1993; Zevenbergen 2003). Despite these disappointing results, the policy goals of the *Bosbeleidsplan* remained very similar to those of the MJPB focusing on wood production in Dutch forests, thereby confirming the LNV's continued support for wood production even though these policy goals would be difficult to achieve, especially as the *Bosbeleidsplan* did not carry the same weight of parliamentary approval. Perhaps most importantly of all, the Ministry of LNV started at this time to shift its interest away from forests to focus on nature and nature conservation (see section 5.2.2). The following quotation of one of the main advocates of the MJPB and the *Bosbeleidsplan* reflects on LNV's loss of interest in supporting the wood production function of forests.

"[…] well the Forest Policy Plan of 1993 did not really make it […] it was completely not implemented […] and to make matters worse there was a policy plan on nature conservation which left hardly any room for forests […] and well that was the sad end (46:301-313)".

The following quotations reflect the overall perception found within this study that the interest in wood production in the Netherlands started to fade away mainly because of low revenues and a lack of societal and governmental support.

"[…] when in 1989 the wood could come from Eastern Europe in such amounts, it was almost the end for forestry. Without subsidies you cannot even cover your costs, so you have to do something else (32:105-108)".

"[…] The Netherlands is not really a wood production country, in that respect not a real forestry country. Just think of the multifunctional forests […].Why (are there) no fast growing forests in the Netherlands? It has to do with land prices, different land uses in the areas. People ask why do you need forests when you can get your wood from elsewhere. It is very difficult to find arguments within our society […] (27:296-309)".

"Forestry in the Netherlands can only be profitable if you put in a whole lot of subsidies; when looking at the Dutch scale of forestry from a business economics perspective, you will never have an independent, profitable forestry (50:647-649)".

"You cannot run a forestry enterprise in the Netherlands on an economic basis, based on wood (58:248-250)".

"[…] because of the high competition and the marginal position of wood, as a forest owner you must no longer bet on that horse […] (33:595-596)".

"[...] the economic side of forest ownership, or of the forest enterprise, is completely out of sight, even almost not done […] (36:190-192)".

"[…] there still is an independent interest from a few owners who still get some revenues through wood from their forests, however, a part of their income is coming through other channels and it is just one of several interests for most owners. And if you want to make an effort for this specific interest it is only a sub-interest and not the interest of a sector […] (55:231-235)".

Despite these problems with wood production from Dutch forests, several attempts have been made to rekindle interest among forest owners and the government in wood production. The wood processing industry has again taken an active role in interesting the government in wood production and processing. In 1987 it joined forces in the new *Platform Hout in Nederland* (The Netherlands Wood Platform; PHN), which most forest contractors, private forest owners and the SBB have subsequently joined. Since its establishment, PHN has tried to raise support for wood production from Dutch forests. They have tried to interest the Ministries of Economic Affairs and LNV to once again take up their 'responsibilities' for supporting wood production. In 1998, they established a commission, headed by Mr. Luteijn that published the *Actieplan Hout* (Action Plan for Wood, 1999). This plan contained a long list of action points, all aimed at improving the economic situation of the forest owner and the wood processing industry. However, as the

next quotation from the secretary of the PHN illustrates that action plan seems to have made very little impact.

> "The wood sector tries, and that is of course the role of PHN, we had the Action Plan for Wood, well, that was an attempt of the Dutch sector to look at how things are going and how you can get this back on track. And that hardly had any effect […] (43:95-99)"

A few years later, in August 2003, the PHN succeeded in interesting the Minister of the Ministry of LNV to cooperateto develop a joint review on the position of wood production in the Netherlands. The PHN saw this as a success, because the main trend within the Ministry of LNV was to abandon any specific focus on wood production, as illustrated in the following quotations from civil servants in the Ministries of LNV and EZ.

> "[…] this Minister is not blind to the production function, as long as the cutting happens in a sensible way […] (30:125-126)"
> "[…] the Minister announced this to the surprise of his own civil servants: that he will come with an outlook on the issue of wood production (27:333-336)".
> "[…] perhaps this is the start of a period in which LNV takes wood production seriously again (24:141)"

This joint initiative resulted in the publication of a new document the *Visie op de Houtoogst* (Outlook on Wood Harvesting) (LNV 2005). This document bears many resemblances with the earlier *Actieplan Hout* and it is a matter of speculation whether it will prove any more successful in helping the PHN meet its political objectives or whether its joint publication with the Ministry of LNV will give it any more political weight.

Thus, as this sub-section shows, there is a group of actors that actively supports the wood production function of forests. While in the past they have enjoyed success in attracting political support, they have more recently encountered great difficulties in finding societal and political support for their focus on commercial exploiting Dutch forests. One of the main reasons for these difficulties lies in the strong focus shared by a large group of forest owners and the government, on the conservation function of forests, as discussed in the following sub-section.

5.2.2 Increasing societal and political support for the nature and landscape conservation function of forests

The C19[th] saw an initial development of interest in nature and landscape conservation.. The emerging focus on the conservation of nature and landscape was closely related to the Arcadian view of nature that came to be held by an increasingly industrialized and urbanized society (Van der Windt 1995, Van Koppen 2002). The C19[th] saw the launch of both the *Nederlandse Vereniging tot Bescherming van Dieren* (Dutch Association for the Protection of Animals) in 1864 and the *Nederlandse Vereniging tot Bescherming van Vogels* (Dutch Association for the Protection of Birds; VBN) in 1889. These associations focused on raising awareness on species protection and it was not until 1905 that a specific organization was established that focused on protecting nature areas.

The *Vereniging tot Behoud van Natuurmonumenten* (Association for Preserving Nature Monuments; NM) was founded in 1905 by two devoted nature protectors, Jac P. Thijsse and Eli Heijmans. The association was initially established to prevent the city of Amsterdam from turning a large natural lake, the *Naardermeer*, into a garbage dump. Thijsse and Heijmans were able to purchase the *Naardermeer*, from loans made to them by wealthy citizens. The money was lent in the expectation that activities such as renting land, hunting rights and forestry would generate enough income to pay the interest on the loans. (Maas 2005). While initially NM had just a few members, their financial wealth and societal influence enabled them to buy forest land and influence politics over the following years (Buis *et al.* 1999). During the 1920s and 1930s, a number of provincial level private organizations, *Provinciale Landschappen* (Provincial Landscape Organizations - PL) with similar aims were established, often initiated by wealthy private landowners who wanted to conserve the specific regional identity and the regional landscape.

The NM and the PLs directly combined nature conservation with purchasing properties. Initially they had some interest in the wood production function of forests as this provided part of the income needed to cover the management costs of the unproductive nature sites and interest on debenture loans. But they also had other sources of income: besides income from wood production, land rent and reed production, members of the organizations also paid membership fees and some donated gifts, legacies and trusts. This additional income enabled the organizations to continue purchasing more properties.

At the same time, the Dutch government was also showing a growing interest in nature and landscape conservation, although this was initially only implicit. The SBB, initially established by the government to become a rational and productive governmental forestry enterprise, had always given some support to the conservation function of forests, though

the emphasis on this has changed over time. Even at the end of the 19th century, under the influence of forester Schermbeek (then the only professional state forester in the Netherlands) the SBB planted a large number of *natuurbossen* (nature forests). Ahead of his time in many ways Schermbeek was convinced that, over time, these *natuurbossen* would become economically more interesting than the classical made production forests (Van der Windt 1995). Later, Van Diesel, director of the SBB from 1902 to 1937 and also a member of the board of NM, argued that wood production should take second place in areas where nature was important (Buis *et al.* 1999).

Since the 1920s, the government started to explicitly and structurally support nature and forest conservation. In 1928, the government issued the *Natuurschoonwet*, a law that created favourable tax and inheritance rules for private forest and estate owners, in exchange for which the owners were obliged to conserve their private forests and estates. Further tax concessions were available to forest and estate owners who allowed public access to their properties. In 1928, Queen Wilhelmina announced, in her annual *Prinsjesdag* speech, that the government would establish a specific law on nature protection. However, for a number of complex reasons, this did not actually occur until 1969, when the government finally issued the first *Natuurbeschermingswet* (Nature Protection Act). So, despite the relatively early interest of Dutch society and government in conservation, it was not until 1990 that the nature conservation became politically embedded in the *Natuurbeleidsplan* (Nature Policy Plan) the main focus of which was on preserving valuable ecosystems. This plan was based around the idea of the *Ecologische Hoofdstructuur* (Ecological Main Structure; EHS), which aimed to establish a network of 750,000 hectares of nature; first by conserving existing nature, and second by making 'new nature areas' to connect these areas (LNV 1990). The EHS has subsequently become an influential vehicle for propagating the conservation in forests, since almost all Dutch forests were included in the EHS and made up more than half of the EHS. This policy plan positioned forests as one of the main natural ecosystems in the Netherlands and gave enormous political support to the conservation function of forests. The following quotations from a civil servant from the Ministry of LNV and two representatives of private nature and landscape conservation organizations emphasize this change.

> "We [the Ministry of LNV] decided to no longer see forests as a separate entity but as part of nature, because we want forests to be managed sustainable (57:106-108)".
> "There are not that many differences in what you do for forest management or for nature management. Also with *Natuurmonumenten* we will continue to do forest management, but for nature (55:221-227)".
> "But if you talk about the sector as forest owners, then I say, please do me a favour and talk about the sector of nature-owners, because the forest is also nature to me (50:608-610)".

This strong focus of the Ministry of LNV on the conservation function of forests has been reinforced by subsequent policy documents. In 2000, the Ministry published *Natuur voor Mensen, Mensen voor Natuur* (Nature for people, people for nature; NvM) a policy document that confirmed the need to further expand the ideas within the *Natuurbeleidsplan* and continue with developing the EHS. This document also contained a new focus on recreation and integrated the previously separate policy objectives towards forests, nature conservation and landscape. With the NvM, the Ministry explicitly abandoned its earlier forest policy goals supporting the wood production function of forests, sought an increase in wood self-sufficiency and the expansion of productive forests. Forests were no longer perceived as a specific or separate policy category. Only one sentence in the document explicitly refers to forests and their role in wood production: "the government thinks it is desirable to have wood production in the Netherlands in light of wood being a sustainable resource and in light of international nature conservation policies, therefore in at least 70% of the Dutch forests wood production should remain possible and the point of departure is that at least the yield level of the years 1995-1999 is maintained" (LNV 2000:23). The following quotation of a representative of the Ministry of LNV shows that while the Ministry does feel some responsibility for wood production from forests this is limited to the level of facilitating.

> "[…] as long as the forest is there, we really are responsible and willing to do something with it, but as soon as the chainsaw is put in the tree, we as the Ministry of LNV are less interested except for the fact that we are saying: we should facilitate wood production […] and we don't really feel responsible for what happens afterwards [...] because it is just no issue and our criteria are what is stated in the policy plan […] which states something about wood production but only at the level of facilitating […] (57:47-55)".

Most private forest owners and forest professionals interviewed as part of this study saw these changes as indicative that the Ministry of LNV has lost most of its interest in the wood production function of forests as the Ministry no longer has specific goals for wood production and only plays a facilitating role. Private forest owners and forest professionals feel that they have lost political and societal acceptance of one of the functions of the forest, although there were explicit policy goals for wood production just a decade previously. The following quotations illustrate how the majority of interviewed private forest owners and forest professionals view this.

> "[…] facilitating wood production, that just means giving money for communication and information projects to get rid of these whining lobbying people […] I have the impression that LNV thinks that they can quite cheaply manage a large part of the EHS by now and then giving some extra money to the sector […] (60:687-692)".

"[...] in my opinion there is now a climate, started because of societal developments, in which the Ministry of LNV no longer has forests on their agenda, forests have become part of nature, and since then they have lost their interest in the issue of wood production (43:87-92)".

"LNV is not interested in the wood aspect of forests […] and the support we get is only for our contribution to ecology […] (32:388-393)"

"LNV […]have no feeling and absolutely no contact with the idea that that forests still produce wood […] (43:91-93)".

"It is not done any more to talk about forests and about wood production […] (they are) contaminated concepts […] LNV does not want to take its responsibilities in both issues (36:766-767)".

5.2.3 Forests now only defined in terms of site management practices

The previous sections showed how the wood production function of forests in the Dutch situation has become problematic and that their conservation function has become quite prominent. Not surprisingly, since the mid 1960s, forest owners in the Netherlands have started to stress the multi-functional character of forests as this allowed them to combine wood production with the growing societal demands for recreation and conservation. For Dutch forest owners multi-functionality meant taking these three functions into account at the same time.

One of the main reasons why forest owners were open to multi-functionality was the deplorable financial circumstances most forest owners were in as a result of low wood prices (see 5.1.1) and because the government offered them financial support in exchange for providing recreation and nature conservation services. In DATE the Ministry of LNV opened the *Regeling Bosbijdragen* (Regulations of Contributions) that granted a subsidy of 60 guilders per hectare to private owners who opened their forests for recreational use. In addition, the government provided another subsidy, the *Beschikking Natuurbijdrage* (Contribution to Nature) to encourage forest owners to plant deciduous and indigenous species instead of conifers (Buis *et al.* 1999). The political legitimacy for these subsidies to stimulate multi-functional forests can be found in the first forest policy plan, the MJPB (L&V 1986). This plan designated 20% of the Dutch forest area as 'forests with an accent on nature' where the main focus was to develop and maintain nature values. The remaining 80% of forests were designated as 'multi-functional forests'.

The new forests planned under the MJPB were also meant to become multi-functional forests: much of the planned 30,-35,000 hectares of new forests were intended to be planted near the most urbanized areas of the Netherlands, where the recreational demand for forests was highest (L&V 1986). The following quotations from respondents who were involved in

drafting the MJPB, suggest that the introduction of the multi-functional character of forests in the MJPB also provided a new political legitimization for wood production.

> "The MJPB emphatically stresses the wood supply and the wood self-sufficiency rate, but that was the influence of SBH, and to a great extent this legitimized forest policy. But it was also legitimized by the focus on recreation, if you read the texts carefully […] (30:564-568)".
>
> "[…] and then LNV said that there should be a forestry policy plan and that was stimulated by the acid rain discussion […] and there they started with the subdivision into so much production, so much nature and so much multi-functionality […] and then I said that I didn't really need those specific production forests because forests produce wood but the issue is whether or not you take the wood out […] so in the end we got those 20% nature forests, and the rest were multifunctional (46:262-273)".

Since the 1990s the political emphasis on the multi-functional character of forests has gradually faded into the background and been displaced by political support for the conservation. Only one sentence in the current integrated policy plan *NvM* (LNV 2000) refers to the multi-functional character of forests which basically 'allows' wood production in 70% of Dutch forests that are designated as multi-functional forests.

This 70% benchmark was laid down in the *Ecosysteemvisie Bos, Natuur in Bossen*. This report investigated the nature values of all forest ecosystems in terms of the uniqueness, species diversity and naturalness of the forest ecosystem (Al 1995). This study showed that about 30% of forests to have high nature values and that the other 70% have lower natural values. Most of the forests with high nature values were owned by private nature conservation organizations and the SBB. The multi-functional forests were predominantly owned by the SBB and private forest owners. Owners of these multi-functional forests can still receive subsidies from the government for opening up their forests to the public under the *Programma Beheer*, and to manage the forests for their wood production potential The following quotations reflect this opening in current policies that allows wood production within multi-functional forests.

> "[…] we have become more intelligent, and the old 'self-sufficient rate' is out-of-date because the wood market is an international market […] the modern translation of the wood interest is that we think that a certain percentage of the Dutch forest must be suitable for wood production, and the market will determine whether or not a forest owner harvests or not […] the people still living in the past are complaining 'this is a degradation and wood is almost thrown away', but if you analyze what is actually happening then there are no problems: (it is) a modern way of making clear that wood is still a factor in forest management (51:915-928)".
>
> "[…] forest management has to be adapted to society's wishes, but that still leaves space for sustainable wood production […] (37:497-498)".

> "Forest are definitely part of the political agenda because there is a lot of attention for nature and forests are part of nature […] wood, wood has no attention […] but forest are benefiting from all policies on nature and landscape, that is great (31:625-629)".

However, while political recognition of the multi-functional character of forests which includes wood production has been reduced to just one sentence in the LNV's policies, when it comes to practical forest management the emphasis is quite different. Forest managers have adopted a multi-functional approach to forest management that is expressed in the term *geïntegreerd bosbeheer* (integrated forest management). This concept was developed by a few foresters during the 1980s and 1990s, partly as a response to the critiques of the *Stichting Kritisch Bosbeheer* (Association of Critical Forest Management; SKB) made by a group of ecologists who strongly criticized forest owners and forest managers after the devastation caused by the storms of 1972 and 1973. This report argued that the focus on monocultures of productive exotic tree species had resulted in unstable forest ecosystems, and was the main reason why the storms had such a devastating effect. They advocated a more nature-oriented type of forest management. The SKB openly attacked forest practices on four different fronts: sustainability, beauty, the vulnerability of the forest and on the scientific basis of forest management (Van der Windt 1995; Zevenbergen 2003). They also argued that wood production was an unprofitable activity (Van der Windt 1995). The following quotation reflects the impact that the SKB had on forest managers and forest management.

> "I remember, at the time of my education, someone characterized the 1970s as disaster years for forestry: the private nature conservation organizations had existed 65 years and this drew a lot of attention and then this nature thinking became big. And in 1972/1973 there were the big storms, SKB came, well, and more and more people in the Netherlands live in urbanized areas, you see a development in which nature becomes increasingly important, in exchange for the traditional foundations of forest management (28:231-238)".

The founders of the *geïntegreerd bosbeheer* approach aimed to establish a forest management system that integrated conservation, recreation, and wood production (Van der Jagt *et al*. 2000). It has now become a widely accepted way of managing multi-functional forests, which receive some subsidies for their recreational and conservation functions, while allowing forest owners to commercially exploit their forests (even those within the EHS). The *geïntegreerd bosbeheer* approach was largely a reaction from forest managers to the loss of societal and political support for the wood production aspect of forest management. Equally it also provided a response to the *Stichting Kritisch Bosbeheer* which had heavily criticized the rationalization of forest management. Overall the, *geïntegreerd bosbeheer* was a forest management system designed by foresters in response to the criticisms of their profession and practices, and provides a strategy that incorporates

societal wishes for recreation and conservation within a multi-functional framework that permits a continued focus on wood production.

5.2.4 The meaning boundaries: multi-functionality subordinated to conservation

Thus in the political debate forests are no longer perceived as an independent specific category but more as natural ecosystems that need to be protected. One of the explanations, shown in section 5.2.1, is that the economic meaning of forests based on wood production has almost completely lost any relevance. At the same time the private nature and landscape conservation organizations no longer support or adhere to the economic meaning of forests based on wood production, which has slowly been displaced by the conservation meaning. In the forty years period following WWII the two meanings of forests continued to co-exist alongside one another - with support of the paper industry and part of the government. But as section 5.2.2 showed since the 1990s, the economic meaning boundary has become almost irrelevant and conservation has become the dominant meaning.

One of the consequences of this is that it has become almost unacceptable in society and politics to demarcate and support a forest sector based on wood production. Private forest owners and forest professionals find this problematic as they feel they have lost political and societal support for their activities. Section 5.2.3 showed that a meaning boundary setting a 'forest sector' only really exists at the practical level of forest management, where the *geïntegreerd bosbeheer* approach seems to legitimate the continued focus on wood production, although in a context that is subordinate to conservation and recreation. It is doubtful, whether one can call this a meaning boundary that supports the existence of an independent 'forest sector' as there is very societal or political support for such a position.

5.3 Membership boundaries

The section addresses the questions of who are (and who are not) members of the forest sector and on the rules in which this membership is based. Figure 5.1, which shows respondents' perceptions of membership of the forest sector shows three clear groups, the core members; a middle group perceived to be 'on the boundary'; and a group perceived as outsiders. These three groups are discussed in turn in sections 5.3.1 – 5.3.3. Section 5.3.4 analyses how the interpretations of the membership boundaries relate to each other in time, whether they overlap or have develop independently of one another and which membership boundaries dominate.
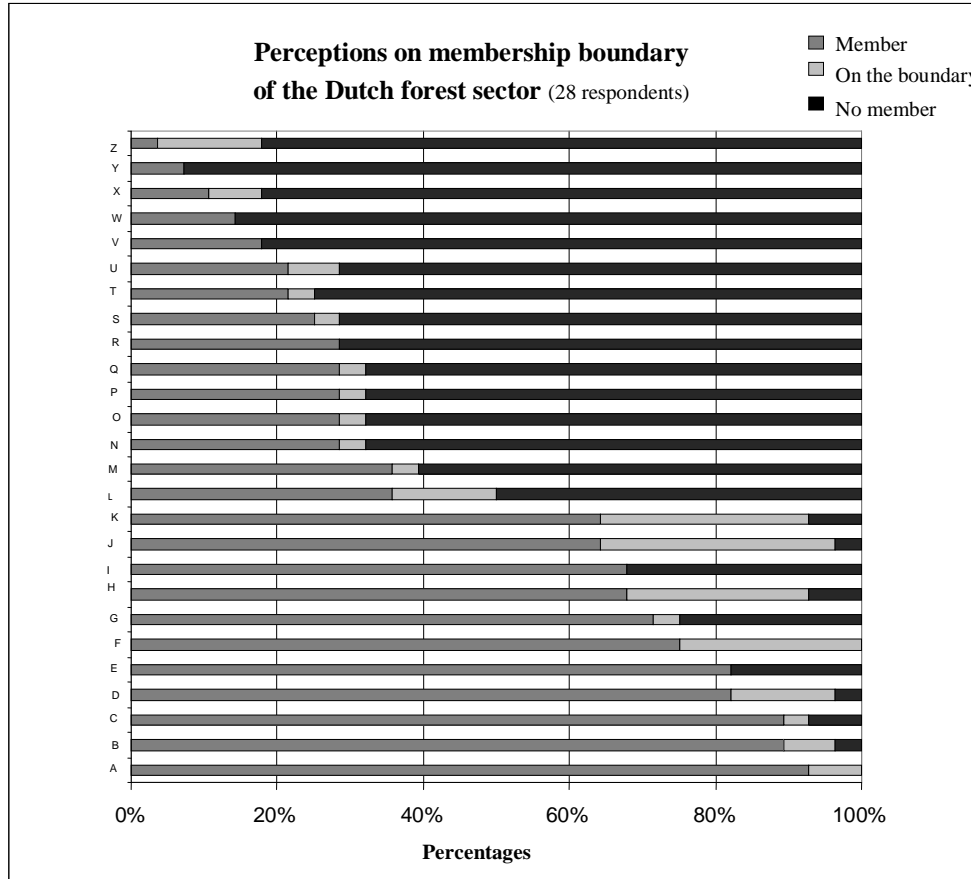
A – Bosschap; B – Nederlandse Vereniging van Boseigenaren; C – Unie van Bosgroepen; D – Federatie Particulier Grondbezit; E – Koninklijke Nederlandse Bosbouw Vereniging; F – Staatsbosbeheer; G – AVIH; H – Platform Hout Nederland; I – Stichting Bos en Hout; J – Vereniging Natuurmonumenten; K – Provinciale Landschappen; L – Ministerie van Landbouw, Natuur en Visserij; M – Provincie Limburg; N – Provincie Overijssel; O – Provincie Gelderland; P – Provincie Noord-Brabant; Q – Vereniging Nederlandse Rentmeesters; R – Stichting Face; S – Provincie Drenthe; T – ANWB; U – Interprovinciaal Overleg; V – Stichting Natuur en Milieu; W – Stichting Recreatie; X – Ministerie van Economische Zaken; Y – Vereniging Nederlandse Gemeenten; Z – Ministerie van Volkshuisvesting, Ruimtelijke Ordeningen en Milieu.

Figure 5.1 Perceptions on membership of the Dutch forest sector

5.3.1 Core members: focus on forest and nature

The starting point of this section is the actors that are perceived as core members and who define the membership boundary. Figure 5.1 shows three groups of core members:

➢ **Forest and nature owners and their representatives**: SBB, NM, *Provinciale
    Landschappen* (Provincial Landscape Organisations: PLs), the *Federatie Particulier
    Grondbezit* (Federation of Private Landowners; FPG) and the *Unie van Bosgroepen*
    (Union of Forest Groups; UvB).

➢ **Joint platforms for all forest owners**: *Bosschap* and the *Nederlandse Vereniging van
    BosEigenaren'* (Dutch Association of Forest Owners; NVBE).

➢ **Forest professional organizations**: *Koninklijke Nederlandse Bosbouwvereniging*
    (Royal Dutch Society of Foresters; KNBV).

Forest and nature owners and their representatives

This first group of core members, forest and nature owners and their representatives, were
perceived as core-members either because they owned forest and nature areas themselves
(NM, SBB, PLs), because they represented a group of private landowners (FPG), or were a
cooperative for (small and private) forest and nature owners (UvB). However, besides their
shared focus on the management of forest and nature properties, there appeared to be a
difference in perceptions of the membership of private owners and private nature and
landscape conservation organizations, with the SBB positioned somewhere between these
two groups. Figure 5.1 shows that over 80% of respondents perceived the FPG and the UvB
as core members; about 75% perceived SBB as a core member, and about 65% perceived
NM and the PLs as core members. At the same time, almost 30% perceived NM and the
PLs as being 'on the boundary' and 5%-10% perceived them as 'outsiders'. In the
following paragraphs these differences between the different core members are further
analyzed by first looking at the membership position of the FPG and the UvB, that of the
private nature and landscape conservation organizations and finally the membership
position of the SBB.

The FGP and the UvB: the private owners

The FPG and the UvB share a primary focus on representing the property and management
interests of private forest owners. Both organisations were seen as core members of the
forest sector by over 80% of respondents, because of their explicit focus on forests and their
interest in wood production the traditional way in which forest owners generate an income.
The following quotations reflect this view of the core position occupied by both the FPG
and the UvB.

"FPG, yes, I think we clearly belong to the forest sector, because we have to live from our forests
    (32:120-121)".
"The UvB has developed into a very strong organization with strong lobbying activities and is
    therefore an exemplary organization for the forestry sector (59:70-72)".
"The UvB are really concerned with the forests, I have never heard them saying a word about the
    landscape. That's why they are at the core of the sector (33:216-218)".

The FPG and the UvB both represent the interests of private owners for whom wood production continues to be of relevance for their income. Table 5.1 shows that on average wood production contributes 25% of the revenues of private owners (Berger *et al.* 2004). This is in contrast to the NM which derives less than 5% of their revenues from wood production (NM 2004).

Table 5.1 Average return of private Dutch forest enterprises (in Euro per hectare of forest) from 2001-2003 (Berger *et al.* 2004, p. 17)

	2001	**2002**	**2003**
Revenues – total	**164**	**188**	**178**
- Selling of wood	42	39	46
- Programma Beheer	71	69	68
- Other subsidies	16	37	22
- Renting out hunting rights	11	11	11
- Other	24	31	31
Costs – total	**220**	**261**	**253**
- Management	68	75	75
- Direct labour	36	39	45
- Contracted labour	51	78	63
- Machinery, resources	18	18	17
- Levy, insurance	31	34	34
- Other	16	18	18
Returns to the enterprise	**-56**	**-73**	**-75**

While the FPG and the UvB commonly acknowledge the importance of wood production there are also differences in their focus and activities. The FPG was established in 1995, uniting six smaller organizations representing different types of private landowners. As a consequence, the FPG's focus was not specifically on private forest ownership, because also covered large agricultural and private estates whose owners were also members of the FPG. The glue that holds together the FPG is a shared orientation of its members around the issue of private property and the ways in which juridical and tax matters influence property rights. The FPG has several different committees and their composition reflects the different organizations that came together to form the FPG. One of these commissions covers forests and nature management and addresses issues related to this topic. The following quotations reflect that, while more than 80% of respondents perceived the FPG as

a core member of the forest sector, the FPG's broader focus makes its membership as a core member of the forest sector somewhat problematic.

> "FPG, yes, they are in, however, there are also farmers involved in the FPG […] (52:50)".
>
> "the FPG mainly focuses on property aspects, fiscal aspects meaning that they have a much broader focus than only forests […] property is as broad as forest and estates, agricultural land […] (28:80-87)".
>
> 'FPG is in, but the FPG is much broader than just forests, because if you are a member of the FPG then you do not automatically own forest […] (there are) also owners of agricultural land […] you are therefore also very close to the LTO […] especially because of this agricultural ownership […] (27:151-163)".
>
> "[…] The FPG sometimes has a different opinion because some of their members are agricultural landowners […] so they have a double interest […] (15:213-216)".

At the same time the position of the UvB as a member of the forest sector seems to have changed. In 1991, the UvB was established as an umbrella organization for regional forest groups with the aim of coordinating their activities and to serve as a single point of contact with the Ministry of LNV. The individual *Bosgroepen* (Forest Groups) were established in the wake of the exceptional storms of 1972 and 1973 when about 6% of Dutch forests was heavily damaged. To streamline the contract work and wood sales, private forest owners in the provinces of Utrecht and Gelderland established cooperatives. Nowadays, the Netherlands has three Bosgroepen in which owners cooperate in buying planting materials, selling wood, and forest and nature management. Since 1978, these *Bosgroepen* have received financial support from the government who saw in them an opportunity to support the professionalization of small-scale forest owners and help them become more profitable. The following quotations show that in terms of practical management, it is the UvB, and not the FPG, that is seen as more representative of the interests of private forest owners.

> "The organizational level of private owners increased tremendously with the coming of the UvB […] and they have taken a very wise direction and they have been able to stand the traditional forces of their backing and have therefore not alienated themselves from the sector (24:723-727)".
>
> "The core-business of the UvB is to manage the property of the private owners. Based on these activities, they have the knowledge to discuss matters such as subsidies. By contrast, the FPG is poorly organized and (lacks) knowledge on actual management issues. If the FPG would be strongly organized, than the UvB would be their informant but now practice is different and the UvB fulfils this information role to others (51:150-155)".

Over recent decades, the nature of the work of the *Bosgroepen* and their scope has gradually changed. First, some of the regional offices of the SBB and of the private nature and landscape organizations became members of the *Bosgroepen* broadening their membership base. Second, the *Bosgroepen* no longer just focuses on forest management,

but also manages nature areas that are not forests. The following quotations reflect that these developments have somewhat weakened the position of the UvB as a core member.

> "[…] yes, the Forest Groups are also broadening more and more into nature […] and also all other organizations are broadening […] searching for more topics […] searching for their right of existence […] and involving nature is then very popular […] (53:344-358)".
>
> "UvB was traditionally part of the forest sector, but if you look at what they are doing than they are more the forest and nature sector (55:72-73)".
>
> "The UvB is getting more vague because the UvB has actually developed into an organization facilitating site management for private owners, municipalities and also partly for Provincial Landscapes, so I don't think that the UvB will still be called the UvB in 15 years or it could be that it is the same as with the SBB that traditionally still is called the SBB although more than 63% of their sites are not forests […] (39:101-105)".
>
> "UvB are not part of the sector […] (28:498)".

Private nature and landscape conservation organizations

The second group of core members, the private nature and landscape conservation organizations, are mainly seen as core members as they are large forest owners, and therefore meet the membership criteria of forest ownership. In just over a century, the private nature and landscape conservation organizations have become major forest and nature owners. From the 1930s onwards NM and the PLs have been acquiring forest and estate properties from private owners, who have either donated these properties (because of financial or inheritance problems) or sold them. Since WWII the SBB has also become involved in purchasing private forests and estates using government funds. Since 1955, a fixed amount has been set aside in the budget of the Ministry of Agriculture and Fisheries to enable the purchase of valuable nature areas (Buis *et al.* 1999).

In addition to this the Ministry for Culture, Recreation and Social Work (CRM) has also begun to financially support land purchases. In 1971, a joint commission (the Commission Reuver) of the Ministries L&V and CRM was set up to advice the government on financially supporting private nature conservation organizations making land purchases. Since then, government has contributed up to 50% of land purchases by the SBB and private nature conservation organizations (Buis *et al.* 1999). Since 1990 the SBB and private nature and landscape conservation organizations have also been financially supported in buying agricultural land with the aim of creating new nature to enlarge existing nature areas, or connect existing areas by establishing corridors (LNV 1990). As a result of all this activity private ownership of forest land has dropped from 65% in 1950 to 37.7% in 1975 (Berger *et al.* 2003) since private owners cannot benefit from these financial arrangements. This suggests that the government places great trust in the SBB and the private nature conservation and landscape organizations to conserve Dutch nature areas and landscapes in the long run. As a result, the NM has become the owner of about 96,000

hectares of nature, of which about 30%, or 30,000 hectares, is forest and the PLs have also become large forest owners, particularly in the forest rich provinces of Gelderland and Noord-Brabant.

This position means that the private nature and landscape organizations are widely perceived as core members of the forest sector. But figure 5.1 shows that there are some questions over this position. Some respondents perceived NM and the PLs as outside the forest sector since they no longer explicitly pay attention wood production. The following quotations show how ownership of forest property means that the private nature and landscape conservation organizations are perceived as core members, but how they are also seen as "less-core" members, because of their low interest in wood production.

> "Well, just, owning and managing a forest with the nature function, for recreation, and sometimes some wood production, that is what all owners have in common, and that is derived from having forest property, but other interests are getting much more vague (55:239-242)".
> "NM, you can hardly count them as member of the forest sector. Because they no longer see wood as a product of their thinking and acting. But they are still member of the *Bosschap* because they own forests, so in that sense they are a member, but economically they have dropped out (32:235-238)".
> "Well, as long it's really about forests. There are some organizations that occasionally say something about the forest, they are not in. But the NM, well, I have put them in because they are colleagues and because they are also forest owners (53:198-199)".
> "[…] I think that a large part of the forest sector no longer sees the NM as part of the forest sector […] they have no wood production objective […] and that once was the basis for the forestry sector, and the NM is now a nature organization (60:296-299)".

The National Forest Service (SBB)

The third group of core members, the SBB seem to occupy a position somewhere in between that of the private owners and the private nature and landscape conservation organizations. During the 19th and 20th centuries, the SBB became the largest forest owner of the Netherlands with about 250,000 hectares of forest and nature area, of which about 97,000 hectares is forest (thus only about 40% of the SBB's property is forest). However, in contrast to most private nature and landscape organizations, the SBB still has a focus on wood production. This is explicitly set out in the goals of the organization. For many respondents this explicit focus on wood production puts the SBB in a different position than the private nature and landscape conservation organizations, as highlighted by the following quotation.

> "SBB, of the three large owners [SBB, NM, and the PLs] it is the only organization that still explicitly pays attention to forestry, it differs a little bit between the different regions and also historically, but they really have a feeling for Dutch forests (36:106-109)".

However, apart from this different attitude towards wood production, most respondents stressed the similarities between the SBB and the private nature and landscape conservation organizations, with both being major forest and nature owners. The SBB was semi-privatized in 1996 and it now operates with more autonomy than it did before when it was a department of the Ministry of LNV. In fact these three organizations, the SBB, the NM and the PLs, were frequently referred to collectively as *terreinbeherende organisaties* (site management organizations; TBOs) confirming the notion that membership rule has shifted from a focus on forest property to a focus on forest and nature property. Private forest owners are notably not included in this group of *terreinbeherende organisaties*. The following quotations illustrate the perceived position of the SBB, which is seen as one of the three large TBO´s, but is also seen slightly differently, because of its continued focus on wood production.

> "Over recent years we as SBB have moved from being a traditional, and perhaps reactionary, organization in terms of forestry to an organization with its main focus on nature and nature management […] (24:241-246)".
> "SBB has been the leader in the sector for about three-quarters of its existence, afforestation as governmental policy, policy for sufficient wood, the SBB stood in the middle of all this […] but not anymore, now we are just mangers of forest and nature, like NM […] (26:121-124)".
> "In my experience the SBB still stands for forests, but in practice that is no longer the case, just look at their magazine *Onverwacht Nederland* that is hardly about forests, they are more some sort of NM, with the only difference being that SBB still openly cuts wood while NM does not (33:126-130)".
> "If I look at how the SBB distinguishes itself in their magazine all I see is about nature and recreation, nature and experience (60:77-78)".
> "I wonder whether or not SBB and NM still want to be seen at as forest organizations […] I think they would rather be seen as nature organizations […] that is matter of image […] thinking in terms of 'target group' and 'customers' you are better off as a nature organization […] so in my definition of the forest sector they are still in because they also own forests […] (37:719-723)".

The *Bosschap* and the NVBE

Thus far the analysis has shown that one of the rules for membership of the forest sector was ownership and that this has shifted slightly from being solely focused on forest property to cover ownership of forest and other nature sites. A similar shift of focus can be seen in the activities and focus of the joint platforms of forest owners, the NVBE and the *Bosschap*. The NVBE was established after World War II, when forest owners felt the need to establish an interest representation organization; through which they could liaise with the Ministry of Agriculture. A second objective at the time was to establish an employer's organization to discuss the newly established collective labour agreements with a growing group of forest workers. In 1946, the NVBE was established with a membership that includes the complete spectrum of forest owners: private owners, the private nature and

landscape conservation organizations, the SBB, and other governmental organizations that own forests, such as municipalities and the Ministry of Defence.

Initially, the negotiations over collective labour agreements were facilitated by the Forestry Commission of a larger, primarily agricultural organization, the *Stichting van de Landbouw* (Association of Agriculture). In 1950, the *Wet op de bedrijfsorganisatie* (Act on Industrial Boards) allowed for the establishment *of product en bedrijfschappen* (PBOs): public private bodies relating to a certain economic activity. The government transferred some of their responsibilities to these independent regulatory commissions where representatives of employers and employees, together with government appointees, would regulate their sector of the economy (Andeweg and Irwin 2002: 142). It was originally intended that the *Stichting van de Landbouw* would be transferred to such an organization, focused on both agriculture and forestry. However, resistance from the KNBV and the NVBE, who both feared a minor role for forestry in relation to agricultural interests, lobbied the *Sociaal Economische Raad* (Social Economic Council; SER) for a separate industrial board for forestry and this led to the establishment in 1954 of an independent organization for forestry: the Industrial Board on Forestry and Silviculture (*Bosschap*).

Bosschap is an official public-private body and all forest owners owning more than 5 hectares of forest are obliged to be registered with it. The *Bosschap* facilitates negotiations over collective labour agreements between forest employers (represented by the NVBE) and forestry employees, (represented by their unions). Both groups also had an official seat on the board of the *Bosschap* and have an equal vote. The founding statement of the *Bosschap* stated that it 'should improve management of enterprises that are occupied with forestry and/or wood production, and should attend to the common interests of these enterprises in policy and politics'. Thus the *Bosschap* has a role as the official body representing the interests of all forest enterprises. Since this time the requirements for registering with the *Bosschap* have only changed once: in 1988 when all forest contractors also became obliged to register their enterprises. This was due to the increasing amount of forest work that was being done by contractors as opposed to direct labour. As a result the forest contractors' interest organization, the *Algemene Vereniging Inlands Hout* (General Association for Domestic Wood; AVIH) also became a member of the board of the *Bosschap* joining the NVBE and the unions. Both the *Bosschap* and the NVBE are perceived as core members of the forest sector as the following quotations illustrate.

> "Policy makers quickly look to the *Bosschap* when they want to know how the sector is thinking on a specific policy […] they represent all forest owners who have more than 5 hectares and also have an influential chairperson and secretary which helps in political circles in the Netherlands (33:97-101)".
> "*Bosschap* is the binding element in the whole thing (32:522)".

> "*Bosschap* is the embodiment of the sector, but more and more with an open view to the outside world (36:160-161)".
>
> "*Bosschap* is a very important organization within the sector, the CAO agreements are made there for the people working there […] also they make regulations in the field of pests and diseases […] (39:171-172)".

Figure 5.1 shows that the NVBE are also seen as core member of the forest sector. Yet in contrast to the *Bosschap*, most respondents didn't know the NVBE or that it still existed. The following quotations reflect the invisibility of the NVBE.

> "The NVBE, nothing more than a sleeping legal form (61:172)".
>
> "[…] the NVBE, a hollow barrel (28:335)".
>
> "The NVBE, do they still exist? I never hear anything about them; I think that they must be as good as dead […] (37:462-463)".

Despite this invisibility, the NVBE's core membership was derived from their central position on the board of *Bosschap* as representatives of forest employers. In 1946, the NVBE was established to represent the interests of all forest owners, but by the beginning of the 1990s, the interests of forest (and nature) owners were increasingly divergent and this threatened to undermine the role of the NVBE as the representative of all forest owners. But the NVBE was also was the organization that represented the interests of forest employers within the CAO negotiations facilitated by the *Bosschap*, and the private nature and landscape organizations had become increasingly dependent on these negotiations as they had become large employers. Therefore, a new construction was devised to permit the continued existence of the NVBE and the *Bosschap*. In this arrangement the NVBE was divided into four sections, each representing a group of forest owners: the SBB, the private nature conservation organizations (NM and the PLs); private forest owners (the FPG), and government agencies that owned forests. Each section has one vote on the board of the *Bosschap*. In practice then, the NVBE only becomes active and visible half an hour before the board meetings of the *Bosschap* when the four members discuss the agenda of the board meeting. The following quotation shows the importance of the CAO for the continued existence of the NBVE.

> "NVBE, in the 1980s, this club still functioned, but you saw a split between the interests of the private forest and estate owners and the nature protection people. This almost exploded. Then three wise men stood up and tried to reanimate the NVBE […]. And why did we find this important? This was because the NVBE represented the interests of the employers in the CAO negotiations facilitated by the *Bosschap*. And we found it important to maintain this association for employers (50:126-136)".

For the *Bosschap*, the shift to the broader membership rule of forest and nature property raised a problem in terms of the regulation regarding registration of forest property. This issue was addressed externally during the evaluation of the PBO Act in the second half of the 1990s. This evaluation addressed more general issues about whether the post-war corporatist structure of the PBOs was appropriate and useful in the 21st century. The evaluation saw a positive future role for the *Bosschap* but only under the explicit condition that it broadened its scope to cover 'forest and nature management' since this was the focus of a large part of its membership. The board of the *Bosschap* agreed upon a transition process in which the term *natuur-inclusief denken* (nature-inclusive thinking) was introduced to explore its new boundaries. In 2004, during the 50th anniversary of the *Bosschap*, the chair expressed her view that this exploratory phase was reaching its completion. She said: "I emphatically speak about forest and nature management and not only of forest management. All the involved organizations have explicitly chosen to broaden from forest and forest management to the management of forest and nature, let's say the non-agricultural areas in the rural areas (Jorritsma-Lebbink 2004)".

Respondents in this study generally saw this adjustment of the membership criteria of the *Bosschap* as a logical step, and as the only possible direction forward. This was not only because most owners were no longer just forest owners, but also because it seemed no longer political and societal appropriate to limit discussions to forests since nature conservation, recreation, and landscape were all equally relevant issues. Most respondents stressed that as most owners depend greatly on governmental subsidies, it was essential to maintain a connection to the contemporary societal and political order, so as to maintain the continuity of these subsidies. The following quotations reflect the opinion of most respondents that broadening the scope of the *Bosschap* was necessary in order to reconnect with the present contexts of ownership and policy.

> "*Bosschap* used to be part of the forest sector, but is now becoming a *Natuurschap*, so it is no longer the forest sector in the narrow sense, in the traditional sense (55:30-31)".
> "As the *Bosschap* you have to connect to this broadening, because this broadening has also occurred in policy and in the regulations and you cannot stay behind (the game), you have to reconnect (59:175-180)".
> "[…] we want to become the platform, in fact we already are, were all *terreinbeheerders* of non-agrarian sites who sit around the table and discuss their common issues for which they can use the *Schap* […] (38:51-55)"
> "*Bosschap* was evaluated, and could remain a PBO within the SER only under certain circumstances […] from that moment you see a convergence within the *Bosschap* to also include nature […] (32:779-785)".

However, not all respondents supported the new broader scope of the *Bosschap*. These respondents, all private forest owners or representatives of the wood processing industry,

were afraid that the specific focus on 'forests' within the membership rule would be lost and that the specific focus on wood production would become lost. This is in line with the analysis in section 5.1.1, which showed this group of actors continuing to search for a way to legitimate the economic meaning of forests. The following quotations reflect the feeling that one of the core-members of the forest sector has adjusted its membership criteria.

> "[…] much more difficult is the *Bosschap* broadening to nature […] I heavily criticize this broadening and many others with me […] because you no longer have the forest at your heart, but you involve other things […] are they also going to be involved with discussions about heather and the Waddenzee? (53:268-277)".
>
> "[…] I understand, but I do not agree with the *Bosschap* becoming a *Natuurschap* [...] when we are moving in that direction you really wonder what is going to happen (47:338-341)".

KNBV – the forest professionals
Figure 5.1 showed that over 80% of the respondents perceived the *Koninklijke Nederlandse Bosbouw Vereniging* (Royal Dutch Forestry Association; KNBV) as one of the core members of the Dutch forest sector (although this implies that about 20% of respondents did not perceive the KNBV as a core member). The following quotations illustrate the opinion of this 20%. The main reason for these respondents seeing the KNBV not as members of the forest sector was its lack of active involvement in decision making processes and its lack of ability to influence the (economic) activity of forest management.

> "[…] is the KNBV part of the forest sector? Economically they are not a part of the sector as this is an association for professionals, so economically they are not part […] (28:166-167)".
>
> "KNBV, they are totally loose, they have no meaning whatsoever in any debate. It is an organization for professionals, which is not involved in the societal debate. You could better call it a fellowship because a fellowship does not really have an interest in being involved in the societal debate, so the KNBV no, they are just a nice chatting fellowship (51:374-380)".
>
> "KNBV is thus very traditional, in the sense that they think they are only concerned with forests, and that they limit themselves to forests, but in fact that is only the name 'forest'. Because if you look at all the owners, then this focus no longer is appropriate, because for most owners, forest management is only a small part of their daily business (55:80-83)".
>
> "KNVB, I think at the level of higher educated foresters and at the academic level it is part of the forest sector, but all the people working in the field, or in the forest, perhaps they have heard about the KNBV, but they are not at all involved (56:129-133)".

The other 80% of the respondents saw the KNBV as a core member because it is the only place where (higher-educated) forest professionals and (private) forest owners can still meet each other and discuss forest-specific issues. Since it was founded in 1910 this has been one of the main roles of the KNBV – one of the reasons for its founding was to enable the growing number of forest professionals to meet and discuss topics related to their

profession. Prior to 1893, there were very few forest professionals as there were limited education or research opportunities (generally done privately). But since 1893 when the wood production section was established (under the leadership of Mr. G.E.H. Tutein Nolthenius), at the *Rijkslandbouwschool* (Agricultural College) in Wageningen, the number of forest professionals gradually increased. Besides highly educated professionals, less educated forest workers were also needed and in 1903, the government subsidized the *Nederlandse Heidemaatschappij* (NHM) to develop special courses for forest workers. Later, in 1955, these practical courses became the responsibility of the *Stichting Bosbouw Praktijkschool* (Association School for Practical Forestry Education). Nowadays, this course has become known as the forest and nature conservation course and is provided by the College Larenstein in Velp, now also part of Wageningen University and Research Centre (VVA 2003).

In 1947 the government established the governmental forest research institute *De Dorschkamp*. The focus of this institute was on improving the economic situation of forest owners by improving tree growth and rationalizing harvesting methods. To pass on this new forestry expertise to forest professionals and owners, the KNBV established a professional magazine, the *Nederlands Bosbouw Tijdschrift* (the Dutch Forestry Journal; NBT). In addition to this journal, a *studiekring* (study group) was established to facilitate forest researchers, professionals and owners to exchange expertise on forest management. Thus over time the establishment of specific education and research organizations resulted in a growing group of forest professionals, with the KNBV providing the main structure for these forest professionals and forest owners to meet and discuss developments in forest management. Yet over time the educational and research structures for forest professionals have either disappeared, or have broadened their scope to cover forest and nature management and this has affected the KNBV.

The forest research institute *De Dorschkamp* has gone through a series of mergers with other research institutes. In 1975 its research focus was broadened to cover forest management and landscape building. In 1991 it merged with the research institute for nature management under the new title *Instituut voor Bos en Natuuronderzoek* (Institute for Forest and Nature Research; IBN-DLO). In 2000 the IBN-DLO merged with the *Staring Centre*, the research institute for landscape research. This new institute was named *Alterra*, (the research institute for the green environment). Most research within *Alterra*, though no longer a governmental research institute, initially continued to be organized along the lines of the existing research programmes. Forest research has subsequently decreased in size and become spread across several different research programmes and its focus has broadened. Between 1996 and 2000, there still was a specific Forest Research Programme. Between 2000-4 this programme was superseded by a programme called *Functievervulling*

Natuur, Bos en Landschap (Function Fulfilment: Nature, Forest, and Landscape). In 2004 the scope of the programme was further broadened and now focuses on all issues related to the Management of the Dry Ecological Main Structure.

A similar development can be observed with respect to forest education. In 1999, the *Vakgroep Bosbouw* (Forestry Chair-group) of Wageningen University was split into two groups, each with its own professor: the Forest Ecology and Forest Management Group, and the Forest Policy and Forest Management Group. In 2002, the name of this second group changed again to the Forest and Nature Conservation Policy Group. This process of broadening the professional focus to forest and nature management can also be seen at the college level: College Larenstein changed the name of their course from 'forestry' to 'forest and nature management', reflecting a change at the practical workers' level, of a shift in education more focused on forest and nature management. In short, the Netherlands no longer trains forest professionals: the focus of the all the courses is now on forests and nature. One respondent observed that this shift in education was in line with the almost complete absence of job vacancies for foresters. Professionals with a single focus on forests are no longer in demand in the Netherlands and forest professionals are becoming a dying breed, as illustrated in the following quotations.

> "You used to study forestry, and that is no longer the case (61:289-290)".
> "Forest professionals no longer exist; the forestry profession no longer exists (46:759)".
> "[…] in case of the organization of the education, you would also say that there is no longer a forest sector […] the fact that you are called forest and nature management, yes, that is also no longer forestry […] (60:1030-1033)".
> "[…] tradition […] you had an education that claimed to deal with forest and forestry only […] and you have the tradition from the past of people from practice being involved with forestry […] that will continue […] but look at the young generations and their affinity with forests as something sectoral, well, that is very small (55:280-286)".
> "I always say: my profession is dying (46:642)".
> "You can also take a look at the requirements that employers ask from new staff. And it is very rare that they look for a person that only has knowledge about forests and not of nature. They want a site-manager or someone who prepares policies in the field of forest, nature and landscape. And that obviously has its consequences for how you organize a professional group, an education, a research field or a government (39:77-86)".

This decline in the stream of educated professional foresters has had consequences for the KNBV. In 2002-2003, the KNBV reflected on their position and role in view of their declining membership, brought about by difficulties in attracting new members and many older members losing interest in the KNBV as they were no longer professionally involved in forest management. This led to the decision to merge the journal of the KNBV (the NBT), with two other professional journals into a new magazine entitled *Vakblad Natuur,*

Bos en Landschap (Professional Journal for Nature, Forest, and Landscape; VNBL). This merger enabled a broadening of the readership, which was now not restricted to members of the KNBV, but open to public subscription. In other respects the KNBV decided to maintain their membership boundary and only KNBV members are allowed to attend the events organized by the KNBV. The following quotations illustrate the growing problematic situation of the KNBV, both with respect to their limited focus on forestry and their limitations upon membership.

> "[…] the forestry magazine is disappearing in January 2004 […] and yes, such a magazine of the association does give the sector some cachet (61:289-291)"
>
> "[…[they do realize that things have to change, and that they have to change in a similar direction of their members […] but within the KNBV change remains difficult […] the KNBV also keeps focused inwards […] (60:211-227)"
>
> "I told them seriously […] there is of course a great risk because what is left of the KNBV now they have no longer an own specific magazine? […] and maybe you have to really take a close look at the main tasks of the KNBV and how you want to stress your distinctive features […] (55:656-660)".
>
> "if you have to go now from the KNBV to a site-management association you are already too late, you are two steps behind […] it goes really fast (39:510-513)".

5.3.2 Non members: a diffuse group of old members, traditional and new partners

Figure 5.1 showed that a large group of actors from among those who originally signed the *Bosakkoord* were seen by the majority of respondents as not being members of the forest sector. This sections explores the membership status of governmental organizations, (the ministries of LNV, VROM, and MEZ and the provinces of Limburg, Overijssel, Gelderland, Drenthe) and of two NGOs, *Stichting Natuur en Milieu* (Association for Nature and Environment; SNM) and the ANWB. Some other organizations which signed the accord will not be discussed as these organizations were hardly mentioned during the interviews, clearly fell outside of the membership boundary and had very few interactions with the organisations within it.

The Ministry of LNV and the provinces: old members
Figure 5.1 showed that about 35% of respondents perceived the Ministry of LNV as a member of the forest sector. However, as the following quotations show, the Ministry of LNV was previously seen as much more of a core member of the forest sector.

> "I will at least continue to appeal to their [LNV] responsibilities towards forests […] If they would forget that, than we [foresters] would just disappear [...] And that is not our intention! (61:207-215)".

"LNV no longer has any professionals in the field of forest management […] so the sector should provide them with content, but the sector is so divided that they hear different opinions […] You can wonder whether or not LNV still takes the sector seriously [...] (60:74-77)".

"LNV is hardly active in the field of forests […] and their expertise in this field has almost completely gone (38:108-110)".

"The Ministry of LNV, I have to put them in, but they do very little for forests […] they no longer have any idea about what forestry is and that's why they do strange things and are a difficult partner. But the sector needs them badly, because they have the money and the subsidies (37:67-72)".

These quotations suggest a changing perception of the Ministry of LNV's membership of the forest sector, one in which they were initially seen as involved but have become subsequently more distant – this is explored further in the following paragraphs.

The establishment of the SBB marked the first involvement of the government in the forest sector. Initially, the SBB was part of the Ministry of Agriculture and Fisheries and was responsible for managing state forests and assigned the task of planting new forests on degraded land. But the SBB's role changed in 1917 when it became responsible for implementing the *Noodboschwet* (Emergency Forest Act), which effectively made them an independent forest authority responsible for forest policy. The *Noodboschwet* was set-up in the aftermath of the overexploitation of Dutch forests during WW1. After the war all forest owners needed the approval of the SBB to fell trees, and were obliged to reforest afterwards. However, such governmental influence over private property was quickly abandoned and only 5 years later the *Noodboschwet* was replaced by the first regular *Boschwet* (Forest Act, 1922) which limited government authority to publicly owned forests. This meant that public forest owners, such as municipalities, still needed a cutting license from the SBB, whilst regulations over privately owned forests were limited to those concerning pest and fire control. In this same period, the Ministry of Agriculture also started to develop policies towards nature conservation, such as the *Natuurschoonwet*. The *Natuurschoonwet* gave the Ministry some influence over private owners, as it provided tax relief in exchange for conserving 'natural beauty'. The Ministry of Agriculture and Fishery also started to develop a *Natuurbeschermingswet* (Nature Protection Act). In this sense therefore the Ministry's membership of the forest sector has been on the basis of a broader interest in forests and not solely based on wood production.

During WWII, the occupying Germans enforced a narrow focus on forests and they made a clear split with the nature conservation field. Responsibility for nature protection and recreation was transferred from the Ministry of Agriculture and Fisheries to the Department of Culture within the Ministry of Education, Arts, and Science. As a result the two policy fields developed separately for awhile. Forestry (and later also landscaping) developed

within the *Department Bos en Landschapsbouw* (Department of Forest and Landscaping) of the Ministry of L&V, while nature conservation and recreation were the responsibility of the Ministry of Culture, Recreation and Social Work (CRM). In 1969, the government enacted the *Natuurbeschermingswet* (Nature Protection Act) and created a new Department of Nature Conservation and Recreation within the Ministry of CRM. This department further developed activities in the field of nature conservation with the CRM financially contributing to purchases of private properties by private nature conservation and landscape organizations and initiating the establishment of National Parks in the Netherlands. Thus for a while there was a split between the Ministry of L&V which was responsible for forests as an independent policy field while the field of nature conservation developed separately.

In 1982, these separate responsibilities for forestry and nature conservation were merged by the Cabinet of Lubbers which put all the tasks regarding both fields within the Department of Forestry and Landscape of the Ministry of LNV. This meant a transfer of civil servants from the CRM to the LNV. In 1985, the director of the SBB merged the two separate practical management departments, establishing one department of site-management. This finally forced the foresters and nature conservationists under one roof and to discuss and overcome their differences, at least at the practical level of management. In 1988, a second step was taken in merging the two departments, when the Ministry of L&V made a clear separation between policy and management. Two new departments were created with the Department of Forestry and Landscape being responsible for forest, nature conservation and recreation policy, and the Department SBB responsible for the actual management. Greater acknowledgement of the role for nature conservation came in 1989 when the Ministry of Agriculture and Fisheries changed its name to the Ministry of Agriculture, Nature Management and Fisheries (*Ministerie van Landbouw, Natuurbeheer en Visserij*: LNV). At the same time the Department of Forestry and Landscape was renamed as the Department of Nature, Forest, Landscape, and Fauna Management (*Departement of Natuur, Bos, Landschap en Faunabeheer;* NBLF). During the 1990s, their focus continually shifted towards nature conservation and forests became part of this focus. Most obviously this can be seen within the *Natuurbeleidsplan* (Nature Policy Plan; LNV 1990) which introduced the concept of the *Ecologische Hoofdstructuur* (Ecological Main Structure; EHS). Since more than half of this ecological main structure consisted of forests, the *Natuurbeleidsplan* was in a way also a forest policy plan. In other words, nature and nature conservation became the dominant focus within a ministry that was previously dominated by an official and independent focus on forests.

Thus, in less than a decade, the independent and visible position of a forest authority melted into the background, in terms of both policy and management. Basically the only reference

to a forest authority within the Ministry of LNV was in the Forest Law and this also changed in 1993 when responsibility for implementing the Nature Protection Law and the Forest Law was decentralized to the provinces. This gave the provinces new powers of discretion and decision making powers over the demarcation of the EHS, the goals of nature conservation and over which areas to buy, cultivate, and manage. In terms of forest policy, this meant that national policy goals had to be implemented within provincial forest plans.

However, the MJPB had been adopted by parliament in 1986 and none of the provinces had made a start on developing provincial forest plans. With decentralization, some of the civil servants that had worked within the NBLF were relocated to the provinces, especially to the forest-rich provinces of Gelderland, Noord-Brabant, Limburg, Overijssel, and Drenthe. In two of these provinces (Limburg and Drenthe) these civil servants produced provincial forest plans. This suggests that at the provincial level, it has also been problematic to develop a separate focus on forests. Figure 5.1 shows that the provinces were predominantly perceived as being outside the forest sector: the following quotations reflect the perception that the provinces' membership of the forest sector depends largely on a few people working with these provinces.

> "Provinces that are now active in forest policy depend on people with a background in forestry working there […] if you don't have them then it is finished (52:210-213)".
> "[…] in principle policy should not be linked to personal interests but apparently that is not the case […] and if I leave the province than the whole forest expansion policy will slowly disappear, I am convinced of that (44:250-256)".
> "[…] the provinces are not part of the sector but the forest people that work there are […] (37:62)".

A further effect of the decentralization of forest policy was that the visibility of a forest authority within the Ministry of LNV slowly dissolved into the nature conservation authority. In 1995, the Department of Nature, Forest, Landscape, and Fauna Management changed its name to the Department for Nature Management. Initially the department maintained a separate *Sectie Bos* (Section Forest), but in a subsequent reorganization the department reorganized itself along the different stages in the policy process. As a result, the field of forest policy was no longer organizationally visible and all that remained was the *Dossier Bos en Hout* the part-time task of one person within a larger team responsible for managing the EHS. For these reasons a large number of respondents no longer perceive the Ministry of LNV as a member of the forest sector.

The Ministry of Housing, Spatial Planning, and the Environment: a new partner?

Figure 5.1 shows that over 80% of respondents see the *Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieu* (Ministry of Housing, Spatial Planning and Environment; VROM) as being outside the forest sector although 15% of respondents perceived them as being on the boundary. This position of being seen as outsider is interesting because the Ministry of VROM, with responsibility for environmental issues, is responsible for attaining the government's goal that the Netherlands should only import wood from sustainably managed forests, a challenging ambition for a country that imports so much wood. In 2001, the Minister of LNV informed parliament that this goal was unattainable and that only 8% of wood imported into the Netherlands came from sustainably managed forests. This led, Marijke Vos, a Left-Green MP to propose amending the Environmental Act so as to favour imports of sustainably produced wood (Van der Hoeven and Krul 2002). As VROM was the authority responsible for implementing this law, it started to become involved in international forest policy issues and sustainable forest management. Since the beginning of 2002, VROM has taken over the responsibilities for implementing the *Regeringsstandpunt Tropisch Regenwoud* (Governmental point of view on Tropical Rainforest) and now has set the target that 25% of imported wood should come from sustainably managed forests (VROM 2001). To reach this goal, VROM initiated the development of the *Beoordelingsrichtlijn Duurzaam Bosbeheer* (Assessment Guidelines for Sustainable Forest Management; BRL) which involved facilitating discussions between the wood processing industry, forest owners and E-NGOs.

However, despite VROM's role in labelling and international sustainable forest management, the Ministry is generally not perceived to be a member of the Dutch forest sector. This is largely because VROM's efforts are mainly focused on international forest policy dialogue over imports of sustainable wood, which has a very limited impact on forests and forest management in the Netherlands. The following quotations from the representatives from the SBB, Ministry of VROM, and the VNNH illustrate this perception that Ministry of VROM is not a member of the forest sector.

> "And apparently by definition they [VROM] distrust the wood sector […] The SBB is put in the same corner as the concession holders in the tropics and based on the idea that the SBB is not allowed to be part of the think tank of the BRL […] and if you look that we have already so much difficulty with doing what we have to do, well, we thus took some distance and in close cooperation with *Bosschap* and *Natuurmonumenten* we have limited our input to a minimum […] so I don't think that VROM is part of the sector (24:319-335)".
> "Possibly we could support the UvB in establishing a system for group certification so as to also have Dutch private owned forests under the BRL. But the Dutch forest sector is not the essential partner because the main focus is international […] understandable because the Netherlands is a

consumption country, so by focusing on the consumption of wood you can gain most (41:280-286)".

"VROM discusses the international dimension of forests […] we would prefer that the Ministry of LNV remained responsible for the BRL because it has more expertise when it comes to forests while the Ministry of VROM mainly has environmental experts […] and it is too bad that within the battle over competences between the Ministries of VROM and the LNV that the international dimension has moved to Ministry of VROM […] It would have been much easier for us if the government would have had one face when it comes to issues like illegal logging, sustainable forest management, certification […] we now have to deal with two Ministries that do not always have the same ideas […] (35:292-312)".

"VROM was not in the picture when it came to forests […] only during the discussions on acid rain during the 1980s did they become interested in forests and now over wood for CO_2 sequestration and for building construction. […] They are only really involved on the international policy field and not on the national policy field. Actually I think that the Ministry of LNV should have been the leader on sustainable forest management […] but the Ministry of VROM is more active on the issues relating to consumers and labelling and that's why this issue is with them […] so they are absolutely not involved in Dutch forest policy, but internationally they are involved (30:54-70)".

The Ministry of Economic Affairs: an old member

Figure 5.1 showed that the *Ministerie van Economische Zaken* (Ministry of Economic Affairs; MEZ) was not perceived as a member of the forest sector but more as outsider. This was despite the successful attempts of the SBH in the 1980s to involve the Ministry in forest sector activities and persuading it to take some responsibility for supporting the wood processing industry. The SBH contended that this involvement meant that the Ministry of EZ accepted (at least some) responsibility for the Dutch wood processing industry. However, section 5.1.1 clearly indicated that within a decade, the Ministry of EZ no longer accepted this responsibility, since the wood processing industry did not have any problems in sourcing sufficient supplies of wood from abroad. The following quotations reflect this change in the Ministry's position as a member of the forest sector.

"[…] our involvement changed enormously: from being involved very closely with wood and forests to a much more distant role of coordination. (27:20-21)".

"[…] as soon as […] retires it is most likely that Ministry of EZ will no longer be involved in wood issues (33:404-406)".

"The Ministry of EZ also dropped out, completely dropped out when it comes to wood (32:455-456)".

"The Ministry of EZ, I hardly notice anything from them anymore. In the past with the fast growing forests, yes, they were really supporting the sector, but I can't give them a place anymore in the sector (36:184-187)".

"(It was) very wise of the Ministry of EZ to withdraw from Dutch forestry because they have to look at the raw material market and for wood industry you need forests to produce wood and you

can get your wood from everywhere […] so they said goodbye to Dutch forests and I must say that nothing went wrong with the industry (39:314-321)".

"The Ministry of EZ are no longer involved in wood production. They dropped the policy field and the only thing they were interested in was wood […] they are in hibernation and maybe they will never awake […] (61:115-118)".

"The Ministry of EZ in hibernation says something about their attitude, but also indicates that they do feel responsible (51:542-544)".

"[…] The Ministry of EZ are more the allies of the wood industry than of the Ministry of LNV, but in the end they also seem to be not very interested, and that seems logical because the wood producing and wood processing industries have grown apart" (55:123-127)".

The SNM and the ANWB: traditional partners

Figure 5.1 showed that only about 30% of respondents perceived the E-NGO *Stichting Natuur en Milieu* (Association for Nature Protection and the Environment; SNM) and the motoring and tourism organization *Koninklijke Nederlandse Toeristenbond* (Royal Dutch Tourist Association; ANWB) as members of the forest sector. They were largely considered as outside the sector as they do not meet the main membership criteria of ownership, or having an interest in wood production, or play a role in bringing together forest professionals. But the role that the large nature and landscape conservation organizations play as NGOs seems to cloud the issue of the membership of E-NGOs. The SNM operates closely alongside the NM and the PLs in representing the interests of civil society about nature conservation and environmental issues. The SNM, together with organizations such as WWF and Greenpeace, has been especially successful in drawing media attention to issues of nature conservation.

The organization that most explicitly represents recreational and tourist interests is the ANWB, whose involvement in this issues can be traced back to its original statutes laid down in 1883 "*the ANWB, in representing the interests of its members, shall also strive for preserving and improving the quality of the environment" (ANWB 2005).* The ANWB, whose activities include operating the largest vehicle breakdown and repair service in the country, is now one of the largest membership organizations in the Netherlands –. It has grown from 450,000 members in 1960, to 1,350,000 members in 1970, and 3.8 million in 2004 (ANWB 2005). With their growth, the ANWB has become more active and powerful in representing the interests of holiday-makers. They have been members of the *Boschraad*, an advisory board to the Ministry of LNV on forest matters and urged the Ministry to only give subsidies to forest and nature owners who are prepared to open their sites to the public, Equally they were involved in the establishment of the Dutch National Park system and emphasised the importance of them for recreation. Despite the roles of the ANWB and E-NGOs in lobbying and advocacy on recreation and environmental issues the majority of respondents did not perceive them as part of the forest sector, although some individuals within these organizations were perceived as members, as reflected in the following quote.

"There are some people, like mister […] from the ANWB, who belongs to the forest sector, because he is on the board of the SBH and often attends symposia […] but to say that the whole ANWB organization is part of the sector, no, that goes too far (61:122-128)".

5.3.3 Members on the boundary: the wood processing industry moves out

Figure 5.1 shows that about 65% of respondents perceived the organizations connected with the wood processing industry (the PHN, *Stichting Bos en Hout* – the Association for Forest and Wood; the SBH and the AVIH) to be members of the forest sector, with the rest considering them to be outside the sector or on the boundary. As such these organizations are positioned somewhere between the more obvious core members and the obvious outsiders. The main reason for the majority of respondents perceiving the wood processing industry as a member is that about 1 million m^3 of wood is harvested every year and the forest owners need a buyer for this wood. In other words, these respondents based their perception of the wood processing industry as a member of the forest sector because of its involvement in the commercial exploitation of forests. This membership criterion is reflected in the following quotation from the representative of the AVIH.

"Economic interest in forests: forests as suppliers of resources, forests offering employment, forests offering work for forest contractors, or an advisory organization: thus an economic relation (28:199-202)".

The AVIH

The AVIH was perceived as positioned on the boundary of the forest sector because of their membership of the main organizations related to forest ownership and the wood processing industry. The AVIH represents the forest contractors that buy trees from the forest owner and sell wood on to the wood processing industry. Its involvement with forest owners and the wood processing industry puts AVIH in a central role in the wood processing chain and justifies their membership on the board of *Bosschap*. The following quotations reflect the wide range of perceptions that respondents had about the AVIH's position as a member of the forest sector.

"[…] AVIH, yes we are in, because I think that we do something in the sector (28:123-124)".
"The AVIH, are very much on the wood site of the sector (55:100)".
"Look, I know all these different organizations on the wood processing side […]. They don't belong to the forest sector [...] but the AVIH is part, because they unite the forest workers and the forest contractors (27:204-206)".

The SBH and the PHN

The SBH is a lobby organization that aims to raise awareness about the wood production function of forests. Respondents also saw this organization as on the boundary of forest sector membership, with no clear cut consensus about their position. Indeed, the very name of the organization suggests that they on the boundary since it refers to both *bos* (forest) and *hout* (wood). The members of SBH also see their position in this way: initially the SBH was a joint project of the wood processing industry (VNP) and the forest owners (the large private forest entrepreneurs and the SBB). Neither the NM or the PLs participate in the SBH, as these private nature conservations have very little interest in wood production. Since the 1980s, the SBH was involved in the political lobby for more forests and more wood production, in the Netherlands. Figure 5.1 showed that about 65% perceived the SBH to be a core member of the forestry sector.

Since 1987 *Platform Hout in Nederland* (Platform for Wood in the Netherlands'; PHN) seems to have taken over the role of SBH as the main lobby organization for forests and wood production in the Netherlands. The members of the PHN include the wood processing organizations and forest owners (represented by the FPG and the SBB). The secretariat of the PHN is located in the offices of the SBH, highlighting the overlap in interests between the two organizations. The main difference is that the PHN is more focused on wood issues, whereas the SBH focuses on both forests and wood. Many respondents were not aware of the existence of the PHN, or didn't perceive them as 'wood guys' or as a member of the forest sector. The following quotations support these somewhat mixed views about the roles and positions of the SBH and the PHN.

"SBH used to represent the wood interest […] but by now this role has been taken over by PHN (51:468-474)".

"SBH is, in its current shape, an outlived shape […] look at the role of SBH […] the government has stopped paying them and business did not increase its input. You could say that the shrinking scope of activities of SBH shows how society has already integrated and thinks in term of landscape while SBH is (still) attempting to depict a sector […] (39:254-271)".

Figure 5.1 showed that more than 30% of respondents perceived the wood processing organizations as either outside the forest sector or on the boundary. For these respondents 'the forest sector ends where the wood processing sector starts'. This because the wood processing organizations do not have a direct involvement with, or responsibility for, forest management, and because (almost 93%) of the wood processed in the Netherlands is imported, which shows the enormous discrepancy between the domestic supply of wood, and the size of the Dutch wood processing industry. This distance between the wood processing industry and the Dutch forestry sector undermines the formers' position as a member of the forest sector. The paper industry is more dependent on supplies from Dutch

forest owners than the wood sector, although for decades, the paper industry has used far more recycled paper than freshly felled wood. The following quotations support the growing perception that the wood processing industry is increasingly moving away from the forest sector.

"[…] the forest sector has more or less dropped wood production and then the wood processing industry can demand more Dutch wood but the forest owners will need to produce it and if they don't do that, well, then in the end forests still produce wood but forest owners will not be able to sell it as the wood processing industry gets the wood from abroad (46:497-502)".

"The interest representation from the wood industry has stopped [...] they are not interested in the Netherlands because wood is an international market and wood coming from Scandinavia and Siberia is of much more interest than Dutch wood (37:19-21)".

"[…] forest enterprises in Netherlands are no longer profitable and as a result forest owners and wood industries are no longer one sector because the wood industry goes abroad and the interests have gone apart […] (55:59-61)".

5.3.4 The membership boundaries: highly problematic when only focusing on forests

Thus, it is highly problematic to depict a clear and unambiguous membership boundary for the forest sector in the Netherlands, mostly because the membership rules are no longer perceived as providing a clear demarcation between members and non-members. The previous sections have shown that, until the beginning of the 1990s, this growing lack of clarity in membership rules was not problematic with for example private nature conservation organizations being accepted as members of the forest sector. But when conservation thinking became dominant in the 1990s this dominance started to influence the membership boundary, resulting in a more diffuse picture. While there is still some kind of membership boundary, it no longer seems to define the forest sector. Instead, the actors considered as members seem to form a group of organizations that are all directly related to forest and nature management. And while the wood processing industry was initially part of the core membership that supported a forest sector in which wood production played a role, they have increasingly withdrawn as they have no interest in the main focus on conservation which leaves little room for wood production.

5.4 Interaction boundaries

The aim of this section is to analyze the dynamics of, and changes in perceptions about, the interaction boundary that defines the Dutch forest sector. The first four sections analyze the informal and formal patterns of interaction between foresters (sections 5.4.1 and 5.4.2

respectively); the interactions between core members and the wood processing industry (section 5.4.3); and the trend towards more flexible interaction patterns (section 5.4.4). The last section, 5.4.5, analyzes relates these interpretations of the interaction boundaries to each other.

5.4.1 Informal interactions among foresters: "friends that have lost most of their influence"

The initial influence of the foresters' network

This sub section examines the role of informal interaction patterns between the core member organizations of the forest sector. Informal interactions between people interested in forests started to take place in the second half of the 19th century. The large forest entrepreneurs on the Veluwe established a special forestry interest section in the local landowners association *Gelderse Maatschappij van Landbouw* (Gelderse Association for Agriculture; GML). The GML had been established by the new agricultural and forest entrepreneurs involved in cultivating the degraded lands of the Veluwe. It promoted advancements in agriculture, cattle breeding, and wood production. Membership was restricted to new entrepreneurs from the higher social classes and excluded the average small farmer and forest owner (Buis 1993). This network of several new forest entrepreneurs, who constituted the forest section, came to be quite influential and were involved in establishing several institutions and organizations with a focus on forests, including the NHM, the SBB, and the forestry course in Wageningen (Buis 1993).

During the first half of the 20th century, the number of foresters grew, mainly because the growing size of the Dutch forests demanded more forest professionals to manage them. This legitimized the establishment of an independent organization for forest professionals and owners. In 1910 the KNBV was established and took over the role of the forest section of the GML. For the first time, foresters no longer depended on a larger agricultural organization for their gatherings. Meetings of the KNBV created the opportunity for the large forest estate owners, forest professionals employed at the SBB, and the teachers and students from the *Rijkslandbouwschool* in Wageningen to establish closer informal relationships. This informal forestry community had an elitist character: membership was restricted to the higher educated forest professionals and the large forest entrepreneurs with the less educated forest workers being excluded.

In the years following World War II, this informal network of foresters came to exercise an important influence over decision making. The close informal relationships between private forest owners and the SBB facilitated the establishment of specific financial and legal arrangements for forests, such as the planting subsidy and the Forest Law. Often these initiatives were the ideas of influential individuals within the KNBV who enjoyed close

contact with the SBB and the Dutch government (Buis *et al.* 1999). The following quotation reflects the powerful position that the KNBV enjoyed at the time.

> "You used to need a certain position in order to become member of the KNBV, and then you also saw the regents in the KNBV. Until 1940, the KNBV had less than 100 members […] and when the KNBV was such a small club, when everybody still met together it was capable of doing something and had a powerful position. Probably that was all very informal, but at that time that worked, especially towards the policy makers (51:374-391)".

This informal network started to lose its influence in the 1970s. The main basis of the foresters' influential position (both when organized through the GML and the KNBV) was their close informal relationship of trust with government forest professionals. The following paragraphs explore how these informal trust relationships were eroded.

The foresters' network looses influence

One reason for the foresters' network losing its influence has been the shift in societal attitudes towards nature and landscape conservation. Financial support from government and society allowed private nature and landscape conservation organizations to purchase substantial amounts of property and by the 1970s these organizations had become large forest and nature owners. This meant that their management costs increased enormously and this forced them to rethink their income situation, especially as wood prices remained very low. As a result these private nature and landscape organizations intensified their links with urbanized society, tapping into a growing societal interest in nature conservation and recreation. Membership recruitment drives resulted in an enormous increase in the membership of *Natuurmonumenten* (NM)and the PLs. In 1991 alone the membership of NM doubled from 300,000 to 600,000, and ten years later, they had almost 1 million paying members (Maas 2005). Membership of the PLs has also grown, although less spectacularly. At the same time policies towards nature conservation were becoming far more explicit and much stronger, with the establishment of the Nature Protection Act, a Nature Policy Department, the Nature Policy Plan, and the European Habitat and Bird Directives. The growing property portfolios and increasing membership of the private nature and landscape conservation organizations were both important resources as these gave them more leverage in influencing policy making.

While the influence of the nature conservation lobby grew, that of the foresters' was in decline. During the 1980s and 1990s, the informal close trust relationship between foresters and the forest authority slowly eroded, as many forest professionals working in the Ministry of LNV lost their jobs as a result of internal reorganizations. Moreover the SBB which was one of the large site managers was no longer a part of the Ministry of LNV. Third, forest policy lost its status as an independent policy field and became part of an integrated field of

nature and landscape policy. Fourth, most forest issues were decentralized to the provinces and only two of them actually established explicit provincial forest policy plans. Fifth, government was rethinking its role in more general terms and focusing on its core task of policy making. This change in focus meant that civil servants required new skills and qualifications: instead of content based knowledge, skills in organizing and facilitating debate and dialogue amongst stakeholders became more important. For all these reasons forest owners and managers lost their ability to informal contact and influence key decision makers. All these factors helped undermine the informal network between forest owners, forest professionals and the government and its ability to influence forest policy making, as illustrated in the following quotes:

> "All the ministries are withdrawing to their core-business and that means that their main focus is on maintenance of their regulations and this trend is so dominant that if you don't say something, then nothing happens […] so the sector gets more responsibilities and they certainly have to take these […] (52:537-544)".
> "[…] it used to be very interwoven and my forester colleagues know all the forest people I talk with […] and I am a social scientist, female, young and not bothered with any knowledge in this field and that was a shock to the forest people because they used to arrange the political agenda setting through the Ministry […] well, that is still possible, but this will happen more quickly if as an LNV employee you do this with a personal interest in the topic […] (57:250-253)".
> "[…] new people coming to work here with the LNV usually have had no forestry background and they all have the attitude of 'you have to protect nature' and have no affinity with cutting and felling trees […] (30:110-112)".
> "[…] you no longer have these direct advocates at LNV […] (39:404)".
> "Look, the KNBV used to be an interlocutor of LNV when the LNV had forest professionals on their staff, but they all disappeared […] they are all replaced by jurists (42:338-342)".

Despite the loss of influence over the policy making process, the informal network of forest owners and forest professionals continued to exist, although, it was getting smaller and smaller. A small circle of individuals remained that continued to propagate the continuation of an interaction pattern around a forest sector. Strikingly quite a few of these key individuals were previously employed by the former Department of NBLF within the Ministry of LNV. But decentralization and privatization led most of these former forest policy officers to work elsewhere, in the provinces where they became responsible for forest policy, with other forest organizations such as the *Bosschap*, the UvB or transferred out of forestry. Moreover, the traditionally influential positions within the forest sector, such as the Director of the SBB, the head management of the NM, and the Director of Nature Management at the LNV were no longer occupied by foresters. Thus the informal network of foresters has shrunk and no longer has access to insiders who occupy influential positions, as reflected in the following quotes:

"The network of people having something with forests has become a small network as one after another leaves the network. So that network is getting smaller [...] but that also means that the level of trust is high […] and this shrinking sector still gets thing done (36:345-355)".

"[…] maybe the biggest problem […] if you took a picture of the people who were involved in forest policy 15 years ago and compare this to the people currently involved, I can assure you that there is nobody new […] and what this sector needs is that all these old guys are set aside and that young people with some innovative energy bring in new ideas […] all the time we see the same old people (47:367-381)".

"My biggest concern is that the forestry sector has lost its position […] all important positions like the Chair of Bosschap, the chair of NVBE […] the Director of SBB are not foresters. The Assistant Director comes from the Bird Association […] The Director of Nature Management at NM always used to be a forester but is now a former director of *Milieudefensie* […] well and you can do politics what you want but without the right positions at the top of organizations you will never win and you are nothing in politics (46:351-373)".

"Those persons are very closely linked […]. They are all from the time of the Department of Forest and Landscaping […] with SBB with the central organization NBLF […] So, you see this in the current situation because the people with the *Bosschap* and the *UvB* all know each other from that time […] that's how the game works, it's all about positions. And I could continue for a long time, and the longer I look the more personal relations I see […]. In my opinion there is a very small circle left: a circle of people and not of organizations when it comes to the forest sector (45:235-296)".

"If you want to glue the sector through organizations, well, then there is no sector (59:313-319)".

For this remaining small group of individuals, the KNBV continues to provide a place to meet and discuss forestry and forest management. Schanz *et al.* (2002) found that 80% of the current members of the KNBV would regret it if the organization ceased to exist. This suggests that the KNBV continues to be important for the members: possibly because it is the last meeting place for people who primarily identify themselves as foresters. However, the KNBV no longer holds an influential position within the decision making process, as illustrated below:

"[…] you see that slowly we are no longer seriously involved […] KNBV no longer participates in the policy process, is not involved in subsidy arrangements […] is not consulted about the activities of Bosschap […] nothing (42:350-353)".

"The KNBV, well, they don't really take up the issues that are going on, they are mainly cynical and critical […] (24:566-572)".

"An association will only have a role to play if members belong to the societal elite […] the only ones who could do that are the professors but you never hear them […] a nice chatting fellowship […] that has no meaning whatsoever in the debate […] (51:405-423)".

5.4.2 The decline in formal interactions among foresters

Besides the informal relationships between foresters in the different organizations involved in forest matters, a set of formal interaction structures has also been constructed; initially between the government and forest owners, and later between the forest owners within the Bosschap. Both interaction structures will be discussed in the following section which focuses primarily on respondents' perceptions of the influence that these structures exert over decision making processes.

The shifting relations between government and forest (and nature) owners
Until World War I, the Dutch government's control over forest owners was limited and their role was predominantly restricted to stimulating and initiating the sector: for example through establishing the NHM and in establishing educational facilities. This first changed with the 1917 *Noodboschwet* (Emergency Forest Law) in which the government assumed rights to influence the management of privately owned forests. In 1922 this was replaced by the *Boschwet* (Forest Act, 1922), which again limited government control to publicly owned forests. Interactions between government and private forest owners were formalized in a governmental advisory body, the *Boschraad* (Forest Advisory Board), which provided a structured platform for forest owners and forest professionals. The *Boschraad's* membership included private forest owners, the SBB, municipalities that owned forests and the NHM, other members, together with the NM and the ANWB. One of the most concrete pieces of advice given by the *Boschraad* was to encourage the continuation of private ownership. In 1928, the Dutch government enacted the *Natuurschoonwet*: a fiscal formal arrangement that favoured private forest owners (see section 5.2.2).

The period of limited control of government over private forest owners lasted until WWII, when the Dutch government issued an official regulation, the *Bodemproductiebeschikking* (Regulation on Soil Production) that aimed to prevent forests from being cut down if the owner wanted to convert the forest into more productive agricultural land. This regulation applied to both public and private forest owners and obliged them to seek a licence for cutting trees and to reforest afterwards. When the Germans took over the country they put two German foresters, *Oberforstmeister* Hagemann and *Oberlandsforstmeister* Schnell, in charge of Dutch forestry with the aim of reorganizing and professionalizing the Dutch private forestry. Under their direction, private forest owners were obliged to make forest management plans, which needed to be approved by SBB. This rise in control of government over private forest owners was accepted during the first part of WWII when wood prices were relatively high, but the cooperative attitude of forest owners changed when, in 1943, the German occupiers fixed the wood prices at a low level. Later the Germans put all the forests under state control, allowing the Germans to plunder much of

the wood from Dutch forests. Since Dutch forest owners had no interest in advising the Germans on how to destroy their own forests, the *Boschraad* was dissolved.

The situation after WWII, when Dutch forests were in a miserable state, allowed for an intensification of the formal relationship between government and forest owners. First, a financial relationship developed which established a financial subsidy for forest owners and this was followed by an extension of the control of government over forest ownership. In 1962, the first *Boschwet* (Forest Act) was replaced by the second *Boswet* which applied to all forest owners, under which the government once again sought to control the continued existence of Dutch forests by obliging owners to reforest after cutting (also see section 5.3.2). The law also led to an intensification of relationships between the SBB and private owners: the SBB was responsible for implementing the *Boswet* and for advising private forest owners on forest management. This advisory role allowed for a further professionalization of forest management among both private forest owners and municipalities that owned forests. It followed the ideas of the German foresters (Buis and Verkaik 1999), but in contrast to the German approach, was pursued voluntarily. Thus the SBB became the central authority linking the government with forest owners: the SBB implemented the Forest Law, provided subsidies and advised forest owners on forest management.

But the SBB no longer holds this central role. Since 1982 it has been reorganized on several occasions: merged with the Department of Nature Conservation, been organizationally split between 'management' and 'policy', withdrawn from the task of advising private forest owners and, finally, semi-privatized (see section 5.3.2). The different responsibilities of the SBB have gradually been taken over by other governmental and non-governmental organizations. As a consequence, most respondents perceive that the SBB has lost its central role in the forest sector and is now mainly the largest owner of forests and nature in the Netherlands. The next quotation from a manager of the SBB illustrates this.

> "The SBB has been the leader in the sector for about ¾ of its existing time, afforestation as governmental policy, policy for sufficient wood, the SBB stood in the middle of all this […] well not any more, we are just site-mangers now like NM […]. The government decided to separate policy and management, completely tear them apart. Then policy became the full responsibility of the Ministry of LNV and later this was decentralized to the provinces and the SBB became a QUANGO […] now we are just a large landowner (26:121-147)".

Implementing the Forest Law has now become the responsibility of the provinces, limiting the direct control that the Ministry of LNV has over forest owners, although the ministry did maintain responsibility for subsidy payments until 2007. Since 2000, all financial arrangements for private nature and landscape organizations and for private forest owners

were merged into a single scheme the *Subsidieregeling Natuurbeheer* (Subsidy for Nature Management, SN), part of a larger subsidy programme, the *Programma Beheer*.[12] Since 2007, the provinces have taken over responsibility for administering these subsidies under the *Wet voor de Inrichting Landelijk Gebied* (Law on the Organization of Rural Areas, WILG). This has raised the profile of the provinces in forest and nature management, a shift in the historic organization of formal interactions between foresters and the government, which was previously primarily through the Ministry of LNV.

The advisory role of SBB has now largely been taken over by commercial consultancy agencies that advise forest and nature owners on management issues. In addition to these commercial organizations, the Ministry of LNV continues to support the professionalization of smaller private forest owners by financially supporting the *Bosgroepen* and the UvB. In 2004, there were three such forest groups active in the Netherlands, with a total of about 1200 owner-members, who together owned about 420,000 hectares of forest and nature (UvB 2005). Since 1991, the UvB became responsible for coordinating activities between these different groups and streamlined the contacts with the Ministry of LNV, which provided financially support to the UvB and forest groups to help professionalize small forest owners. In this way the UvB has established a central role for itself in the relationship between the Ministry of LNV and private owners. This position is somewhat problematic since the forest groups also operate alongside the commercial forest consultancies. But in contrast to these private agencies, the *Bosgroepen* receive financial support from the government. The following quotations reflect the problematic position of the forest groups and the UvB in the functioning of the forest sector.

> "We have some problems with the UvB: they are living off of subsidies and as a subsidized organization they can sell wood cheaper than private market parties […]. From our point of view this UvB is only an extra link that has no added value for an efficient, cheap, stream of resources from the forest to the industry […] there are enough private consultancies but the forest groups can give cheaper advice because they are subsidized […]. Please let the market take over […]. Why should we have a cheap advisor for forest owners? (28:111-139)".
>
> "The UvB was traditionally part of the forest sector but if you look at what they are doing then they are now more part of a forest and nature sector (55:72-73)".
>
> "The UvB is getting more vague because it has actually developed into an organization facilitating site management by private owners, municipalities and also partly for Provincial Landscape Organizations, so I don't think that the UvB will still be called the UvB in 15 years or it could be

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[12] The only organization to remain outside of this programme was the SBB who maintained a separate financial arrangement with the LNV.

that it is the same as with the SBB that still keeps its traditionally name although more than 63% of their sites are not forests […] (39:101-105)".

In the period 2006-2007, the problematic position of the UvB was re-evaluated. To overcome the complaints expressed above, the financial arrangement between the Ministry of LNV and the UvB was made more transparent and the Ministry decided to only financially support the UvB and the *Bosgroepen* in activities specifically aimed at 'small' forest owners, (defined as owners with less than 250 hectares). For all other activities, the *Bosgroepen* and the UvB now have to operate as independent commercial agencies, on a level footing with their commercial competitors.

The problems with common interest representation within the NVBE and *Bosschap*
Since 1954, all forest owners have formally structured their joint interactions through the NVBE and the *Bosschap*. During the 1960s and 1970s the *Bosschap* played an active role in raising political awareness about the financial difficulties facing forest owners (see section 5.2.2). Today however, most respondents question the political influence of the *Bosschap*. Since the 1980s, its role in representing the interests of all forest owners has become less clear as the private nature and landscape conservation organizations and the SBB have grown into large forest and nature owners which has enlarged their influence in the *Bosschap*. Moreover, NM had become an influential E-NGO with its own relationships with the Ministry of LNV outside the channels of the NVBE and the *Bosschap*. The following quotations reflect how the interactions between forest owners within the *Bosschap*, and therefore the influence of the *Bosschap*, subsequently became problematic.

> "the SBB, NM, and Provincial Landscape Organizations have their own lobbyists in Den Haag […]. You see that the position of the *Bosschap* is being undermined. The SBB, NM, and the PLs all have their own lines of communication with the government. They also all sit independently at the table, independent of the *Bosschap* (60:354-364)".
> "The Position of the NM is quite exceptional because of the *geefgulden* (private contributors who financially support the NM) […] when I came here in 1990 I noticed that the NM could just give their ideas to Members of Parliament and the Ministry and their ideas were literally copied […]. Private owners were ignored […] so the power is obviously with the NM […] (25:438-450)".
> "Disunity is a quite obvious characteristic of the *Bosschap* and it has been for years: it has to do with the fact that there are relatively few common interests between different forest owners who lobby Den Haag (60:227-230)".

The diminishing influence of the *Bosschap* has not led to its abolition, although the differences between the different types of owners and the fact that many have become E-NGOs in their own right has had repercussions for the role of the *Bosschap* in representing forestry interests. In 1999, the role of the *Bosschap* was evaluated as part of a broader political review on the usefulness of corporatist public-private organizations. At that time

the board of the *Bosschap* decided to continue with the *Bosschap*, with it operating more as a platform and representing the interests of forest owners over specific shared interests. The following quotations show that this new role as a platform, combined with a new focus on forests and nature (see paragraph 5.3.1) has given the organization back a meaningful position within the current constellation.

> "[…] an increasing feeling of loyalty towards *Bosschap* from NM, the SBB and the PLs, who recognize that concerning certain issues it is better to use *Bosschap* instead of going for it separately (24:591-593)".
>
> "As the *Bosschap* you have to connect to this broadening, because this broadening has also occurred in policy and in the regulations and so you cannot stay behind but you have to connect (59:175-180)".
>
> "*Bosschap* was evaluated and could remain a PBO within the SER only under certain circumstances […] from that moment you see a convergence within the *Bosschap* to also include nature […] (32:779-785)".

However, the influence of the *Bosschap* on decision making remains limited. Not only because many of its member organizations do most of their lobbying also by themselves, but also because when there is not a consensus then the members cannot use *Bosschap* to express their own views. Also *Bosschap's* resources remain limited: the size of the staff has hardly changed in decades, whereas the member organizations, such as the SBB and NM have substantially increased their number of lobbyists. In conclusion, the official structure of the *Bosschap* makes it difficult for it to represent the common interests of the forest sector (and particularly of private forest owners) since the interests of owners have diverged so much.

5.4.3 Less intense interactions along the wood chain

Section 5.3.3 showed that respondents did not perceive the wood processing industry to be a member of the forest sector, as it does not make much use of wood coming from Dutch forests. Despite this lack of a link some interactions between forest owners and the wood processing industry have occurred, especially since the 1970s. This was mostly because of the concerns of the wood processing industry about the reliability of wood imports. They expressed some interest in sourcing wood from Dutch forests and this created a momentum for developing relationships with forest owners. The SBH was particularly active in advocating the institutionalization of relationships between forest owners, the wood processing industry and relevant governmental organizations (the Ministries of LNV and EZ).

In 1983, SBH established the *Overlegorgaan Houtvoorziening en Houtverwerking* (Platform for Wood Supply and Wood Processing; OHH). Participants in this platform included some forest owners (private forest owners, the SBB and the Bosschap), the wood processing industry (AVIH, VVNH and VNP) and the government, which was represented by two ministries (the Ministry of EZ which felt a responsibility for wood processing and the Ministry of L&V which felt a responsibility for wood supply). The government's support for the OHH was expressed by the official announcement of the establishment of the OHH in the Government Gazette and financial contributions made by both ministries to the secretariat of the OHH (managed by the SBH). The OHH thus formally structured the relationships of those involved in the wood chain. Private nature and landscape conservation organizations did not participate in the OHH, because of their lack of interest in this aspect of forestry. However, indirectly, the private nature and landscape conservation organization did have an involvement with the OHH, through the *Bosschap* which is a platform for all forest owners.

Section 5.2.1 showed that, initially, the SBH and the OHH were quite influential actors in policy discussions on forest issues, even arguing the case for establishing a subsidy scheme for planting new forests. However, nowadays, this strong position has been eroded. Sections 5.2.2 and 5.3.3 showed that by the beginning of the 1990s, some of the forest owners and the wood processing industry had lost their interest in domestic wood production and wood supply. In addition the Ministry of EZ lost most of its interest in the wood chain, and withdrew from the OHH. The official status of the OHH did not continue for long and their meetings were no longer officially announced in the Government Gazette. implying that government participation within the OHH was voluntary. The Ministry of EZ withdrew its financial support for the OHH and was followed in this by the Ministry of LNV. The following quotations from several participants involved in the OHH reflect how the OHH's diminished status was reflected in its declining ability to influence decision making.

> "[…] we as the Ministry of LNV used to really discuss the forest and wood interests in order to find solutions within the OHH […] now we let them solve their own problems and just let us know whether or not they succeeded […] (27:30-34)".
>
> "[…] in the corridors this is called *Ouewhoeren over hout* [talking and talking about wood] […] the Ministry of EZ is stopping their subsidy to the platform […] they want to remain a member, but no longer pay for it […] there is still one civil servant […] and that is it (38:178-181)".
>
> "There is this structural consultation between the Dutch *bosbouwsector*, the Ministries of LNV, VROM and EZ, in the OHH, and we as VVNH participate in that because of the international aspects of wood. In the OHH, all the partners keep each other informed, but the lack of decision to really do something with the OHH is enormous and the OHH can't arrive at decisions and therefore it is very difficult to really make a joint fist with all these organizations (35:380-385)".

Despite its declining influence the OHH continues to exist and, since the end of the 1990s, the wood processing industry has regained its interest in the OHH. Private sector members (the wood processing industry and participating forest owners) now provide the financial support to the secretariat of the OHH, on condition that the *Ministerie van Volkshuisvestiging, Ruimtelijke Ordening en Milieu* (Ministry of Spatial Planning and Environment; VROM) and the *Ministerie van Verkeer en Waterstaat* (Ministry of Traffic and Water Control; V&W) also participate in the OHH. These two Ministries are seen as valuable members of the OHH: VROM now has responsibility for the import of sustainable wood and the V&W is one of the biggest users of construction wood. The wish of the private partners (wood processing industry and forest owners) to continue the interaction between themselves and government through the OHH suggests that they see some value in continuing with this platform. For the wood processing industry, the added value of the OHH is that it offers the only platform where all the organizations with an interest in forest and wood related themes come together to discuss issues of mutual interest and the OHH continues to provide links between the several ministries with an interest in these issues. However the PHN also has regular meetings with the Ministry of LNV and the added value of having two interaction moments has been questioned by the Ministry of LNV. Section 5.2.1 showed the increasing difficulties of getting support for the wood production function of forests, and this is the main reason why the OHH and PHN have limited influence over policy making processes, as the following quotes show .

   "[…] the contacts between the Ministries are limited to this OHH platform (57:367-368)".

   "[…] within the OHH I speak to almost the same clubs as within the PHN, well that is strange […] I cannot really sell this to the Minister also because they ask about the same [things], the problems do not differ that much […] well if they would work more together, with the *Bosschap* or with the KNBV, but everybody is so within his or her own club. It would be really good if they would come together more because than they would probably also be taken much more serious by the Chamber […] so this is a real challenge for these interest groups […] and the other challenge is in looking more realistically at the situation and how they can turn this into something beautiful (57:309-322)".

   "The future is developing faster and faster and you would be surprised that there are still some clubs that have not made the change […] well that is the same with ecosystems that change […] some species are not able to keep up and that is what you see happening here […] not every organization has to follow the societal developments, you can also just stop existing (39:723-730)".

   "I have difficulties with all these different organizations. I know that some are trying to work together more closely and I really support these attempts […but I think that..] some of the partitions could be taken out between all these different organizations (31:615-624)".

5.4.4 Increasingly flexible interactions with non-members

The previous sections showed that a large group of actors has become involved in forest and nature issues. This is not a homogenous group, as the actors differ in their origin, their focus and their functions. These actors include different types of owners with quite different interests, non-governmental organizations, market organizations, semi-governmental organizations, and a range of governmental organizations. Non-governmental organizations such as NM, SNM, and ANWB have become influential in policy making processes, largely because of the increasing emphasis on nature policies which has given them more legal powers and because of their success in mobilizing civil society. At the same time, the informal and informal networks of foresters (such as the KNBV, the OHH and the *Bosschap*) maintain a role, although their influence over decision making processes is greatly diminished. Several of these organizations (the Ministry of LNV, the *Bosschap*, and the journal of the KNBV) have broadened their focus from forests to cover forests, nature and landscape. Only the SBH and the KNBV have remained specifically focused on forests. Interactions between this large group of actors increasingly occurs within temporary coalitions. The following quotation reflects this continuous search for partners as new situations arise.

> "Because we all know each other and all the organizations have a very different scope. Once, the perspective was sectoral, but nowadays everybody thinks more about integration and asks: who are my partners? (40:875-877)".

One such temporary coalition was the *Nederland Natuurlijk*, which brings together LTO Nederland (the farmers' Union), the ANWB, NM, the SBB, SNM, *Unie van Waterschappen* (Union of Waterboards; UvW) and the *Vogelbescherming Nederland* (Dutch Association for the Protection of Birds; VBN). This coalition was up in 2002 to lobby the government for additional funding (600 million Euro) for rural areas. The following quotations reflect that the formation of such temporary coalitions is widely perceived as a promising way to organize future interactions.

> "Yes, *Nederland Natuurlijk*. That is a very nice coalition because the water partners also became involved. ANWB has taken it up very well. You have to find these kinds of coalitions. As a large organization you can get some things on the agenda, but then you have to continue with a broader coalition. That is the road and if you try to do that on your own, than you will be lost. Then you become Atlas with that big globe on his back: he stands all alone and can't move (26:576-581)".
> "We know each other [...] *Nederland Natuurlijk*, ourselves [*Unie van Waterschappen*] also joined in, together with NM, SNM and so on. Often our interests are the same as those of the forest and nature owners. Sometimes they are different, because they clearly only stand for forest and

nature management and we have a broader task. Sometimes our interests are in conflict. But often we can find common ground (34:428-435)".

"You can see the alliances in, for example, *Nederland Natuurlijk* which has the LTO, the ANWB and the nature protection organizations. These are signs of a different kind of integration compared to the past:[…] looking at common interests, and then we see that around an issue 'supply' and 'demand' come together […]the way alliances are created is like zapping on television: some time in this group, some time in that one, it's all much faster to organize with email nowadays (39:710-721)".

Another temporary coalition was built around the *Gedragscode Zorgvuldig Bosbeheer* (Code of Conduct for Careful Forest Management). Since April 1 2002, species protection has been legally implemented through the Flora and Fauna Law (FFL), which replaced the Hunting Act, the Bird Act, and several paragraphs from the Nature Protection Act. The FFL, implemented the regulations within the *Habitat en Vogelrichtlijn* (Habitats and Birds Directives; HBD) that referred to species protection. The FFL embodies two principles for species protection: a general care-duty (*zorgplicht*) and a not-unless principle (*nee-tenzij principe*). Under the second principle, dispensations can be granted. A test court case concerning the first principle established that in forestry the care-duty applies from February to November. This effectively restricted the period when forest owners can enter their forests to carry out forest measures to a few months in the winter. Not surprisingly, forest owners, contractors and the wood processing industry were displeased with this verdict, as the following quotes show.

"The government is losing much credibility by the way it is implementing European regulations […] with the FF-Law and the HBD […] […] the government keeps the sector dangling (60:1053-1059)".

"LNV should become more of a broker than a director, but it takes offence at such comments as it wants to play a central role. But they only have limited knowledge about wood and wood production and more attention should have been given to these issues when preparing the FFL. There is now some sort of agreement under which a code of conduct will be central […] (25:542:547)".

"There is no professional knowledge [within the Ministry of LNV] about forestry and wood production and also no recognition of the problem. LNV doesn't see the problem. They say you can just cut these trees during the winter. And that is of course true, but what they don't realize is that behind this there is a whole branch of industry working in the exploitation, transport, processing of this wood, and well, they just can't sit and wait for more than half a year for new wood to come (28:410-415)"

"What has surprised me enormously is that the people within LNV who have been working on the FFL were able to put this on paper. I really don't understand that, either these people are so biased they thought that 'they won't see through this and in this way we can stop all wood cutting in the Netherlands' but it could also have been that they are people who don't know anything about the topic they are working on (35:507-513)".

Initially the *Bosschap* and the AVIH encountered difficulties in getting the LNV to recognize the problems that this new law created. The two organizations came together to draft a Code of Conduct that defined what care-duty meant in case of normal forest management practices. However, the Ministry of LNV found the first draft unacceptable as it raised legal difficulties and would have meant amending the FFL. Only after the AVIH and the *Bosschap* had mobilized the European Commission and other E-NGOs such as the *Vogelbescherming*, did the Ministry of LNV start to acknowledge the problems associated with the FFL, and later come to accept their responsibility for finding a solution. This resulted in a second Code of Conduct, which was drafted by a much wider group led by the *Vogelbescherming* and the *Bosschap*, in cooperation with the AVIH, the PLs, NM, the SBB, and the UvB. After much negotiation the Ministry of LNV amended the FFL to allow the Code of Conduct for Careful Forest Management to be accepted.

This example again shows how new coalitions emerge, this time to provide a broad enough base of support to get the new Code of Conduct accepted and the FFL amended. Not all organizations have yet adapted to these changing circumstances or got used to their new role and positions. The forest actors only became involved after the FFL passed onto the statute book. Questions have been asked about why they only became involved at so late a stage. Respondents had several different views about why this occurred. Some thought it was because the Ministry of LNV has limited expertise about forests and so did not foresee these consequences. Others felt that forest owners and wood processors are not well organized and did not intervene early enough. Others felt that the E-NGOs did not foresee that this interpretation could also negatively affect their image.

One characteristic of both these coalitions was that they included actors from traditionally opposing 'sectors'. *Nederland Natuurlijk* saw the farmers' association and NM joining together. And the *Gedragscode Zorgvuldig Bosbeheer* saw the AVIH and the VBN working together. Another characteristic was that both coalitions were established as *ad-hoc* temporary structures to address a specific problem and were dissolved when the problem was solved. The *Nederland Natuurlijk* coalition was established just before the elections in 2002 to draw the attention of politicians towards nature and landscape. In principal, the constituting organizations represent a broader interest, only joining forces over one specific issue. The working group that had drafted the *Gedragscode Zorgvuldig Bosbeheer* was (temporary) dissolved after completion and only will be reinstalled when the code has to be evaluated.

This type of flexible and temporary interaction patterns seem to be supported by the ongoing professionalization of interest representation, which is now less based on personal and emotive ties, than it was in the past. This professionalism is visible in how directors of

many organizations exchange positions: for example the former director of the *Vogelbescherming* became the assistant director of the SBB; a regional manager of the SBB became the Director of the VBN; the Greenpeace director became Director of Management at NM; the Director of UvW became the Director of NM etc. One can expect that in times when there are clear boundaries between these organizations, such changes in positions would not have been so easily accepted. At the same time the larger private nature and landscape conservation organizations, the E-NGOs and even the SBB have developed special departments for public relations and public affairs that employ specialized professional lobbyists.

5.4.5 Interaction boundaries: limited to the informal network of foresters who lack influence

The previous sections have showed that both the formal and the informal relationships between foresters that used to demarcate the forest sector have either lost their ability to perform and influence decision making, or have adjusted their boundaries by intensifying their relationships with outsiders and becoming more flexible in their interaction patterns.

The picture is somewhat different for the *Bosschap*, which has adjusted its membership boundary and its role. The *Bosschap* has found new ways to continue to be meaningful in the current political arena, as they are the only platform where all forest owners meet on an obligatory basis. However, this organizational setting can only deal with a limited number of issues and more complex issues that require more flexibility are addressed through temporary coalitions based on professional relationships. Alongside this dominant interaction pattern between a large group of actors, there is the remains of an interaction boundary that defines the forest sector but this is shrinking in its size and the influence it has over formal decision making processes and its impact is now perceived to be minimal.

Similar conclusions can be drawn about the organizations that have been involved in organizing a relationship along the wood chain. Since WWII, interactions between forest owners and the wood processing industry were institutionalized within different organizational structures. However their role seems now mostly confined to exchanging information and the overall influence of these organizations was perceived to be very low. Since the 1990s, interactions along the wood chain have been further marginalized and these platforms are not considered to be very influential. As a result it is increasingly irrelevant to conceptualise the forest sector as being based along clearly defined patterns of interaction between forest owners and those responsible for the governance of the forest.

5.5 Sector frames and frame alignment processes

One aim of this chapter is to illustrate how actors, both inside and outside the field of forest policy in the Netherlands have set and reset forest sector frames through a continuous process of forest sectorization. The previous sections have focused on analyzing how the different boundaries of the forest sector were and are perceived. Based on the identification of these boundaries, this section focuses on identifying the sector frames that exist in the Netherlands, and how, and why at certain moments in time these have been adjusted.

5.5.1 The *bosbouw* sector frame*: a negative connotation*

Sector metaphor 'bosbouw'
Use of the sector metaphor *bosbouw* started in the mid C19[th] when private entrepreneurs started to purchase large properties to exploit the wood production function of forests. The sector metaphor *bosbouw* refers to the commercial exploitation of forests and seeing forest land as productive. The closest English translation of *bosbouw* would be 'forestry'. Large-scale private forest entrepreneurs and forest professionals introduced and used the metaphor to depict an independent economic sector and field of study. Both Wageningen University and the *College Stichting Bosbouw Praktijkschool* had courses in *bosbouw*, and educated *bosbouwers*. These foresters formed their own professional organization which ran its own professional magazine. All these organizations explicitly used the word *bosbouw* within their titles, as in the *Koninklijke Nederlandse Bosbouw Vereniging* (KNBV), and the *Nederlandse Bosbouw Tijdschrift* (NBT).

But the sector metaphor '*bosbouw*' now seems to be more associated with the destruction, rather than the construction, of forests. Today, the KNBV is one of the few organizations whose name remind us of the *bosbouw* sector metaphor. The discrediting of the metaphor is shown in the following quotations from forest professionals working for the Ministry of LNV and the provinces.

> "[…] I think that there are not enough people left with any affinity or insight into what was originally meant by *bosbouw*. In the eyes of people from international affairs *bosbouw* is associated with green mining because for them forestry is the activity of illegal logging in tropical countries, so the word has become contaminated […] I see that the word *bosbouw* will disappear, not the profession, but the term (30:167-186)".
> "Everybody coming from school can only think in plans and the actual doing you can only learn in practice, and this practice seems to becoming lost: *bosbouw* has become a craft that is slowly disappearing (31:515-520)".
> "The forest sector only still exists in parts of science, in associations and it is a fiction […] The Netherlands is fundamentally different than Austria, and we only have an internationally focus

on forests, but in the Netherlands it is foolish to think in terms of *bosbouw*, or a *bosbouw* sector (39:53-60)".

The bosbouw sector frame builds on the discredited wood production function

Until the period 1960-1970, the *bosbouw* sector metaphor was used to depict the *bosbouw* sector frame. Until that time, the economic boundary based on the wood production function seemed valid and the membership boundary was clear. This sector frame included the private forest owners, government (through the SBB) and the private nature and landscape conservation organizations. At this time the later group needed the income from wood production to pay for the upkeep of their properties. The clearest definition of the *bosbouw* sector frame was the interaction boundary expressed in the cooperation between all forest owners within the *Bosschap*: established to support forest enterprises occupied with *bosbouw* and/or wood production and to represent the common interests of these enterprises. However, after this period the use of the *bosbouw* sector frame has become discredited.

Section 5.2.4 showed that from the 1970s onwards the meaning boundary based on economic wood production became increasingly less relevant, although some of its members remained loyal to this concept (sections 5.34.-5.3.5) and the *bosbouw* sector frame continued for some time because of the close informal links between the forest owners and forest professionals at the *Bosschap*, the Ministry of L&V, and the KNBV. The desire to continue using the sector metaphor *bosbouw* can be seen in the names of several publications from this group of actors at this time. In 1969, the Ministry of Agriculture and the *Bosschap* established a commission to study the deplorable economic situation of forest owners whose findings were published as the *Nota Bosbouw en Bosbouwbeleid in Nederland* (*Bosschap* 1969). In 1975, the *Bosschap* published another plea over the drastic financial situation of forest owners in their *Noodsituatie in de Bosbouw* (*Bosschap* 1975). In 1977, the Ministry of L&V responded to this, publishing the *Structuurvisie Bos en Bosbouw* (L&V 1977). In 1986, the Ministry of L&V published their first official forest policy document, the *Meerjarenplan Bosbouw* (L&V 1986). Clearly from all these titles, these documents were all still drawing on the *bosbouw* sector metaphor and supporting the *bosbouw* sector frame. But when looking at the content of all these documents, it is evident that they all point to the (financial) difficulties faced by forest owners because wood production was no longer at all profitable.

During the 1990s, when the contexts about property, markets, government and civil society changed further it became even less feasible to support the *bosbouw* sector frame. Forest owners became forest and nature owners; the wood processing industry and the Ministry of EZ lost interest in wood production from domestic forests; the government started to advocate an ecosystem approach and civil society was even further alienated from the

productive aspects of forests. This discredited the *bosbouw* sector frame which was no longer supported by a clear or meaningful meaning boundary, membership boundary or interaction boundary.

Section 5.4.5 shows that a small group of individuals continues to meet within the KNBV and continues to form an informal interaction boundary around the forest sector. However this organization has lost its influential position and is now mostly internally focussed. This internal focus may explain why the KNBV continues to support the *bosbouw* sector metaphor and has yet to change its name or focus. This contrasts with the former foresters' journal, the *Nederlands Bosbouw Tijdschrift* (NBT), which merged with two other professional journals into a new magazine entitled *Vakblad Bos, Natuur en Landschap* (Professional Journal for Forest, Nature and Landscape; VBNL). Despite the KNBV maintaining its name the *bosbouw* sector metaphor is no longer supported by meaningful boundaries and the *bosbouw* sector frame has almost completely lost its meaning.

> "We apply the term *bosbouw* in a modern way. *Bosbouw* not only refers to the exploitation side, but *bosbouw* is the term internally used to express all things related to the ecosystem forest (50:578-584)".

5.5.2 A small and insufficient adjustment to the *bosbeheer* sector frame

The *bosbeheer* sector metaphor

Section 5.2.3 showed that in the 1980s, the term multi-functional forest management was introduced to displace the abandoned one-dimensional focus of an economic meaning boundary based on wood production. The *bosbeheer* sector metaphor sought to build a multi-functional approach to forest management that including a focus on the wood production, nature, and the recreational functions of forests. The *bosbeheer* sector metaphor allowed for the continuation of a focus on wood production within a broader multi-functional perspective. This sector metaphor also allowed private forest owners to manage their forests according to recreational and nature criteria, drawing in financial support from the government. At the same time, under pressure of ecologists from the *Stichting Kritisch Bosbeheer* (Association of Critical Forest Management; SBK), ideas amongst forestry professionals started to shift towards a more ecosystem-oriented form of forest management. The following quotation shows how the *bosbeheer* sector metaphor replaced the *bosbouw* sector metaphor.

> "I don't really think that the Netherlands has a real *bossector* […]. At a certain moment, the *bosbouwsector* started to call itself *bossector*, because *bosbeheer* is much more than wood production, then you get multi-functional forests, recreation was also very important (55:34-39)".

The *bosbeheer* sector frame builds on the multi-functional focus on forests

The multi-functionality of forests, captured in the *bosbeheer* sector metaphor, allowed for a redefinition of the boundaries that had set the *bosbouw* sector frame. Section 5.2.2 showed that the system of governmental subsidies played an important role in leading private forest owners to shift towards a multi-functional approach on forests. Sections 5.2.1, 5.3.3, and 5.4.3 showed that the Dutch paper industry, the Ministries of MEZ and LNV, private forest owners, and the SBB started to cooperate with each other and together emphasized the importance of wood production. However as section 5.3 showed, the membership boundary did not really open up and the wood processing industry continued to remain on the boundary. Moreover, section 5.3.2 showed how the membership of the Ministry of LNV became ambiguous, although they retain some degree of attachment to the *bosbeheer* sector frame as reflected, for example, in their publication of the *Bosbeleidsplan* (LNV 1993).

Nowadays it is difficult to find much support for the *bosbeheer* sector frame. Section 5.3.4 showed that the membership rule based on owning forest property has lost most of its meaning because most owners do not just own forests but also other types of nature areas. Moreover, the large private nature and landscape conservation organizations have mobilized society's growing interest in the environment and no longer need to support the economic meaning boundary to finance their management of forests. Indeed by rejecting this aspect they have attracted further societal support by promoting an image of themselves as protectors of nature and of the Dutch landscape. Section 5.4.5 showed that these private nature and landscape conservation organizations undermined the interaction boundary that was based on a single focus on forests and established their own effective relationships with the Ministry of LNV. The following quotations show how difficult it has become to set and support a *bosbeheer* sector frame.

"I think that the idea of a *bossector* only exists in the mind of some people who are organized and grouped in a very traditional way. It only exists within the KNBV, but in fact it is fiction. In the Netherlands, the only *bossector* organization is the AVIH, which are the contractors who specifically work in the forest. But even they are also busy with other things in nature management […] In the Netherlands it is ridiculous to think in terms of a *bossector* (39:48-60)".

"Several aspects about the *bosbeheer* are portrayed by some people as negative; because they want the *bosbeheer* sector to have a negative image while forests fulfil very important functions. But we have to find a positive point of view instead of continuously raising our voice in complaint (42:308-312)".

"Forests are an issue at the international political agenda, but not on the national agenda. And the people in this *bosbeheersector* […] tell me that they feel very sorry about that (57:123-129)".

"Obviously we have ended up in a situation in which even the *bosbeheerders* themselves […] have become afraid of telling and explaining why they are working with money, cubic meters, turn-over and efficiency issues […]. No matter if you manage forests for the birds, or for the deer […] trees will always produce wood, whether you like it or not. And if you want to manage the forest

for these different reasons, you have to cut trees, and I think you should do this as efficiently and cheaply as possible. And apparently you know have to be ashamed of thinking and saying this (28:250-261)".

5.5.3 The *bos- en natuurbeheer* sector frame permits a focus on forest management

Sector metaphor *bos en natuurbeheer*

The sector metaphor *bos en natuurbeheer* refers to the joint management of forests and nature areas. In English, the phrase translates as forest and nature management. This sector metaphor combines the previous sector metaphor of *bosbeheer* with the growing attention for nature management. The phrase also suggests that forest management is not the same as nature management, or that forests are somewhat more than just another ecosystem of nature. The following quotation shows how the sector metaphor has been used to express the idea that forests are somewhat different to other types of nature because there is a possibility of commercially exploiting forests which does not exist with most other types of nature areas.

> "And there is still a difference between forest and nature. Because forest management is something that involves the long run and continuity, whereas nature management needs another type of protection because than you make a different type of product (26:155-161)".
> "[…] when I started I saw this traditional gap between forest managers and nature managers and that started to change with the MJPB […] the Nature Policy Plan […] the Forest Reserve Programme […] and it changed from a emotional religious attitude towards an atmosphere of discussing and searching for agreement between forest and nature management instead of pointing out the differences (24:697-705)".
> "I think that the *bosbeheersector* most probably will be left with a better name because they are now joined together in the *bos en natuurbeheer* sector (60:719-723)".
> "But *bosbeheer* is more than just *natuurbeheer*. *Bosbeheer* is partly a technique that is a piece of the economy […] although nature policy is more than forest policy; it lacks some elements of a forest policy. And if you merge with a much stronger partner, that is the same as with KLM and Air France, then you are being taken over […] And I think that that is the big problem forestry is facing in the Netherlands (46:381-390)".
> "So, there is now more or less a *bos en natuurbeheersector* in which all different gradations are present […] And again, there is no longer a *bossector*, at most there is something like a *bos- en natuurbeheersector* (55:40-44)".
> "[…] *the bos en natuurbeheer* is associated with a higher ethical goal, and yes, there is no place for economy and money, as if those things don't fit together. I don't think that is true. But the dominant perception is different (28:541-543)".

The *bos en natuurbeheer* sector frame acknowledges conservation and wood production functions

The previous section showed that by introducing the *bosbeheer* sector metaphor, a group of forest owners and forest professionals sought to continue to set a forest sector that was partly defined by its economic meaning boundary. However, section 5.2.3 clearly showed that societal and governmental support for this multi-functionality of forests has substantially diminished. From the 1990s onwards the Ministry of LNV has further strengthened its focus on nature conservation, partly so as to implement international agreements on biodiversity, such as the International Convention on Biodiversity and the Habitats and Birds Directives of the EU. Yet, as section 5.3.4 showed, the Ministry of LNV was not at this time perceived as member of the forest sector. The consequences of this change in the Ministry's position were shown in section 5.4.5, which disrupted the previously close relationships between forest owners, forest professionals and their advocates in the Ministry.

These developments made it increasingly difficult for the actors involved to continue using and making sense of the *bosbeheer* sector frame. But section 5.2.4 showed that there is still a group of individuals that seeks to propagate a meaning boundary around a forest sector as arguing that forests are different from other nature areas because of their wood production function. Sections 5.3.4 and 5.4.5 showed that this group of individuals still constructs a membership and interaction boundary based on their informal network and their meetings within the KNBV. Section 5.3.4 showed that, the *bos- en natuurbeheer* sector frame allowed the *Bosschap* to broaden its membership rule and maintain the interest and membership of the private nature and landscape conservation organizations (that supported nature conservation) and the private owners and the AVIH (that supported the multi-functional meaning of forests).

Section 5.4.5 showed that the interaction patterns that bind this *bos en natuurbeheer* sector frame together have lost some of their ability to perform and influence decision making processes. This is partly because not all policy issues were dealt with within the coalition of the *Bosschap* and partly because there was hardly any societal and political interest in the wood production function of forests. In other words, it is questionable whether the identified boundaries are sufficiently robust to effectively construct and support the *bos en natuurbeheer* sector frame. The sector metaphor *bos en natuurbeheer* was only used by a small group of individuals trying to get recognition for a specific focus on forests as their wood production function, the income this generates for the owners and the way in which this differentiates them from other nature types. However, the focus on site-management remains dominant in which forests are positioned as one of the aspects of site-management. Since forests are the dominant ecosystem in Dutch nature, a specific focus on forests seems legitimate. Hence, it is very questionable whether the fact that more than halve of Dutch

nature consists of forests provides a strong enough argument to continue to set a meaningful *bos en natuurbeheer* sector frame.

5.5.4 The *terreinbeheer* sector frame - a lighter type of sector frame?

Sector metaphor *terreinbeheer*
Aside from the relatively small group that continues to support the *bos en natuurbeheer* sector frame most organizations involved in forest management no longer identify themselves with forests or forest management activities, but more with the role that forests play in the overall landscape. These actors are developing a shared use of the *terreinbeheer* sector metaphor. *Terreinbeheer,* or in English 'site-management' refers to the management activities of all the areas (forest and other nature) owned by organizations and private individuals, (excluding agricultural land). One of the earliest uses of this term was in 1985 when the director of the SBB created a *terreinbeheer* department to bring forest managers and nature conservationists closer together and overcome the mutual distrust that they shared of each other. However the term has only become prominently used as a sector metaphor since 2000 or so. Today the semi-privatized SBB, the NM and the PLs are often referred to as the *terreinbeherende organisaties* (site-managing organizations; TBOs). Since 2003, the *Bosschap* has established an unofficial commission called the *terreinbeheerdersoverleg* (consultation between site-managers) that discusses typical site-management issues at a strategic level. The following quotations show how the term *terreinbeheer* is emerging as a new sector metaphor.

> "I think that the forest sector doesn't exist […] more a *terreinbeheer* sector […] (55:152-154)".
> "So, we call this the sector *terreinbeheer* (51:230)".
> "The national policy is completely integrated. There are still some civil servants that have forests as one of their responsibilities, but then as part of terreinbeheer. A long time ago there used to be an *bosbouw* inspectorate. I have been head of the Bos Sector for some time. But in 1995, we realised that the name was outdated, and so we changed the name to the *Natuurbeleid* Sector (39: 474-481)".

The *terreinbeheer* sector frame builds on an open interpretation of sector boundaries
The *terreinbeheer* sector metaphor is supported by rather 'open' boundaries. Section 5.2.4 showed that the meaning boundary has become dominated by the conservation function, but also allows for other management functions, including wood production, to be included. There the dominant perception of the meaning boundary no longer specifically distinguishes a forest sector but shows that the two approaches have become integrated, with forests becoming a specific natural ecosystem within the broader conservation framework. Section 5.3.4 showed that the membership boundary that sets a specific forest sector lost its meaning as with the erosion of the previously clear membership rules of

forest ownership and forest professionals. Today a wider range of actors are involved with the issues surrounding the terreinbeheer. Section 5.4.5 showed that, as a result, the interaction boundary is now more defined by structural, long-lasting relationships within shared institutionalized platforms, with ad-hoc issues being dealt with in especially established coalitions. So, in sharp contrast to the *bosbouw* sector frame, the *terreinbeheer* sector frame has a lower profile and less defined membership rules that provides a structure for solving common problems, while allowing individual actors to pursue their own goals.

In consequence of this several respondents questioned whether it is still possible to distinguish a clear forest sector in the Netherlands. They do so for two reasons: first because of the large number of actors involved pursuing different ideas and interests, and second because the issue of forests is no longer a sectoral issue, but has become an element in broader discussions.

> "… I don't think you can speak of a sector, but I think there are some larger clubs that take the lead and that do feel loyalty towards the others because the interests of nature spreads to all sites. But actually they don't have the legitimacy to talk on behalf of the sector (24:582-587)".
>
> "It depends how you want to see such a sector, but what you see happening is that besides the owners and the direct economic partners, there are more and more groups who are involved in one way or the other (55:137-140)".
>
> "If you want to glue the sector in terms of organizations, well, then there is no sector (59:313-319)".
>
> "[…] you can look at a sector as having an economic interest, but I see it as organizations having some kind of relation to forests, and so all the organizations are inside the sector in that way (49:245-248)".
>
> "You see that with the Ministry of LNV, *Bosschap* and the PLs it is more and more ridiculous to only discuss forests and that you have to talk about nature, which forests are a part of. It is quite obvious that the other organizations in the sector think differently about this and still have forests as their central focus (37:170-173)".
>
> "I think that the forestry sector is more than just forests, more than just wood production […] the difference between forest and nature sector is disappearing […] and it is about time to forget about the difference between forest and nature (39:128-136)".
>
> "Forest is no longer a sector, but forests are something that is being managed by *terreinbeheerders*. And this means they have to serve different societal interests, such as wood, nature, recreation […] There are thus many sectors that use forest for their purposes, and the *terreinbeheer* combines and organizes the coordination. You could say that in the Netherlands a whole new sector is growing, namely a *terreinbeheer* sector, in one way or the other (51:61-71)".

As a result, the *terreinbeheer* sector frame does not conform with a sector construct in the traditional sense, but seems to be more of a low-profile sector frame that provides some structure for addressing common problems, while allowing actors to pursue their individual goals. For example, private nature conservation organizations want to actively market their

brand, as this is crucial for their financial situation and societal support. At the same time, private forest and estate owners have specific interests in respect of tax and inheritance laws. A small hard-core group of individuals continues to seek recognition for the economic wood production of forests but this is no longer the focus of the sector frame an issue that is played out in site-management. While forests are the largest type of ecosystem within Dutch nature, it seems logical that there is a specific focus on forests, although not couched in terms of a specific forest sector.

5.6 Conclusions

The aim of this chapter has been to illuminate how actors inside and outside the field of forest policy have set and reset the forest sector boundaries in the Dutch process of forest sectorization. This case study has shown that despite the continued attempts of a small group of individuals, it has become highly problematic to depict boundaries that can be used construct a Dutch forest sector. Table 5.2 presents a summary of the sector boundary and sector frames found in the Dutch case.

Table 5.2 Summary of sector boundaries and sector frames in the Netherlands

Sector frames	*bosbouw* sector frame	*bosbeheer* sector frame	*bos en natuurbeheer* sector frame	*terreinbeheer* sector frame
Meaning boundaries	Economic meaning – focus on mono-functional wood production.	Multi-functional meaning, legitimized by national forest policy.	Multi-functional meaning, *geintegreerd bosbeheer* used in practical forest management.	Conservation meaning – forests as ecosystems. Focus increasingly on the level of the landscape.
Membership boundaries	Private forest owners, forest professionals and foresters working with the SBB. Membership mainly based on a shared idea of the importance of commercial exploitation of forests.	Private forest owners, SBB, the wood processing industry, the Ministries of EZ and LNV. Membership based on involvement along the wood chain.	A shrinking group of individuals Membership based on the conviction that 'forests are more than just nature' because of their production function.	Large site-management organizations and a changing group of different actors from state, market, and civil society. Membership is not fixed but flexible and depends on the issue or problem at hand.

Sector frames	*bosbouw* sector frame	*bosbeheer* sector frame	*bos en natuurbeheer* sector frame	*terreinbeheer* sector frame
Inter-action bounda-ries	Informal closed trust relationships, facilitated by the KNBV, later supported by corporatist relationship in the NVBE and the Bosschap.	Institutionalized interactions in the SBH and OHH, the Bosschap became paralyzed because of conflicting interests between different types of owners.	Informal interactions within traditional institutions such as the OHH and the KNBV between an 'old boys' network' of forest professionals.	Professional interactions amongst a large group of actors in flexible and temporary coalitions, supported by interaction in fixed platforms.
Sector metaphors	*bosbouw* (forestry)	*bosbeheer* (forest management)	*bos en natuurbeheer* (forest and nature management)	*terreinbeheer* (site-management)

This chapter showed that the conservation meaning of forests has become dominant in the Netherlands and that this is strongly supported by both the large *terreinbeheerders* and the government. The influence of private owners has declined enormously in favour of private nature and landscape conservation organizations and the SBB which have become large *terreinbeheerders*. These groups own other properties too and less than half of their property is forest, which has led to a shift in the forest ownership membership criteria to one that encompasses forest and nature properties. And while the private owners are poorly organized, the large *terreinbeheerders* are both well organized and have the great advantage of being deeply socially embedded. This means that most private nature and landscape organizations no longer support the economic function of forests, based on timber production, as the predominantly urban Dutch society no longer feels comfortable with the wood in 'their' forests being cut down. However, at the practical level of forest management, the application of the *geïntegreerd bosbeheer* approach allows private forest owners to continue to commercially exploit their forests.

A small group of individuals, supported by the wood processing industry, continues to attempt to reset the meaning boundary of the forest sector under the *bos en natuurbeheer* sector frame which favours a multi-functional meaning of forests. This group, restricted largely to the KNBV and the PHN continues to advocate the importance of wood production for some forest owners, forest contractors and the wood processing industry. But in recent decades these organizations and individuals have lost most of their influence: the informal network of foresters has lost most of its advocates as foresters no longer hold influential positions within the Ministry of LNV. Moreover, there is no longer a separate

forest authority, based on an independent forest policy. Instead a whole range of different actors has become responsible for nature and landscape conservation, in which forests play a role but are no longer the main focus. In addition forest professionals are becoming a dying breed, as no new foresters are being educated. Thus there are few clear membership criteria on which a forest sector can be unambiguously constructed.

This has left a vacuum which has largely been filled by the *terreinbeheer* sector frame. However this sector frame lacks a stable and common identity. Cooperation occurs in smaller ad hoc and structural groups, whose identity and membership can fluctuate. Most of the actors in this group also wish to maintain their individual identities as separate actors. In this sense the *terreinbeheer* sector frame does not provide a clear forest sector frame in the traditional sense. More structural, long-lasting problems are discussed within the frame of a stable cooperative organization, the Bosschap, while the individual actors also cooperate with the traditional actors as the outsiders in ad-hoc coalitions especially established to address certain issues. The Bosschap is still perceived as meaningful because it has adjusted its membership boundary and their role to these new circumstances. But it remains difficult to find the societal, economic and political legitimization for continuing to promote the *bosbouw* and *bosbeheer* sector frames. Almost all forest owners are greatly financially dependent on support from the government and civil society and the private sector owners are almost exclusively focused on nature conservation and recreation. Thinking about forest as a sector is now associated with a traditional and out-moded approach and has been largely replaced by integral-thinking, which is also reflected in the lower profile and more flexible *terreinbeheer* sector frame.

6   Discussing forest sectorization processes

"In the Netherlands your forestry has, I wouldn't say anything at all, but nearly no economic approach; it is more or less a park in a very densely populated country. In Austria, about half of the total area is forest and our forestry is economically oriented and we have a very large wood processing industry and our population in some valleys is as dense as in the Netherlands. But still, a lot of Dutch people come to Austria to walk in the forest and admire things that would be forbidden in the Netherlands (21:7-15)".

The case studies in chapters 4 and 5 present an analysis of developments in forest sectorization processes in Austria and the Netherlands. Both chapters closed with some conclusions on sectorization processes in each country. This chapter reflects on the meaning of these findings so as to draw out a more general understanding of these sectorization processes and on (the call for) inter-sectoral coordination. Section 6.1 characterizes these sectorization processes by comparing both case studies and summarizing the differences and similarities in Austria and the Netherlands, using the three sector boundaries as the guide for analysis. Section 6.2 presents the differences and similarities in the use of sector metaphors and frame alignment processes at the integral level of sector frames in order to further explain dynamics in sectorization processes. Section 6.3 deals with the hypotheses formulated in chapter 1, drawing on the discussions in sections 6.1 and 6.2 and discusses the prospects and uniqueness of the call for inter-sectoral coordination in forest policy.

6.1 Characterization of forest sectorization processes

In chapter two, sectors were conceptualized as following sectorization processes, in which socially constructed temporary sector frames come to the fore or move to the back in a continuous process of re-framing. A 'sector' then becomes a snapshot at a fixed point in time. A certain sector comes to the fore at a certain time and in a certain place when a difference, a boundary, can be created between a meaning system that meets the needs of the actors that make up the sector. Empirically, these sectorization processes have been studied by applying a framing perspective. Table 6.1 shows the perceptions on the forest sector boundaries found in the Austrian and Dutch case studies. Based on this overview, this section compares the cases and summarizes the differences and similarities in the Austrian and the Dutch forest sectorization processes.

Table 6.1 Summary of the interpretations of the boundaries of the 'forest sector' in Austria and the Netherlands

Austria	**The Netherlands**
Meaning boundaries	
Mono-functional forests: strong focus on commercial forestry	Very limited economic and social support for wood production
Multi-functional forests: but with most emphasis on wood production	Increasing societal and political support for the nature- and landscape conservation function of forests
Optimizing the domestic wood chain: the most promising way forward	Forests now only defined in terms of site management practices
Membership boundaries	
Core members: the forest family – an exclusive group	Core members: focus on forest and nature
Non members: gaining influence but still outsiders	Non members: a diffuse group of old members, traditional and new partners
Members on the boundary: the wood processing industry comes closer	Members on the boundary: the wood processing industry moves out
Interaction boundaries	
Interactions between core-members: a closed forest family	Informal interactions among foresters: "friends that have lost most of their influence"
Interactions with non-members: intensified but limited in scope	The decline in formal interactions among foresters
Intensified and professionalized interactions along the wood chain	Less intense interactions along wood chain
	Increasingly flexible interactions with non-members

6.1.1 Meaning boundaries: co-existence of multiple meanings

One characteristic of both countries is the co-existence of multiple meanings around 'forests'. Table 6.1 shows that both in Austria and in the Netherlands, there were three different meanings attached to forests, which co-existed alongside each other. At different times, one or another of these meanings became more dominant, at the expense of the others. In both countries, the economic meaning of forests, based on a narrow focus solely on the wood production function has more or less disappeared and in the Netherlands this meaning has lost most of its economic and societal support. In Austria a continued focus on the economic meaning has led to the forest sector becoming more inclusive and involving the wood processing industry along the wood chain. At the same time, this new economic meaning has also had to take into account societal opinions about forestry, access, recreation and sustainable forest management.

In both countries at least one of the meaning boundaries is built around the notion of multi-functionality. In Austria, this interpretation came to the fore through the growing call for recreation possibilities and the international call for conservation and sustainable forest management. When subsidies for forest management also started to cover other aspects besides wood production the core members of the forest sector also started to support this multi-functional meaning. Before these subsidies were available, these core actors obstructed all attempts to establish an Austrian forest policy based around a multi-functional meaning of forests, as they were afraid this would imply them losing part of their sovereignty. In the Netherlands too there has been a multi-functional meaning of forests, although it has become difficult to build support for this multi-functional meaning (or for a separate focus on forests at all). This is largely because wood production plays a very limited role in Dutch forests and because conservation has come to be the dominant discourse guiding forest (and nature) management. At the practical level, private forest owners and the SBB still manage their forests, to some extent, with an eye to wood production, but within a context of multi-functional management, following the forest management measurements set out in the *geïntegreerd bosbeheer* approach to forest management. In Austria, conservation does not play such an important role in defining forests or how they should be managed.

These multiple meanings attached to forests complicate any attempt to construct a meaning boundary of the forest sector that effectively captures the meaning of forests within a specific spatial and temporal context. Such an attempt is further complicated as the same actors sometimes make use of different meanings of the forest sector at the same time. Thus, in conclusion, it is problematic to define a forest sector through a single and clearly defined meaning boundary. Instead, there are multiple and co-existing meanings, which are used in different situations and contexts.

6.1.2 Membership boundaries: the involvement of a growing number of actors

Table 6.1 shows that in both countries it has become increasingly problematic to set a membership boundary with core members as a growing number of other actors have become involved in the forest sectorization processes. Involvement in the forest sectorization process is no longer limited solely to forest owners and forest professionals: the previous well defined membership rules of forest ownership and forest professionalism have faded away and the membership boundaries have become less clearly defined. As a result, in both countries, non-forest owners and non-forest professionals have now also become involved in constructing the membership boundaries of the forest sector. However, there are differences between the two countries as to whether these new actors are seen as true members of the forest sector or not.

In the case of Austria, despite the broader involvement of other actors in the forest sectorization process, the membership boundary set by the core actors has remained rather clear and closed. In Austria, all civil society organizations had the opportunity to participate and construct the *Wald* sector frame within the *Wald* Dialogue, although, these organizations were not perceived as members of the forest sector. Most respondents recognized that, despite the open and transparent nature of the *Wald* Dialogue, it was the traditional core-members of the forest sector who exerted the most influence over decision making processes. In Austria one group of actors, the wood processing industry, has been welcomed within the otherwise closed membership boundary. This is largely because both parties have a shared interest in protecting the closed membership boundaries from the influence of the NGOs on the edge of the forest sector. In the Dutch case, a wide range of different actors, including owners, governmental organizations and NGOs are involved in one way or another in the different issues relating to *terreinbeheer*. While the membership rules in the Dutch forest sector have become more flexible, there is still a slight difference between owners and non-owners: this is less based on owning forest property *per se* but more on being a *terreinbeheerder* (site-manager) or not.

Both case studies showed that forest sectorization processes have moved away from a clear and well-defined membership of forest actors based on forest owners and forest professionals and are now characterized by the involvement of a growing number of actors, including governmental and non-governmental actors with different interests in forests. Membership of the forest sector has become more ambiguous and the rules for membership less clearly defined and more flexible. The extent to which this has occurred varies between the two countries. In the Netherlands many new actors have entered the membership boundary and become accepted as members of the forest sector, making that defining a forest sector based on clear membership has become problematic. Whereas in Austria these

new actors have (with the exception of the wood processing industry) not yet been able to penetrate the membership boundary set by core members.

6.1.3 Interaction boundaries: interactions along multiple coalitions

One characteristic of both forest sectorization processes is that interaction patterns increasingly involve multiple coalitions rather than just one or a few dominant and fixed coalitions. The interpretations of the interaction boundaries in table 6.1 show that interaction boundaries based on informal and formal interactions between core forest actors continue to exist. However, these interaction boundaries have lost some of their ability to perform and influence and have been complemented with interaction boundaries, based on temporary coalitions that involve members and non-members.

In Austria, the formal corporatist coalition of core-members has lost some of its powers but remains the most powerful coalition. In the Netherlands, the power of the formal coalition of all forest owners, the *Bosschap*, has also declined and the informal coalition of foresters has lost almost all its influence over decision making processes. Instead, multiple coalitions between core members and outsiders have come to dominate the Dutch interaction boundary. However, the *Bosschap* still plays a role in influencing forest and nature policy, because it has adapted its scope to 'forest and nature' and has explicitly changed from an interest representation organization to a platform. In this way the *Bosschap* still has the ability to influence policy making processes that relate to forest and nature owners.

The emergence of these multiple coalitions within the forest sectorization process seems to be supported by relationships that are increasingly built on professional trust rather than a kind of automatic trust between like-minded forest professionals and forest owners. Table 6.1 shows that in both cases close trust relationships existed between professionals working with the forest authority and forest owners and their representatives. But the results also show that more professional relationships are emerging, particularly in terms of interactions involving the newer actors. Most of these new actors don't have the same background, heritage or education as the traditional members of the 'forest family'. As a result the patterns of interaction can no longer rely on familiarity but involve an active process of building trust (especially between the traditional and new participants). However, the results clearly show that in the Austrian case there are differences in the level of trust in the professional relationships with different groups of new actors. By contrast in the Dutch case professional trust plays an important role amongst a large group of actors operating in 'light' ad-hoc coalitions that can easily be dissolved. These 'light' coalitions allow the involved actors to maintain their own public identity, which is important for them as many

are highly dependent on financial support from the public and this in turn gives them an edge in negotiations.

6.2 Sectorization as a frame alignment processes

Section 6.1 characterized and compared sectorization processes along the three boundaries of the sector frames and showed that forest sectorization processes are fluid. The focus in this section is finding explanations for why sector frames become aligned throughout time and why different actors make use of different perceptions of the forest sector. The framing perspective suggests that a patchwork of different forest sector frames co-exist as different perceptions of the forest sector frame will be held by different actors in different spatial and temporal contexts. Framing has been defined as 'a way of selecting, organizing, interpreting, and making sense of complex reality to provide guideposts for knowing, analyzing, persuading, and acting' (Rein and Schön 1993:146). The use of frames is typically a matter of circumstance, context and constraints. Chapter 2 identified four processes through which frames can be aligned: frame amplification, frame extension, frame bridging, and frame transformation or reframing. Table 6.2 shows the different sector frames found in the two case studies. An analysis of how and why different frames were used next to each other or have been aligned or reframed in each country is used to increase our understanding of sectorization processes. The following sub-sections reflect the reasons why the involved actors align sector frames in sectorization processes.

Table 6.2 Summary of the interpretations of the sector frames in Austria and the Netherlands

Austria	The Netherlands
Sector frames	
The establishment of a strong *Forst* sector frame	The *bosbouw* sector frame: a negative connotation
The *Forst* sector frame challenged	A small and insufficient adjustment to the *bosbeheer* sector frame
Towards a *Forst-Holz* sector frame?	The *bos- en natuurbeheer* sector frame permits a focus on forest management
Towards a *Wald* sector frame?	The *terreinbeheer* sector frame – a lighter type of sector frame?

6.2.1 Continuation of current practices

Table 6.2 shows that in both cases new sector frames have been introduced, with other forest functions such as nature conservation, environmental, and recreation being added to the traditional wood production function. Furthermore, in the course of time, the perceptions about membership and interaction patterns have changed and become more inclusive. This more inclusive character of the forest sector is also reflected in the new sector frames that have been introduced: with exclusive sector frames such as *Forst* and *bosbouw* being displaced (or at least challenged by) the more inclusive sector frames *of Wald* and *terreinbeheer*.

In both cases the same actors made use of different sector frames in different places and, in so doing, were expressing and framing the forest sector in different ways. The new sector frames have not completely displaced the existing ones and different sector frames continue to be used. For example in Austria, the Forest Authority within the BMLFUW was involved in both the *Wald* Dialogue and the *Forst-Holz* Platform, showing that it simultaneously was using two different (and somewhat contradictory) sector frames. In the Dutch case, actors within the loose *terreinbeheer* sector frame participated in different (temporary) coalitions with different actors from both inside and outside this, loosely defined, group. In addition other actors, such as the private nature and landscape organizations, also operated individually. This raises the question of whether these actors truly support both frames, or whether they are merely continuing with existing practices within a realigned or new sector frame.

The Austrian case report suggested that the *Wald* sector frame was partly being used by supporters of the *Forst* sector frame in order to continue their practices and maintain the dominant economic and productive function of Austrian forests while symbolically supporting societal demands for a more multi-functional approach to forests. The core members of the *Forst* sector frame continue to enjoy 'insider status' through their position in the Social Partnership and within the *Forst Gipfel*. This gave them an advantage over the newly involved actors in the two other sector frames that they were not willing to give up.

In the Dutch case, the *bosbouw* sector frame was primarily focused on wood production, although this was not an absolutely one-dimensional perspective and also allowed forest owners to adapt a more conservation oriented perspective to forests. Despite this extended and more flexible interpretation of the *bosbouw* sector frame it has become problematic to even use the word 'forest' in a Dutch sector frame. Only a small group of individuals now continue to use the *bos en natuurbeheer* sector frame, because this allows the continuation of a multi-functional focus on forests at the management level. But at the policy level there is very little specific focus on forests anymore and it has been almost completely displaced

by the *terreinbeheer* sector frame, which allows a large group of actors to be involved in managing the Dutch landscape. This sector frame also allows other more or less temporary 'sector' frames to emerge over certain activities or issues of one of the actors or of an *ad-hoc* group of actors.

Thus, the first reason why actors may be willing to adapt their sector frame is that this allows them to continue with existing practices in a situation in which the old sector frame is no longer socially, politically or economically accepted. As such this represents more a shift in rhetoric than in practice.

6.2.2 Mobilizing (new) resources

In both cases, the traditional productive sector frames were challenged by changes in the domestic wood market, international market competition and decreasing wood prices. In the Netherlands, the *bosbouw* sector frame came under challenge when significant parts of the internal wood market disappeared, international wood prices were low and labour prices started to rise. This changing economic context forced forest owners into a phase of frame reflection that resulted in a division, with the private nature and landscape conservation organizations abandoning their perception of a forest sector based on economic productivity. However most (large) private owners and the SBB aligned themselves with the wood processing industry and sought to expand the *bosbouw* sector frame to a *bosbeheer* sector frame. This multi-functional approach towards forests allowed a continuation of the traditional commercial focus to be combined with governmental subsidies for recreation and nature conservation. But when the wood processing industry lost interest in Dutch forests, and wood prices dropped even more, the *bosbeheer* sector frame became problematic. Meanwhile SBB had been semi-privatized and started to move towards the *terreinbeheer* sector frame. At the same time the remaining group of private forest owners and forest professionals started to move towards the *bos en natuurbeheer* sector frame in order to maintain some adherence to wood production. However, most of these private forest owners are also heavily dependent on governmental subsidies. While the site-managing organizations obtain part of their income from society, private owners do have to find other ways to generate an income to cover the costs of maintaining their property.

In Austria low wood prices also forced private forest owners to reflect on the *Forst* sector frame. However, it was not until the beginning of the 1990s, when under growing pressure from international market competition and the internationalization of the wood market that the supporters of the *Forst* sector frame started to seriously reflect on their position. Until then the *Forst* sector frame suited the interests of large forest owners and the Forest Authority who were able to generate sufficient income from their large forest properties. It

is only since the 1990s, that the forest owners and the wood processing industry found a common aim in optimizing the domestic wood chain and creating a joint *Forst-Holz* sector frame.

Thus, a second reason emerges for actors adapting their sector frame: the need to mobilize new resources. This follows Triandafyllidou and Fotiou (1998) whose research on EU policy-making also found that actors shift their frames in response to resource availability. Thus it is not a surprise that developments on the international wood market influence perceptions about the forest sector: higher wood prices would mean more resources for the forest owners who see wood production as a key element in the forest sector and this will reinforce their perception of continuing an independent forest sector based on the commercial exploitation of forests. On the other hand, lower wood prices will have the opposite effect, forcing forest owners to find other sources of income and thus to explore other sector frames
.

6.2.3 Continued social acceptance

Besides innate conservatism and resource dependency a third factor has also been at play in challenging the existing sector frames: societal changes and the growing need to legitimate forest activities and thereby gain social support. The Dutch case showed that societal legitimization has always been important for private nature and landscape conservation organizations. But even since the 1950s, private forest owners in the Netherlands have also been dependent upon societal support, expressed in the subsidies they receive from the government for forest management. Initially, these subsidies supported continuation of the *bosbouw* sector frame, as they sought to stimulate wood production in the forests. But soon, the government was only willing to provide additional subsidies that were in line with the growing societal demand for recreation and conservation. The political anchoring of the slightly adjusted *bosbeheer* sector frame within the forest policy plan of the MJPB allowed for additional governmental subsidies for private forest owners. But when nature conservation became the main governmental focus during the 1990s, the *bosbeheer* sector frame was forced to realign itself and evolve and into the *bos en natuurbeheer* sector frame. However, those supporting this sector frame have encountered many difficulties in enlisting the societal and political support to continue with a sector frame that includes a focus on forests. Most actors today support the rather loose *terreinbeheer* sector frame that allows site-managers to receive subsidies from the government and individual actors to develop an independent relationship with society.

In the case of Austria, the forest owners were rather reluctant to bow towards societal influence as they value their sovereignty. The *Forst* sector frame limited government control over forest owners. But since the 1975 Forest Law, forest owners have had the opportunity to receive subsidies in exchange for public access to their forests. This implied an extension of the *Forst* sector frame into the *Wald* sector frame, which incorporated a multi-functional meaning to forests. At the same time the competing the *Forst-Holz* sector frame also required societal legitimacy, especially as the main wood importing countries demand certification to prove the sustainability of wood products. At the same time in Austria itself, discussions on conservation have had limited effects and most E-NGOs are withdrawing from the national debate over forest policy for this reason.

Thus, social acceptance provides a third explanation for the (re)alignment of sector frames in sectorization processes. Dwindling social legitimacy forced Dutch forest actors to significantly change their ways of framing the societal and policy situation (see also Schön and Rein 1994:187) and consequently to adapt much broader and lighter sector frames, resulting in the disappearance of a narrow forest sector frame. In Austria similar social pressures have challenged the sector frame supported by most forest owners but, to date, the forest owners and their new colleagues have managed to maintain sufficient societal support for forestry activities that focus upon wood production and have deflected the challenges from outsiders to adopt a more broadly-based forest sector frame.

6.3 Expectations towards inter-sectoral coordination practices

In chapter 1 five hypotheses were presented that are widely used within the forest policy community to explain the added value of a specific focus on inter-sectoral coordination in forest policy. The following sub-sections explore these hypotheses by making use of the empirically analyzed perceptions of the forest sector in Austria and the Netherlands.

Hypothesis 1: The main pillars of the forest sector are being eroded
The first hypothesis was based on the assumption that the forest sector is confronted with a growing number of developments that together erode the four main pillars on which the forest sector is built, the so-called forestry doctrines. The following paragraphs discuss these four pillars in relation to the different perceptions towards the forest sector found in the two case studies.

The first pillar of the forest sector is that timber is the chief product of forests. Section 6.1.1 showed that in both countries new meanings have entered and influence the forest sector and most actors no longer perceive timber as the only forest product. In the Dutch

case, only the actors supporting the *bos en natuurbeheer* sector frame have an explicit interest in wood production and conservation thinking prevails in the larger and more influential *terreinbeheer* sector frame. In Austria, a focus on the primacy of timber extraction remains amongst a group of large forest owners, one of the main actors within the *Forst-Holz* sector frame which has have developed different ways, such as public campaigns, to legitimate their continued focus on wood production. While Austria also has a group of forest owners with different ideas about forests and their commercial exploitation, this group remains smaller and less influential than the *Forst* and *Forst-Holz* sector frames.

With respect to the second pillar, that sustainability means cutting less than the yearly growth, differences could be found within and between the cases, depending on perceptions about the boundaries of the forest sector. In the Dutch case, supporters of the *terrreinbeheer* sector frame have an ecosystem approach towards forest management in which ecological processes form the starting point of forest management. Wood has become a by-product and thinning is seen as a means and no longer as a goal. Supporters of the *bos en natuurbeheer* sector frame advocate integrated forest management and this can be seen as practical translation of a modern interpretation of sustainability that seeks to integrate the economic, social, and ecological aspects of forests. In Austria, within the *Wald* sector frame the meaning of sustainability was officially altered in the 2002 Forest Law and now refers to the forest ecosystem and the importance of forests for people, animals and plants. However, as chapter 4 showed the *Wald* sector frame is not the dominant perception towards the forest sector. The delicate relationship between forest owners and the (withdrawing) forest authority make it unclear what the effect of this official reference to sustainability is, or will have, on actual forest management practices.

With respect to the third pillar, that society must adapt and be patient as forestry is a matter of the long run; both cases show that society has become increasingly involved in forest matters. In Austria, the *Wald* sector frame allows for the involvement of societal partners in discussions about forest policy, although, the forest owners themselves still get the final say about their forests. An exception to this was the success of the recreation lobby in forcing forest owners to open up forest roads for public use. In the Dutch case, the separate focus on long term forest management in the *bosbouw* and *bosbeheer* sector frames and the shorter term focus on nature management by nature and landscape conservation organizations have been integrated within a shared *terreinbeheer* sector frame. Only the supporters of the *bos en natuurbeheer* sector frame seek to maintain a separate focus on forests, and cite the different growth rate between trees and (for example) heather or grass as one of the reasons for this. However, a recent study by Hoogstra and Schanz (2008) questions the doctrine of forestry as a long term matter: their study among Dutch foresters

suggests that their time perspectives are not substantially different from other social groups. No equivalent research has been conducted in Austria.

With respect to the fourth pillar, that forest professionals should decide on forest matters, both case studies showed that the forest professionals are no longer solely responsible for making decisions on forest matters and have to rely more and more on relationships of professional trust with non-forest professionals. In Austria, the boundaries of the *Forst-Holz* sector frame have been opened up to professional input from the wood processing industry, especially for marketing and logistical issues. In the Dutch case, a large group of different actors has become involved in different matters that relate to forest policy in the *terreinbeheer* sector frame.

This expanding involvement of other actors has consequences for the scope, position and role of forest professionals. First, in both cases, forest professionals have broadened their scope: in both countries the forest training has been broadened and now also focus on other societal and environmental issues. Second, in both cases the number of positions available for forest professional is declining. As a consequence, forest professionals no longer automatically go to work with typical forest organizations. In Austrian for example some trained foresters work with E-NGOs. Third, the role of the forest professionals is changing as they can no longer decide on forest matters by themselves but have to deal with other types of professionals, such as communication experts, the managers of subsidy schemes, and in the case of larger organizations, with organizational management systems.

Hypothesis 2: The main problems in forest policy lay outside the forest sector
The second hypothesis was based on the conviction that the main causes for the current problems in the forest sector lie outside the forest sector. The call for inter-sectoral coordination is based at least on the assumption that such complex inter-sectoral problems can no longer be solved by the forest sector alone. This study suggests that this hypothesis will only really be held by actors who perceive the forest sector as a separate and closed entity.

The Austrian case clearly showed that the actors who perceive the forest sector as a rather closed entity with a primary focus on wood production perceive developments such as the implementation of the Habitats and Birds Directives as problems coming from outside the forest sector. However those who perceive the forest sector as a lighter and more flexible constellation, (such those aligned to the *terrreinbeheer* sector frame in the Netherlands) the differentiation between what is outside and inside the sector is different, as the boundaries are less fixed and obvious.

Hypothesis 3: Forests have a multi-functional character, automatically implying involving other sectors

The third hypothesis was based on the acknowledgment of the multi-functional character of forests and the assumption that forest policy makers therefore need to coordinate their forest policy and practices with the other sectors involved in managing different forest functions. Table 6.1 and section 6.1.1 show that in both countries perceptions on the forest sector are moving towards a multi-functional meaning boundary, and as sections 6.1.2 and 6.1.3 show the acknowledgement of the multi-functional character of forests also has consequences for perceptions about membership and interaction boundaries. However, the two case studies marked a difference of involvement with other sectors, which was related to perceptions about the forest sector.

In Austria, the *Wald* sector frame builds on a multi-functional meaning of forests and allows for interaction with a broad range of actors, but these 'others' have hardly any influence over decision making which is still dominated by the *Forst* sector frame. Over 85% of forests are owned by private forest owners and they continue to protect their sovereignty as they are reluctant to allow social or governmental involvement to affect their user rights. Chapter 4 showed that the acknowledgment of the multi-functional character of forests within the *Wald* sector frame was primarily symbolic and largely a method of ensuring additional financial subsidies. The *Forst* sector frame remains dominant and 'coordination' with other sectors is primarily concerned with limiting the influence of these sectors. Only when financial compensation for acknowledging other functions became available, did the forest actors aligned to the *Forst* sector frame express interest in coordination with these other sectors.

In the Dutch case, a specifically multi-functional focus on forests is only advocated within the *bos en natuurbeheer* sector frame, while the *terreinbeheer* sector frame, which involves actors involved in site-management, no longer gives forests a special or privileged position. A key issue here seems to be that the property balance has tipped from predominantly private ownership to predominantly ownership by large private nature and landscape conservation organizations and the SBB which depend on governmental subsidies and public donations and membership fees to manage their properties. This financial dependency means that a far broader range of interests are taken into account. Sovereignty is an issue among private Dutch forest owners who want to maintain their family estates, but this also largely depends on subsidies and a favourable tax and inheritance system. Consequently, coordination with the nature conservation and recreation sectors is hardly an issue in the Netherlands, as most forest owners have already integrated these functions in their management programmes.

Several of the perceptions about the forest sector found in this study do acknowledge the multi-functional character of forests and this has created new openings for the core members of the forest sector to establish joint meanings with other sectors and to develop new relationships. However, the study shows that, especially in Austria, the core members of the forest sector have been rather reserved towards these new actors and have tried to keep the boundary as closed as possible. A key factor in the differences between the two cases seems to lie in the difference in the pattern of forest ownership and the opportunities that types of different owner have for generating an income from their property (see also Schlüter 2007).

Hypothesis 4: Forest policy making increasingly occurs outside of typical forest policy structures
The fourth hypothesis claims that forest policy making increasingly occurs outside typical forest institutions and that this explains the call for inter-sectoral coordination in forest policy.

In the Dutch case, supporters of the *bos en natuurbeheer* sector frame did experience policy making as increasingly occurring outside the typical forest policy structures. Moreover, they regret that a clear forest authority can no longer be identified as in their perception; the forest authority is no longer distinguishable from the nature conservation authority. Even more, they no longer saw the Ministry of LNV as clearly being a member of the Dutch forest sectorization process, but more as a partner within the *terreinbeheer* sector frame. Thus the Ministry has moved closer to the conservation position that resonates with most actors within the *terreinbeheer* sector frame (who also have their own relationships with the Ministry), while the traditional forest actors have lost their direct links with their advocates within government.

In Austria the forest authority has remained far more clearly visible and independent, although its role is evolving. It has moved from a primarily regulatory role (within the *Forst* sector frame) to a more facilitating one (within both the *Wald* and *Forst-Holz* sector frames). Furthermore, within the *Wald* sector frame, the closed relationships between the Forest Authority and the forest owners are complemented by other formal consultations, and a more powerful position of parliament. The core members of the *Forst* sector frame strongly disapprove of this development and together with their new partners in the sector frame, are trying to prevent new policy structures such as the *Wald* Dialogue and the nature conservation authority from gaining too much influence over forest policy.

Forest policy in both countries has a corporatist history, as reflected within the *Forst* and the *bosbouw* sector frames, but the two forest sectors have developed in different ways that

allow for more inclusive and interactive ways of policy making that include a broader range of interests.

Hypothesis 5: The perceived need to maintain an independent forest sector

The fifth hypothesis claims that forest actors have introduced the term inter-sectoral coordination as a way to maintain an independent forest sector that can address inter-sectoral problems by coordinating with other sectors.

In both countries, a certain group of actors can be found that continues to propagate and seek to legitimize a narrow and specific perception of the forest sector. In Austria, the 'forest family' that framed the *Forst* sector frame was, for a long time, able to keep the sectorization process closed and independent. In this respect they were strongly supported by organizations and institutions centrally located within the Austrian political system. The *Forst* sector frame also builds on forestry being part of Austrian culture and this has been used to stabilize positive societal perceptions towards the forest sector. The main reason for the core members in the *Forst* sector frame also participating in the *Wald* sector frame is to guarantee that Austria will continue to have an independent forest sector that represents their interests.

In the Netherlands, immediately after WWII, the actors involved in the forest sectorization process had the chance to institutionalize the existing informal forest tradition within the *bosbouw* sector frame. However, within a few decades this sector frame had lost its allure, although a small group of individuals continued to try to legitimate a *bos en natuurbeheer* sector frame that explicitly refers to 'forest' and 'nature' through the use of the traditional structures, such as the Forest Law, the KNBV, and the *Bosschap*. However, this doesn't mean that 'forest' or 'wood production' are no longer an issue in the Dutch context, merely that wood production was no longer perceived to be an issue strong enough to continue to construct a forest sector based on a single focus on forests.

Thus, expectations about inter-sectoral coordination in forest policy and to whether inter-sectoral coordination is something special very much depends on the perception actors have on the forest sector. First, when actors no longer perceive a forest sector, these actors most probably will have hardly or no expectations about inter-sectoral coordination in forest policy as a specific forest sector frame is not, or no longer, of relevance to this group. Second, when actors continue to propagate an independent forest sector frame but encounter great difficulties in finding legitimization and support for this sector frame, inter-sectoral coordination could be seen as another or a new way for this group to gain support for their specific focus on forest activities. However, whether these expectations will be met remains to be seen as the forest sector frame is barely acknowledged by the outside world.

Third, when actors perceive the 'forest sector' as something real and there is also societal support for a forest sector frame, inter-sectoral coordination can be expected to exist as something real and special. As inter-sectoral coordination allows these actors to continue to propagate forest sector boundaries and at the same time reflects a willingness to adapt to new circumstances and reflect the interest of forest actors in their environment and other sectors. The meaning of these different expectations for understanding the call for inter-sectoral coordination in forest policy will be concluded and reflected upon in the final chapter.

7 Conclusions and reflections on the call for inter-sectoral coordination

This final chapter presents some conclusions and reflections on the results of this study and the role and meaning(s) of the call for inter-sectoral coordination in forest policy within the European context. Section 7.1 reflects on the relevance and value of the framing perspective. Section 7.2 positions the findings of this study in relation to other scientific studies. Section 7.3 concludes and reflects on the relation between inter-sectoral coordination in forest policy and trends in governance. Section 7.4 reflects on how the call for inter-sectoral coordination can be understood in light of the findings in this study. Finally, section 7.5 reflects on how forest policy can meaningfully proceed with inter-sectoral coordination.

7.1 Understanding the call for inter-sectoral coordination in forest policy

Section 6.3 interpreted the results of this study in light of the five hypothesis presented in the first chapter. It showed that the degree to which one might expect inter-sectoral coordination in forest policy to be meaningfully adopted depends on the perception of the actors towards the forest sector. When actors no longer perceive the forest sector as something that can be clearly defined, or have great difficulties legitimating the continued existence of a separate forest sector, inter-sectoral coordination hardly has any meaning and is not experienced as a substantial issue. But when actors perceive the forest sector as something distinct and feel the need to continue to propagate clear boundaries that set an independent sector, the issue of inter-sectoral coordination can be expected to be perceived as something tangible.

For this second group, inter-sectoral coordination allows the continued propagation of an independent forest sector while also indicating that these actors are willing to coordinate issues with other sectors. The willingness of members of the forest sector to explore new perceptions of their sector can be driven by their internal needs, (for example because of financial difficulties), or by external pressures, (such as societal pressure or judicial instruments). For actors propagating a forest sector, inter-sectoral coordination cause a kind of internal friction with those actors who want to maintain a boundary, and, at the same time, explore existing or new boundaries that include new meanings, new actors, and develop new interaction patterns. This also explains why the call for inter-sectoral coordination has been so strongly propagated by forest policy platforms such as the

Ministerial Conference on the Protection of Forests in Europe (MCPFE) (see section 1.1). These platforms are specifically geared to discussing forest issues and as such almost automatically propagate the continuation of a forest sector. But at the same time, these platforms are also part of contemporary social and political reality and feel the pressure to develop and stimulate a more communicative approach to policy making. This contrasts with the first group, which does not perceive an independent forest sector, and therefore does not see the need for propagating inter-sectoral coordination. This group is already participating in policy making processes that involve more open and flexible coalitions based on professional relationships.

This conclusion is in contrast to the focus of the call for inter-sectoral coordination that explicitly focuses on coordination between the forest and other sectors, a call that presupposes sectors to be entities. As this research has shown, sectors cannot unambiguously be identified as separate entities and inter-sectoral coordination is only meaningful for those groups of actors or countries that perceive the forest sector as an independent entity. For other groups of actors, sectors are not specific entities that need coordination, and inter-sectoral coordination is not about coordination between different sectors. This means that the forest policy community should move beyond a single focus on coordination mechanisms. Instead, as this study concludes, coordination takes places between different sector frames, the boundaries of which are set and reset in framing and frame-alignment processes which differ from coordination between actors and interests. The main advantage of understanding inter-sectoral coordination as a process of frame alignment is that it allows the observer to explicitly take into account that the forest sector is a social construct and that the actors involved can and do make use of different sector frames. When inter-sectoral coordination is interpreted in this way it makes the call for inter-sectoral coordination more substantial, as it translates and places the call into a meaningful and specific context. A summary of the results from this study on inter-sectoral coordination has also been published elsewhere (Verbij *et al.* 2007).

7.2 Added value of the framing perspective

Acknowledgment that 'sectors' are temporary forms

This study showed that forest sector boundaries need to be characterized as open to multiple interpretations. The call for inter-sectoral coordination in forest policy can be seen as a call for reflection on the meaning and use of the term forest sector. The previous chapters showed that forest sectorization processes can be characterized as framing processes in which different sector frames co-exist. As a result, the meaning of the forest sector can no longer be interpreted by an outsider in a straightforward and unambiguous

manner as the boundaries that set this sector are not interpreted by the actors involved in a one dimensional way. Sectors are thus temporary outcomes or forms of interactions between groups of actors, based on a shared meaning attached to forests. The Dutch case clearly showed that when this shared meaning no longer makes sense within the social and institutional environment, it is no longer possible to unambiguously talk of a forest sector. The actors who wish to continue to set the boundaries of a forest sector continuously need to seek for legitimization for the particular meaning they attach to forests. Consequently, the traditional definition of sectors as an observable set of actors defined by a general set of commonly accepted rules and norms conceptualized along established divisions of objectives, instruments, and institutional arrangements no longer automatically holds true. Instead, the boundaries of forest sectors are constructed along different perceptions of the meaning of forests; different perceptions on who are members and who are not (which are based on increasingly flexible membership rules) and with large sets of actors cooperating in more or less fixed coalitions around changing issues.

In this respect, sectors, in line with the ideas of Elias (see section 2.2.1), are indeed snapshots or temporary forms within continuous sectorization processes. Through boundary actions, actors continuously define and redefine the forest sector and this blurs the meaning of the forest sector to an outsider. Also, in line with the ideas of Luhmann, sector boundaries only become meaningful when they create a difference between the sector and its outside environment. Both cases show that creating this difference and framing an independent 'forest sector' requires more and more adjustments from the members (in the Austrian case) or has become almost irrelevant (in the Dutch case). This study showed the value of applying a framing perspective as this takes into account that actors can and do make use of different sector boundaries to shape reality in order to continue to make sense of their activities in a wider context.

Sector boundaries as flexible structures
Applying the framing perspective to forest sectors also has consequences for our understanding of forest sector boundaries. A framing perspective takes into account the broad variety of perceptions about the forest sector that exist across Europe and how social actors use them to justify their own activities and to make sense of the complex world around them. In this respect sector boundaries are not fixed entities, but are continually being set and reset in dynamic sectorization processes. This requires more flexible and temporary boundaries that are also relatively easy to adjust to the rapidly changing context. The Dutch case showed several examples of such professional short term coalitions where the boundaries were set around a certain topic, by a specific group of actors and for a certain period of time. Even the highly institutionalized boundaries of the Austrian forest sector were challenged and had to be adjusted. The traditional way of conceptualizing

boundaries that demarcate the forest sector in terms of formal interactions between forest institutions, a forest authority, and forest owners and their representatives has become highly problematic. This simple perception of the forest sector, and consequently of inter-sectoral coordination, is no longer appropriate in the contemporary political, societal and economical context.

The choice of the most appropriate forest sector and how it will be used or aligned depends not only on obvious contextual characteristics, such as the relative forest cover, but also on its ability to allow current practices to continue; to secure sufficient resources; and the societal support that it receives. These factors also influence whether an adapted or new sector frame can become stabilized. For example, rising wood prices in Europe could mean that as yet unstabilized sector frames that are built on a multi-functional meaning of forests will be adjusted again in favour of a more one-dimensional focus on wood production. Hence, we cannot assume that traditional forest sector oriented structures are no longer necessary or useful, since boundaries help actors to define, structure, and distinguish the complexity of their political and social interactions. However, actors may need to reflect upon these more structural sectoral boundaries and perhaps align them more closely to the contemporary societal, economical and political environment. This study showed that a framing perspective on sectorization processes is being a fruitful analytical perspective for studying boundary setting and resetting practices.

Inter-sectoral coordination in forest policy then has to build on action boundaries which need to be semi-structured and flexible as these boundaries change continuously. Otherwise, there is a chance they lose contact with social reality and thereby lose their relevance and ability to perform. Sector boundaries continue to play an important role, because some type of boundaries are always be needed for making sense of the world around us. However, this study showed that new perceptions of the forest sector have to be developed, or acknowledged, to meet the new requirements of contemporary policy making. Follow up research could, perhaps in a more quantitative way, further explore actors' perspectives on the European forest sector in order to further reflect on the meaning of the forest sector in the current European context of urbanization and rural development.

7.3 Some reflections on the results

Given the explorative character of this study, it was difficult to assess the findings on forest sectorization processes in relation to other studies - as there is very little other empirical research on perceptions of the forest sector that these results can be compared with. There has been very limited analysis of sector boundaries in forest policy making, section 1.3

showed that several studies indicate that the European economic, societal and political context is changing quite rapidly and that this requires adjustments within forest policy. However this study is the first to explore the consequences of these developments for the perceptions on the forest sector as a whole. The review of Schanz and Verbij (2002) showed that studies on inter-sectoral coordination in forest policy have interpreted forest sectors as social and institutional structures. However, the consequence of the problems associated with unambiguously identifying forest sector boundaries have hardly been taken into account in studies on inter-sectoral coordination. Most recently, Dubé and Schmithüsen (2007) edited a book on cross-sectoral policy developments in forestry that gives a state of the art picture of the different theoretical and empirical studies on inter-sectoral coordination. Here most of the contributions focus on other sectors that influence the forest sector and on mechanisms of inter-sectoral coordination and do not question the boundaries of the forest sector itself, let alone discuss the consequences of ambiguous sectoral boundaries for coordination mechanisms.

An exception to this near absence of studies on forest sector boundary dynamics is the study by Schiellerup (2008), who investigated how the British Forestry Commission was confronted with challenges to its identity and its boundaries. She found that the Forestry Commission had to shift from a core identity based around the idea of the productive entrepreneur to a governmental organization that also meets other political and societal objectives. This led the boundaries set by the funding arrangements to change in order to ensure a more solid new identity. Several other narrative studies on other sectors or policy fields have also shown that it can be problematic for an outsider to observe sector boundaries. These studies argue for a thorough analysis of different perceptions towards the policy field at hand before undertaking purposeful policy making interventions (see Dicke 2000).

In this respect, the need to empirically study the involved actors' perceptions of the forest sector justifies the choice of the interpretative approach made in this study. Because the objective, observable facts are less real than the interpretations of the forest sector boundaries held by the involved actors, it is these interpretations that need to be studied as they define social reality. An interpretative research departs from the premise that social categories are constructed and contingent and that any analysis is made valid by the way it fits with the context and the background understanding in which the studied phenomenon is situated (Derkzen 2008). The discovery of different interpretations of forest sector boundaries in both the case studies supports the case made in this study for the need for future research in forest policy to come to an in-depth understanding of what is meant by the forest sector. Moreover, the comparative view between two case studies taken in this study allowed other and new elements of context and background to be highlighted. The

added value of taking more than one case study is that taken-for-granted features of one case can be questioned when viewed from the perspective of the other case.

One of the conclusions of this study is that different interpretations of the forest sector do co-exist with each other. Alongside a stable and dominant perception of the forest sector other sector frames have come to the fore, existing sector frames have been adjusted and new sector frames have developed. This shows that while a perception of the forest sector as a stable structure is logical, it does not exclude the possibility of other perceptions of the sector also existing at the same time. Van Tatenhove *et al.* (2000) claim that it is more likely that different structures co-exist alongside each other, rather than that stabilized structures are completely replaced. The ability of a certain interpretation of the forest sector to remain dominant and stable in the face of its loss of meaning in a changing context partly depends on the level of institutionalization of the sector frame.

Institutionalization refers to the process through which structures arise, gradually become more stable, and shape interactions between actors (Van Tatenhove *et al.* 2000). Institutionalization can lead to the perception that these structures are objectively given, as has been the case with the forest sector. Boonstra (2004) and Leroy (2001) argued that no matter how stable structures appear to be, they are always subject to change as they are in fact processes. Institutionalization expresses the tendency towards stabilization, but also allows for changes, as actors change apparently stable structures. Schlüter (2007) argued that one needs to carefully analyse the different perceptions towards institutional change as actors use these meaning systems to explain the world around them and because these meaning systems also function as normative value judgements for actors in interpreting how the world 'should be'. So, indeed, actors do not merely belong to sectors but also constantly sectorize.

7.4 Inter-sectoral coordination and governance

This study showed that the call for inter-sectoral coordination in forest policy is a call for more and/or other forms of coordination in forest policy making processes. The conclusion that forest sectors are socially constructed abstractions obviously has consequences for the meaning of inter-sectoral coordination. Moreover, the previously closed interaction patterns based on informal and formal trust relations between fixed groups of actors have been partly replaced by a complex of arrangements of interaction patterns between large groups of actors based on professional trust relations. Instead of searching for a general model of inter-sectoral coordination as might be expected under the rationalist and pluralist tradition (see Chapters 1 and 2), the findings of this study suggest the need to focus on coordination

processes between different meanings attached to forests, between different actors, different interaction patterns, and different sector frames. This means that inter-sectoral coordination is no more special than any other coordination process: inter-sectoral coordination is not essentially different, nor more or less difficult or important than coordination between actors, between interests, between policies or between different levels of government.

The call for inter-sectoral coordination should not be seen primarily as a call for coordination between different sectors; but can be better understood as a general call for more coordination activities in a broader and more inclusive understanding of the field of forest policy. This is in line with contemporary ideas in policy science and governance which view the time-honoured divisions of responsibilities that governed the structure of cabinets and departments as giving way to more complex arrangements in which overlapping responsibilities and blurred lines of authority are more commonplace. As such, coordination is becoming increasingly important, regardless which entities are involved, and is part of a broader general trend towards integration in governance. . This trend has been referred to in section 1.2.

The results of this study show that the time-honoured divisions in the forest policy sector which structured responsibilities between governmental and non-governmental actors have partly given way to more complex arrangements in which overlapping responsibilities and blurred lines of authority are more common: where new constellations arise or old constellations are adjusted so that they can provide other forms of coordination. In other words, the results of this study suggest that the governance trend (see Chapter 1) can also be identified within forest sectorization processes. Both case studies showed that decision making processes around the issue of forest policy increasingly had to deal with a growing set of different actors with different resources (financial, judicial, societal) that interact in different constellations, some of which are more or less fixed while others are more flexible. In recent years, governance has become a hot issue in forest policy research. Both the European Forest Institute (EFI) and the Centre for International Forestry Research (CIFOR) have initiated specific research themes on 'forest and governance' (CIFOR 2008; EFI 2008), while a growing number of studies in forest policy focus on governance issues (see for example Visseren-Hamakersand and Glasbergen 2007).

Building such 'new' (temporary) governance constellations requires the development of communicative and flexible patterns of interaction that involve a broader group of actors and in which interaction is based on professional trust. Kouplevatskaya-Yunusova and Buttoud (2006) argued that, to address the issue of reforming forest policies and programmes, new coordination mechanisms have to be developed that build on both the deductive instrumental and the communicative approach to negotiation processes based on

ongoing adoption to changes in the context. This search for new coordination mechanisms can also be found in the broader field of natural resource management that seeks to address current global environmental challenges. For example, Ison *et al.* (2007) argued that in the field of sustainable water management new coordination mechanisms have to be built and institutionalized. These mechanisms need to acknowledge and understand that social outcomes also depend on agreement, negotiation, conflict, empathy, power sharing, rules, and social wisdom. Many countries are moving away from a traditional corporatist approach to forest policy and, although at a different pace, towards more inclusive and interactive ways of policy making. Policy making now relies on building broader societal groupings, in which responsibilities can be shared. This requires that governments play a more facilitating role. This characterization of forest sectorization processes is in line with ideas within the current governance debate in which the central role of the state is eroded as responsibilities are increasingly distributed amongst state, market, and civil society actors (see e.g. Jordan 2001; Hajer 2003).

However, this governance trend has not (yet) completely displaced the more traditional government style of coordination within the forest sector on specific forest issues, between the core members, and through their traditional informal and formal interaction patterns. Examples were found in both case studies that support this finding, such as the informal meetings organized by the KNBV in the Netherlands, and the continued important role of the *Forest Gipfel* forest advisory body in Austria. Section 6.1 showed that a kind of hybrid situation seems to have arisen in which different, more traditional and more contemporary, perceptions on sector boundaries and coordination exist alongside one another. Other studies have also found these kinds of hybrid situations (Leroy *et al.* 2001, Boonstra 2004). Van der Zouwen (2006) found different governance and government arrangements to co-exist in the field of nature conservation policy. Jordan (2008) recently argued that the governance debate needs to move beyond grand theories and typologies of governance and to undertake more detailed empirical testing to measure the extent to which a shift from government to governance is actually occurring.

In conclusion, the call for inter-sectoral coordination in forest policy means the involvement of a wider range of actors and a shift towards a mixture of more networked coordination mechanisms in which policy coordination takes place in complex patterns and processes of interactions between various actors seeking to build consensus through information and persuasion strategies. Thus, instead of focusing on the multi-functional aspect of forest policy, it seems more fruitful to focus on the shared meaning attached to a certain problem or issue at hand that can create a feeling of interdependency between the actors in that specific context. The challenge of inter-sectoral coordination is thus nothing else than re-setting boundaries in a process of learning through frame reflection. This

automatically implies a focus on more context specific issues and more flexible coordination mechanisms.

Pestman and Tatenhove (1998) argued that one of the obvious consequences of coping with governance processes is that these processes require reflexive policy making in which changing coalitions of actors continuously adjust existing constellations, (in the study, sector frames). Reflexivity and flexibility are needed to enable the crossing of borders between different policies, interests, functions, actors and levels of government. Such an approach requires a perspective that goes beyond a focus the instrumental mechanisms of coordination, but includes an argumentative approach to coordination between the different meanings and expectations that actors use to give meaning to their practices. Coordination then implies a mixture of communicative practices and 'light' instrumental structures. 'Light' is used in the sense that these instrumental structures, or temporary coalitions, will fade away when the issue has been resolved and become operational again should the problem return. This requires an interpretive approach in empirically researching different forest sector frames as it is not just the observable programmes, structures, and networks that set the boundaries of the 'forest sector', but the actors themselves coordinating their actions in line with their perceptions of the sector and thereby involved in a process of sectorization.

The introduction of National Forest Programmes (NFPs) is seen as a serious attempt by the forest policy sector to take up the challenge of reflexivity and to allow an exchange of different meanings attached to forests amongst different actors within the context of a certain country or region (see chapter 1). However, in the Austrian case, the participants of the Wald Dialogue felt that the Austrian NFP was primarily the property of the Forest Authority, and those outside the forest sector expected that any changes would be very limited. The Dutch case showed more examples of exchanges of different meanings, with the *Bosschap* – the traditional forest sector body – even being forced (by internal as well as external pressures), to adjust its official boundaries to focus on forests and nature. Section 6.2 showed that differences in reflexivity and the acceptance of a more argumentative turn in policy making are related to the need for resources and societal support. In Austria a large group of forest owners still depend heavily on wood production for their income, in the Netherlands this is no longer the case and governmental and societal subsidies are the main source of income for most owners. In this respect the call for inter-sectoral coordination is a call for more coordination between actors, interests, functions and governmental levels, because the act of coordination is of utmost importance for the (re)distribution of resources and societal acceptance of forest-related activities.

According to the conception of inter-sectoral coordination as frame reflection, coordination between different sector frames means questioning the different frames and thereby enabling learning processes. The challenge for substantial future European forest governance lies in preventing the development of a limited and authoritative focus on forest policy. Instead, European forest governance should develop in line with the governance trend, learn from questioning the different sector frames and develop new arrangements that go beyond the traditional forest sector frame. The focus of forest policy makers should be on facilitating learning between actors from different sector frames, so as to set and reset forest sector boundaries so that they continue to make sense in the contemporary political, social and economical context.

7.5 How to proceed with inter-sectoral coordination in European forest policy?

This study showed that the call for inter-sectoral coordination in forest policy is also a call by the traditional forest actors for recognition of the exclusive character of European forest policy. The Austrian case study shows that the call for inter-sectoral coordination does make sense in countries with a strong traditional forest sector that increasingly has become under societal pressure. In such circumstances the call for inter-sectoral coordination can be used to stress the forest sector's interest in responding to emergent social pressure, while stressing that the forest sector maintains its separate identity and autonomy. In this respect, the call for inter-sectoral coordination seems a strategy adopted by the forest policy community to maintain an independent forest sector and prevent it from being overtaken by other policies or interests. But this strategy doesn't work in countries such as the Netherlands where the general societal and political focus has shifted from stimulating economic exploitation of private forests to a focus on nature and landscape conservation and where only a small group of individuals remains that want to continue to express an independent forest sector and for whom a call for inter-sectoral coordination still makes sense.

So what does this mean for forest policy processes at the European level? Based on the results of this study, one could speculate that different perceptions towards the forest sector will also be found in other countries within Europe; and that these might be similar to the range found in the two extreme cases of the Netherlands and Austria. Based on the expectations presented in section 6.3, one could expect that in countries with a dominant sector frame building on the pillars of the forest sector, the call for inter-sectoral coordination is indeed meaningful and relevant. However as meaning of the forest sector is

context dependent, this implies that there are likely to be different perceptions of the forest sector within the different countries of the European Union, and Europe at large.

While forest policy is not officially a competence of the European Union, it does seem to be maturing and growing in stature s: initially there was the EU Standing Forestry Commission, then the EU Forestry Strategy was adapted, and currently the European Commission is implementing the latest EU Forest Action Plan. But how does this fit with the expected divergence in perceptions on the forest sector? As long as these forest policies remain voluntarily they will most probably not be perceived as problematic in countries where a single focus on forests no longer makes sense. But the traditional forest countries may well perceive that their forest sector is being threatened and these actors may see or use an independent European forest policy to give new legitimacy to their activities and their sector frame. This explains the numerous attempts of these traditional forest countries to put the issue of forestry on the policy agenda of Brussels, a move which is being actively supported by several European forest lobby associations, such as the *Confédération Européenne des Propriétaires Forestiers* (European Association of Private Forest Owners; CEPF). Together with the paper lobby, they recently jointly established a Forestry House in Brussels. In 2003, the president of the CEPF, at the occasion of 10th annual conference of the European Forest Institute, stated that *"the main challenge for the future is to keep forestry profitable"*. This statement reflects how these organizations frame the European forest sector and perceive the call for inter-sectoral coordination as relevant and meaningful. If these countries and groups are successful in their lobby for an independent European forest policy, this could also provide an external legitimization for countries where continuation of an independent forest sector frame has become problematic. For such countries, with a less traditional focus on forestry, the EU focus on forests could provide a new legitimization for the supporters of an economic or multi-functional approach to forests and their attempts to put these perspectives back on the societal and policy agenda. However, as long as forest policy is not an official competence of the EU and implementation of EU forestry policy is based on voluntarily cooperation, the effects at the national level will most likely remain limited.

In that case, the call for inter-sectoral coordination can be used to stress that the forest sector wants to take on board broader societal wishes, but at the same time wishes to maintain the traditional forest sector boundary. In this way the call for inter-sectoral coordination is a strategy of forest policy makers to express their general feeling of being overtaken by other policies – and their preference for retaining their traditional forest frame by co-ordinating this frame with other adjacent frames (as opposed to looking for a new shared frame).The pleas for inter-sectoral coordination as a solution to the various problems that face the forest sector can be understood as yet another attempt to define the forest

sector and its boundaries and reinforce the notion of a separate legitimate forest sector. This study argues that it is important to go beyond such a symbolic or strategic use of inter-sectoral coordination and of focusing instead on coordination between actors, interests, functions, frames and governmental levels, as it is coordination that is of the utmost importance.

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Summary

Inter-sectoral coordination has become a central issue in different forest policy arenas worldwide and is considered to be essential for solving a whole range of problems the forest sector is currently facing. Chapter 1 argues that until now inter-sectoral coordination has not been clearly defined, neither has the process it refers to. Inter-sectoral coordination is related to a more general trend in policy practice that is commonly referred to as governance. The literature on governance emphasizes that policy processes take place in complex patterns of interactions between various actors who employ different information-sharing and persuasion strategies. As both governance and inter-sectoral coordination focus on coordination and processes of interaction, it is surprising that inter-sectoral coordination is hardly mentioned in the governance literature. Whereas at the same time the forest policy community prefers the use of the term inter-sectoral coordination besides the more commonly used term governance. This study addresses the question what the significance is of the call for inter-sectoral coordination amidst the present governance trend. Five hypotheses are formulated as possible explanations for this specific focus on inter-sectoral coordination. These hypotheses share the common premise that the term inter-sectoral coordination as used in forest policy is different from the term governance as it is used in the policy science literature. All five focus on the dynamics the forest sector is currently confronted with which seem to broaden the range of interpretations of the terms 'forest sector' and 'inter-sectoral coordination'. The aim of this study is to explore the processes through which the actors involved set, maintain and adapt the meaning of the 'forest sector' so as to understand the meaning of the call for inter-sectoral coordination in forest policy arenas within Europe.

Chapter 2 conceptualizes the term 'sector'. In contrast with many studies which take the sector as the starting point for studying inter-sectoral coordination, this study conceptualizes sectors as being social constructs. As a result, a definition of the sector is not the starting point of this study but one of the outcomes. This study considers sectors as the result of processes in which actors define sectors and give meaning to them by creating difference between what they consider inside the sector and what they consider outside it. The actors involved set, maintain and adapt context specific and meaningful sector boundaries. In this study these continuous processes in which sector boundaries are drawn and repositioned are referred to as sectorization processes. A frame analysis has been used to empirically study these sectors. Frames, like sectors, function metaphorically. In using frames, the actors involved can distinguish between what is 'inside' and 'outside' the sector, thereby drawing the boundaries of the sector. Three different aspects of sector boundaries, namely meaning, membership and interactions, have been studied by means of describing and analyzing actors' perceptions of these boundary aspects. With respect to the

meaning boundary, the focus was on the actors' perceptions of the function(s) of forests. The membership boundary was related to actors' perceptions of the types of membership and membership criteria. With respect to the interactions aspect of boundaries, the focus was on the perceived nature of interactions typical within the forest sector, such as the level of formality, level of trust, and the ability to intervene based on available resources. Furthermore, this study looked at sector metaphors. These are concise terms that through suggestion and possible multiple interpretation can bind actors in a certain sector together. A sector metaphor, together with the different boundaries constructs a sector frame. Finally, inter-sectoral coordination has been studied as processes through which different sector frames align themselves. In this respect coordination between different sector frames means sector metaphors are questioned and learning processes are allowed to take place. Four processes through which frames become aligned were investigated: frame amplification, frame extension, frame bridging, and frame transformation or reframing.

Chapter 3 states the methodological choices and elaborates upon the choice for an interpretive approach in which the behaviour of actors is looked upon as the outcome of their interpretations of reality. As such, this study investigates actors' perceptions of forest sectorization processes. These perceptions explain why and how actors in and outside the forest policy arena draw and reposition sector boundaries and why and how they construct forest sector frames through continuous processes of sectorization. Thus, the chosen qualitative case study approach seems best suitable for disentangling the multiple interpretations of sector boundaries and forest sector frames. Two cases have been selected, Austria and the Netherlands, which differ maximally in terms of societal pressure on forest land and the role of wood production and the wood processing industry. The main quantity of data was collected by conducting qualitative interviews which afterwards have been transcribed and coded. Case stories for both Austria and the Netherlands were written, based on these coded interviews.

Chapter 4 tells the story of the Austrian forest sector. It shows that the traditional boundaries of the Austrian forest sector are increasingly being challenged, at different levels and by different groups of actors. Whereas so far this has not had considerable effect on the actual course of these boundaries yet, it is nevertheless causing traditional forest actors increasingly more effort to maintain them. Three sector frames have been identified: the *Forst,* the *Forst-Holz*, and the *Wald* sector frame. The *Forst* sector frame provides a relatively straightforward perception of the forest sector: a closely knit policy community consisting of a largely fixed set of core members, with a shared focus on the economic function of forests. For a long time, this economic function legitimized the forest sector, its importance, content, interests, identity and boundaries. However, the current picture looks different. The Austrian case shows that the influence of internationalization and the

increasing importance of other functions such as recreation, lead to changes in the perceived identity of the forest sector and has introduced two other sector frames: the *Forst-Holz* sector frame and the *Wald* sector frame. Each of these two new sector frames reflect different perceptions of the forest sector and offers different prospects for its future. In an attempt to counteract the challenges the forest sector is facing, actors that use the *Forst-Holz* sector frame include the wood processing industry, this way stressing its economical importance. Those who support the *Wald* sector frame are trying to deal with these challenges by emphasizing the forest functions recreation and conservation, this way stressing the forest sector's importance for society. These two sector frames overlap in terms of membership. Some of the actors that supported the *Forst-Holz* sector frame also used the *Wald* sector frame as a means of improving the image of forestry in Austria without making any changes to its primary focus. There are substantial differences in respondents' expectations about the extent to which the forest sector frame will actually open up in response to these challenges. Most respondents expect that the traditional, economically oriented *Forst* and *Forst-Holz* sector frames, will, at least in the short term, continue to dominate forestry in Austria. However, some respondents expect that societal, political and economical developments will result in a growing importance of the *Wald* sector frame. Forest sectorization processes in Austria thus are dynamic. However, to this date; these dynamics have been counteracted by strong traditional powers and positions enabling a largely stable forest sector to have continued to far.

Chapter 5 tells the Dutch story. It shows that distinguishing an independent forest sector in the Netherlands has become highly problematic: in terms of a specific focus on and meaning of forests; in terms of members and clear membership criteria; in terms of interaction patterns; and in terms of forest sector frames. Forests are still considered relevant for the Netherlands, for a whole set of reasons, but not more or less relevant than other ecosystems. The economic relevance of timber has become marginal, and most forest owners are more or less dependent on support from the government and from society at large. Four sector frames have been identified: the *bosbouw, the bosbeheer,* the *bos- en natuurbeheer,* and the *terreinbeheer* sector frame. Both the *bosbouw* and *bosbeheer* sector frame are characterized on an explicit focus on forests and the case study shows how this has become difficult to legitimize. Unlike Austria, the economic function of forests is not important in the Netherlands. Almost all forest owners financially depend on support from the government and civil society and the private owners are almost exclusively driven by nature conservation and recreation. At the practical level, the *bos- en natuurbeheer* sector frame allows private forest owners to continue to harvest timber in their forests but this sector frame is supported only by a small group of individuals. This group continues to advocate the importance of timber production for a few forest owners, forest contractors and the wood processing industry. In recent decades this group has lost most of its

influence. The informal network of foresters has lost most of its advocates as foresters no longer hold influential positions within the Ministry of Agriculture, Nature and Food Quality. Moreover, there no longer is a separate forest authority, based on a separate forest policy as forest policy has become a part of nature conservation policy. In addition forest professionals are becoming a dying breed, as no new foresters are being educated. Thus there are few clear membership criteria around which a forest sector can be unambiguously constructed. The *terreinbeheer* sector frame does not explicitly focus on forests as a separate category. This sector frame emphasizes the conservation function of forests and nature and is supported by both the large *terreinbeheerders* (private nature and landscape conservation organizations and the National Forest Service) and the government. Half of the total area managed by these *terreinbeheerders* comprises forests and this means that membership is based not only on forest ownership but on nature ownership as well. This sector frame lacks a stable and communal identity. Cooperation occurs in smaller ad hoc and structural groups, whose identity and membership can change. Most of the actors in this group furthermore wish to maintain their individual identities. In this sense the *terreinbeheer* sector frame does not provide a straightforward forest sector frame. The Dutch increasingly consider thinking about forest as a sector a traditional and out-moded approach, which has already largely been replaced by integral thinking as performed in the flexible *terreinbeheer* sector frame.

Chapter 6 discusses forest sectorization processes and compares the two cases. First of all, in both cases actors have attached different meanings, which co-existed alongside each other, to forests. Second, it has become increasingly problematic to draw a membership boundary with core members. A growing number of other actors have become involved in the forest sectorization processes and the established well defined membership rules of forest ownership and forest professionalism have faded away. Third, in both cases, interaction patterns increasingly involve multiple coalitions rather than just one or a few dominant and fixed coalitions. In conclusion, forest sectorization processes are fluid and throughout time, sector frames have become aligned. This chapter discusses conservatism, resource dependency, and the growing need to legitimize forest activities through gaining social support as the main reasons for these frames to become aligned.

The last part of chapter 6 discusses expectations towards inter-sectoral coordination based on an exploration of the five hypotheses presented in chapter 1. This chapter shows the added value of the interpretative perspective taken in this study. It shows that expectations about inter-sectoral coordination in forest policy and the question whether inter-sectoral coordination is something special very much depends on the actors' perceptions of the forest sector. First, when actors no longer perceive a forest sector to exist, expectations about inter-sectoral coordination are likely to be limited. Second, when actors continue to

advocate an independent forest sector frame and at the same time encounter great difficulties in legitimizing this sector frame, inter-sectoral coordination could be seen as another or a new way for this group to gain support for their specific focus on forest activities. Third, when actors perceive the forest sector as something real and there is also societal support for a forest sector frame, inter-sectoral coordination can be expected to exist as something real and relevant. As inter-sectoral coordination allows these actors to continue advocating forest sector boundaries and at the same time reflects a willingness to adapt to new circumstances and reflect the interest of forest actors in their environment and other sectors.

Chapter 7 concludes and reflects on the call for inter-sectoral coordination in forest policy. The results of this study suggest that studies on inter-sectoral coordination should take into account that not all actors will recognize the forest sector as a separate entity in need of coordination. This means that the forest policy arena should move beyond a single focus on coordination mechanisms. The pleas for inter-sectoral coordination as a solution to the various problems the forest sector is facing can be understood as yet another attempt to define the forest sector and its boundaries thus tempting to reinforce a separate forest sector. This study argues that it is important to move beyond such a symbolic or strategic use of inter-sectoral coordination. The time-honoured divisions in the forest sector which structured responsibilities between governmental and non-governmental actors have partly disappeared in favour of more complex arrangements in which overlapping responsibilities and blurred lines of authority are more common, in which new constellations arise, old constellations are adjusted and new forms of coordination emerge. The challenge of coordination is to give room to processes of learning and frame reflection. This implies a focus on context specific issues and flexible coordination mechanisms. Instead of searching for a general model of inter-sectoral coordination, the findings of this study suggest the need to focus on coordination processes between different meanings, functions or interests attached to forests, between different actors, different interaction patterns, different sector frames and different governmental levels.

Samenvatting

Inter-sectorale coördinatie is een centraal thema in bosbeleid in de gehele wereld en wordt gepresenteerd als een oplossing voor veel problemen waar de bossector momenteel mee wordt geconfronteerd. In hoofdstuk 1 wordt beweerd dat tot nu toe geen eenduidig begrip bestaat van inter-sectorale coördinatie. Het thema inter-sectorale coördinatie in bosbeleid lijkt sterk gerelateerd aan het in de bestuurskunde vaak gebruikte begrip governance. De governance literatuur benadrukt dat beleidsprocessen plaatsvinden in complexe interacties tussen overheid- en niet-overheid actoren met verschillende strategieën voor het delen van informatie en het overtuigen van andere actoren. Omdat zowel governance als de roep om inter-sectorale coördinatie in bosbeleid zich richten op coördinatie en interacties tussen (beleids)actoren is het verrassend dat het onderwerp inter-sectorale coördinatie niet of nauwelijks een specifiek onderwerp is binnen de governance literatuur en dat binnen bosbeleidarena specifiek naar inter-sectorale coördinatie wordt verwezen naast de verwijzing naar governance. Binnen deze studie is daarom de vraag gesteld wat de specifieke vraag naar inter-sectorale coördinatie binnen bosbeleid betekent in het licht van de meer algemene governance discussie. Er zijn vervolgens vijf hypotheses geformuleerd die deze specifieke focus op inter-sectorale coördinatie in bosbeleid zouden kunnen verklaren. Al deze hypothesen stellen dat de term inter-sectorale coördinatie, naast de roep voor meer en andere vormen van coördinatie, ook staat voor een herziening van de grenzen van de 'bossector'. Doel van deze studie is om de processen in kaart te brengen waarin actoren de grenzen van de 'bossector' definiëren, behouden en aanpassen en tevens om de betekenis van inter-sectorale coördinatie in bosbeleidarena's binnen Europa te begrijpen.

In hoofdstuk 2 wordt de term 'sector' geconceptualiseerd. Sectoren worden gezien als continue processen waarin actoren sectoren definiëren en betekenis geven door het creëren van verschillen tussen wat als 'binnen' en 'buiten' de sector kan worden beschouwd. Betrokken actoren definiëren sectorgrenzen die voor hen betekenis hebben in een bepaalde context van tijd en plaats. Het definiëren van grenzen en het aanpassen van grenzen wordt in deze studie sectorizatie genoemd. Om dit proces empirisch te onderzoeken is gebruik gemaakt van frame analyse. Dit omdat frames, net als sectoren, functioneren als metaforen. Sector frames zijn beknopte termen die actoren gebruiken om sectoren te duiden en om actoren te binden. Door gebruik te maken van deze metaforische sector frames kunnen actoren het verschil maken tussen 'binnen' en 'buiten' en daarmee de grenzen van de sector construeren. Binnen de sector frames zijn drie verschillende aspecten van de sector grenzen bestudeerd. De betekenis grens (1) heeft betrekking op de perceptie ten aanzien van de verschillende functies van bos. De lidmaatschap grens (2) heeft betrekking op de perceptie ten aanzien van lidmaatschap van verschillende actoren en de criteria van lidmaatschap van de bossector. De interactie grens (3) heeft betrekking op de perceptie ten aanzien van de

kenmerken van de interacties typisch voor de actoren in en betrokken bij de bossector. Inter-sectorale coördinatie is in deze studie beschouwd als het ter discussie stellen van bestaande sector frames. Coördinatie van sector frames kan vervolgens plaatsvinden door het aanpassen of uitbreiden van bestaande sector frames, het overbruggen van verschillende sector frames door een samengesteld sector frame, of door het herdefiniëren van sector frames.

Hoofdstuk 3 behandelt de methodologische keuzes en legt uit waarom een interpretatieve benadering is gekozen en deze studie daarom de interpretaties van actoren op sectorizatie processen in de bossector onderzoekt. Op basis van deze interpretaties willen we begrijpen hoe en waarom actoren binnen en buiten het domein van het bosbeleid de grenzen van de bossector definiëren en herdefiniëren. Er is gekozen voor kwalitatieve case studies. Dit geeft de mogelijkheid om de complexiteit van verschillende interpretaties en betekenissen die worden gehecht aan de sector frames en de grenzen van de bossector in detail te bestuderen. Vervolgens zijn er twee cases geselecteerd, namelijk de bossectoren in Oostenrijk en Nederland. Beide landen verschillen maximaal in de mate van maatschappelijke interesse in bos en bosbouw en in de rol van houtproductie en de houtverwerkende industrie. Dit geeft inzicht in verschillen en overeenkomsten tussen verschillende sectorizatie processen in een Europese context.

Hoofdstuk 4 behandelt de Oostenrijkse case en laat zien dat de traditionele grenzen van de Oostenrijkse bossector steeds meer worden uitgedaagd. Tot nu toe lijkt dit echter geen duidelijk effect te hebben gehad op de sectorgrenzen al betekend het wel dat het handhaven van de huidige grenzen in toenemende mate inspanningen vergt van de traditionele actoren actief in de bossector. Drie sector frames zijn geïdentificeerd: het 'Forst', 'Forst-Holz' en 'Wald' sector frame. Het eerste frame, het 'Forst' sector frame is een relatief eenduidige interpretatie van de bossector, namelijk die van een nauw verweven gemeenschap bestaande uit een grotendeels vaststaande groep actoren welke de nadruk legt op de economische functies van bossen, voornamelijk houtproductie en jacht. Deze economische functies verlenen sinds lange tijd legitimiteit aan het belang, de inhoud en de identiteit van de grenzen van de bossector in Oostenrijk. Maar het huidige beeld van de bossector ziet er anders uit. De Oostenrijkse case studie laat zien dat internationalisering en het toenemende belang van andere functies van bos, zoals de recreatiefunctie, hebben geleid tot veranderingen in de interpretatie van de bossector. Dit heeft geresulteerd in de opkomst van twee alternatieve sector frames: het 'Forst-Holz' en het 'Wald' sector frame. Beide frames maken gebruik van andere interpretaties van de bossector en geven verschillende toekomst perspectieven. Om de uitdagingen van de huidige bossector aan te gaan willen actoren die het 'Forst-Holz' sector frame aanhangen het economische belang en imago van de bossector versterken door nauwer samen te werken met de houtverwerkende industrie. Dit

in tegenstelling tot de actoren die het 'Wald' sector frame aanhangen; zij benadrukken het multifunctionele karakter van bossen. Door het belang van bossen voor recreatie en natuurbehoud breed uit te meten willen zij het belang van bossen voor de maatschappij versterken. Opvallend was dat een deel van de actoren gebruik maakt van beide sector frames en dat de lidmaatschap grens dus overlapt. Enkele actoren die het 'Forst-Holz' sector frame ondersteunen maken ook gebruik van het 'Wald' sector frame met als doel het imago van bos en bosbouw in Oostenrijk te verbeteren maar zonder substantiële veranderingen door te voeren in de hun ogen voornamelijk economische betekenis van bossen. Ten aanzien van de toekomstige ontwikkelingen bestaan er sterk uiteenlopende meningen. De meerderheid verwacht dat, zeker op de korte termijn, de economische georiënteerde 'Forst' en 'Forst-Holz' sector frames dominant blijven. Maar sommige respondenten verwachten dat maatschappelijke, politieke en economische druk er voor zullen zorgen dat het 'Wald' sector frame belangrijker zal worden. De Oostenrijkse bossector lijkt dus inderdaad dynamisch en aan verandering onderhevig. Echter, tot nu toe hebben deze veranderingen relatief weinig effect gehad vanwege de sterk gevestigde sectorgrenzen van het 'Forst' sector frame die het voortbestaan van dit frame mogelijk maakt.

Hoofdstuk 5 behandelt de Nederlandse case en laat zien dat het in Nederland problematisch is geworden om een onafhankelijke bossector te onderscheiden: in termen van een specifieke focus op bos; in termen van leden en duidelijke criteria voor lidmaatschap van de sector; in termen van interactie patronen; en ook in termen van zelfstandige sector frames. Bossen worden belangrijk gevonden in Nederland om verschillende redenen, maar niet meer belangrijk dan andere natuur. Het specifieke economische belang van bos voor de houtproductie is een marginaal belang geworden. In de Nederlandse case zijn vier sector frames geïdentificeerd: het 'bosbouw', 'bosbeheer', 'bos- en natuurbeheer', en 'terreinbeheer' sector frame. Zowel het 'bosbouw' als het 'bosbeheer' sector frame zijn gebaseerd op een expliciete focus van een sector op bos. De case studie laat zien waarom het in Nederland moeilijk is geworden om politieke, maatschappelijke en economische legitimatie te vinden voor een dergelijke focus. In tegenstelling tot Oostenrijk is in Nederland de houtproductie nauwelijks van economisch belang voor de meeste boseigenaren. In plaats daarvan zijn de meeste boseigenaren grotendeels financieel afhankelijk van overheidssubsidies en maatschappelijke fondsen en giften voor het beheren van hun eigendommen waardoor vooral de maatschappelijk hoog gewaardeerde natuur- en recreatiefunctie van bos wordt nagestreefd. Alleen op het meer praktische niveau van het bosbeheer maakt het 'bos- en natuurbeheer' sector frame het mogelijk voor voornamelijk private boseigenaren en Staatsbosbeheer om hout uit hun bossen te exploiteren. Dit sector frame wordt maar ondersteund en gebruikt door slechts een groep individuen. Deze groep blijft uitdragen dat houtproductie van belang is voor sommige boseigenaren, bosaannemers

en de houtverwerkende industrie in Nederland. Maar gedurende de laatste decennia is de invloed van deze groep sterk verminderd. Het informele netwerk van bosbouwers is niet alleen kleiner geworden, maar bosbouwers zitten ook niet langer op invloedrijke posities, bijvoorbeeld op het Ministerie van Landbouw, Natuur en Voedselkwaliteit. Er is in Nederland geen aparte autoriteit meer die zich enkel en alleen met bossen en bosbeleid bezig houdt; in plaats daarvan is het bosbeleid geïntegreerd in het natuurbeleid. Daarnaast is er in Nederland geen opleiding meer die zich uitsluitend op bosbouw richt. Met andere woorden, er zijn nauwelijks nog eenduidige criteria die het mogelijk maken om in Nederland een bossector te begrenzen. In plaats daarvan wordt gebruik gemaakt van het 'terreinbeheer' sector frame. Bossen spelen wel een rol in dit sector frame maar zijn niet langer de enige focus. Dit sector frame benadrukt het natuur- en recreatiebelang van bossen en van andere natuur en wordt vooral ondersteund door private en overheids-natuurbeherende organisaties. Het criterium voor deelname aan dit sector frame is eigendom van natuurterreinen en niet langer eigendom van bos, onder andere omdat slechts ongeveer de helft van de natuureigendommen die worden beheerd door deze organisaties bestaan uit bos. Dit sector frame heeft echter niet een stabiele en gemeenschappelijke identiteit en begrenzing. Interactie tussen actoren vindt zowel plaats in structurele samenwerkingsverbanden als in ad hoc samengestelde groepen die wisselen van samenstelling. Daarnaast is het voor de meeste actoren van belang om hun individuele identiteit te waarborgen om zichtbaar te blijven voor de maatschappij en de overheid, onder andere vanwege hun financiële afhankelijkheid. Door deze flexibiliteit in grenzen is het 'terreinbeheer' sector frame geen duidelijk afgebakend sector frame.

In hoofdstuk 6 worden de onderzochte sectorizatie processen bediscussieerd door de twee casussen met elkaar te vergelijken. Uit deze vergelijking blijkt dat in beide case studies verschillende betekenissen worden toegedicht aan bossen. Deze betekenissen bestaan naast elkaar. Ook wordt het in beide landen problematischer om een lidmaatschap grens van een bossector te definiëren met duidelijke kern actoren. Dit vanwege het feit dat niet alleen een groeiend aantal actoren betrokken is bij bossen en bosbeleid, maar ook omdat de voorheen duidelijke criteria voor deelname, dat wil zeggen boseigendom en het beroep van bosbouwer, zijn vervaagd. Verder laten beide case studies zien dat in toenemende mate de interactie grens vervaagt omdat interacties vaker in wisselende coalities plaatsvinden in plaats van in vaststaande coalities. Geconcludeerd kan worden dat de 'bossector' niet een vaststaande entiteit is, maar evolueert mee met veranderende sector frames. Verder laat dit hoofdstuk zien dat de neiging tot conservatisme, de afhankelijkheid van hulpbronnen, en het toenemende belang van maatschappelijke legitimiteit en steun voor activiteiten in bossen belangrijke redenen zijn waarom sector frames wel of niet worden aangepast. Het laatste deel van dit hoofdstuk gaat in op de verwachtingen ten aanzien van inter-sectorale coördinatie aan de hand van de vijf hypotheses die zijn gepresenteerd in het eerste

hoofdstuk. De studie laat zien dat de verwachtingen van actoren ten aanzien van inter-sectorale coördinatie afhankelijk is van de interpretaties van de bossector. Ten eerste, voor actoren waarvoor geen zelfstandige bossector bestaat, zijn de verwachtingen ten aanzien van inter-sectorale coördinatie zeer beperkt. Ten tweede, voor actoren die een zelfstandige bossector zien maar het tegelijkertijd als moeilijk ervaren legitimatie en steun hiervoor te krijgen, wordt inter-sectorale coördinatie gezien als een andere of nieuwe manier om steun te krijgen voor een specifieke focus op activiteiten gerelateerd aan bossen. Ten derde, voor actoren die de bossector als een legitieme relevante entiteit beschouwen waarvoor maatschappelijke steun bestaat is inter-sectorale coördinatie relevant. Dit omdat inter-sectorale coördinatie deze actoren in staat stelt de grenzen van de bossector te handhaven. Tegelijkertijd straalt het gebruik van de term inter-sectorale coördinatie uit dat deze actoren bereid zijn zich aan te passen aan nieuwe omstandigheden en te reflecteren op de belangen van de bossector in relatie tot de omgeving en andere sectoren.

In hoofdstuk 7 worden conclusies getrokken en wordt gereflecteerd op de betekenis van de vraag naar inter-sectorale coördinatie in bosbeleid. De resultaten van deze studie suggereren dat studies naar inter-sectorale coördinatie in het bosbeleid rekening moeten houden met het feit dat niet alle actoren een bossector zullen erkennen als een te onderscheiden entiteit. Dit betekent dat deze studies verder moeten kijken dan coördinatie mechanismes gericht op de afstemming tussen sectoren. Het pleidooi voor inter-sectorale coördinatie als een mogelijke oplossing voor een deel van de problemen waar de bossector mee wordt geconfronteerd kan dus worden begrepen als een poging om de bossector en de grenzen van de bossector te definiëren en de notie van een zelfstandige bossector te versterken. De resultaten van deze studie pleiten voor meer dan alleen symbolisch of strategisch gebruik van inter-sectorale coördinatie. Dit omdat de vertrouwde verdeling van verantwoordelijkheden tussen overheid en niet-overheidsactoren deels vervangen is door complexere arrangementen waarin verantwoordelijkheden meer verdeeld zijn. De uitdaging van coördinatie ligt in het faciliteren van leerprocessen door te reflecteren op bestaande sector frames. De resultaten van deze studie pleiten voor een focus op context specifieke onderwerpen en flexibele coördinatie mechanismes die zich richten op coördinatie tussen verschillende betekenissen van bos, functies en belangen van bossen, betrokken actoren, interactie patronen en sector frames in plaats van te zoeken naar een generiek model voor inter-sectorale coördinatie.

Appendices

Appendix 1 Respondents

Austria

Florian Birkmayer (1)	Wirtschaftskammer Österreich Bundessparte Tourismus und Freizeitwirtschaft – policy officer for environmental issues (March 22, 2004)
Bertram Blin (2)	President Österreichischer Forstverein (October 7, 2004)
Christian Brawenz (3)	Secretary/director Hauptverband der Land- und Forstwirtschaftsbetriebe Österreichs (April 15, 2004)
Rektor Duerrstein (4)	Rector BOKU (October 5, 2004)
Guenter Edinger (5)	AUSTROPAPIER – policy officer (October 6, 2004)
Mr. Fladl (6)	Direktor Forstsektion Klosterneuborg (May 6, 2004)
Ingwald Gschwandtl (7)	BMLFUW -Leiter der Abteilung Waldpolitik und Waldinformation (March 25, 2004)
Josef Hackl (8)	Head of the Forest Department (May 13, 2004)
Hermann Hinterstoisser (9)	Landesnaturschutz behorden Salzburg (October 4, 2004)
Andreas Januskovecz (10)	Direktor Forstamt der Stadt Wien (April 28, 2004)
Mr. Kalhs (11)	BMLFUW - Landesforstbehorden Steiermark (May 7, 2004)
Claudius Kollmann (12)	Director Wirtschaftskammer Österreich Fachverband der Holzindustrie (May 10, 2004)
Peter Lebersorger (13)	Director of the Zenstralstelle Österreichischer Landesjagdverbände (April 7, 2004)
Guenter Liebel (14)	BMLFUW – head of the department Natur- und Artenschutz, Nationalparks (May 6, 2004)
Friedrich Macher (15)	President of the VAVÖ (October 6, 2004)
Gerhard Mannsberger (16)	BMLFUW – head of the Sektion Forstwesen (April 21 2004)
Ernst Partl (17)	Former forest policy officer at Umweltdachverband (May 14, 2004)
Gerald Plattner (18)	Naturfreunde Österreich – voluntair policy officer (April 23, 2004)
Johannes Schima (19)	BMLFUW - head of the department 'Forstliche Raumplannung, Waldschutz' in the Sektion Forstwesen (April 13, 2004)
Gerald Steindlegger (20)	WWF Österreich – forest and alps policy officer (April 15, 2004)

Thomas Stemberger (21)   PROKO – head of the Department Forstwirtschaft und
                                Umwelt (March 26, 2004)
Peter Weinfurter (22)   Österreichische Bundesforste AG – former director
                                (April 23, 2004)
Franz Zaunbauer (23)   BMLFUW - Landesforstdirektor Salzburg
                                (March 24, 2004)

The Netherlands
Erwin Al (24)   Staatsbosbeheer – forest policy officer (January 6, 2004)
Dhr. Alferink (25)   Koninklijke Nederlandse Jagers Vereniging – director
                                (Febraury 4, 2004)
Willem de Beaufort (26)   Staatsbosbeheer – director regio Limburg/Oost-Brabant
                                (January 23, 2004)
Karel de Beer (27)   Ministerie van Economische Zaken – senior policy officer
                                (December 16, 2003)
Kees Boon (28)   Algemene Vereniging Inlands Hout – director
                                (December 5, 2003)
Rob Busink (30)   Ministerie van Landbouw, Natuurbeheer en Visserij –
                                senior policy officer (October 15, 2004)
Bea Claessens (31)   Provincie Gelderland – senior policy officer
                                (November 10, 2003)
Oene Gorter (32)   Federatie Particulier Grondbezit – private forest estate
                                owner (November 11, 2003)
Marleen van den Ham (33)   Ministerie van Landbouw, Natuurbeheer en Visserij –
                                policy officer (August 5, 2003)
Herman Havekes (34)   Unie van Waterschappen – Head of the Juridical
                                Department (September 20, 2004)
Paul van den Heuvel (35)   Vereniging van Nederlandse Houthandelaren – policy
                                officer (February 2, 2004)
Lex Hoefnagels (36)   Provincie Limburg – policy officer (October 16, 2003)
Patrick Jansen (37)   Stichting Bos en Hout/Stichting Probos – director
                                (December 12, 2003)
Jos Jansen (38)   Bosschap – secretary/director (October 17, 2003)
Walter Kooij (39)   Raad voor het Landelijk Gebied – secretary/director
                                (November 27, 2003)
Henny Kromhout (40)   ANWB (December 3, 2003)
Hugo Kuijer (41)   Ministerie van Volkshuisvesting, Ruimtelijk Ordening en
                                Milieu – senior policy officer (January 8, 2004)

Jaap Kuper (42)	Koninklijke Nederlandse Bosbouw Vereniging – chair (November 6, 2003)
Nico Leek (43)	Platform Hout Nederland – secretary (November 28, 2003)
Meino Lumkes (44)	Provincie Drenthe – policy officer (December 4, 2003)
Theo Meeuwissen (45)	Staatsbosbeheer – regio Gelderland (October 3, 2003)
Herman van der Meiden (46)	Former director Stichting Bos en Hout (November 20, 2003)
Marco Mensink (47)	Vereniging Nederlandse Papierindustrie – policy officer (January 16, 2004)
Sandra Mulder (49)	FSC Nederland – director (December 18, 2003)
Frank Naber (50)	De Landschappen – director Overijssels Landschap (November 7, 2003)
Rob Nas (51)	Former secretary Bosschap (October 14, 2003)
Jaap Paasman (52)	Ministerie van Landbouw, Natuurbeheer en Visserij – policy officer (January 16, 2004)
Dhr. Repelaer (53)	Federatie Particulier Grondbezit – private forest estate owner (December 9, 2003)
Renske Schulting (54)	Schulting Onderzoek – forest researcher (December 4, 2003)
Henk Siebel (55)	Natuurmonumenten – forest policy officer (November 5, 2003)
Jos Truijen (56)	Formerly affiliated to Nederlandse Vereniging Bos Eigenaren (November 25, 2003)
Esther Veldhuis (57)	Ministerie van Landbouw, Natuurbeheer en Visserij – policy officer (November 19, 2003)
Dhr. Verweij (58)	Stichting Face – director (December 8, 2003)
Kees van Vliet (59)	Former forest researcher Alterra (July 29, 2003)
Martijn van Wijk (60)	Forest researcher Alterra (November 21, 2003)
Arno Willems (61)	Unie van Bosgroepen – director (October 10, 2003)

Appendix 2 Coding list

Conceptual framework	**Coding used for analyzing interviews**
Membership	111 Governmental actor
	112 Semi-governmental actor
	113 Actor from NGO
	114 Private
	115 Other
	121 – 131 Member
	122 – 132 Non member
	123 – 133 On the boundary
Membership rule	211 Historical reasons
	212 Issue at hand
	213 Property rule
	214 Perception on meaning of 'forests'
	215 Professional background
Interaction pattern	141 Control – level of authority
	142 Emotion – level of trust
	143 Operation - ability to perform
	144 Level of formality of interaction pattern
	151 Open interaction pattern
	152 Semi-permeable interaction pattern
	153 Closed interaction pattern
Framing the meaning of 'forests'	221 Political meaning
	222 Economical meaning
	223 Societal meaning
	224 Scientific meaning
	225 Professional meaning
'Forest sector' frame	311 'forestry'
	312 'forest management'
	313 'forest-wood chain'
	314 'site management'
	315 'forest and nature conservation'
Reframing	231 External challenges
	233 Internal challenges
	161 Willingness/ability to reframe low
	171 Willingness/ability to reframe high

Appendix 3 List of abbreviations

ANWB	Algemene Nederlandse Wielerbond (General Association for Recreation and Mobilization)
Austropapier	Austrian Paper Manufacturer's Association
AVIH	Algemene Vereniging Inlands Hout (General Association for Domestic Wood)
BFW	Bundesforschungs- und Ausbildungszentrum für Wald, Naturgefahren und Landschaft (Federal Research and Training Centre for Forests, Natural Hazards and Landscape)
BMLF	Bundesministerium für Land and Forst (Minstry of Agriculture and Forestry)
BMLFUW	Bundesministerium für Land, Forst, Umwelt, und Wasser (Ministry of Agriculture, Forestry, Environment and Water management)
BMW	Bundesministerium für Wirtschaft (Ministry of Economical Affairs)
BOKU	Universität für Bodenkultur (University for Ground Cultivation)
BRL	Beoordelingsrichtlijn Duurzaam Bosbeheer (Assessment Guideline Sustainable Forest Management)
CAO	Collectieve Arbeids Overeenkomst (Collective Labor Agreement)
CEPF	Confédération Européenne des Propriétaires Forestiers (European Association of private forest owners)
CEPI	Confederation of European Paper Industries
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CRM	Ministerie van Cultuur, Recreatie en Maatschappelijk Werk (Ministry of Culture, Recreation and Social Work)
EFI	European Forest Institute
EHS	Ecologische Hoofdstructuur (Ecological Main Structure)
E-NGOs	Environmental-Non-Governmental-Organizations
EU	European Union
EP	European Parliament
FAO	Food and Agricultural Organization of the United Nations
FFL	Flora en Fauna Wet (Flora and Fauna Law)
FHÖ	Fachverband der Holzindustrie Österreichs (Association of the Austrian Wood Processing Industry)
FPP	Forum for Forest Board and Paper
GML	Gelderse Maatschappij van Landbouw (Gelderse Association for Agriculture)

HBD	Habitats and Birds Directives of the European Union
HOSP	Houtoogststatistiek en prognose oogstbaar hout (Wood harvesting statistics and forecasts for harvestable wood)
HVLF	Hauptverband der Land- und Forstwirtschaftsbetriebe Österreichs (Austrian Confederation of Farmers and Forestry Owners)
HVP	Houtvoorzieningsplan (Policy plan on Wood Supply)
IBN-DLO	Instituut voor Bos en Natuuronderzoek (Institute for Forest and Nature research)
IFF	Intergovernmental Forum for Forests
IFP	Intergovernmental Panel on Forests
KNBV	Koninklijke Nederlandse Bosbouw Vereniging (Royal Dutch Forestry Association)
KPÖ	Kommunistische Partei Österreichs (Communist Party of Austria)
L&V	Ministerie van Landbouw en Visserij (Ministry of Agriculture and Fishery)
LNV	Ministerie van Landbouw, Natuurbeheer en Visserij (Ministry of Agriculture, Nature management and Fisheries)
LWKB	Landelijke Werkgroep Kritisch Bosbeheer (National Working Committee Critical Forest Management)
MCPFE	Ministerial Conference on Protection of Forests in Europe
MEZ	Ministerie van Economische Zaken (Ministry of Economical Affairs)
MJBP	Meerjarenplan Bosbouw (Long-term policy plan for Forestry)
NBLF	Departement Natuur, Bos, Landschap en Faunabeheer (Department Nature, Forest, Landscape, and Fauna management)
NBT	Nederlands Bosbouw Tijdschrift (Dutch Forestry Journal)
NFÖ	Naturfreunde Österreich (Nature Friends Austria)
nfp	national forest program
ngo	non-governmental organization
NHM	Nederlandse Heidemaatschappij (Dutch Heather Company, NHM)
NM	Vereniging tot Behoud van Natuurmonumenten (Association for Preserving Nature Monuments)
NVB	Nederlandse Bosbouw Vereniging (Dutch Forestry Association)
NVBE	Nederlandse Vereniging van Bosbouw Eigenaren (Dutch Association for Forest Owners)
NvM	Natuur voor Mensen, Mensen voor Natuur (Nature for people, people for nature)
ÖBf	Österreichische Bundesforste (Austrian Federal Forest Service)
ÖBf-Ag	Österreichische BundesforsteAktiengesellschaft (Austrian Federal Forest Service – limited company)

OeAv	Österreichische Alpenverein (Austrian Alpine Association)
ÖF	Österreichischer Forst Verein' (Austrian Foresters Association)
ÖGB	Österreichischer Gewerkschaftsbund (Austrian Federation of Trade Unions)
OHH	Overlegorgaan Houtvoorziening en Houtverwerking (Platform for wood supply and wood processing).
ÖTK	Österreichische Touristenklub (Austrian Tourist Club)
ÖVP	Austrian People's Party
PBOs	Product- en bedrijfschappen (Industrial boards)
PEFC	Pan European Forest Certification
PHN	Platform Hout in Nederland (Platform for Wood in the Netherlands)
PL	Provinciale Landschappen (Provincial Landscape Conservation Organizations)
PRÄKÖ	Präsidentenkonferenz der landwirtschaftlichen Körperschaften Österreich (Presidents' Conference of the Austrian Chambers of Agriculture)
Probos	Stichting Probos (Association Pro-forest)
SBB	Staatsbosbeheer (National Forest Service)
SBH	Stichting Bos en Hout (Association Forest and Wood)
SER	Sociaal Economische Raad (Social Economic Council)
SIH	Stichting Industriehout (Association Industry Timber)
SKB	Stichting Kritisch Bosbeheer (Association Critical Forest Management)
S-NGOs	Sport-Non-Governmental-Organizations
SNM	Stichting Natuur en Milieu (Association Nature Protection and Environment)
SP	Social Partnership
SPÖ	Social democrat Partei Österreichs (Social Democrat Party Austria)
TFAP	Tropical Forest Action Plan
UNCED	United Nations Conference on Environment and Development
UNECE	United Nation Economic Commission of Europe
UNFF	United Nations Forum on Forests
UvB	Unie van Bosgroepen (Union of Forest Groups)
UvW	Unie van Waterschappen (Union of Waterboards)
V&W	Minsterie van Verkeer en Waterstaat (Ministry of Traffic and Water Control)
VAVÖ	Verband Alpiner Vereine Österreichs (Federation of Alpine Association Austria)
VBN	Vogelbescherminge Nederland (Dutch Association for the Protection of Birds)

VNBL	Vakblad Natuur, Bos en Landschap (Professional Journal for Nature, Forest, and Landscape)
VNP	Vereniging Nederlandse Papierindustrie (Dutch Paper and Board Association)
VÖF	Verband Österreichischer Förster Association' (Austrian Foresters Association).
VÖP	Vereinigung der Österreichischen Papierindustrie (Association of Austrian Paper Industry)
VROM	Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieu (Minstry of housing, spatial planning, and environment)
VVNH	Vereniging van Nederlandse Houthandelaren (Association of Dutch Timber Traders)
WRO	Wet op de Ruimtelijke Ordening (Spatial Planning Act)
WWF	World Wide Fund for Nature

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Evelien Verbij

Curriculum Vitae

Evelien Verbij was born in Purmerend on July 11th 1975 in the Netherlands. After high-school graduation (VWO) in 1993 at the St. Ignatiuscollege, she studied Forestry at Wageningen University. During the doctoral phase of her study she did her graduate project at Alterra, a research institute for the green environment and looked into the well-being function of nature. She did an externship in the United Kingdom. She graduated in January 1999 end then started to work as a junior-researcher at Alterra researching policy processes in the green environment. In February 2001, she started a PhD at the Forest- and nature policy chairgroup at Wageningen Univesity. This thesis is the result of the research conducted there. Since February 2006 she works as a senior policy officer at the Bosschap in Driebergen.

Evelien Verbij werd geboren op 11 juli 1975 te Purmerend. Na het behalen van haar middelbare school diploma (VWO) aan het St. Ignatiuscollege in Purmerend in 1993, begon zij datzelfde jaar de studie Bosbouw aan de toenmalige Landbouwuniversiteit te Wageningen. Tijdens de doctoraalfase heeft zij een afstudeeronderzoek verricht bij het onderzoeksinstituut Alterra naar de welzijnsfunctie van natuur. De stage-periode bracht ze door in het Verenigd Koninkrijk. In januari 1999 studeerde zij af en begon zij als junior-onderzoeker bij Alterra bij het team Beleidsprocessen Groene Ruimte. Na twee jaar maakte zij in februari 2001 de overstap naar Wageningen Universiteit waar zij AIO werd bij de leerstoelgroep Bos- en Natuurbeleid. De resultaten van het daar uitgevoerde onderzoek staan beschreven in dit proefschrift. Sinds februari 2006 werkt zij als senior-beleidsmedewerker bij het Bosschap in Driebergen.

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