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# **FSC Standard for Finland**

Finnish FSC Association

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#### PREFACE

The Forest Stewardship Council (FSC) is an independent, non-governmental, not-for-profit organisation established to promote the responsible management of the world's forests.

The FSC provides standard-setting, <u>trademark assurance</u> and <u>accreditation</u> services for companies and organisations interested in <u>responsible forestry</u>. Products carrying the FSC label are independently certified to assure consumers that they come from forests that are managed to meet the social, economic and ecological needs of present and future generations. The FSC maintains representation in more than 45 countries.

Forests provide us with clean water and fresh air, and help combat global warming. They also provide food, medicine and important natural resources, such as timber and paper. If managed responsibly, forests and plantations benefit forest people and the global community. However, in some countries as much as 80% of the timber is harvested illegally. This often involves violation of human rights and felling of protected forests. The FSC attempts to minimise the negative impacts of forest operations. For further information, please visit: www.fsc.org.

The Finnish FSC Association was established to draft national indicators for the international FSC Principles and Criteria. Furthermore, the association promotes FSC certification in Finnish forests, provides guidance to companies in using the FSC label and works in co-operation with FSC International and other FSC associations. More information is available at <a href="http://finland.fsc.org">http://finland.fsc.org</a> (in Finnish).

#### **1. INTRODUCTION**

#### 1.1 Purpose

The purpose of drafting this Standard is to prepare requirements for responsible forest management suited to circumstances in Finland. Accredited certification bodies will evaluate the implementation of the requirements. The international FSC Principles and Criteria (February 2000) make up the framework of the Standard. These are supplemented by national indicators, formulated with respect to Finnish legislation as well as social and geographic conditions.

The structure and content of the Standard follow the requirements of FSC International (FSC-STD-20-002 Structure and Content of Forest Stewardship Standards).

#### 1.2 Scope

This Standard applies to all Finland and all types of forest ownership.

#### 2. VERSION OF THE STANDARD

This version of the Standard has been drafted in March–September 2010 in response to a message from FSC Executive Director Andre de Freitas (11 March 2010) in which the Finnish FSC Association was requested to rapidly close the accreditation conditions applying to the standard accredited on 7 June 2006.

#### 2.1 Code

The code of this Standard is: FSC-STD-FIN-01-2006 Finland natural forests FIN.

#### **2.2 Signatures**

Suomen FSC-yhdistyksen hallituksen allekirjoitukset

Suomen FSC-yhdistyksen hallitus on päättänyt 24.9.2010 esittää oheisen standardin yhdistyksen jäsenistön hyväksyttäväksi seuraavassa yleiskokouksessa (8.10.2010). Vakuudeksi:

Nimenselvennys TARI HAAHIEL

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#### **3. CONTEXT**

#### 3.1 General description of forest management in Finland

3.1.1 Finland is the most forested country in Europe

The human influence on forests in Finland has a long history. The livelihoods and cultural development of people have long relied on forests and their natural resources.

Forest management in Finland is mainly based on the use of native tree species. Forests are generally managed quite intensively with practices based on regular thinnings and clear-fellings. As part of forest management, the majority (some 10 million hectares) of Finland's mires have been drained.

Of the land area in Finland, 86% (26 mill. ha) is classified as forestry land. On the basis of site productivity, forestry land is divided into forest land (20 mill. ha), low-productive land (3 mill. ha) and non-productive land (3 mill. ha). The proportion of mires is 34% of the forestry land area.

Of the total forestry land in Finland, 84% is available for wood supply, *i.e.* felling is permitted in these areas. The total growing stock volume in Finland has increased since the 1970s, amounting to 2,206 million cubic metres (over bark). Half of the growing stock volume consists of Scots pine, 30% Norway spruce and 20% broadleaves (mainly birch). The proportion of pine has gradually increased and that of spruce has decreased. The proportion of growing stock on mires is 23%, and its importance is increasing. Of the growing stock volume, 92% is in forests available for wood supply.

The annual increment of the growing stock in Finland is 100 million cubic metres, of which 97 million cubic metres are in forests available for wood supply. In 2008, the total drain of stemwood was 70 million cubic metres, or 3.2% of the standing volume. Since the 1970s, drain has continuously remained lower than the volume increment of the growing stock. The difference between increment and drain was largest in pine.

Finland reports its greenhouse gas emissions annually to the UN Framework Convention on Climate Change and the EU. In 2007, the annual increase in carbon stocks sequestered by forests was 33 million tonnes. This means that Finnish forests act as carbon sinks.

Owing to conditions in the north, forest management in Finland takes place in climatically exceptional conditions. Finland belongs for the most part to the boreal vegetation zone.

The number of tree species in Finnish forests is small. There are only four coniferous species native to Finland, and fewer than 30 deciduous trees and arborescent shrubs. The majority of forests in Finland are predominantly coniferous, with broadleaves growing in mixed stands.

3.1.2 Private forest ownership – family forests predominate

As in other countries in Western Europe, forests in Finland are mainly owned by private people and families. Private forest holdings are mostly in the hands of families. The holdings are quite small. The number of farms with more than two hectares of forest is 345,000. The average size of holdings is 30 ha.

There are more forest owners than there are holdings, because spouses often have joint ownership of the holding. The number of people owning forest is estimated to be about 735,000.

Of the total forestry land in Finland, 52% is under private family ownership; the State owns 35% and forest industry companies own 8%. The remaining 5% represents forests under municipal, parish, shared or joint ownership. State-owned forests are mainly situated in Northern Finland, and the State also owns most of the nature conservation and wilderness areas. Private forest owners have 64% of the total growing stock volume and 70% of the growing stock in forests available for wood supply.

#### 3.1.3 Safeguarding and protecting forest biodiversity

Strictly protected areas cover 5.2% of forest land in Finland (2008). In addition, 0.4% of forest land is protected as areas where restricted forest management is possible. Of the total land area (including low-productive and non-productive lands), 13.7% is strictly protected. Most of the forest conservation areas have been established in Northern Finland, where the State owns a lot of forests, while there are clearly less of them in Southern Finland, where the majority of forests are owned by private persons. The main flaw in the forest conservation area network is the low rate of conservation in the hemiboreal, southern boreal and middle boreal forest vegetation zones, where only about 2% of forest land is strictly protected.

Nature conservation in Finland is based on statutory conservation programmes specific to habitat types. National parks and nature reserves are the backbone of the conservation programmes. These have been complemented with special conservation programmes for mires, herb-rich forests, old-growth forests, wetlands, shoreline areas and esker formations. The smallest sites are protected under separate conservation decisions. The preservation of wilderness areas in Lapland is secured by the Wilderness Act. The EU Natura 2000 network includes 1,860 protected sites in Finland, totalling 4.9 million hectares (of which 3.6 mill. ha is land).

The status of voluntary protection measures in privately owned forests was surveyed in the Forest Biodiversity Action Programme for Southern Finland (METSO) in 2002–2007. The second phase is being implemented in 2008–2016. The programme has tested and adopted new solutions in protection based on voluntary participation to promote forest biodiversity, especially for individual forest owners. Sites protected under the METSO programme may remain in private ownership or be sold to the State.

Biological diversity in commercial forests is promoted by the Forest Act, recommendations and guidelines for best practices in forest management as well as fixed-term conservation agreements, forest certification and training. Forestry professionals take a special qualification in nature management. The Nature Conservation Act lists nine protected habitat types, three of which are found in forests, while the Forest Act contains definitions of habitats of special importance.

According to recommendations, old broadleaved trees are left standing in the forest in fellings, and decaying trees or other trees that have special biological value are also preserved.

About one half of the approximately 43,000 species known in Finland live in forests. Since the 1990s, there have been significant inputs in the research in forest species, and the interaction between forest management and forest species. The occurrence of threatened species is monitored regularly. According to a recent survey, there are 1,505 threatened species in Finland, of which 37% are forest species that favour especially herb-rich forests or old-growth forests (Annex 1). The majority of threatened forest species are invertebrates and fungi.

An assessment of threatened habitat types in Finland was first published in 2008. It assessed the status 400 habitat types and human influence on them. Two-thirds of the 76 habitat types in forests were found to be threatened. In the evaluation, mires were classified into 54 types, of which about a half were assessed to be threatened throughout the country.

#### 3.1.4 Indigenous peoples in Finland

The Sámi are an indigenous people recognised by the UN. The Sámi in Finland can be divided by language into the North Sámi, the Inari Sámi and the Skolt Sámi. As determined by the Constitution and other legislation, the Sámi people have use rights to the land and cultural autonomy in their homeland in Northern Finland (municipalities of Enontekiö, Inari and Utsjoki, and part of Sodankylä). Reindeer herding and management is not only part of the Sámi culture, but also important for the economy in Northern Finland. Metsähallitus, which manages the State forests, shall consider the Sámi people in particular, negotiating with them about forest management operations in the Sámi homeland. The Sámi interests in local and political decision making are represented by the Sámi Parliament, the Skolt Village Assembly and the reindeer

herding co-operatives. Many Sámi organisations have proposed the approval of tenure to the State land, but the processes are still under way.

#### 3.1.5 Cultural and multiple use of forests

Access to and recreational use of forests is free for all in Finland. The everyman's rights (freedom to roam) bestow on all people a free right to use land owned by others to travel on foot, skis, bicycle or horseback, provided that they do not cause any damage. Other activities freely permitted on other people's land are picking wild berries and mushrooms. The use of motor vehicles and making fire in forests, however, always require permission from the landowner.

Forests are an important environment for recreation in Finland. The most common forms of recreation in forests are hiking, berry-picking, hunting, camping, cross-country skiing and orienteering. Forests also provide a setting for relaxation, meditation and communing with nature.

The most important non-wood products which have an economic value are game, berries, mushrooms and lichen. The greatest value in economic terms is game, particularly moose. In Northern Finland, reindeer management is also regionally significant. The volume of nature tourism has increased in recent years.

#### 3.1.6 Forest industry

Finland is country that depends on forests and relies on the forest sector business. Forestry and forest industry account for approximately 6% of the gross domestic product. The great majority of forest industry products are exported. The most important market is the European Union which represents nearly 70% of the exports.

#### 3.1.7 Workforce in forestry and forest industry

Forestry and forest industry are important in maintaining the vitality of rural areas, employing about 89,000 persons, three-fourths of whom work for the forest industry. Forestry provides jobs for about 23,000 people, mostly in small forestry contracting and transport businesses. In addition, a considerable part of silvicultural work in particular is done by private forest owners and their families.

#### 3.1.8 Energy from wood

The share of wood-based fuels of the total consumption of energy in Finland is about 20%. Most of the wood-based energy is produced by the forest industry. Forest industry companies produce their own energy using bark, sawdust and chips, logging residues from thinnings and regeneration fellings as well as process by-products such as black liquor. Wood is also used increasingly in rural areas and population centres, especially for heating. A target has been set to increase the use of forest chips to 13.5 million cubic metres by the year 2020.

#### 3.1.9 International co-operation and commitments in promoting sustainable forest management

Finland participates actively in international forest policy and co-operation, and is committed to implementing its international obligations (Annex 2). These and EU objectives are incorporated nationally in various policy programmes and strategies. The National Forest Programme 2015, the National Strategy for Sustainable Development, the Forest Biodiversity Action Programme for Southern Finland (METSO), the National Climate and Energy Strategy as well as Finnish development policy in forestry are consistent and supportive of each other.

International agreements have been implemented in legislation and in other guidelines. The forest legislation regulating the sustainable management and use of forests gives special attention to protection of biodiversity. Besides other constitutional rights, the Constitution of Finland guarantees the linguistic and cultural rights of the (indigenous) Sámi people. Economic policy instruments along with research and education play an

important role in achieving the international objectives. Forestry organisations and different stakeholders have paid more and more attention to international and EU-level forest issues, being actively involved in preparing international forest policy and EU forest affairs together with different ministries.

3.1.10 National forest programmes and other forest-related programmes

Forest programmes have played an important role in Finland both as an instrument of forest policy and in the provision of funding for forestry. The latest one is the National Forest Programme 2015 (NFP 2015), prepared in extensive co-operation and adopted by the Government in 2008 and updated in 2010. Its aim is to secure employment and livelihoods based on the use of forests, the biological diversity and vitality of forests, as well as their recreational benefits.

In 2008, the Government also adopted the Forest Biodiversity Action Programme for Southern Finland 2008–2016 (METSO). The aim of the METSO programme is to improve the maintenance of habitats and structural features of forests vital to the survival of threatened species.

The first regional target programmes for forestry (regional forest programmes) to comply with the revised Forest Act of 1997 (Annex 3) were completed in 1998. The programmes were revised in 2000, 2005 and 2008. They provide an overall view of the status and development needs of forests and forest management in the domain of each Forestry Centre.

Finland's National Strategy for Sustainable Development was adopted by the Government in 2006, aimed at ecological sustainability and creating the economic, social and cultural preconditions for achieving this end. The National Strategy for the Conservation and Sustainable Use of Biodiversity in Finland 2006–2016 was also adopted by the Government in 2006. The aim of the strategy is to halt the decline of biodiversity in Finland, and to establish a favourable development of biodiversity in the long term.

#### 3.1.11 Forestry and environmental organisations

The highest forest authority in Finland is the Ministry of Agriculture and Forestry, whose mandate is to create conditions for the sustainable and diversified use of renewable natural resources and to secure the quality of the commodities obtained from them. The Department of Forestry in the Ministry is charged with directing and developing forest policy in Finland. Metsähallitus (State forests), the Finnish Forest Research Institute, the Forestry Development Centre Tapio and the regional Forestry Centres are all under the performance guidance of the Ministry. The 13 Forestry Centres and the Forestry Development Centre Tapio are responsible for promoting the sustainable management of forests, protecting their biodiversity and other activities within the forest sector. Metsähallitus manages, uses and protects the natural resources and other property on State lands under its administration. Forests and forestry are studied in Finnish Forest Research Institute.

The function of the 113 Forest Management Associations in Finland (figure as of 1 January 2009) is to promote the profitability of forestry practised by forest owners and to support the attainment of objectives they set to their operations. The Forest Management Associations are organised geographically into Unions of Forest Management Associations (8 unions as of 1 January 2009). The Unions in turn are members of the national interest group, the Central Union of Agricultural Producers and Forest Owners (MTK).

There are also a number of organisations for forest and wood products industry employers, employees, contractors and other interest groups as well as great many NGOs active in the forest sector.

Many environmental and nature conservation NGOs promote the protection and more sustainable use of forests. Among their activities, they produce information on valuable forest areas, prepare action proposals and recommendations, participate in political processes related to forest use as well as organise different nature-related activities. Organisations working actively with forest nature include BirdLife Finland,

Greenpeace, the Finnish Nature League, the Finnish Society for Nature and Environment, The Finnish Association for Nature Conservation and WWF Finland.

#### 3.1.12 Legislation

Practically all legislation on forests and nature conservation was reformed in the mid-1990s (Annex 3).

In the Forest Act (1997), the requirement of maintaining forest biodiversity has emerged alongside wood production as an important aim of forest management. Thanks to the Act on the Financing of Sustainable Forestry (Kemera), nowadays Government financing is available not only for traditional silvicultural work, but also for safeguarding forest biodiversity, habitat management and wood harvesting for energy. As a result of the reformation of forest legislation, the acts concerning Metsähallitus, the Forestry Centres and the Forest Management Associations were also amended.

Statutes affecting forest management also include the Act on Trade in Forest Reproductive Material, the Act on the Prevention of Insect and Fungal Damage in Forests, and the Act on Environmental Impact Assessment Procedure. Such matters as zoning are governed by the Land Use and Building Act. During the preparation of local and master plans, various uses of forests are merged together at the regional and municipal levels.

Employment relationships and occupational safety and health are covered extensively by legislation. Forestry is also covered by special legislation which applies to the safety of wood harvesting work, for instance.

Nearly all persons working in the forest sector are covered by collective agreements made by employer organisations and trade unions, negotiated within the framework of labour legislation.

#### 3.1.13 Interaction in forest resource planning

The sustainable management and use of forests depends on smooth co-operation between the public and private sectors, since the development of the forest sector is very much influenced by the actions of forest industry companies, SMEs, forest owners, forestry interest groups and many others. These actors participate in the direction and monitoring of forest policy in the national Forest Council and regional Forest Councils as well as numerous forestry-related working groups.

Regional special characteristics are considered in regional forest programmes. This work relies on cooperation with other organisations preparing regional programmes, such as Regional Councils, Centres for Economic Development, Transport and the Environment (ELY Centres) as well as authorities responsible for statutory land-use planning, such as municipalities. Regional forest programme work is developed as a participatory process. The comprehensive land-use planning system used in Finland (regional plans and municipal master and local plans) is a good example of the participatory process.

#### 3.1.14 Education and training

Forestry education is provided in the universities of Helsinki and Joensuu, and at the technical and vocational level in several institutes and colleges around the country. Training for private forest owners is provided by private forestry organisations, forestry colleges and polytechnics, as well as various further training centres.

Advisory services for forest owners are provided by Forest Management Associations, Forestry Centres as well as forest service and forest industry companies. Advisory services may take the form of personal or group consultation, or consultation provided in conjunction with exhibitions, competitions or field trips.

There are several journals in Finland dealing with forestry. They publish information about forests for interested parties, primarily for forest owners and forestry professionals.

#### 3.1.15 Forest management planning

Regional Forestry Centres conduct regional forest management planning, complemented by management plans for individual forest holdings and owners. The Forestry Centres have surveyed valuable forested environments in their respective regions. Management plans include compartment-specific information on the area, volume, structure and increment of the growing stock as well as the location and characteristics of valuable habitats. The plans also suggest measures for both forest management and habitat management.

Forest management plans for individual holdings are an important instrument for systematic long-term forest management. They normally come in printed form and are valid for 10–15 years, mostly prepared by the Forestry Centres and the Forest Management Associations. The management plan is an account of the forest resources of the holding, based on a field visit and documented by map data, and including calculations of harvesting opportunities and needs for silvicultural work and environmental management.

GIS-based, continuously updated forest management plans or forest information systems are applied in the forests of companies and other large forest owners. Detailed mapping and calculation functions are essential features of these systems. Information on forest resources is continuously updated on the basis of data coming from the field.

#### 3.1.16 Types of timber sale

In Finland, forest operations or timber sales can be realised in many different ways depending on the circumstances.

In a *standing sale* (or *stumpage sale*), the forest owner sells a felling right to a certain area, and the buyer obtains the right to perform wood harvesting as agreed in the sales agreement (felling agreement).

In a *delivery sale*, the forest owner is responsible for harvesting and delivers the processed timber to the roadside.

In *business-to-business sales*, the timber is delivered to the point of use. This type of sale is usually conducted by companies and Metsähallitus.

A *forest service agreement* is an agreement on work that a forest service provider will perform in the forest owner's forests. The services may be related to timber sale, silviculture, forest operations, management planning and/or forestry advice. Such services may be provided, for example, by companies, associations and Forestry Centres.

3.1.17 Forest inventory, monitoring and assessment

The Finnish Forest Research Institute implements a national forest inventory by surveying all areas every 10 years. National Forest Inventories (NFI) have been conducted since the 1920s. Structural features that have impacts on biodiversity and can be measured have been included in the latest inventories.

The Finnish Forest Research Institute maintains central statistics on harvesting and silvicultural work in commercial forests.

Regional Forestry Centres continuously assess the implementation and quality of felling and other forest management operations. Things under assessment include the number of retention trees, the amount of decaying wood, buffer zones of water courses, protection of valuable habitats and any damage caused to the remaining stand and soil.

Forest owners have access to the information regarding their own holdings. However, wider distribution of information on individual landowners is restricted by the Privacy Protection Act.

Regional ELY Centres and Metsähallitus Natural Heritage Services monitor the implementation of forest protection at the regional level. The Finnish Environment Institute (SYKE) is responsible for forest protection monitoring at the national level.

Companies and Metsähallitus monitor and assess internally the quality of silvicultural and other forest management activities in their own areas.

Inventory and monitoring data are continuously used in updating and developing forest management plans and forest information systems.

#### 3.2 Members of the Standard Working Group

The following group worked in April–September 2010 to close the accreditation conditions:

Environmental Chamber:	Sini Eräjää, Finnish Association for Nature Conservation
	Keijo Savola, BirdLife Finland
Economic Chamber:	Anders Portin, Finnish Forest Industries Federation
	Kirsi-Marja Korhonen, Metsähallitus
Social Chamber:	Jan Saijets, Porosaamelaiset (Sámi Reindeer Herders of Finland)
	Maili Mustonen, Kuluttajat Konsumenterna (Finnish Consumers' Union)
Chairperson:	Rotating
Secretary:	Antti Otsamo, Finnish Forest Industries Federation
	Bernt Nordman, Finnish Society for Nature and Environment

#### 3.3 Experts assisting the Standard Working Group

- Timo Lehesvirta, UPM-Kymmene
- Pekka Kallio-Mannila, Stora Enso
- Pasi Miettinen, Finnish FSC Association
- Bernt Nordman, Finnish Society for Nature and Environment
- Janne Soimasuo, Metsämannut

#### **3.4 References**

In the preparation of this Standard, the following FSC guidance and other documents were used for reference:

- FSC-STD-01-001 FSC Principles and Criteria for Forest Stewardship
- FSC-GUI-60-004 FSC Forest Stewardship Standards: structure, content and suggested indicators
- FSC-GUI-60-100 Guidance on interpretation of the FSC Principles and Criteria taking account of the scale and intensity of forest management
- ABU-REP-31-FIN-2006-03-01 Standards Evaluation Report
- Accreditation decision by the Standards Committee of the FSC Board of Directors at June 7th 2006
- FSC-STD-20-002 V3-0 Structure, content and local adaptation of Generic Forest Stewardship Standards
- FSC-STD-60-002 V1-0 Structure and Content of National Forest Stewardship Standards
- FSC-STD-60-006 V1-2 Process requirements for the development and maintenance of Forest Stewardship Standards
- FSC-STD-01-002 FSC Glossary of Terms

#### **3.5 Terms and definitions**

The terms related to the structure of this Standard are defined in the FSC glossary (FSC-STD-01-002 FSC Glossary of Terms).

#### 4. HIERARCHICAL FRAMEWORK

#### **4.1 Compliance with the Principles**

The FSC and FSC-accredited certification bodies will not insist on perfection in satisfying the FSC Principles and Criteria.

#### 4.2 Non-compliance

Major failures in any individual FSC Principle will normally disqualify a candidate from certification, or will lead to decertification.

#### 4.3 Certification decision

Certification decisions will be guided by the extent to which each FSC Criterion is satisfied, and by the importance and consequences of failures.

#### 4.4 Structure of the Standard

*Principles* are numbered from 1 to 10. The content of each Principle is described with a few unnumbered lines at the beginning of the Principle. The Finnish FSC Association cannot internally decide upon the content or formulation of the Principles. These things can be influenced by joining as a member of FSC International and participating in the preparation of Principles and Criteria.

*Criteria* are numbered using second level headings. There are several Criteria to each Principle, used by auditors to evaluate whether the Principle has been met. The Finnish FSC Association cannot internally decide upon the content or formulation of the Criteria either. These things can be influenced by joining as a member of FSC International and participating in the preparation of Principles and Criteria.

*Indicators* are numbered using third level headings. The preparation of indicators is the main task of the Finnish FSC Association. Indicators may be quantitative or qualitative variables which can be unambiguously measured or described. A sufficient number of indicators are prepared for each Criterion in order to cover all of its requirements. Indicators are binding to auditors who use them to evaluate whether the forest management meets the requirements of the Criterion.

*Notes* complement and detail the interpretation of the requirements set by indicators.

*Verifiers* are intended as tools for the forest owner and/or auditor. They are not binding. They can be used to show the implementation of an indicator as necessary.

Info boxes are intended as background information, primarily for the auditor. They are not normative.

*Footnotes, terms and definitions* fall under the main clause, *e.g.* a footnote of an indicator is part of the indicator and, therefore, it is normative.

#### 5. FSC STANDARD FOR FINLAND

The letter 'S' after the indicator number denotes that the indicator is applicable to all forest owner groups – including small forest owners.

The letters '**S.B**' after the indicator number denote that the indicator is applicable only to small forest owners (SLIMF<sup>1</sup>) with less than 500 ha of forest.

An indicator number only denotes that the indicator is applicable only to large forest owners.

#### PRINCIPLE 1: COMPLIANCE WITH LAWS AND FSC PRINCIPLES

Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.

#### 1.1 Forest management shall respect all national and local laws and administrative requirements.

1.1.1 S The forest owner shall comply with all legal requirements in forest management.

Verifiers: Judgments, Forestry Centre and ELY Centre data.

**1.1.2 S** The forest owner shall require that the forest service providers used comply with the law.

Verifiers: Judgments, Forestry Centre and ELY Centre data. Agreements made by the forest owner.

#### 1.2 All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid.

**1.2.1 S** The forest owner shall pay all applicable taxes and charges related to forest management and use, most importantly:

- a) income tax on timber sale
- b) value-added taxes related to forest management
- c) employer charges
- d) forest management fee (unless exempt)

Verifiers: Bookkeeping of the holding, tax records.

## **1.3** In signatory countries, the provisions of all binding international agreements such as CITES, ILO Conventions, ITTA, and Convention on Biological Diversity, shall be respected.

**1.3.1 S** The forest owner shall respect the provisions of international agreements by complying with the laws and regulations of Finland.

Verifiers: Judgments, Forestry Centre and ELY Centre data, other decisions by authorities.

**1.3.2** The forest owner shall comply with other relevant international agreements according to the guidelines confirmed by the FSC (FSC Policy 30-401, Annex 2b).

Verifiers: Interviews.

## 1.4 Conflicts between laws, regulations and the FSC Principles and Criteria shall be evaluated for the purposes of certification, on a case by case basis, by the certifiers and the involved or affected parties.

<sup>&</sup>lt;sup>1</sup> SLIMF (small and low intensity managed forests) refers to certification requirements for small forest holdings of less than 500 ha. If a certain indicator is applicable to a different size of forest holding, this is mentioned separately in the

**1.4.1 S** Any conflicts between legislation, regulations and the FSC Principles and Criteria shall be reported to the arbitration committee of the Finnish FSC Association, unless the certification body can resolve the conflict.

Verifiers: Certifiers' written decision, including the certification candidate's statements. Decision by the arbitration committee of the Finnish FSC Association.

### 1.5 Forest management areas should be protected from illegal harvesting, settlement and other unauthorized activities.

**1.5.1 S** The forest owner shall supervise the use of forests.

Verifiers: Forestry Centre and ELY Centre data, forest owner's interviews, field visits.

**1.5.2** S Upon gaining knowledge of any unauthorised activity by a third party, the forest owner shall take the necessary action, for example notify the appropriate authorities.

Verifiers: Forest owner's interview, notifications to authorities.

### **1.6** Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria.

**1.6.1 S** The forest owner shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria and the Finnish FSC Standard in forest management.

Verifiers: Written commitment, forest owner's interview.

**1.6.2** S If another party (*e.g.* a forest service provider) acts for the forest owner within the scope of the Standard, the forest owner shall require adherence to the FSC Principles and Criteria and the Finnish FSC Standard.

Verifiers: Management plan, forest service agreement, forest owner's and service providers' interviews.

**1.6.3 S** According to the international FSC regulations (Annex 6, Policy 20-002), the forest owner may have only a part of the forest holding certified. In such a case, the forest owner's areas remaining outside certification shall be notified to the certifiers.

Verifiers: Forest owner's land ownership data, interview.

### **PRINCIPLE 2: TENURE AND USE RIGHTS AND RESPONSIBILITIES** Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.

2.1 Clear evidence of long-term forest use rights to the land (*e.g.* land title, customary rights, or lease agreements) shall be demonstrated.

2.1.1 S The forest owner shall demonstrate long-term:a) land title, orb) use rights to the land

Verifiers: Real estate register, landowner's agreements.

2.2 Local communities with legal or customary tenure or use rights shall maintain control, to the extent necessary to protect their rights or resources, over forest operations unless they delegate control with free and informed consent to other agencies.

2.2.1 S The forest owner shall respect statutory easements and use rights concerning the area (real estate).

Verifiers: Real estate register, landowner's and stakeholders' interviews.

**2.2.2 S** In areas covered by municipal master and local plans, when a landscape work permit is required for forest operations, the forest owner shall have the results of consulting the neighbours before commencing fellings that have significant aesthetic impacts on the landscape.

Verifiers: Plan regulations, landscape work permit, interviews.

**2.2.3 S** The forest owner shall respect the everyman's rights (freedom to roam).

Verifiers: Stakeholder interviews, field inspections.

2.2.4 S The forest owner shall not restrict the use of forest roads without a reason.

Verifiers: Field inspections, road information, interviews.

**Note:** Restrictions of use may be justified for reasons such as seasonally poor roads, dumping of waste or abuse of everyman's rights.

**2.2.5** In the area referred to in the Hunting Act, section 8, the manager of State forests shall respect the residents' free hunting right on State land in their own municipality.

Verifiers: Guidelines, management of hunting arrangements, interviews.

2.2.6 S The forest owner shall allow free grazing of reindeer on land located in the reindeer herding area.

Verifiers: Stakeholder interviews, field inspections.

2.2.7 S The forest owner shall respect reindeer herders' right to off-road traffic in reindeer herding work.

Verifiers: Regulations on off-road traffic, stakeholder interviews, field inspections.

**2.2.8** The manager of State forests shall negotiate with the reindeer herding co-operative when planning forest operations that may have substantial impacts on reindeer herding. Things in the scope of negotiations and negotiation arrangements are determined by an agreement with the Reindeer Herders' Association.

Verifiers: Agreements, minutes of meetings, interviews with the Reindeer Herders' Association and reindeer herding co-operatives.

**2.2.9 S** In forest management, the forest owner shall consider the requirements of reindeer herding as follows:

- a) Reindeer fences are not broken and gates are kept closed.
- b) Site preparation is avoided on lichen heaths of winter pastures.
- c) Forest management work in the vicinity of separation corrals is planned and implemented in a way that it will not cause harm to reindeer separation.

Verifiers: Interviews, field inspections.

**2.2.10** In the Sámi homeland, the manager of State forests shall recognise customary use rights a) in management plans and b) in the implementation of the plans as well as record the measures taken to protect them.

#### Verifiers: Management plans, interviews.

**2.3** Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights. The circumstances and status of any outstanding disputes will be explicitly considered in the certification evaluation. Disputes of substantial magnitude involving a significant number of interests will normally disqualify an operation being certified.

**2.3.1** The forest owner shall document conflict situations related to forest operations and the status of their resolution, a) primarily attempting to reach resolution through negotiation with the parties involved, and, if this cannot be achieved, b) resolving disputes over tenure claims and use rights through legal processes.

#### Verifiers: Minutes of meetings, notes, judgments, interviews.

**2.3.1 S.B** The forest owner shall attempt to reach resolution through negotiation with the parties involved, and, if this cannot be achieved, resolve disputes over tenure claims and use rights through legal processes.

Verifiers: Minutes of meetings, notes, judgments, interviews.

**2.3.2** The forest owner shall recognise the disputes over tenure claims and use rights that may be of substantial magnitude involving a significant number of interests, and describe the mechanisms to resolve them as far as they are within the forest owner's authority.

Verifiers: Management plans, minutes of meetings, forest owner's and stakeholders' interviews.

#### **PRINCIPLE 3. INDIGENOUS PEOPLES' RIGHTS**

The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.

## **3.1** Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and informed consent to other agencies.

3.1.1 S The Sámi people shall have full authority over forest management on their privately owned lands.

Verifiers: Real estate registers.

**3.1.2** In the Sámi homeland, the forest owner shall consult the Sámi Parliament, the Skolt meetings and the reindeer herding co-operatives when planning the scale of forest operations and preparing significant land-use decisions (*e.g.* natural resource plans on State land). The Sámi views, as well as the way how they have been considered in the plans, shall be documented.

**3.1.2 S.B** In the Sámi homeland, the forest owner shall provide the reindeer herding co-operative an opportunity to give its views on the management plan. The views, as well as the way how they have been considered in the plan, shall be documented.

#### Verifiers: Management plans, negotiation memos, interviews.

**3.1.3** In the Sámi homeland, the manager of State forests shall make management plans specific to the reindeer herding co-operative, recording in them, on the basis of information provided by reindeer herding co-operatives and their sub-units, the most important arboreal and ground lichen pastures as well as other pasture areas, and routes and structures essential to reindeer herding.

#### Verifiers: Management plans, information provided by reindeer herding co-operatives and their sub-units.

**3.1.4** In the Sámi homeland, the management plan specific to the reindeer herding co-operative may not cause harm to reindeer herding or degrade important pasture areas. To secure this, the manager of State

forests and the reindeer herding co-operative shall make a written agreement for the following activities to be implemented by the manager of State forests:

- a) fellings in important grazing forests
- b) site preparation in the framework of the Forest Act
- c) construction of summer roads
- d) operations around structures important to reindeer herding (fences, separation corrals)
- e) land leasing, new snowmobile routes and other land uses with significant impacts and subject to permission within the authority of the manager of State forests

Such an agreement requires that the majority $^2$  of the reindeer herding co-operative does not oppose the decision.

Verifiers: Management plan, memos, agreements.

## **3.2** Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.

**3.2.1 S** In the Sámi homeland, the forest owner shall not prevent the practice of reindeer management by fencing, unless the fencing is approved by the reindeer herding co-operative.

#### Verifiers: Memos, interviews.

**3.2.2** Any sale of State land in the Sámi homeland outside areas covered by regional and municipal plans for purposes that prevent its use for reindeer management shall be negotiated beforehand with the reindeer herding co-operative and its sub-unit, attempting to obtain approval from the reindeer herding co-operative and the Sámi Parliament in the framework of legislation.

#### Verifiers: Memos, interviews.

**3.2.3 S** In the Sámi homeland, the forest owner shall not use site preparation on lichen heaths (xeric and subxeric heaths), except to comply with the Forest Act. Barren heath forests shall always be regenerated without site preparation, *e.g.* with methods maintaining vegetation cover. On other sites in the Sámi homeland, site preparation shall be avoided or applied with the lightest possible method.

#### Verifiers: Management plan, forest use declarations, field inspections.

**3.2.4** The manager of State forests shall maintain maps and statistics on lichen heaths specific to the Sámi reindeer herding co-operative, and develop reporting on other areas important to Sámi reindeer herding.

#### Verifiers: Reports, maps.

## **3.3** Sites of special cultural, ecological, economic or religious significance to indigenous peoples shall be clearly identified in cooperation with such peoples, and recognized and protected by forest managers.

**3.3.1** A forest owner with more than 1,000 ha of forest in the Sámi homeland shall identify, in co-operation with the Sámi Parliament, the Skolt meetings and the reindeer herding co-operatives, the most important sites regarding the Sámi culture:

a) locations of reindeer fences including directions of moving reindeer

 $<sup>^{2}</sup>$ A majority of the reindeer herding co-operative is achieved when 5/6 of the votes support the view. The majority view will prevail if there are two or fewer opposing full-time reindeer herders (with more than 80 reindeer). These conditions must be met simultaneously. In other words, no majority is reached if three full-time reindeer herders with 1/6 of the votes disagree. A majority decision is made when reindeer herders do not appeal against the decision in writing, referring to the above definitions, to the forest manager.

- b) old settlements and other cultural monuments
- c) arboreal and ground lichen sites of special significance
- d) traditional religious sites
- e) calving areas

Verifiers: Management plans, memos, interviews.

**3.3.1 S.B** The forest owner shall identify in the management plan the most important sites regarding the Sámi culture:

- a) locations of reindeer fences including directions of moving reindeer
- b) old settlements and other cultural monuments
- c) arboreal and ground lichen sites of special significance
- d) traditional religious sites
- e) calving areas

#### Verifiers: Management plans, memos, interviews.

**3.3.2** When planning forest operations in the vicinity of sites referred to in Indicator 3.3.1, the forest owner (> 1,000 ha) shall negotiate beforehand with the reindeer herding co-operatives and their sub-units, and record the Sámi proposals and how they have been considered.

#### Verifiers: Memos, interviews.

**3.4** Indigenous peoples shall be compensated for the application of their traditional knowledge regarding the use of forest species or management systems in forest operations. This compensation shall be formally agreed upon with their free and informed consent before forest operations commence.

**3.4.1 S** In the Sámi homeland, the forest owner shall compensate reindeer herders for reasonable expenses, if Sámi traditional knowledge of plant species and their utilisation is applied to the use of forest species, and if reindeer herders participate in the preparation of management plans specific to the reindeer herding co-operative through joint negotiations.

Verifiers: Compensation paid, interviews.

#### PRINCIPLE 4. COMMUNITY RELATIONS AND WORKERS' RIGHTS

Forest management operations shall maintain or enhance the long-term social and economic wellbeing of forest workers and local communities.

## **4.1** The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services.

**4.1.1** The forest owner shall give employment opportunities to local residents and contractors.

Verifiers: Invitations for tenders, contractor data.

**4.1.1 S.B** The forest owner shall evaluate the employment opportunities and benefits from forestry to the family.

Verifiers: Forest owner's interviews.

**4.1.2 S** The forest owner shall provide hired workers with the necessary information and, when needed, instruction or training for the quality and safe performance of the work.

Verifiers: Occupational safety guidelines, training data.

**4.1.3.** The forest owner shall provide appropriate instructions and monitor that hired contractors meet their occupational safety obligations.

*Verifiers: Training register, reports, employees' interviews, list of necessary training requirements and safety equipment.* 

### **4.2** Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.

**4.2.1 S** The forest owner shall comply with the legislation on occupational safety and health and occupational health care (Annex 3), and agreements and regulations based on them.

Verifiers: Occupational Safety and Health Act, occupational health and safety regulations, occupational safety guidelines, safety equipment, occupational health and safety inspections, inspection reports on machines and equipment, employees' interviews, occupational health risk surveys.

**4.2.2 S** The forest owner shall only make contracts with service providers who have taken care of their statutory taxes and charges (incl. social security and employment pension contributions).

Verifiers: Tax authority registers, Trade Register, contracts.

**4.2.3 S** In employment relationships, the forest owner shall comply with:

- a) labour legislation and other provisions applicable to employees and employees
- b) current collective agreements

Verifiers: Collective agreements, work instructions, working time monitoring reports, interviews.

**4.2.4 S** The forest owner shall ensure that employees have access to statutory safety equipment and appropriate instructions.

Verifiers: Instructions, interviews, inspections, list of safety equipment.

### **4.3** The rights of workers to organize and voluntarily negotiate with their employers shall be guaranteed as outlined in Conventions 87 and 98 of the International Labour Organisation (ILO).

**4.3.1 S** The forest owner shall grant workers the freedom of assembly and the freedom to join labour unions.

Verifiers: Interviews.

4.3.2 S The forest owner shall allow inspections of working conditions conducted by labour unions.

Verifiers: Interviews, inspection documents.

4.4 Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups (both men and women) directly affected by management operations.

**4.4.1** In management planning and operations, the forest owner shall especially consider impacts on social values of nationally important recreation areas.

Verifiers: Management plan, approved regional and municipal plans, social impact evaluation materials, evaluated impacts of recreational use of forests.

**4.4.2 S** The forest owner shall know the use rights of outsiders to the area.

Verifiers: Easements and encumbrances in the National Land Information System, agreements.

**4.4.3 S** The forest owner shall comply with the regulations of approved regional plans and municipal master and local plans.

Verifiers: Approved regional and municipal plans.

**4.4.4** Forest owners (> 10,000 ha and municipalities) shall ensure that management plans including recreation areas (V, VR and VL) of regional plans and municipal master and local plans incorporate the results of participatory planning regarding forest management principles.

*Verifiers: Approved regional and municipal plans, management plan, documentation of the process and results of participatory planning.* 

**4.4.5** In areas where a landscape work permit is required for forest operations, the forest owner (< 10,000 ha, other than municipalities) shall have the results of consulting the neighbours before commencing fellings.

Verifiers: Approved regional and municipal plans, management plan, results of consulting the neighbours.

**4.4.6** The forest owner shall have a documented routine for handling stakeholder feedback.

Verifiers: Forest owner's system, interviews.

**4.4.7 S** If plan regulations require a landscape work permit for forest operations, the forest owner shall supply information of the operations to the municipality.

Verifiers: Landscape work permit, interviews.

4.5 Appropriate mechanisms shall be employed for resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources or livelihoods of local peoples. Measures shall be taken to avoid such loss or damage.

4.5.1 S The forest owner shall be aware of the impacts of operations on local people's

- a) legal and customary rights
- b) property
- c) livelihoods

Verifiers: Interviews, judgments.

**4.5.2** The forest owner shall document conflicts about damage affecting the local people's legal and customary rights, property or livelihoods.

Verifiers: Easements recorded in the real estate register, forest owner's notes, protocols and minutes, judgments.

**4.5.2** S.B The forest owner shall document conflicts about damage affecting the local people's legal and customary rights, property or livelihoods, as established in writing.

Verifiers: Easements recorded in the real estate register, forest owner's notes, protocols and minutes, judgments.

**4.5.3 S** The forest owner shall have practices to resolve conflicts according to Finnish legislation.

Verifiers: Forest owner's notes, protocols and minutes, interviews, judgments.

**4.5.4 S** The forest owner shall document the handling and resolution of conflicts as well as compensation paid.

Verifiers: Forest owner's notes, protocols and minutes, judgments.

4.5.5 S The forest owner shall develop measures to avoid damage affecting local people.

Verifiers: Management plan, interviews.

#### **PRINCIPLE 5: BENEFITS FROM THE FOREST**

Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.

5.1 Forest management should strive toward economic viability, while taking into account the full environmental, social, and operational costs of production, and ensuring the investments necessary to maintain the ecological productivity of the forest.

5.1.1 S The forest owner shall set economic objectives for forest product sales and income generation.

Verifiers: Management plan, forestry revenues, forest owner's interview.

**5.1.2 S** The forest owner shall ensure adequate economic, technical and other resources for forest regeneration and other forest management as well as the protection of biological diversity, soil and water resources.

Verifiers: Measures taken and funds spent to maintain the economic and ecological productivity of the forest, management plan, bookkeeping of the holding.

5.1.3 S The forest owner shall be aware of applicable subsidies to forestry and environmental management.

Verifiers: Interviews, documents on subsidy options, subsidies and financing received, e.g. Act on the Financing of Sustainable Forestry (Kemera) and METSO.

**5.1.4 S** In order to maintain the productivity of forests, they shall be regenerated after regeneration felling with tree species suitable for the site, in compliance with the Forest Act.

Verifiers: Bookkeeping of the holding, management plan, forest use declaration, interview, field inspection.

## **5.2** Forest management and marketing operations should encourage the optimal use and local processing of the forest's diversity of products.

**5.2.1** The forest owner shall know the various production opportunities of the forest and be aware of local buyers of forest products.

Verifiers: Sales documents for forest products (roundwood, woody biomass, hunting lease, etc.), interviews.

**5.2.1 S.B** The forest owner shall know the various production opportunities of the forest.

Verifiers: Sales documents for forest products (roundwood, woody biomass, hunting lease, etc.), interviews.

**5.2.2** The forest owner shall promote local processing of forest products in line with business objectives and competition legislation.

Verifiers: Wood sales, interviews.

**5.2.3** The forest owner shall seek optimal value for the forest products in terms of markets, product prices, costs and other essential aspects.

Verifiers: Sales and logistics systems, interviews, sales documents.

## 5.3 Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.

**5.3.1 S** The forest owner shall utilise all marketable wood raw materials, unless wood is left on the site to enhance biological diversity (Indicator 6.3.1) or soil physical or chemical properties.

Verifiers: Field inspections, work instructions, sales documents.

**5.3.2 S** Harvesting and other forest management operations shall be conducted so as to avoid damage to the remaining stand.

Verifiers: Field inspection, work instructions.

## 5.4 Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.

**5.4.1** The forest owner should create circumstances for multiple use of forests by favouring operations that in the long term consider activities such as collection of mushrooms and berries as well as game management.

Verifiers: Management plan, guidelines, field inspections, forest owner's and stakeholders' interviews.

**5.4.2 S** The forest owner shall consider routes and structures important for ecotourism and recreational use by:

- a) preserving recreation routes, marked trails and structures of recreation areas in regional plans and municipal master and local plans while performing forest operations, and
- b) implementing forest regeneration on a small scale in the vicinity of hiking trails marked in the regional plan.

Verifiers: Management plan, regional and municipal plans (V, VR, VL, recreation routes), field inspection, stakeholders' interviews.

5.4.3 S The forest owner shall not restrict the use of forest roads without a reason.

Verifiers: Field inspection, interviews.

**Note:** Restrictions of use may be justified for reasons such as seasonally poor roads, dumping of waste or abuse of everyman's rights.

**5.4.4** In the area specifically intended for reindeer herding (Reindeer Husbandry Act 848/1990), forest management on State land shall be implemented in a way that it will not cause significant harm to reindeer herding.

Ways of implementation are determined by an agreement made by Metsähallitus and the Reindeer Herders' Association (Indicator 2.2.8).

Verifiers: Management plan, documents of consultations with reindeer herding co-operatives, field inspections, interviews with Reindeer Herders' Association and reindeer herding co-operatives.

5.5 Forest management operations shall recognize, maintain, and, where appropriate, enhance the

#### value of forest services and resources such as watersheds and fisheries.

**5.5.1 S** The forest owner shall be aware of groundwater areas (classes I and II) determined by the regional authority, and record them in management plans.

Verifiers: Management plan, field inspection, interview.

**5.5.2** S In the preparation and implementation of the management plan, the forest owner shall take into account groundwater areas as well as aspects of water protection related to runoff water in the area.

Verifiers: Management plan, ditching plans, water protection plan, field inspection, interview.

**Note:** Principle 6 deals with the impacts of forestry on water resources and, therefore, also on fisheries.

5.5.3 S In forest management, the forest owner shall consider the following aspects of game management:

a) During forest operations, the forest owner preserves wetlands important for game animals and paludified depressions with their shelter trees.

b) In conifer-dominated forests, the forest owner retains tree species important for game animals (juniper, aspen, alder, rowan and goat willow).

c) Regarding mires where drainage has not increased tree growth and ditch cleaning and supplementary ditching will not be economically feasible, the forest owner preserves them as mire habitats for game animals.

Verifiers: Management plan, work instructions, field inspection, interviews.

**5.5.4 S** Known capercaillie leks shall be recorded in the management plan and considered in forest management operations as follows:

- a) When performing regeneration fellings, forest cover and tree size variation are maintained by creating openings with a maximum size of 0.5 ha or narrow regeneration fellings less than one hectare in size.
- b) Thickets for game and shrubs are preserved in all phases of forest management.

Verifiers: Management plans, field inspections, interviews.

**5.5.5** Large forest owners (> 10,000 ha and municipalities) shall manage areas important for recreational use (V, VL and VR in regional plans and municipal master and local plans) so as to conserve recreational and landscape values. Regeneration shall be carried out with methods such as special fellings that maintain forest cover, patch clear-fellings or small regeneration fellings (< 2 ha in Southern Finland, < 3 ha in Northern Finland).

Verifiers: Regional and municipal plans, management plan, field inspection, interviews.

#### 5.6 The rate of harvest of forest products shall not exceed levels which can be permanently sustained.

**5.6.1** The forest owner shall plan and implement forest operations in such a manner that harvest will not exceed the sustainable yield of the forest in the long term.

Verifiers: Management plan, records of harvest volumes and forest management operations.

**5.6.2 S** The forest owner shall ensure that forests are regenerated after regeneration felling with tree species suitable for the site.

Verifiers: Forest use declarations, forest regeneration documents, field inspection.

**5.6.3 S** The forest owner shall ensure that seedling stands are tended according to the management plan, however, considering the development of the stand.

Verifiers: Management plan, reports, field inspection.

#### **PRINCIPLE 6: ENVIRONMENTAL IMPACT**

Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.

6.1 Assessment of environmental impacts shall be completed – appropriate to the scale, intensity of forest management and the uniqueness of the affected resources – and adequately integrated into management systems. Assessments shall include landscape level considerations as well as the impacts of on-site processing facilities. Environmental impacts shall be assessed prior to commencement of site-disturbing operations.

**6.1.1** The forest owner shall assess and consider the environmental impacts of forest management operations. Assessment shall cover all key operations.

Note: This assessment does not refer to statutory environmental impact assessment (Indicator 6.1.4).

*Verifiers: Environmental management system, management planning system, management plan, forest use declaration.* 

**6.1.2** Environmental impacts shall be considered in the planning, instruction and implementation of operations. Environmental impacts shall be considered both at the landscape and stand levels.

*Verifiers: Environmental management system, management planning system, management plan, forest use declaration.* 

**6.1.2 S.B** Any threats to the environment from forest management operations shall be considered in the planning, instruction and implementation of operations.

Verifiers: Management plan, forest use declaration, interviews.

**6.1.3 S** The forest owner shall notify significant forest operations and their environmental impacts, if any, to the regional ELY Centre or Forestry Centre as agreed with them, and implement the projects according to instructions given by the authorities.

**Note:** The indicator applies to construction of new forest roads, ditching projects and forest operations with potential impacts on directive-based conservation values of Natura 2000 areas.

*Verifiers: Environmental management system, management planning system, management plan, ditch network maintenance plan, notifications to authorities.* 

**6.1.4** Statutory environmental impact assessment shall be conducted if so required by the Act on Environmental Impact Assessment Procedure (468/1994).

Verifiers: Forest use declaration, notification to authority, decision by authority (if any), plan for management and use of a Natura 2000 area.

6.2. Safeguards shall exist which protect rare, threatened and endangered species and their habitats (*e.g.*, nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping and collecting shall be controlled.

**6.2.1** The forest owner shall acquire information of, and record in the management plan or otherwise document, the occurrences of nationally and regionally threatened species known to the Finnish Environment Institute (Hertta database), the ELY Centre or the Forestry Centre.

**Note:** The obligation to acquire information applies to observations made after 1990 and documented with sufficient accuracy.

Verifiers: Management plan, Hertta database, ELY Centre and Forestry Centre data, documentation of known threatened species, interviews.

**6.2.1 S.B** The forest owner shall acquire information of, and record in the management plan or otherwise document, the occurrences of nationally and regionally threatened species known to the Finnish Environment Institute (Hertta database), the ELY Centre or the Forestry Centre.

**Note:** The obligation to acquire information applies to observations made after 1990 and documented with sufficient accuracy. The information shall be updated at least when the management plan is revised.

Verifiers: Management plan, Hertta database, ELY Centre and Forestry Centre data, documentation of known threatened species, interviews.

**6.2.2 S** The forest owner shall secure the preservation of habitats of known occurrences of nationally and regionally threatened species if the threat is due to forest management.

Verifiers: Management plan, guidelines, field inspections, ELY Centre and Forestry Centre data.

**6.2.3 S** The forest owner shall not perform fellings during the bird nesting season on sites valuable for birdlife:

- a) In the vicinity (less than 500 m) of inhabited nests of the golden eagle and the white-tailed eagle during 15 March 31 July in Lapland, 15 February 31 July in the rest of Finland.
- b) In the vicinity (less than 500 m) of inhabited nests of the osprey, on sites with visibility to the nest during 15 April 31 July.
- c) In the vicinity (less than 50 m) of bird wetlands (shallow lakes, ponds, sea bays, flooded swamps) in internationally and nationally important bird areas in Finland (IBA and FINIBA) during 15 April 31 July.
- d) In known, frequented capercaillie leks during the courting season, 1 April 15 May in Lapland, 15 March 15 May in the rest of Finland.

Verifiers: Management plan, guidelines, work instructions, field inspections.

**6.2.4 S** Harvesting shall be avoided during the bird nesting season, 15 April – 31 July, in fertile forests (herbrich forest, herb-rich heath forest and mesic heath forest) dominated by broadleaved trees (proportion > 50%), around nest trees of birds of prey and in buffer zones of water courses.

**Note:** The recommendations to restrict harvesting during the nesting season are based on the best practices in the field.

Verifiers: Guidelines, work instructions, field inspections.

**6.2.5 S** The forest owner shall not afforest locally, regionally or nationally valuable traditional environments, identified as valuable in official surveys by the environmental administration.

**Note:** Regionally valuable traditional environments have been identified in inventories of traditional rural biotopes conducted by the Finnish Environment Institute, published in the publication series of Regional Environment Centres. Nationally valuable traditional environments are defined by the Government resolution on nationally valuable landscapes (1995).

#### Verifiers: Guidelines, field inspections.

6.2.6 S The forest owner shall notify illegal hunting, fishing and collecting activities to the authorities.

#### Verifiers: Forest owner's interview, notifications to authorities.

**6.2.7 S** In all forest management operations, the forest owner shall preserve ancient monuments valuable in terms of cultural history.

**Note:** The obligation applies to ancient monuments referred to in the Antiquities Act (295/1963). The preservation of these sites requires the use of guidelines approved by authorities, utilisation of the up-to-date ancient monuments register, and in certain cases communication with the National Board of Antiquities or the provincial museum.

#### Verifiers: Work instructions, official guidelines, field inspections.

**6.2.8** The forest owner (> 10,000 ha) shall use prescribed burning to maintain habitats of species dependent on forest fires. The minimum total area of prescribed burnings performed annually shall be 3% of the regeneration felling area of suitable sites (MT and poorer sites) during a 5-year period. The purpose is to produce a minimum average of 20 fire-damaged stems (DBH > 20 cm in Southern Finland, DBH > 10 cm in Northern Finland) per hectare in the burnt area.

**Note:** The burnt area includes prescribed burnings of regeneration areas, groups of retention trees and sunexposed slopes located in the certified area.

**Note:** If stands (> 0.2 ha) with all their trees are burnt, their area can be calculated in the area target five-fold, with the exception of sites listed in Indicator 6.4.1. This also applies to naturally burnt, well-stocked areas, if trees are not harvested.

#### Verifiers: Management plan, work plan, documentation of prescribed burnings done, field inspection.

**6.2.9 S** The forest owner shall leave buffer zones during ditching, site preparation and clear-felling, thereby ensuring not to degrade the water quality of small waters and rivers identified as valuable for fishing and nature conservation.

#### Verifiers: Buffer zones, management plan, guidelines, field inspections, interviews, ELY Centre data.

### **6.3.** Ecological functions and values shall be maintained intact, enhanced, or restored, including: a) Forest regeneration and succession.

#### b) Genetic, species, and ecosystem diversity.

#### c) Natural cycles that affect the productivity of the forest ecosystem.

**6.3.1** Dead trees (DBH > 10 cm) shall be retained during forest operations, totalling a minimum of 20 trees/ha when available in the area. Decaying broadleaved trees are always retained. Dead standing trees may be felled if they endanger the safety of forest workers or people roaming in the forest. Forest management operations shall be planned in a way to minimise damage to dead stemwood.

**Note:** This indicator does not prohibit harvesting under the threat of significant fungal or insect damage (Act on the Prevention of Insect and Fungal Damage in Forests 263/1991) or in extensively damaged areas where a large proportion of the trees are dead. Neither does the indicator prohibit the production and use of artificial snags or occasional collection of wood for household use (including provisions of the Skolt Act and other rights granted on special grounds).

#### Verifiers: Work instructions, field inspections.

**6.3.1 S.B** Dead trees (DBH > 10 cm) shall be retained during forest operations, totalling a minimum of 20 trees/ha when available in the area. Dead standing trees may be felled if they endanger the safety of forest workers or people roaming in the forest. A minimum of 20 decaying broadleaved trees per hectare are retained, if present. Forest management operations shall be planned in a way to minimise damage to dead stemwood.

**Note:** This indicator does not prohibit harvesting under the threat of significant fungal or insect damage (Act on the Prevention of Insect and Fungal Damage in Forests 263/1991) or in extensively damaged areas where a large proportion of the trees are dead. Neither does the indicator prohibit the production and use of artificial snags or occasional collection of wood for household use (including provisions of the Skolt Act and other rights granted on special grounds).

#### Verifiers: Work instructions, field inspections.

**6.3.2 S** On a regeneration felling compartment, the forest owner shall permanently retain:

**6.3.2.1 S** A minimum average of ten large-diameter (DBH > 20 cm in Southern Finland, DBH > 15 cm in Northern Finland), living trees of native species per hectare. Retention trees may be concentrated at the planned logging site level, especially when listed valuable trees occur as a group. These retention trees may include trees which are listed in sub-indicator 6.3.2.2 and meet the diameter requirement of this sub-indicator.

**6.3.2.2 S** The following living trees valuable for biodiversity:

- a) Single trees clearly larger in diameter than dominant trees, DBH > 60 cm (pine, spruce, birch, oak) or > 40 cm (other species)
- b) Southern broadleaved trees, willow, goat willow, bird cherry, rowan and black alder, DBH > 10 cm
- c) Large aspen, DBH > 40 cm, occurring in conifer-dominated forest
- d) Cavity trees
- e) Known nest trees of birds of prey
- f) Fire-scarred pine trees. In Northern Finland, in areas with extensive fire scarring, a minimum of ten fire-scarred trees per hectare shall be retained, if present.

**Note:** The listed trees do not refer to commercially grown special trees or conventional seed or shelter trees related to forest regeneration.

Note: Retention trees shall not be left in the immediate vicinity of power lines or roads.

Verifiers: Guidelines, work instructions, field inspections.

**6.3.3 S** The forest owner may harvest woody biomass on sub-xeric heaths and more fertile sites as well as corresponding transformed mires.

**6.3.3.1 S** In woody biomass harvesting, a minimum of 30% of the residues shall be retained, evenly distributed over the harvested site. All standing and fallen dead (decaying) trees more than 10 cm in diameter shall be left unharvested and intact.

**6.3.3.2 S** A minimum of 25 stumps more than 15 cm in diameter per hectare (minimum 50 stumps/ha on clay and silt soils) shall be left unharvested, evenly distributed over the harvested site. If possible, stumps of different species should be retained. Stumps less than 15 cm in diameter and old, decaying stumps shall be left unharvested.

**6.3.3.3 S** In stump harvesting, a buffer zone with a minimum width of 3 m shall be left around remaining silviculturally valuable trees as well as ditches.

6.3.3.4 S Stumps shall not be harvested in groundwater areas.

**Note:** The various types of work done in woody biomass harvesting shall comply with all applicable obligations of the Standard (habitats, buffer zones of water courses, etc.).

**Note:** This indicator does not prohibit harvesting under the threat of significant fungal or insect damage (Act on the Prevention of Insect and Fungal Damage in Forests 263/1991) or in extensively damaged areas where a large proportion of the trees are dead.

Verifiers: Management plan, work instructions, field inspections.

**6.3.4 S** The forest owner shall ensure a sufficient proportion of broadleaved trees in conifer-dominated forests as follows:

#### 6.3.4.1 S Thinning:

- a) In thinning, the proportion of broadleaves is not reduced below 10% of the number of stems of thinning-sized trees.
- b) If the proportion of broadleaves before thinning is less than 10% of the number of stems, the broadleaves are retained, except for those that clearly disturb the growth of coniferous trees.

#### **6.3.4.2 S** Tending of seedling stands:

- a) In tending of seedling stands, broadleaves are retained to make up a minimum of 10% of the number of stems.
- b) If the proportion of broadleaves is less than 10% of the number of stems before tending of seedling stands, the broadleaves are retained, except for those that clearly disturb the growth of coniferous trees.

Note: If possible, the broadleaved trees to be retained should include different species.

Verifiers: Management plan, work instructions, field inspections.

**6.3.5** S The forest owner (> 20 ha) shall delineate special sites, *i.e.* sites of special significance to the diversity of the forest ecosystem or for diversifying the forest structure. Combined with the sites listed in Indicators 6.4.1 and 6.4.2, special sites shall cover a minimum of 10% of the certified forest land.

**6.3.5.1 S** (> 20 ha) Special sites may also include forests for which a site-specific, diverging environmental objective with supporting measures is set, such as:

- a) part of the forests grown with an uneven-aged structure or permanent cover, *i.e.* continuously with a minimum of 50 trees more than 20 cm in diameter per hectare, or
- b) sites regenerated with fellings with a maximum size of 0.5 ha, or
- c) sites allowed to generate more than  $10 \text{ m}^3$ /ha of deadwood, or
- d) forests permanently dominated by broadleaved trees, managed in a manner that maintains biodiversity based on broadleaved forests
- e) buffer zones of water courses (6.5.1)
- f) herb-rich forests with representative vegetation (6.4.3)
- g) the parts of high-altitude forests managed with special fellings (6.3.12)

- h) the parts of recreation areas managed with special fellings (5.5.5)
- i) sites treated with prescribed burning (6.2.7)

Verifiers: Management plan, maps of special site locations, work instructions, field inspections.

**6.3.6 S** The forest owner shall favour naturally regenerated seedlings when silviculturally or economically justified. In artificial regeneration, the suitability of the origin of seedling and seed material shall be confirmed.

Verifiers: Management plan, data of seedling lots, field inspections.

**6.3.7 S** The forest owner shall not perform site preparation by ploughing with furrows deeper than 25 cm.

Verifiers: Guidelines, field inspections.

**6.3.8** The forest owner may fertilise sites where the stand is proven to suffer from nutrient imbalance. Fertilisation for growth is also possible in advanced thinning stands of MT and VT heath forests. Ash fertilisation in peatland forests is permitted.

**6.3.8.1** Sites to be fertilised shall be determined in the management plan so as to be able to achieve significant economic benefits without environmental risks.

**6.3.8.2** Sites fertilised for growth may cover a maximum of 30% of the forest owner's forest holding in the long term. Forest owners with more than 10,000 ha shall fertilise no more than 2% of their forest holding annually.

Verifiers: Management plan, fertilisation plan, results of nutrient imbalance, field inspections.

**6.3.8 S.B** The forest owner may fertilise sites where the trees are proven to suffer from nutrient imbalance. Fertilisation for growth is also possible in advanced thinning stands of MT and VT heath forests.

**6.3.8.1 S.B** Sites to be fertilised shall be determined in the management plan so as to be able to achieve significant economic benefits without environmental risks.

**6.3.8.2 S.B** Sites fertilised for growth may cover a maximum of 50% of the forest owner's forest holding in the long term.

Verifiers: Management plan, fertilisation plan, results of nutrient imbalance, field inspections.

**6.3.9 S** The forest owner shall minimise the impacts of fertilisation on water resources by leaving unfertilised buffer zones with the following minimum widths between the fertilised area and the water:

- a) water courses (sea, lake, river or pond): 50 m
- b) brooks: 20 m
- c) ditches: 5 m.

6.3.9.1 S The forest owner shall not apply fertilisation in groundwater areas, classes I and II.

*Verifiers: Work instructions, fertilisation plan, interviews, field inspections.* 

**6.3.10 S** The forest owner shall ensure that the product used as fertiliser meets the legal requirements regarding the components used in the fertiliser and the concentrations of harmful substances.

Verifiers: Work instructions, fertilisation plan, interviews.

6.3.11 The forest owner (> 1,000 ha) shall manage high-altitude forests, more than 300 m above sea level on

northern and eastern slopes and more than 330 m above sea level on southern and western slopes, cautiously and preserving the landscape pronouncedly. Fellings shall be carried out mainly as thinnings, release fellings, special fellings that maintain forest cover as well as openings with a maximum size of 0.5 ha.

Verifiers: Management plan, work instructions, field inspections, interviews.

# 6.4 Representative samples of existing ecosystems within the landscape shall be protected in their natural state and recorded on maps, appropriate to the scale and intensity of operations and the uniqueness of the affected resources.

**6.4.1 S** The forest owner shall leave defined valuable habitats and certain sites of special importance for species protection outside forest operations. Treatments supporting protection objectives are permitted on them. These sites include:

6.4.1.1 S Statutory sites:

- a) Habitats of special importance referred to in the Forest Act, section 10
- b) Protected habitat types referred to in the Nature Conservation Act, section 29<sup>3</sup>
- c) Trees hosting large birds of prey referred to in the Nature Conservation Act, section 39
- d) Habitats of species under strict protection referred to in the Nature Conservation Act, section  $47^3$
- e) Breeding sites and resting places of species referred to in the Nature Conservation Act, section 49, and listed in Annex IV (a) of the Habitats Directive<sup>3</sup>
- f) Small waters meeting the criteria of the Water Act, sections 15 a and 17 a

**6.4.1.2 S** Other sites to be always preserved:

- a) Sites meeting the criteria of a habitat of special importance referred to in the Forest Act, section 10, despite their size and regional occurrence
- b) Heath forests and transformed mires rich in deadwood as defined separately (Annex 7)
- c) Wooded bedrock, cliffs and boulder fields with old growth and deadwood (Annex 8)
- d) Spruce-dominated, advanced and older mesic herb-rich forests with more than 15 m<sup>3</sup>/ha of deadwood (created during a minimum of 10 years, DBH > 10 cm)
- e) Mixed, advanced and older herb-rich forests with more than 10 m<sup>3</sup>/ha of deadwood (created during a minimum of 10 years, DBH > 10 cm)
- f) Deciduous-dominated (> 50%), advanced or older herb-rich forests with a natural and near-natural stand structure, and more than 5  $m^3$ /ha of deciduous deadwood
- g) Moist herb-rich forests with natural and near-natural hydrological conditions as well as herb-rich forests with old, large or decay-damaged southern broadleaved trees
- h) Wooded flood meadows
- i) Spruce-dominated kettles (Meriluoto & Soininen 1998)
- j) Rivers and brooks with natural or near-natural beds including their banks (wooded zone with a minimum width of 20 m to be preserved)<sup>4</sup> as well as springs with a similar zone. This does not apply to clear-felled areas, seedling stands and young conifer-dominated thinning stands. In older forests with a single species and an even structure, thinnings, release fellings and selection fellings are permitted in the buffer zone as far as they exceed the requirement stated in Indicator 6.5.1.
- k) Forests adjacent to water courses and small waters (wooded zone with a minimum width of 30 m to be preserved) with an uneven-aged structure<sup>5</sup> or a visible amount of deadwood
- 1) Natural or near-natural flads and gloe lakes including their shores (wooded zone with a minimum width of 30 m to be preserved)
- m) Natural or near-natural succession series, or single representative parts of succession series, of

<sup>&</sup>lt;sup>3</sup> The preservation obligation also applies to occurrences of habitat types and species that the environmental authority has not delineated. This definition applies to sub-indicator 6.4.1.1 S, items b, d, and e.

<sup>&</sup>lt;sup>4</sup> The definition also applies to short stretches of rivers and brooks with natural or near-natural beds.

<sup>&</sup>lt;sup>5</sup> Stands meeting the criterion differ from managed stands by their growing stock. These forests are characterised by layering, uneven-aged trees and different tree species created due to natural regeneration and gap dynamics – not only in the transitional zone of forest and water.

forests along emergent coastlines<sup>6</sup>

- n) Spruce mires, pine mires and bogs, fens, rich fens and (flooded) wooded swamps with natural and near-natural hydrological conditions<sup>7</sup>
- o) Natural or near-natural low-productive and non-productive lands.

**Note 1:** In this context, all undrained mires are considered to be mires with natural hydrological conditions. Mires with old ditches that have not essentially altered tree growth or the hydrological conditions of the mire, and no longer affect the preservation of mire vegetation, are considered mires with near-natural hydrological conditions.

**Note 2:** Wooded mineral soils classified as low-productive and non-productive lands are considered nearnatural if their growing stock is uneven-aged and has been treated with nothing more than selective type fellings.

**Note 3:** On naturally treeless non-productive land (mainly exposed bedrock), all sites where the vegetation has remained near natural may be considered near-natural. Slight denudation or eutrophication is accepted as part of the definition of near-natural non-productive land.

**Note 4:** Natural values created through active habitat management in commercial forests (restrictions of use and measures implemented during forest operations, *e.g.* retention trees, prescribed burning, special fellings, intentionally created deadwood) do not constitute a preservation obligation as referred to in the Indicator.

**6.4.1.3 S** Additional sites to be considered:

- a) sun-lit slopes of eskers
- b) forest pastures and forest meadows

**6.4.1.4 S** Upon joining certification, the forest owner shall present a publicly available plan for the identification of sites listed in Indicator 6.4.1 within four years of joining certification.

**6.4.1.5 S** The sites meeting the definitions of the Indicator shall be recorded in the management plan and preserved as soon as they are found.

Verifiers: Management plan, map data, guidelines, field inspections.

**6.4.2 S** The delineation of valuable habitats shall be sufficient with regard to preservation of their special features.

Verifiers: Management plan, map data, work instructions, field inspections.

**6.4.3 S** The forest owner (> 20 ha) shall preserve a minimum of 5% of the certified area's forest land to secure biological diversity. All forest land permanently excluded from forest operations to implement the Indicators of this Standard (*e.g.* 6.2.2, 6.4.1, 6.5.1 and 6.5.7) may be calculated in the protected proportion.

Note: The following sub-indicators only apply to owners of forest holdings of more than 20 ha.

**6.4.3.1 S** The sites shall be selected among those with significant biodiversity values.

<sup>&</sup>lt;sup>6</sup> Applies to sites with excellent, good or significant representativity by the definition of habitat types in the Habitats Directive (Airaksinen & Karttunen 2001).

<sup>&</sup>lt;sup>7</sup> Does not apply to pine and spruce mires treated with fellings, and not classified as threatened mire types in their respective areas (Southern Finland, Northern Finland). Any further treatment of these sites shall be done without disturbing their hydrological conditions, using selection or strip fellings or patch clear-fellings.

**Note 1:** The sites may include protected areas established as private conservation areas and areas sold to the State as conservation areas after FSC certification.

**Note 2:** Mires to be actively restored, including low-productive and non-productive lands, may be calculated in the 5% proportion using a coefficient of 0.5; however, so that they cover a maximum of 20% of the sites to be preserved.

**Note 3:** On State land, all sites excluded from forest management operations outside official conservation programmes (incl. METSO programme) are counted in, even though they were established as statutory protected areas or forest reserves of Metsähallitus after the Standard comes into effect.

6.4.3.2 S The sites to be preserved shall be permanent.

**6.4.3.3 S** Sites not included in Indicator 6.4.1 may be replaced with sites meeting the definitions of Indicator 6.4.1, if found during the site identification period or thereafter.

**6.4.3.4 S** Upon joining certification, the forest owner (> 20 ha) shall present a publicly available plan for the identification of sites for the 5% protection target. The identification shall be done within one year of joining certification.

Verifiers: Management plan, map data, work instructions, field inspections, interviews.

**6.4.4 S** Herb-rich forests with representative vegetation, other than sites listed in Indicator 6.4.1, shall be managed so as to secure the preservation of the demanding and diverse species of herb-rich forest.

**Note:** Representative herb-rich forests have a diverse flora and include eutrophic moist and mesic herb-rich forests as well as mesotrophic and eutrophic dry herb-rich forests.

Verifiers: Management plan, guidelines, field inspections, stakeholder interviews.

**6.4.5 S** The forest owner shall ensure that forest management operations, including ditching or construction of forest roads, will not damage existing protected areas, Natura 2000 areas or habitats listed in Indicator 6.4.1.

Verifiers: Management plan, guidelines, field inspections, interviews.

## 6.5 Written guidelines shall be prepared and implemented to: control erosion; minimize forest damage during harvesting, road construction, and all other mechanical disturbances; and protect water resources.

**6.5.1 S** The forest owner shall leave a buffer zone determined by topography and soil type adjacent to water courses (including seashores) and small waters. The minimum width of the buffer zone shall be:

- a) 10 m on all ponds and lakes
- b) 15 m on brooks, rivers and seashores
- c) 30 m on flads and gloe lakes

**6.5.1.1 S** Felling of forest, site preparation, ditching and stump harvesting are not permitted in the buffer zone. Forest machines shall not be operated in the buffer zone, with the exception of necessary crossings.

Note: Fellings done clearly for restoration or habitat management are possible in the buffer zone.

Verifiers: Management plan, work instructions, field inspections, interviews.

**6.5.2** The forest owner (> 10,000 ha) shall comply with written guidelines determining the ways to avoid erosion, degradation of surface water and groundwater quality as well as damage to growing stock and soil during forest operations.

Verifiers: Management plan, written guidelines, field inspections.

6.5.3 S The forest owner shall not perform first-time ditching.

Verifiers: Management plan, written guidelines, field inspections.

**6.5.4 S** The forest owner's ditch cleaning and supplementary ditching shall be based on a ditch network maintenance plan which includes information on water protection decisions as well as valuable habitats (listed in Indicator 6.4.1) located in the planning area.

Verifiers: Ditch network maintenance plan.

**6.5.5** During ditch cleaning and supplementary ditching, the forest owner shall restore drained mires classified as critically endangered (CR), if appropriate for nature conservation.

Verifiers: Restoration plan, ditch network maintenance plan, field inspections.

**6.5.6 S** The forest owner shall exclude ditches reaching to flooding sites on low-lying shores as well as ditches especially vulnerable to erosion from ditch cleaning and supplementary ditching.

**6.5.6.1 S** When performing ditch cleaning and supplementary ditching on known acid sulphate soils, digging deeper than the original ditch depth shall be avoided.

*Verifiers: Ditch network maintenance plan, water protection plan, statement of the environmental authority (Indicator 6.1.3), field inspections.* 

**6.5.7 S** In ditch cleaning and supplementary ditching, the forest owner shall prevent runoff water from directly entering water courses or small waters from old ditches.

Verifiers: Ditch network maintenance plan, water protection plan, field inspections.

**6.5.8 S** In important groundwater areas (classes I and II), the forest owner shall secure the preservation of groundwater quality by refraining from ditch cleaning and supplementary ditching, fertilisation, use of chemical pesticides, stump harvesting and prescribed burning.

**Note:** Prescribed burning may be applied in groundwater areas with permission from the environmental authority.

Verifiers: Management plan, guidelines, prescribed burning and ditch network maintenance plans, field inspections.

**6.5.9 S** When performing clear and seed tree fellings, first-time ditching, ditch cleaning and supplementary ditching as well as site preparation, the forest owner shall retain:

- a) small, paludified depressions inside heath forest compartments with natural hydrological conditions, clearly distinguishable by their vegetation and trees
- b) paludified transitional zones of mires with natural hydrological conditions, clearly distinguishable by their vegetation

**6.5.9.1** S A single ditch may be dug in an undrained area if it is necessary to lead water from an existing drained area in its natural drainage direction.

Verifiers: Ditch network maintenance plan, field inspections.

6.5.10 S The forest owner shall comply with written guidelines when constructing forest roads.

Verifiers: Management plan, written guidelines, field inspections.

6.6. Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks.

**6.6.1 S** If there is a risk that stumps on a felling site may be infected by root rot (*Heterobasidion annosum* for pine or *Heterobasidion parviporum* for spruce), the forest owner shall only use biologically degradable pesticides.

Verifiers: Guidelines, records of pesticides used, field inspections.

**6.6.2 S** The forest owner shall prioritise biological and mechanical pest and weed control over chemical control.

Verifiers: Guidelines, records of pesticides and control methods used, field inspections.

**6.6.3 S** When using chemical pesticides, the forest owner shall comply with guidelines issued by authorities and safety instructions for the substance used.

Verifiers: Official guidelines, records of chemical pesticides used, field inspections.

6.6.4 S The forest owner shall refrain from using chemicals prohibited by the following documents:

- a) FSC list of highly hazardous pesticides (FSC-POL-30-001)
- b) Act on the Prevention of Insect and Fungal Damage in Forests (263/1991)
- c) EU Commission Decision C(2000) 4140 (permethrin)
- d) EU Decision 2455/2001/EC, list of priority substances in the field of water policy

Verifiers: Records of pesticides used, field inspections.

**Note:** The forest owner may use chemical control on coniferous seedlings if necessary before planting, unless the chemical is prohibited by Indicator 6.6.4 above.

**6.6.5** Workers and contractors handling pesticides shall receive training and instruction in their use and storage.

Verifiers: Official guidelines, work instructions, interviews.

## 6.7 Chemicals, containers, liquid and solid non-organic wastes including fuel and oil shall be disposed of in an environmentally appropriate manner at off-site locations.

**6.7.1 S** The forest owner shall ensure that non-organic wastes originating from forest operations are not left on the site.

Verifiers: Work instructions, field inspections.

**6.7.2 S** The forest owner shall ensure that hazardous wastes (*e.g.* fuel, oil and their containers) are kept separate from other wastes and delivered for appropriate disposal.

Verifiers: Work instructions, records of hazardous wastes, field inspections.

**6.7.3 S** The forest owner shall ensure that fuel and oil containers, other chemicals and hazardous wastes are not stored, even temporarily, in groundwater areas or on sites with an imminent risk of contamination to surface water in case of an accident.

Verifiers: Work instructions, field inspections.

**6.7.4** The forest owner shall document and provide instructions for the use of legal, biologically degradable chemicals.

Verifiers: Work instructions, records.

6.7.4 S.B The forest owner shall document the use of legal, biologically degradable chemicals.

Verifiers: Work instructions, records.

6.8 Use of biological control agents shall be documented, minimized, monitored and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be prohibited.

**6.8.1** The forest owner shall document and provide instructions for the use of legal, biological control agents.

Verifiers: Work instructions, records.

**6.8.1 S.B** The forest owner shall document the use of legal, biological control agents.

Verifiers: Records.

**6.8.2 S** In biological control, the forest owner shall only use species that occur naturally in the area where the control agent is used.

Verifiers: Guidelines, records.

**6.8.3 S** The forest owner shall not use genetically modified organisms.

Verifiers: Seedling and seed receipts, certificates of origin.

6.8.4 S The forest owner shall use biological control agents only for justified reasons.

Verifiers: Management plan, guidelines, interviews.

**6.8.5 S** The forest owner shall monitor the use of biological control agents.

Verifiers: Management plan, reports, interviews.

## **6.9** The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts.

**6.9.1** The forest owner shall document the origin of all exotic seeds and seedlings used in forest regeneration according to information obtained from their suppliers.

Verifiers: Certificates of origin of seeds and seedlings, field inspections.

**6.9.2** During a 5-year period, the forest owner may regenerate a maximum of 3% of the planting or regeneration area with exotic tree species.

Verifiers: Management plan, certificates of origin of seeds and seedlings, records, field inspections.

**6.9.2 S.B** The forest owner may grow exotic tree species for forest management use on a maximum of 5% of the forest land. A forest owner with less than 50 ha of forest land shall restrict the use of exotic tree species to an area of 2.5 ha.

6.9.3 S The forest owner shall monitor and document the occurrence of exotic tree species.

Verifiers: Records of monitoring exotic tree species, field inspections.

**6.9.4** If an exotic tree species spreads strongly, the forest owner shall remove its seedlings that have spread outside the planting area.

Note: The obligation does not apply to the Siberian larch (Larix sibirica).

Verifiers: Records of monitoring exotic tree species, field inspections.

6.10 Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion:

a) entails a very limited portion of the forest management unit; and

b) does not occur on high conservation value forest areas; and

c) will enable clear, substantial, additional, secure, long term conservation benefits across the forest management unit.

**6.10.1** The forest owner shall manage forest in a manner that conversion to plantations or non-forest land uses entails less than 5% of the forest land of the certified area, and it will enable clear, substantial, additional, secure, long-term conservation benefits.

**Note:** As an exception, change of land-use class is possible through an official planning process (statutory land-use planning) or with permission from authorities.

Verifiers: Management plan, field inspection.

**6.10.2 S** The forest owner shall restore gravel extraction areas back to forestry land after they are no longer used.

**Note:** The restoration obligation does not apply to sites that should be justifiably maintained treeless or sparsely wooded for reasons of securing biodiversity.

Verifiers: Soil extraction permit, guidelines, field inspections.

**6.10.3 S** The forest owner shall not change the land-use class of high conservation value (HCV) areas or habitats to be always preserved (6.4.1) in a way that their conservation or other values are endangered.

**Note:** As an exception, change of land-use class is possible through an official planning process (statutory land-use planning) or with permission from authorities.

Verifiers: Assessment to identify HCV areas (according to Principle 9), maps of HCV areas and habitats to be always preserved on the landowner's land, field inspections.

#### PRINCIPLE 7: MANAGEMENT PLAN

A management plan – appropriate to the scale and intensity of the operations – shall be written, implemented, and kept up to date. The long term objectives of management, and the means of achieving them, shall be clearly stated.

7.1 The management plan and supporting documents shall provide:

- a) Management objectives.
- b) Description of the forest resources to be managed, environmental limitations, land use and ownership status, socio-economic conditions, and a profile of adjacent lands.
- c) Description of silvicultural and/or other management system, based on the ecology of the forest in question and information gathered through resource inventories.
- d) Rationale for rate of annual harvest and species selection.
- e) Provisions for monitoring of forest growth and dynamics.
- f) Environmental safeguards based on environmental assessments.
- g) Plans for the identification and protection of rare, threatened and endangered species.
- h) Maps describing the forest resource base including protected areas, planned management activities and land ownership.
- i) Description and justification of harvesting techniques and equipment to be used.

**7.1.1** The forest owner shall have in place a management plan or a management planning system including the items stated in Criterion 7.1, a) to i).

#### Verifiers: Management plan.

**Note:** A system is made up of many components: GIS databases updated after forest operations, other databases, calculation components (*e.g.* growth models, felling potential evaluation), maps (based on satellite imagery or aerial photography), specific guidelines, other documents.

7.1.1 S.B The forest owner shall have in place a management plan including:

- a) Objectives for the use of forests.
- b) A map or map data of the forest holding including real estate boundaries as well as protected areas affecting the holding and high conservation value areas (Principle 9). Protected areas shall also include the sites listed in Indicators 6.2.7 (valuable ancient monuments), 6.4.1 (valuable habitats to be always preserved) and 6.4.3. (5% protected proportion) and 6.3.5 (special sites).
- c) A description of the forest resources (sites, development classes, volumes by species).
- d) Information of the location of exotic tree species.
- e) Suggested measures.
- f) Occurrences of nationally and regionally threatened species known to the ELY Centre or the Forestry Centre.
- g) Special types of work done (fertilisation, ditch cleaning and supplementary ditching).

**7.1.1.1 S.B** The forest owner (< 20 ha) shall have in place a management plan or other documentation of the information required to implement management planning according to this Standard.

#### Verifiers: Management plan.

# 7.2 The management plan shall be periodically revised to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances.

**7.2.1 S** The forest owner shall revise the management plan at least every 10 years to incorporate the results of monitoring, and new scientific and technical information.

Verifiers: Management plan.

**7.2.2** The forest owner shall check annually the authorities' data on valuable habitats (listed in Indicator 6.4.1), occurrences of threatened species (6.2.1) and ancient monuments valuable in terms of cultural history (6.2.7), and update them in the management plan.

Verifiers: Management plan, authorities' data.

**7.2.2 S.B** The forest owner shall record the data received from authorities on valuable habitats (listed in Indicator 6.4.1), occurrences of threatened species (6.2.1) and ancient monuments valuable in terms of cultural history (6.2.7).

Verifiers: Management plan, authorities' data.

**7.2.3 S** The forest owner is responsible for recording the measures taken in the management plan/planning system.

Verifiers: Management plan, field studies.

## 7.3 Forest workers shall receive adequate training and supervision to ensure proper implementation of the management plan.

**7.3.1 S** The forest owner shall be responsible for hired workers' training, skills and supervision to be adequate so as to implement operations according to the management plan.

Verifiers: Training register, interviews.

**7.3.2 S** The forest owner shall ensure that hired workers have site-specific instructions that are consistent with the management plan.

Verifiers: Work instructions, management plan, interview.

**7.3.3 S** The forest owner shall ensure adequate supervision and control of compliance with site instructions. The level of supervision shall be appropriate to the requirements of the operations.

Verifiers: Work instructions, interview, quality feedback.

## 7.4 While respecting the confidentiality of information, forest managers shall make publicly available a summary of the primary elements of the management plan, including those listed in Criterion 7.1.

**7.4.1.** While respecting the confidentiality of information, the forest owner shall ensure that a summary of the management plan/planning system, including the information described in Annex 10, is publicly available on request in the format indicated in Annex 10. This does not apply to information on timber sale or to data on the occurrence of threatened species vulnerable to disturbance, collecting and hunting.

**7.4.1 S.B** While respecting the confidentiality of information, the forest owner shall be able to provide, when requested, the information listed in Indicator 7.1.1 S.B, items a) and b), f) and g), and a summary of the latest audit report.

Verifiers: Management plan summary, interview.

**Note:** The Act on the Openness of Government Activities lays down provisions on the publicity of information regarding the State and municipalities.

**7.4.2** The forest owner (> 10,000 ha) shall ensure that the key information of the forest use declaration (planned felling operations and their location on the map) is publicly available, on request or otherwise, from the forest owner. A reasonable fee may be charged for supplying the information.

#### Verifiers: Guidelines, availability of forest use declarations, interviews.

#### **PRINCIPLE 8: MONITORING AND ASSESSMENT**

Monitoring shall be conducted – appropriate to the scale and intensity of forest management – to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.

**Note:** The internal documentation and evaluation of an enterprise shall be conducted in a fashion which allows the certification organization to assess compliance with these guidelines.

8.1 The frequency and intensity of monitoring should be determined by the scale and intensity of forest management operations as well as the relative complexity and fragility of the affected environment. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change.

**8.1.1** The forest owner shall prepare a monitoring plan determining the things to be monitored as well as the frequency and method of monitoring. The forest owner shall document the results of the monitoring conducted.

Verifiers: Monitoring plan, documented monitoring results.

8.1.1 S.B The forest owner shall conduct monitoring of forest management operations.

Verifiers: Interviews, management plan.

**8.2** Forest management should include the research and data collection needed to monitor, at a minimum, the following indicators:

a) Yield of all forest products harvested.

b) Growth rates, regeneration and condition of the forest.

c) Composition and observed changes in the flora and fauna.

- d) Environmental and social impacts of harvesting and other operations.
- e) Costs, productivity, and efficiency of forest management.

**8.2.1 S** The forest owner shall keep books showing

- a) Sales volumes and revenues for all forest products.
- b) Cost levels of forest management and habitat management.
- c) Places and times of control agent and fertiliser use.

Verifiers: Bookkeeping, management plan.

8.2.2 S The forest owner shall monitor the growing stock volumes, regeneration and health of the forest.

Verifiers: Monitoring plan and documented monitoring results, interviews, management plan.

8.2.3 The forest owner shall be aware of authorities' data regarding species composition and changes in it.

**Note:** Information is available in sources such as the Forestry Centre, the Finnish Environment Institute, the Finnish Forest Research Institute, the regional ELY Centre, and the Finnish Game and Fisheries Research Institute.

Verifiers: Monitoring plan, authorities' data, interviews.

**8.2.4 S** The forest owner shall be aware of opportunities of forest use provided by the everyman's rights and support their implementation in management planning.

Verifiers: Interviews, management plan.

**OK: 8.2.5** The forest owner shall monitor the environmental and social impacts of harvesting and other operations.

Verifiers: Management plan, interviews, monitoring plan and documented monitoring results.

**OK: 8.2.5 S.B** The forest owner shall identify the environmental and social impacts of harvesting and other operations.

Verifiers: Interviews, management plan, documented monitoring results.

## **8.3** Documentation shall be provided by the forest manager to enable monitoring and certifying organizations to trace each forest product from its origin, a process known as the "chain of custody".

**8.3.1 S** The forest owner shall prove to the buyer in writing that the forest products originate in a certified forest. The documents shall determine the origin of wood down to the forest holding or forest management unit.

Verifiers: Documents, field inspections.

8.3.2 S Bookkeeping shall include records of

- a) sales volumes
- b) harvest sites
- c) buyers

Verifiers: Timber sales agreements, bookkeeping of the holding.

8.3.3 If the forest owner delivers the timber to the mill gate, the bookkeeping shall also include records of

- a) FSC certificate number,
- b) place of delivery,
- c) companies involved in harvesting, and
- d) companies involved in transport of the product.

Verifiers: Timber sales agreements, supply agreements, bookkeeping.

## 8.4 The results of monitoring shall be incorporated into the implementation and revision of the management plan.

**8.4.1 S** The results of monitoring shall be incorporated into the implementation and revision of the management plan.

Verifiers: Documentation of monitoring results, management plan and its revision (7.2).

## **8.5** While respecting the confidentiality of information, forest managers shall make publicly available a summary of the results of monitoring indicators, including those listed in Criterion 8.2.

**8.5.1 S** While respecting the confidentiality of information, a summary of the monitoring plan and the results of monitoring referred to in Criterion 8.2 shall be made publicly available or be supplied on request.

Verifiers: Public availability of the monitoring plan and results, stakeholder interviews.

**8.5.2 S** See Criterion 7.4.

#### **PRINCIPLE 9: MAINTENANCE OF HIGH CONSERVATION VALUE FORESTS**

Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.

**9.1** Assessment to determine the presence of the attributes consistent with High Conservation Value Forests will be completed, appropriate to scale and intensity of forest management.

**9.1.1** The forest owner shall be aware of relevant sources of information regarding the determination of high conservation value areas (Annex 9).

Verifiers: Authorities' data, account of the sources of information used, interviews.

**9.1.2** The forest owner shall consider and survey high conservation value areas when making a management plan, and record them in it.

**Note:** There is a manual for small forest owners for determining HCV sites: FSC step-by-step guide – Good practice guide to meeting FSC certification requirements for biodiversity and High Conservation Value Forests in Small and Low Intensity Managed Forests.

Verifiers: Management plan, field inspections, account of the survey of HCV sites, stakeholder interviews.

**9.1.2 S.B** The forest owner shall assess high conservation value areas in the forest management area and record them in the management plan.

Verifiers: Management plan, field inspections, account of the survey of HCV sites.

**Note:** High conservation value (HCV) areas are defined in Annex 9. The annex also lists the most relevant sources of information for determining these areas.

## **9.2** The consultative portion of the certification process must place emphasis on the identified conservation attributes, and options for the maintenance thereof.

**9.2.1** The forest owner shall have consulted with local stakeholders with relevant expert knowledge relating to the listed high conservation values (Annex 9) in the identification of areas with those values within the certified forestry areas.

Verifiers: Authorities' data, stakeholder interviews, account of the survey of HCV sites.

9.2.1 S.B The forest owner shall acquire information on the location of known high conservation value areas.

Verifiers: Authorities' data, management plan, field inspections, account of the survey of HCV sites and sources of information used.

**9.2.2** The forest owner shall have consulted with local stakeholders with relevant expert knowledge relating to the listed high conservation values when planning the management options to maintain or enhance the high conservation values within the certified forest area.

Verifiers: Authorities' data, stakeholder interviews, management plan.

**9.2.2 S.B** The forest owner shall consider any effects of high conservation value areas on the practice of forest management.

Verifiers: Authorities' data, management plan, field inspections.

**9.2.3** The forest owner shall acquire information from authorities (ELY Centres, the Finnish Environment Institute, Regional Councils) and BirdLife Finland (IBA and FINIBA) regarding the location of high conservation value areas known to them, or their effects, if any, on the practice of forest management.

Verifiers: Authorities' data, stakeholder interviews.

**9.3** The management plan shall include and implement specific measures that ensure the maintenance and/or enhancement of the applicable conservation attributes consistent with the precautionary approach. These measures shall be specifically included in the publicly available management plan summary.

**9.3.1 S** The forest owner shall record measures that ensure the maintenance or enhancement of the applicable conservation attributes of high conservation value areas in the management plan.

#### Verifiers: Management plan.

**9.3.2 S** The forest owner shall ensure the maintenance or enhancement of the applicable conservation attributes of high conservation value areas by implementing the measures determined in the management plan.

Verifiers: Management plan, field inspections, interviews.

**9.3.3 S** The forest owner shall ensure that the measures related to high conservation value areas are part of the summary determined in Indicator 7.4.1.

Verifiers: Forest management guidelines, management plan summary.

## 9.4 Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.

**OK: 9.4.1** The forest owner shall assess annually the effectiveness of the measures employed for the maintenance of the applicable conservation attributes.

Note: The assessment may be based on up-to-date geographic information or field inspections.

Verifiers: Up-to-date management plan, field inspections, interviews.

**9.4.1 S.B** The forest owner shall assess and document the development of the applicable conservation attributes of high conservation value areas as well as the effectiveness of the management measures employed.

Verifiers: Up-to-date management plan, field inspections.

**Note:** The definition of high conservation value forests presented in this Standard should not be applied as such outside certified forests.

#### **PRINCIPLE 10: PLANTATIONS**

Plantations shall be planned and managed in accordance with Principles and Criteria 1–9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests.

#### Addition to the Finnish context:

Note: In Finnish forestry, plantations refer to areas aimed at producing fast-growing, exotic tree species (including hybrid aspen, Christmas trees and energy willow), using rotation periods shorter than normal.

#### They must be established in areas used for purposes other than conventional forest management.

10.1 The management objectives of the plantation, including natural forest conservation and restoration objectives, shall be explicitly stated in the management plan, and clearly demonstrated in the implementation of the plan.

10.1.1 S Plantations and their management objectives shall be recorded in the management plan.

Verifiers: Management plan.

**10.1.2** Plantation establishment and management shall comply with the management plan.

Verifiers: Field inspections, forest owner's interviews.

Example: Energy willow plantation.

10.2 The design and layout of plantations should promote the protection, restoration and conservation of natural forests, and not increase pressures on natural forests. Wildlife corridors, streamside zones and a mosaic of stands of different ages and rotation periods, shall be used in the layout of the plantation, consistent with the scale of the operation. The scale and layout of plantation blocks shall be consistent with the patterns of forest stands found within the natural landscape.

10.2.1 S Plantations shall be established only on land released from uses other than forestry.

Note: Such areas include former agricultural land and power lines.

Verifiers: Management plan, field inspections, interviews.

**10.2.2 S** The management plan shall consider the effects of plantations on nationally and regionally valuable landscapes as determined by authorities.

Verifiers: Management plan, field inspections, Forestry Centre and ELY Centre data.

**10.2.3** A buffer zone with a minimum width of 20 m shall be left between plantations and water courses, and allowed to return to its natural state.

Verifiers: Management plan, field inspection.

**10.2.4** In the design of plantations, linear or patterned shapes shall be avoided.

Verifiers: Management plan, field inspections.

10.3 Diversity in the composition of plantations is preferred, so as to enhance economic, ecological and social stability. Such diversity may include the size and spatial distribution of management units within the landscape, number and genetic composition of species, age classes and structures.

**10.3.1 S.** If it is possible to grow various species on the site, the maximum size of a compartment covered by a single species shall be 5 ha.

Verifiers: Management plan, field inspections.

10.4 The selection of species for planting shall be based on their overall suitability for the site and their appropriateness to the management objectives. In order to enhance the conservation of biological diversity, native species are preferred over exotic species in the establishment of plantations and the restoration of degraded ecosystems. Exotic species, which shall be used only when their performance is

### greater than that of native species, shall be carefully monitored to detect unusual mortality, disease, or insect outbreaks and adverse ecological impacts.

10.4.1 S The origin of seedlings or seeds shall be known and suitable for the site.

Verifiers: Management plan, bookkeeping of the holding.

10.4.2 S If exotic species are planted, they shall be monitored in order to detect any:

- unusual mortality
- disease
- insect outbreaks
- adverse ecological impacts

Verifiers: Field inspections, bookkeeping of the holding, interview.

## 10.5 A proportion of the overall forest management area, appropriate to the scale of the plantation and to be determined in regional standards, shall be managed so as to restore the site to a natural forest cover.

**10.5.1 S** When establishing plantations on agricultural land in the natural distribution of native southern broadleaved trees, on suitable sites, native southern broadleaved trees shall be planted to make up 5% of the number of stems, either in pure or mixed stands.

#### Verifiers: Management plan, field inspections.

10.6 Measures shall be taken to maintain or improve soil structure, fertility, and biological activity. The techniques and rate of harvesting, road and trail construction and maintenance, and the choice of species shall not result in long term soil degradation or adverse impacts on water quality, quantity or substantial deviation from stream course drainage patterns.

10.6.1 S Soil productivity shall be assessed case by case and ensured by appropriate measures as necessary.

Verifiers: Management plan, use of fertilisers, field inspections.

**10.6.2 S** A buffer zone with a minimum width of 20 m shall be left between plantations and water courses, and allowed to return to its natural state.

Verifiers: Management plan, work instructions, field inspections.

**10.6.3 S** Water protection measures shall be (a) planned, (b) implemented, and (c) monitored according to guidelines and regulations issued on ditching, ditch cleaning and supplementary ditching.

Verifiers: Field inspections, work instructions.

10.7 Measures shall be taken to prevent and minimize outbreaks of pests, diseases, fire and invasive plant introductions. Integrated pest management shall form an essential part of the management plan, with primary reliance on prevention and biological control methods rather than chemical pesticides and fertilizers. Plantation management should make every effort to move away from chemical pesticides and fertilizers, including their use in nurseries. The use of chemicals is also covered in Criteria 6.6 and 6.7.

**10.7.1 S** Appropriate measures shall be taken to prevent and control:

- a) outbreaks of pests
- b) diseases
- c) fire

#### d) invasive plant introductions

Verifiers: Management plan, monitoring reports, data on biological control methods, field inspections.

**10.7.2 S** A pest control plan shall primarily focus on pest prevention and biological control methods, in order to avoid the use of chemical pesticides and fertilisers whenever there are feasible alternatives to them.

Verifiers: Management plan, monitoring reports, data on biological control methods and pesticides ordered as well as areas where they have been used, field inspections.

**10.7.3** In the procurement of seedlings, nurseries with environmental management systems shall be favoured as permitted by competition legislation.

Verifiers: Bookkeeping of the holding, data of seedling lots used, interviews.

10.8 Appropriate to the scale and diversity of the operation, monitoring of plantations shall include regular assessment of potential on-site and off-site ecological and social impacts (*e.g.* natural regeneration, effects on water resources and soil fertility, and impacts on local welfare and social wellbeing), in addition to those elements addressed in principles 8, 6 and 4. No species should be planted on a large scale until local trials and/or experience have shown that they are ecologically well-adapted to the site, are not invasive, and do not have significant negative ecological impacts on other ecosystems. Special attention will be paid to social issues of land acquisition for plantations, especially the protection of local rights of ownership, use or access.

**10.8.1 S** Monitoring of plantations shall be consistent with the monitoring requirements described in Principle 8.

Verifiers: Management plan, forest owner's interview, Forestry Centre and ELY Centre data.

**10.8.2** Monitoring shall cover natural regeneration of planted trees, adaptation of exotic species, effects on water resources and soil productivity as well as impacts on local welfare.

Verifiers: Management plan, forest owner's interview, Forestry Centre and ELY Centre data.

**OK:** 10.8.3 No species shall be planted on a large scale until local trials and/or experience have shown that they are ecologically well-adapted to the site, are not invasive, and do not have significant negative ecological impacts on other ecosystems.

Verifiers: Trial results, plantation monitoring reports.

10.9 Plantations established in areas converted from natural forests after November 1994 normally shall not qualify for certification. Certification may be allowed in circumstances where sufficient evidence is submitted to the certification body that the manager/owner is not responsible directly or indirectly of such conversion.

10.9.1 S Plantations established in the place of natural forests after 1994 cannot be certified.

**Note:** Conversion of areas formerly in other land uses to plantation use is acceptable irrespective of the time of the original land-use change.

Verifiers: Field studies, bookkeeping, management plan.

#### Threatened animal and plant species in Finland

Out of the total of around 43,000 species in Finland, 15,000 species are known well enough to evaluate how threatened they are. According to an evaluation, there are some 1,500 threatened species in Finland. Nearly 200 species are already totally extinct in the wild in Finland. Slightly more than 1,000 species have been classified as near threatened.

Korjaus: For statistics and classification of threatened species in Finland, please see the environmental administration website: <u>http://www.ymparisto.fi/default.asp?contentid=246389&lan=fi&clan=en</u>.

A red list evaluation carried out in 2000 established that species in Finland are threatened by:

- Forest management 30.2% (regeneration and silviculture 6.8%, changes in tree species dynamics 7.1%, changes in age structure 5.4%, reduction in deadwood 10.9%)
- Closure of traditional environments 27.5%
- Small size of population or distibution 11%
- Construction 10.5%
- Adverse chemical effects 4.0%
- Water construction 3.9%
- Drainage and peat extraction 3.5%
- Gravel extraction and mining 2.1%
- Denudation of soil and bedrock 2.0%
- Large population variations 1%
- Changes in cultivated land 0.9%
- Trapping, collecting and picking 0.6%
- Other reasons 1.6%
- Reason unknown 1.2%

Source: Rassi, Alanen, Kanerva & Mannerkoski (eds.) 2001. Suomen lajien uhanalaisuus 2000 [The 2000 Red List of Finnish Species (in Finnish)].

#### Threatened habitat types

An assessment of threatened habitat types in Finland was published in 2008. Two-thirds of the 76 habitat types in forests were found to be threatened. In the evaluation, mires were classified into 54 types, of which about a half were assessed to be threatened throughout the country. The results are available at the Ministry of the Environment website: <u>http://www.ymparisto.fi/default.asp?contentid=284498&lan=fi&clan=en</u>.

#### International environmental agreemeents ratified by Finland

The table below is a translation of a press release by the Ministry of the Environment of Finland, updated on 19 August 2010: 'Key international environmental agreements, their objectives and implementation'.

Agreement	Objective	Implementation
United Nations Framework Convention on Climate Change (UNFCCC) 1992 (Rio de Janeiro), and the Kyoto Protocol 1997	Stabilisation of greenhouse gas concentrations in the atmosphere at a safe level. In the Kyoto Protocol, industrialised countries are committed to reducing their greenhouse gas emissions by a total of 5% from the 1990 level until 2012. According to the EU internal burden sharing, Finland's target for the commitment period 2008–2012 is to keep its emissions at the 1990 level.	The UN Climate Convention was signed in 1992 and it entered into force in 1994. By August 2010, the Convention has been ratified by 193 countries and the EU. The Kyoto Protocol has been ratified by 193 countries and the EU, and it entered into force on 16 February 2005. In 2008, greenhouse gas emissions were somewhat below the 1990 level. The emissions data were reported to the EU in January 2010. Negotiations on the post-2012 climate convention system are ongoing.
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) 1973 (Washington)	Control of international trade in endangered species and products derived from them.	The Convention has been ratified by 175 countries. The EU is not a member, because the amendment to the Convention permitting accession by regional economic integration organisations (made in 1983) is not in force. The EU implements the Convention through European Council Regulation 338/97 and many European Commission regulations.
Convention on Biological Diversity (CBD) 1992 (Rio de Janeiro)	Conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources.	The Convention has been signed by 167 countries and the EU, and ratified by 192 countries and the EU. Finland ratified it in 1994. In December 2006, the Goverment approved the new National Strategy and Action Plan for the Conservation and Sustainable Use of Biodiversity in Finland 2006–2016. Finland's fourth country report was sent to the Secretariat of the Convention (SCBD) in June 2009. The 2010 target will be

		evaluated in a meeting of the Conference of the Parties in October 2010. Negotiations under the Convention will deal with an International Regime on Access and Benefit-sharing.
Cartagena Protocol on Biosafety 2000	The Protocol aims to ensure the safe handling, transport and use of living modified organisms (LMOs) resulting from modern biotechnology that may have adverse effects on biological diversity, taking also into account risks to human health.	The Protocol entered into force on 11 September 2003. It has been ratified by 159 countries and the EU. Finland ratified the Protocol on 9 July 2004. The GMO regulations of the EU and Finland cover the the provisions of the Protocol.
Stockholm Convention on Persistent Organic Pollutants (POPs) 2001	Elimination of the production and use of ten pesticides and industrial chemicals, and restriction of dioxin and furan releases.	The Convention entered into force on 17 May 2004. It has been signed by 151 countries and the EU, and ratified by 171 countries and the EU. Finland ratified the Convention on 3 September 2002, and the EUon 16 November 2004. The EU implements the Convention under the European Parliament and Council Regulation 850/2004. In the 4th meeting of the Conference of the Parties on 4–8 May 2009, nine new chemicals were added to the Convention.
Convention on Access to Information, Public Participation in Decision- making and Access to Justice in Environmental Matters (Aarhus, 1998)	Guaranteeing rights of access to information, public participation in decision- making and access to justice in environmental matters.	The Convention entered into force on 30 October 2001. It has been ratified by 43 countries and the EU. Finland ratified the Convention on 1 September 2004, and the EU on 17 February 2005. Finnish legislation primarily meets the obligations of the Convention. The second national implementation report was submitted in December 2007. The amendment on genetically modified organisms (Article 6) has been ratified by 25 countries and the EU. Finland ratified it on 10 June 2008. In summer 2009, a decision was made to hold an extraordinary session of the Meeting of the Parties in 2010 to establish a Task Force on Public Participation in Decision- making.

Convention on Environmental	Assessment of the	The Convention entered into
Impact Assessment in a	environmental impact of certain	force in 1997. It has been
Transboundary Context (Espoo,	activities at an early stage of	signed by 29 countries and the
1991)	planning, and general	EU, and ratified by 43 countries
,	obligation of States to notify	and the EU. By the end of
	and consult each other on all	2009 Finland had applied the
	major projects under	Convention to 22 projects and
	consideration that are likely to	been an affected party for 14
	have a significant adverse	times
	environmental impact across	times.
	houndaries	
Protocol on Strategic	Evaluation of the	The Protocol has been signed
Environmental Assessment	environmental consequences of	by 37 countries and the EU
(View 2002)	official draft plans and	by 57 countries and the EO,
(KIEV, 2003)	programmas as well as policies	the EU Einland ratified it on 18
	and logislation, though this is	April 2005. The Protocol
	and registration, though this is	aptili 2005. The Flotocol
	not mandatory, and public	2010
	participation in government	2010.
Durate and the state	Deduction-making.	
Protocols on reducing	Reduction of emissions for	The Protocol entered into force
emissions or limiting the use	mercury, lead and cadmium	on 29 December 2003. It has
of various substances:	below the levels in 1990.	been signed by 35 countries
a) Heavy Metals (Aarhus,		and the EU, and ratified by 28
1998)		countries and the EU. Finland
		ratified the Protocol on 20 June
		2000, and the EU on 3 May
		2001. In 2008, Finland's
		emissions had been reduced
		from the 1990 levels as
		follows: mercury 27%,
		cadmium 81%, lead 94%.
b) Persistent Organic Pollutants	Reduction or elimination of the	The Protocol entered into force
(POPs) (Aarhus, 1998)	use of Persistent Organic	on 23 October 2003. It has been
	Pollutants. Reduction of	signed by 35 countries and the
	emissions for dioxins and	EU, and ratified by 28 countries
	furans, polycyclic aromatic	and the EU. Finland ratified the
	hydrocarbons (PAHs) and	Protocol on 3 September 2002,
	hexaclorobenzene (HCB)	and the EU on 30 April 2004.
	below the levels in 1994. In	In 2008, Finland's emissions
	2009, seven new POPs as well	had been reduced from the
	as emission levels for dioxins	1994 levels as follows: dioxins
	and furans from waste	and furans 55%, PAHs 5%,
	incinerators, sinter plants and	HCB 35%.
	steel industry electric arc	
	furnaces were added to the	
	Protocol.	
c) Protocol to Abate	Reduction of emissions for	The Protocol entered into force on
Acidification, Eutrophication and	sulphur, nitrogen oxides,	17 May 2005. It has been signed
Ground-level Ozone (Gothenburg,	ammonia and volatile organic	by 31 countries, and ratified by 24
1999)	compounds (VOCs) permanently	countries and the EU. Finland
	below the ceilings set by the	ratified the Protocol on 23
	Protocol for 2010. Finland's	December 2003, and the EU on
	emission ceilings for 2010 will be	23 June 2003. In 2008, Finland's
	16,000 tonnes for sulphur,	emissions were 70,100 tonnes of
	170,000 tonnes for nitrogen	sulphur dioxide, 166,000 tonnes

	oxides, 130,000 tonnes for VOCs and 31,000 tonnes for ammonia.	of nitrogen dioxide, 118,000 tonnes of VOCs and 37,300
Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea Area 1992, and under it:	Prevention and elimination of pollution in order to promote the ecological restoration of the Baltic Sea area and the preservation of its ecological balance.	tonnes of ammonia. The new Convention entered into force on 17 January 2000, and the amendments of Annexes III and IV regarding the prevention of pollution from agriculture and the provision of reception facilities for ship-generated wastes on 31 December 2000. In addition, the amendments of Annex IV regarding the prevention of pollution from ships entered into force on 5 December 2002 and 1 July 2004, and the amendments of Annex III on 15 November 2008.
- Baltic Sea Joint Comprehensive Environmental Action Programme 1992	Elimination of the main point and diffuse pollution sources on the Baltic Sea.	Implementation through national permit procedure as well as bilateral and multilateral co-operation, especially cross-border co- operation. Of the originally 162 serious pollution sources in the Baltic Sea area, 90 had been eliminated by December 2009. Of the 10 hot spots in Finland, one is still left.
Recommendations and Ministerial Declarations of the Helsinki Commission (HELCOM), or the Baltic Marine Environment Protection Commission, notably the Baltic Sea Action Plan (BSAP) 2007	Restoration of the good ecological status of the Baltic marine environment by 2021. The plan includes environmental targets and actions to combat eutrophication, to reduce pollution from hazardous substances, to ensure environmentally friendly maritime activities, and to conserve Baltic Sea biodiversity.	Eutrophication is still the major problem. Especially pollution from agriculture has not diminished according to targets set previously. Reduction of pollution cannot be seen yet in the status of the Baltic Sea. HELCOM recommendations are implemented nationally, for example through Government resolutions and EU regulations. A report on the progress of the implementation of the BSAP was submitted to the Ministerial Meeting on 20 May 2010.

#### ILO Conventions relevant to forestry and ratified by Finland

Finland has ratified the ILO Declaration on Fundamental Principles and Rights at Work. These principles and rights are recorded in eight Conventions:
Freedom of association, No. 87, and right to organise, No. 98
Abolition of all forced labour, No. 29 and 105

- Abolition of child labour, No. 138 and 182

- Equal remuneration and abolition of discrimination, No. 100 and 111.

The international agreements are available on the following websites:

CITES – <u>www.cites.org</u> ILO – <u>www.ilo.org/ilolex/english/convdisp1.htm</u> ITTA – <u>www.itto.int/itta</u> Convention on Biological Diversity – <u>www.cbd.int</u>

#### Annex 2b

#### ILO Conventions relevant to FSC-certified forests

The following ILO Conventions have an impact on forestry operations and practices, and shall be complied with in FSC-certified forests whether or not they are nationally ratified (FSC Policy 30-401):

No.	Title of Convention	Year
29	Forced Labour Convention	1930
87	Freedom of Association and Protection of the Right to Organise	1948
	Conventions	
97	Migration for Employment (Revised) Convention	1949
98	Right to Organise and Collective Bargaining Convention	1949
100	Equal Remuneration Convention	1951
105	Abolition of Forced Labour Convention	1957
111	Discrimination (Occupation and Employment) Convention	1958
131	Minimum Wage Fixing Convention	1970
138	Minimum Age Convention	1973
141	Rural Workers' Organizations Convention	1975
142	Human Resources Discrimination Development Convention	1975
143	Migrant Workers (Supplementary Provisions) Convention	1975
155	Occupational Safety and Health Convention	1981
169	Indigenous and Tribal Peoples Convention	1989
182	Worst Forms of Child Labour Convention	1999
	ILO Code of Practice on Safety and Health in Forestry Work	1998
	Recommendation 135 Minimum Wage Fixing Recommendation	1970

#### Annex 3

#### Acts of Finnish law and national programmes pertaining to the use of forests

Forest Act (12 December 1996/1093) Act on the Financing of Sustainable Forestry (12 December 1996/1094) Act on the Prevention of Insect and Fungal Damage in Forests (8 February 1991/263) Act on Trade in Forest Reproductive Material (5 April 2002/241) Timber Measurement Act (22 February 1991/364) Nature Conservation Act (20 December 1996/1096) Real Estate Formation Act (12 April 1995/554) Land Use and Building Act (5 February 1999/132) Water Act (19 May 1961/264) Wilderness Act (17 January 1991/62) Environmental Protection Act (4 February 2000/86) Act on Environmental Impact Assessment Procedure (10 June 1994/468) Act on the Forestry Centres and Forestry Development Centre Tapio (18 December 1995/1474) Act on Metsähallitus (30 December 2004/1378) Act on the Finnish Forest Research Institute (3 December 1999/1114) Forest Management Association Act (10 July 1998/534) Act on Jointly Owned Forests (14 February 2003/109)

Other acts related to forestry:

The Constitution of Finland (11 June 1999/731) Act on Private Roads (15 June 1962/358) Outdoor Recreation Act (13 July 1973/606) Gene Technology Act (17 March 1995/377) Chemicals Act (14 August 1989/744) Pesticides Act (23 May 1969/327) Waste Act (3 December 1993/1072) Land Extraction Act (24 July 1981/555) Off-road Traffic Act (22 December 1995/1710) Antiquities Act (17 June 1963/295) Hunting Act (28 June 1993/615) Reindeer Husbandry Act (14 September 1990/848) Employment Contracts Act (26 January 2001/55) Collective Agreements Act (7 June 1946/436) Working Hours Act (9 August 1996/605) Act on the Sámi Parliament (974/1995) Skolt Act (253/1995) Occupational Safety and Health Act (738/2002) Act on the Supervision of Occupational Safety and Health and Appeal in Occupational Safety and Health Matters (131/1973) Act on the Register of Occupational Safety and Health Personnel (1039/2001) Act on Occupational Safety and Health Administration (16/1993) Occupational Health Care Act (1383/2001) Act on Measures to Restrict Tobacco Smoking (693/1976) Act on the Openness of Government Activities (21 May 1999/621)

Full-text English translations of many of the acts are available at http://www.finlex.fi/en/laki/kaannokset/.

### Significant programmes

National Forest Programme 2015 Forest Biodiversity Action Programme for Southern Finland 2008–2016 (METSO)

#### References

- Airaksinen & Karttunen 2001. Natura 2000 -luontotyyppiopas [Natura 2000 habitats manual (in Finnish)].
- Finnish Forest Research Institute 2009. Finnish Statistical Yearbook of Forestry 2009. Official Statistics of Finland. Agriculture, forestry and fishery. ISSN 1796-0479.
- Government resolution (1995). Nationally valuable landscapes (in Finnish).
- Lehto 1969. Käytännön metsätyypit [Forest site types in practice (in Finnish)].
- Meriluoto & Soininen 1998. Metsäluonnon arvokkaat elinympäristöt [Valuable habitats of forest nature (in Finnish)].
- Vasander (ed.) 1998. Suomen suot [Peatlands in Finland (in Finnish)].

#### **Definitions of terms**

Term	Definition
Ash fertilisation	Forests can be fertilised with wood, peat or agrobiomass ash, i.e. "forest ash" (Decree on Fertiliser Products, Annex IA6). Forest ash must be hardened or granulated before use. The production, use and transport of ash is regulated by the Act on Fertiliser Products (539/2006) as well as the Decrees on Fertiliser Products (12/07, 13/07 and 09/08) issued under it. Forest ash shall have the following contents: min. 1% of phosphorus (P) and potassium (K) combined, min. 8% of calcium (Ca), and max. 2% of chlorine (Cl) in dry matter. In ash used as forest fertiliser, the cadmium content can be no higher than 17.5 mg/kg in dry matter, <i>i.e.</i> the cadmium dose cannot exceed 60 g/ha given over a period of 40 years.
Auditor	An expert working in a certification company (certification body) accredited by ASI GmbH, who evaluates how well the forest management practised by the certificate applicant meets the requirements of the FSC standard.
CR	Critically endangered by IUCN classification.
DBH	Diameter at breast height. Tree diameter is measured at the height of 1.3 m (130 cm) from the topmost root collar that flares the butt and hampers felling or, if none is present, from the ground level at the butt. The measurement is taken on the side of approach over bark, generally to an accuracy of 1 cm (or 2 cm in exceptional cases).
Decay class	In this standard, decaying wood is divided into three decay classes: fresh (wood dead for less than three years), medium decayed (wood decaying from a few years to approximately ten years) and very decayed (old, very decayed wood).
Ditch cleaning and supplementary ditching	Cleaning and supplementing old ditch networks, usually done by excavator.
Environmental impact	The Act on Environmental Impact Assessment Procedure (EIA Act)
assessment (EIA)	nice Act on Environmental impact Assessment Procedure (EFA Act) entered into force on 1 September 1994. The act applies to projects for which an EIA is required, on the basis of international agreements ratified by Finland, or which may have significant environmental impacts on Finland. EIA procedure is always required for certain projects, such as oil refineries, pulp, paper and board mills, major ports, motorways and large hazardous waste processing plants. The procedure may also be applied to single projects or cases where significant changes are made to finished projects. In such cases, the decision on the need of EIA procedure is made by the Ministry of the Environment.
Everyman's rights (freedom to	Rights by which everybody in Finland has the freedom to, for
roam)	example, walk, ski, and pick wild berries and mushrooms in a forest, regardless of who owns it.
Fertilisation for growth	Adding necessary nutrients to forest to improve tree growth.
Forest	Land with tree crown cover of more than 10% and area of more than 0.5 ha. The trees should be able to reach a minimum height of 5 m at maturity <i>in situ</i> .
Forest land	On forest land, the annual potential increment calculated for a rotation period of one hundred years is at least one cubic metre per hectare.

Forest management plan	A plan for forest property management and other activities for a
	certain period (generally 10 years), prepared jointly by forestry
	professionals and the forest owner. In the context of this Standard, the
	management plan refers widely to documents related to management
	planning or a management planning system.
Forest owner	A forest owner is a natural person, or a jointly governed entity,
	The forest super may perform forest management independently or
	delegate it with appropriate documentation to a forest service
	provider
	In this context, the forest owner also refers to an organisation with
	title and tenure to forests, and the right to decide on short- and long-
	term management objectives and practices. (Forests owned by the
	State, towns, parishes and companies. In Finland, Metsähallitus
	manages the State forests under the control of Ministries.) The
	organisation may perform forest management independently or
	delegate it with appropriate documentation to a forest service
	provider.
	As a certification candidate, the forest owner bears all relevant
	responsibilities and obligations. In the case of an agreement related to
	forest use/forest service agreement, the forest owner shall ensure that
	the agreeing parties/service providers work in compliance with the
	requirements of the Standard.
Forest reserve	A protected area established on State land by Metsähallitus under its
	own decision.
Forestry land	Forest land, low-productive land and non-productive land. Forestry
CIE	Tand also includes storage areas, forest roads, etc.
615	produce store manage analyse and/or present geographic
	information The GIS incorporates hardware software geographic
	information data, users and practices.
High conservation value (HCV)	See Annex 9.
area	
Low-productive land (scrub	Low-productive land (scrub land) is mainly forest, exposed bedrock,
land)	scree or mires, where the annual increment is below one but over 0.1
	cubic metres per hectare.
Mire	An ecosystem characterised by a high water level and maintained by a
	humid climate, where only partially decayed organic matter
МТ	Accumulates into pear (Vasander 1998). Myrtillus type (Lehto 1960)
MT and noorer sites	Myrtinus type (Lento 1909). Mesic heath sub-veric heath veric heath and harren heath (Lehto
wit and poorer sites	1969).
MT and VT heath forests	Mesic heaths and sub-xeric heaths (Lehto 1969).
Natura 2000 area	The Natura 2000 network includes 1,857 areas in Finland, of which
	87 in the Åland Islands. The total area of the network is approx. five
	million hectares. Three-quarters of this, about 3.6 mill. ha, is land.
	There are 1,713 SCI sites (Habitats Directive) with an area of about
	4.8 mill. ha, corresponding to some 14% of the total area of Finland.
	There are 468 SPA sites (Birds Directive) with an area of about 3.1
	Initi. na, corresponding to some 9% of the total area of Finland. The SCI and SPA sites are portly overlapping
Non-productive land (waste land)	Non-productive land (waste land) consists of almost traclass areas
1 1011-productive failu (waste failu)	ron-productive ratio (waste ratio) consists of attrost treetess aleas

	where the entry of increment is less than 0.1 which matters ner heaters	
Namela and Endamed	where the annual increment is less than 0.1 cubic metres per hectare.	
Northern Finland	An area covered by the territories of the Kainuu, North Ostrobothnia	
	and Lapland Forestry Centres (not applicable to Annex 7).	
Plantation	In Finnish forestry, plantations refer to areas aimed at producing fast-	
	growing, exotic tree species (including hybrid aspen, Christmas trees	
	and energy willow), using rotation periods shorter than normal. They	
	must be established in areas used for purposes other than	
	conventional forest management.	
Prescribed burning	Intentional burning of forest in a selected area under favourable	
	weather conditions. Prescribed burning is aimed at well-defined	
	targets for forest management and protection.	
Regeneration felling	Felling of mature forest, <i>e.g.</i> clear-felling, shelterwood felling or strip	
	felling.	
Regional forest programme	As provided in the Forest Act, Forestry Centres prepare regional	
	forest programmes in co-operation with forestry organisations and	
	other stakeholders. The regional forest programme combines	
	information and development needs regarding the forests in the	
	region, including the sustainable management and use of forests as	
	well as the general objectives of forestry development. The first	
	regional forest programmes were prepared in 1997–1998 and revised	
	in 2000. The information included in the regional forest programmes	
	as well as regional plans may be used, for example, to assess the	
	feasibility of forest industry in the region. The regional forest	
	programmes were used as the basis for preparing the National Forest	
	Programme 2010.	
Reindeer herding area	The reindeer herding area comprises the Province	
	of Lapland, excluding the towns of Kemi and	
	Tornio and the municipality of Keminmaa, and the	
	following areas: the municipalities of Hyrynsalmi,	
	Kuivaniemi, Kuusamo, Pudasjärvi, Suomussalmi,	
	Taivalkoski and Yli-Ii, and the areas north of the	
	Kiiminkijoki river and the road between Puolanka	
	and Hyrynsalmi in the municipalities of Puolanka,	
	Utajärvi and Ylikiiminki.	
Area specifically intended for	As determined in the Reindeer Husbandry Act, an	
reindeer herding	area (north of the line marked on the map) where	
	State land may not be used in a manner that may	
	significantly hinder reindeer herding. Transfer of	
	ownership or leasing of land in this area may only	
	be on the condition that the landowner or lessee	
	does not have a right to receive compensation for	
	damage caused by reindeer.	

Reindeer herding co-operative	The reindeer herding area covers 114,000 km <sup>2</sup> , in other words 36% per cent of the entire surface area of Finland. Each reindeer herder is a shareholder in a co-operative and the number of reindeer owned by a herder defines his or her rights and obligations in the co-operative. There are 56 herding co-operatives, <i>i.e.</i> profit-making reindeer herding units, each differing in size according to area and the number of reindeer. The role of the co-operatives is to tend to their reindeer	
	and prevent them from causing damage or straying into other herding co-operative areas. Each co-operative has its own administrative system headed by a Chief of District elected at a shareholders' meeting. A Vice-chief of District, a Treasurer and a four-member council are also elected. All the co-operatives belong to the Reindeer Herders' Association and their right to vote, based on the number of	
	reindeer in each co-operative, is executed through the Chief of District at meetings of the Association.	
Restoration	Returning an area back to its original state, for example by filling ditches on peatlands, imitating natural disturbance dynamics with prescribed burning, etc.	
Sámi homeland	Legal definition of the areas where the Sámi have practised their traditional livelihoods. The Sámi homeland covers the municipalities of Enontekiö, Inari and Utsjoki, and the part of Sodankylä belonging to the Lapland Reindeer Herding Co-operative.	
Sámi Parliament	The Sámi Parliament (Sámediggi) is the self-government body of the Sámi. Its main purpose is to plan and implement the cultural self- government guaranteed to the Sámi as an indigenous people. The Sámi Parliament is the supreme political body of the Sámi in Finland. It is an independent legal entity of public law which, due to its self- governmental nature, is not a state authority or part of the public administration. The Sámi Parliament functions under the administrative sector of the Ministry of Justice. The Sámi Parliament represents the Sámi in national and international connections, and it attends to the issues concerning Sámi language, culture, and their position as an indigenous people. The Sámi Parliament can make initiatives, proposals and statements to the authorities. The 21 members, and 4 deputies, are elected from among the Sámi every four years. Due to its representative nature, the Sámi Parliament expresses an official view of the Sámi in Finland on the issues concerning them. The operation of the Sámi Parliament is funded by the state.	
Skolt meetings	The Skolt Village Assembly is an old system of self-government of the Skolt Sámi. The Village Assembly is chaired by an Alderman elected by the Skolt. The Alderman's work is supported and monitored by the Skolt Councils elected by the Skolt in Sevetti and Nellim	
SLIMF	Small and low intensity managed forests, <i>i.e.</i> small forest holdings or larger holdings treated with restricted forest management operations.	

	In Finland, a small forest holding refers to one less than 500 ha in
	area.
	Restricted forest management operations denote that the felling
	volume is permanently less than 20% of the mean annual increment.
	and less than 5,000 cubic metres annually (for more information, see
	FSC-STD-01-003).
Southern broadleaved trees	Maple, oak, beech, ash, small-leaved lime, white elm, wych elm,
	common hazel.
Southern Finland	An area south of the territories of the Kainuu, North Ostrobothnia and
	Lapland Forestry Centres (not applicable to Annex 7).
V	Recreation area (in statutory land-use planning).
VL	Local recreation area (in statutory land-use planning).
VR	Hiking and recreation area (in statutory land-use planning).
VT	Vaccinium type (Lehto 1969).
Wilderness area	Protected under the Wilderness Act, wilderness areas are established
	for preserving the wilderness character of these areas, and
	safeguarding the Sámi culture and nature-based forms of livelihood.

FSC International, Policy and Standards Unit has defined a policy for situations where large forest owners certify only part of their forests:

#### FSC POLICY, PARTIAL CERTIFICATION OF LARGE OWNERSHIPS, FSC-POL-20-002 (2000) EN

The policy requires the forest owner to inform the certification body about the entire forest holdings. Uncertified forest shall be managed as carefully as FSC-certified forest:

"When a certification body, as a result of consultations, concludes that a management practice in another forest, owned by the same legal entity as the applicant for certification, constitutes, because of its magnitude and frequency, a clear indication of a lack of willingness or commitment to adhere to the FSC P&C, the certification body will establish whether that lack of commitment represents a major failure of Principle 1 which could affect the certification of the FMU under assessment."

#### Definitions of heath forest and transformed mire rich in deadwood

*Southern Finland* (administrative Southern Finland, the western part of North Ostrobothnia, southwestern Kainuu and southwestern Lapland<sup>8</sup>) corresponding to current METSO boundaries:

Heath forest rich in deadwood is in the advanced development class or higher and meets Criteria 1 and 2, or is in the advanced development class or higher and meets Criterion 3. Transformed mire rich in deadwood is in the advanced development class or higher and meets Criterion 3.

1. Stand structure is natural or near-natural<sup>9</sup>

2. There is clearly more large-diameter (> 10 cm) standing and fallen deadwood than in a normal commercial forest.

- Nutrient-poor forest with an uneven structure (sub-xeric heath forest with exposed bedrock or boulders, xeric heath forest, barren heath forest): more than 7 m<sup>3</sup>/ha of deadwood created during a minimum of ten years and representing two decay classes<sup>10</sup>.
- Mesotrophic forest with uneven structure (herb-rich heath, mesic heath, other sub-xeric heath forest): more than 10 m<sup>3</sup>/ha of deadwood created during a minimum of ten years and representing two decay classes.

3. Mixed (minimum two tree species) transformed mire or mixed heath forest with an even structure due to previous fellings, rich in deadwood: more than  $20 \text{ m}^3$ /ha of deadwood created during a minimum of ten years and representing two decay classes. The definition of valuable habitats does not apply to sites where more than 75% of the deadwood has been created as a result of a single disturbance and belongs to decay class 1.

*Northern Finland* (administrative Northern Finland, excluding the western part of North Ostrobothnia, southwestern Kainuu and southwestern Lapland):

Heath forest rich in deadwood is in the advanced development class or higher and meets Criteria 1 and 2, or is in the advanced development class or higher and meets Criterion 3. Transformed mire rich in deadwood is in the advanced development class or higher and meets Criterion 3.

1. Stand structure is natural or near-natural<sup>11</sup>

2. There is clearly more large-diameter (> 10 cm) standing and fallen deadwood than in a normal commercial forest.

<sup>&</sup>lt;sup>8</sup> Southwestern Lapland: Kemi, Keminmaa, Pello, Ranua, Rovaniemi, Simo, Tervola, Tornio and Ylitornio. Southwestern Kainuu: Kajaani, Paltamo, Ristijärvi, Sotkamo and Vaala. Western part of North Ostrobothnia: Alavieska, Haapajärvi, Haapavesi, Hailuoto, Haukipudas, Ii, Kalajoki, Kempele, Kiiminki, Kärsämäki, Liminka, Lumijoki, Merijärvi, Muhos, Nivala, Oulainen, Oulu, Oulunsalo, Pudasjärvi, Pyhäjoki, Pyhäjärvi, Pyhäntä, Raahe, Reisjärvi, Sievi, Siikajoki, Siikalatva, Tyrnävä, Utajärvi, Vihanti, Yli-Ii and Ylivieska.

<sup>&</sup>lt;sup>9</sup> In Southern Finland, near-natural refers to advanced or older forests whose structure has not been systematically influenced by thinnings or release fellings, or clear or seed tree fellings performed after the 1940s. The growing stock of such forests generally has an uneven-aged structure and a random spatial distribution. The forests may also have been subject to occasional selection felling and felling for household use. Thinnings and release fellings performed after the 1950s have generally altered the forest structure so much that it cannot be considered to be near-natural.

<sup>&</sup>lt;sup>10</sup> Decaying wood is divided into three decay classes: fresh (wood dead for less than three years), medium decayed (wood decaying from a few years to approximately ten years) and very decayed (old, very decayed wood).

<sup>&</sup>lt;sup>11</sup> In Northern Finland, near-natural refers to advanced or older forests whose structure has not been systematically influenced by fellings. The growing stock of such forests generally has an uneven-aged structure and a random spatial distribution. The forests may also have been subject to occasional selection felling and felling for household use, or old selective fellings which have left them with many structural characteristics of natural forest, *e.g.* a visible proportion of trees of the previous generation.

- Nutrient-poor forest with an uneven structure (sub-xeric heath forest with exposed bedrock or boulders, xeric heath forest, barren heath forest): more than 10 m<sup>3</sup>/ha of deadwood of either decay classes 1, 2 and 3 or decay classes 2 and 3.
- Mesotrophic forest with an uneven structure: herb-rich heath and mesic heath, more than 15 m<sup>3</sup>/ha; other sub-xeric heath forest, more than 20 m<sup>3</sup>/ha of deadwood of either decay classes 1, 2 and 3 or decay classes 2 and 3.

3. Mixed (minimum two tree species) transformed mire or mixed heath forest with an even structure due to previous fellings, rich in deadwood: more than 25  $m^3$ /ha of deadwood representing either decay classes 1, 2 and 3 or decay classes 2 and 3. The definition of valuable habitats does not apply to sites where more than 75% of the deadwood has been created as a result of a single disturbance and belongs to decay class 1.

*Uneven structure:* By this definition, forests with more than one or two storeys are considered to have an uneven structure.

*Exposed bedrock:* The proportion of exposed bedrock is 30–50%.

Boulders: The presence of boulders is visible and influences tree growth and creation of deadwood.

**Exception:** In Northern Finland, the criteria do not apply to separate stands fragmented by regeneration fellings or seedling stands. A forest area is considered to be fragmented if it is less than 60 ha in size in Enontekiö and Inari municipalities, less than 40 ha in size in Kittilä, Muonio, Salla, Savukoski and Sodankylä municipalities, and less than 10 ha in size in other Northern Finland municipalities. The exception does not apply to forests which are completely natural in growing stock, include a minimum of 20 m<sup>3</sup>/ha of uneven-aged deadwood, border protected areas, or are naturally separate islets separated by natural low-productive and non-productive lands.

**Note:** Natural values created through active habitat management in commercial forests (measures and restrictions implemented during forest operations, *e.g.* retention trees) do not constitute an obligation to conserve forest rich in deadwood as referred to in the definition.

#### Wooded bedrock, cliffs and boulder fields with old growth and deadwood

Old forests on bedrock, with growing stock more than 120 years old, and decaying fallen pine trees, snags or thickly barked old pine in groups or as single trees.

Forests under cliffs, with growing stock more than 100 years old and deadwood, located in hollows with moist microclimates, in gorges, along strips of spruce mires and on shores of small waters.

Groundwater-fed, wooded boulder fields including adjacent forests, with growing stock more than 100 years old or more than 5  $m^3$ /ha of deadwood.

Forests on bedrock, boulder fields and cliffs, with occurrences of nationally threatened species.

#### HIGH CONSERVATION VALUE (HCV) AREAS

- a) Natura 2000 areas, statutory protected areas and sites of national conservation programmes (HCV 1)
- b) Protected areas of regional plans (S and SL areas) and conservation allocations of current regional plans (HCV 2)
- c) Areas with extensive<sup>12</sup> and uniform<sup>13</sup> occurrences of habitats listed in the FSC Standard, Indicator 6.4.1 (HCV 1; HCV 3)
- d) Internationally Important Bird Areas (IBA) and nationally valuable bird wetlands (FINIBA) \* (HCV 3). Applies to Important Bird Areas according to their current definition in 2010.
- e) Groundwater areas, classes I and II (HCV 4)
- f) Extensive<sup>14</sup> mire formations preserved mainly with natural hydrological conditions in the hemiboreal, southern boreal and middle boreal zones (HCV 1; HCV 3)
   Note: The HCV attributes of an area are preserved if the hydrological conditions of its mires are preserved.
- g) Wilderness areas (HCV 5, HCV 6)

Essential sources for determining HCV areas include the following:

- OIVA environmental and geographical information service (a, b, e, g)
- Approved regional plans on Regional Council websites (b)
- BirdLife Finland website (IBA, FINNIBA)

The definition is based on the international FSC guideline FSC-GUI-60-004 (V1-0) EN:

#### The 6 types of High Conservation Values

HCV1. Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia).

HCV2. Forest areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance.

HCV3. Forest areas that are in or contain rare, threatened or endangered ecosystems.

HCV4. Forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control).

HCV5. Forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health).

HCV6. Forest areas critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).

<sup>&</sup>lt;sup>12</sup> "Extensive" refers to a site including valuable habitats listed in Indicator 6.4.1 on a minimum of 20 ha in the hemiboreal zone, 50 ha in the southern and middle boreal zones, and 100 ha in the northern boreal zone.

<sup>&</sup>lt;sup>13</sup> "Uniform" implies that, within a uniform area, a maximum of 10% may be made up of habitats other than those listed in Indicator 6.4.1.

<sup>&</sup>lt;sup>14</sup> An "extensive" mire formation refers to an area of undrained and interconnected mires with a minimum extent of 30 ha in the hemiboreal zone, 50 ha in the southern boreal zone and 100 ha in the middle boreal zone.

#### Annex 10

#### Management plan summary and publicly available information

#### 1. General description of forest management operations, cf. Criterion 7.1

- a) Description of forests, forest growth monitoring, planning methods, silvicultural and felling methods, harvesting technology, participatory approach
- b) Justification of annual cut
- c) Land ownership and usage
- d) Land use of surrounding areas

Note: This does not include volumes harvested but justification of wood harvesting.

#### 2. Environmental impact assessment, environmental objectives and monitoring methods

- a) Environmental management programme, environmental guidelines, environmental aspects and environmental objectives
- b) (ISO14001,) environmental impact monitoring
- c) Plans for the identification of sites described in Indicators 6.4.1 and 6.4.3

#### 3. Summary of restrictions of use (annual)

- a) Summary of special types of work done (prescribed burning, ditch cleaning and supplementary ditching, fertilisation, restoration)
- b) Summary of restricted-use sites described in Indicators 6.4.3 and 6.3.5
- c) Summary of audit report

#### 4. Planned logging site level information

- a) Forest use declarations (as described in Indicator 7.4.2)
- b) Prescribed burning
- c) Ditch cleaning and supplementary ditching

#### 5. Map data

- a) HCV areas and measures required to maintain or enhance the applicable conservation attributes
- b) Protected habitats confirmed by authorities
- c) 5% protected proportion of forest land (6.4.3), other habitats to be always preserved (Indicator 6.4.1) and special sites (Indicator 6.3.5)
- d) Threatened wood-decay species and nationally and regionally threatened species, with the exception of species vulnerable to collecting, disturbance or hunting, provided that permission is obtained from authorities